IOWA

Interim Report
Iowa Health and Wellness Plan Evaluation

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The University of Iowa

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Executive Summary

The University of Iowa serves as the independent evaluator for Iowa's 1115 Waiver: Iowa Health and Wellness Plan. The demonstration originally began on January 1, 2014. It is in the second 5-year extension which will end on December 31, 2024. IHAWP continues to change and evolve, as does the evaluation plan. There are currently seven key areas of investigation within the evaluation: Health Behaviors Incentive (HBI) program, Dental Wellness Plan (DWP), waiver of retroactive eligibility (WRE), cost sharing, cost and sustainability, waiver of non-emergency medical transportation (NEMT), and member experiences.

Healthy Behaviors Incentive

Survey data indicated that those who were enrolled since 2015 have the highest level of awareness at 47%. Those enrolled before the pandemic began (March 2020) report awareness of the HBI program at 35%, while 27% of those who were only enrolled during the pandemic (when the program was on pause due to the public health emergency) were aware of the program. Additionally, adjusted results show higher awareness of the HBI program for White (37%) as compared to Black (26%) and Hispanic members (24%) and for those with a 4-year degree (44%) as compared to those with less education. Females also had higher adjusted rates than males.

As members spend more time in the IHAWP program, the likelihood of having a well-visit during the year increases. For example, 40% of members with eight years of enrollment reported having a well-visit compared to 31% for members with only one year of enrollment. Health risk assessment completion remains low and is not as closely associated with time in the program; reported completion rates are between 10% and 15% for members regardless of the total number of years in the program. Of members enrolled for at least eleven months during the year, 41% reported having a well-visit while only 11% of members reported having a well-visit if they were enrolled six months or fewer. IHAWP members with higher incomes are more likely to report having well-visits during the year compared to members with lower incomes.

Analyses of claims and enrollment data, indicate there is an overall increase in the percentage of members completing a well visit over years of enrollment, with the greatest percentage (39%) being in the 8th year of enrollment. Additionally, a number of factors are related HBI completion rate:

- A greater proportion of members belonging to the highest income group (>100% FPL) complete a well-visit, HRA or both, followed by members belonging to the middle-income group (51–100% FPL), and then by members with the lowest income level (≤50%).

- A greater proportion of members residing in small towns/rural areas tend to complete both required activities over time compared to those residing in metropolitan or micropolitan areas.
- The Black population has the smallest percentage of members completing both required activities over time compared to other races/ethnicities. People with "unknown race" have the highest percentages of members completing both activities over time.

Overall, most of the race/ethnicity groups follow a broadly similar pattern over time, with the highest percentage of members completing both required activities being in the 6th year. There is no regular pattern of change over time in the percentages of members completing both required activities by MCO membership status (i.e., MCO versus non-MCO beneficiary), or by MCO type (i.e., AmeriGroup, AmeriHealth, UHC, or ITC beneficiary).

Dental Wellness Plan

A plan to evaluate the dental portions of Iowa Medicaid's 1115 waiver (also known as the Dental Wellness Plan-DWP) was originally approved by CMS in 2020 as part of the comprehensive IHAWP evaluation plan. In December 2021, however, Iowa Medicaid made significant programmatic changes to the DWP that necessitated a new evaluation plan, such as eliminating the healthy behavior requirements as described in the Iowa Wellness Plan Section 1115 Demonstration Waiver, This new DWP evaluation plan was submitted and approved by CMS in early 2023 with new hypotheses and research questions appropriate to the new design of the program. The new evaluation plan focuses on access to care, particularly on member knowledge of the program changes and access to a dental wellness exam, in addition to the use of Hospital Emergency Department for non-emergent dental care. The primary analytic results thus far have been from a mail survey called the 2021 Survey of Iowa Private Practice general dentists, which evaluated the level of dentist Medicaid participation and attitudes toward the program, as one perspective on access to care. About two-thirds of dentists had an adult Medicaid patient in their practice, with participation varying significantly between the two dental carriers contracted with the program. Less than one in three Iowa dentists were accepting new adult Medicaid patients (most with some limits such as the number of Medicaid patients or the type of patients such as only family members of current patients in the practice).

Waiver of retroactive eligibility

Preliminary analyses indicate that there are no increases in charity care or bad debt for Iowa hospitals following implementation of the WRE. Information provided through the process evaluation indicates that providers have increased their role in initiating Medicaid applications.

Cost Sharing

No results to date.

Cost and sustainability

No results to date.

Waiver of non-emergency medical transportation

A survey was conducted with IHAWP members to evaluate the impact of the waiver of non-emergency medical transportation (NEMT) services for most IHAWP members. Results were compared for IHAWP members who do not have the NEMT benefit with a traditional group of Medicaid-enrolled adults who retained their NEMT benefit.

Transportation was an important issue for all Medicaid members, regardless of NEMT waiver status. One in nine traditional Medicaid members had a missed health appointment in the last 6 months due to transportation problems and one in 15 IHAWP members without the NEMT benefit had a missed health appointment. Around one in three Medicaid members overall indicated a concern for the cost of transportation to health care.

Overall, transportation-related access to health care for IHAWP members without NEMT was similar or better than for other Iowa Medicaid-enrolled adults with the NEMT benefit, as underlying risk factors were more important than the benefit itself.

The NEMT benefit was also not well understood by IHAWP or traditional Medicaid members. About one in five Medicaid members with the NEMT benefit knew that they had transportation coverage and about one in 14 IHAWP members without NEMT "thought" they had NEMT coverage.

Member experiences

A 2022 mail survey of IHAWP enrolled adults was used to assess member experience, access to care, health status and quality of the care. Results were compared to either primary data collected in 2022 from a mail survey of traditional Iowa Medicaid adult members and/or national data from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey where appropriate.

Even though the IHAWP members were generally older and more likely to have a condition that affected their activities of daily living, their overall health status was rated similarly to traditional Medicaid adults. There were more similarities than differences regarding a number of utilization measures including the proportion with a personal doctor (about three-quarters), receipt of preventive care in the last 6 months (about half), use of routine care (about three-fifths), use a specialist (about one-third), need for urgent care (about one in four), and hospitalizations in the previous 6 months (about one in 11).

Regarding access, there were again more similarities than differences between IHAWP and adult Medicaid members with about one in 10 having reported an unmet need for preventive care, one in 12 reporting an unmet need for routine care, one in four an unmet need for a specialist and one in five reporting an unmet need for urgent care.

IHAWP members did report lower rates of need, use and unmet need for mental health care and were more likely to report having received a seasonal flu vaccine and at least one COVID-19 vaccine. A smaller proportion of IHAWP members used the emergency department in the past 6 months than Medicaid members and among those who used the ED, significantly more Medicaid members than IHAWP members reported that the care they received in the ED could have been provided in a doctor's office.

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Table 1. IHAWP Evaluation Progress

Hypothesis	Progress
Health Behavior Incentives (HBI)	
Hypothesis 1: The proportion of members who complete a wellness exam, health risk assessment, or both will vary. **Hypothesis 2: The proportion of members completing a wellness exam, health risk assessment, or both will change over time and by income level.** **Hypothesis 3: Member characteristics are associated with the likelihood of completing both required HBI activities.** **Hypothesis 4: Completing HBI requirements is associated with a member's use of the emergency department (ED).**	Completed trend analyses using Medicaid enrollment and HBI completion data for 2014-2019. Results reported.
Hypothesis 5: Completing HBI requirements is associated with a member's use of hospital observation stays.	Enrollment, claims, and HBI completion data have been compiled, John's Hopkins ACG program purchased, and modelling is in progress.

Hypothesis	Progress
Hypothesis 6: Completing HBI requirements is associated with a member's use of inpatient hospital care. **Hypothesis 7: Completing HBI requirements is associated with shifts in patterns of member's health care utilization.** **Hypothesis 8: Completing HBI requirements is associated with a member's health care expenditures.** **Hypothesis 9: We will identify disparities in the relationships between HBI completion and outcomes.**	Enrollment, claims, and HBI completion data have been compiled, coding and modelling are in progress.

Hypothesis	Progress
Hypothesis 10: Members who have been enrolled longer are more aware of the HBI program than those who have been enrolled a shorter period of time. **Hypothesis 11: Members who have been enrolled longer have more knowledge about the HBI program than those who have been enrolled a shorter period of time.** **Hypothesis 12: Those who are aware of the HBI program are more likely to complete the behaviors (HRA and well exam) compared to those who were not aware.** **Hypothesis 13: Those who have more knowledge about the HBI program are more likely to complete the behaviors (HRA and well exam) compared to those with less knowledge.** **Hypothesis 14: Members socio-demographic characteristic and perceptions/attitudes are associated with awareness of the HBI program.** **Hypothesis 15: Members socio-demographic characteristic and perceptions/attitudes are associated with knowledge of the HBI program.** **Hypothesis 16: Members socio-demographic characteristic and perceptions/attitudes are associated with completion of the HRA and well exam.** **Hypothesis 17: Members are most likely to hear about the HBI program from their MCO.**	Baseline comparisons completed using 2021 HBI survey results. Additional analyses will be added following 2024 HBI survey.
Hypothesis 18: Members report difficulty in using hardship waiver.	Will be addressed in the 2024 HBI survey.

Hypothesis	Progress
Hypothesis 19: Members who do not complete the HRA and well exam report barriers to completing the behaviors.	Baseline comparisons completed using 2021 HBI survey results. Additional analyses will be added following 2024 HBI survey.
Hypothesis 20: Disenrolled members report no knowledge of the HBI program. **Hypothesis 21: Disenrolled members describe confusion around the disenrollment process.** **Hypothesis 22: Disenrolled members report consequences to their disenrollment.**	Unable to complete as disenrollments related to HBI will not occur until the last 6 months of the waiver period.
Dental Wellness Plan (DWP)	
Hypothesis 1: Higher levels of awareness and perceived ability to comply with requirements will be associated with receiving a dental wellness exam. **Hypothesis 2: IHAWP members will have equal or greater access to a dental wellness exam and other dental services because dental wellness exams qualify as a healthy behavior.** **Hypothesis 3: The oral health status of IHAWP members who receive a dental wellness exam will improve over time.** **Hypothesis 4: Utilization of a dental wellness exam among IHAWP members will change due to system changes associated with the COVID-19 pandemic.**	DWP evaluation changes were approved 2023, data is currently being compiled. The 2021 Survey of Iowa Private Practice Dentists, a survey collection tool remaining from the original DWP evaluation plan, was completed. The Iowa Medicaid Member Survey regarding member's access to and use of dental services is in field.

Hypothesis	Progress
Waiver of Retroactive Eligibility (WRE)	
Hypothesis 1: Eliminating retroactive eligibility will increase the likelihood of enrollment and enrollment continuity.	The New Enrollee Survey is in field. Preliminary results utilizing enrollment data for the period 2010-2021 are completed providing descriptive results on enrollment patterns.
Hypothesis 2: Eliminating retroactive eligibility will not increase the likelihood of negative financial impacts on members.	State bankruptcy data were being analyzed, results reported. The New Enrollee Survey is in field.
Hypothesis 3: Eliminating retroactive eligibility will improve member health.	Claims are being analyzed. The rate of ED visits has been added to this measure.
Hypothesis 4: Eliminating retroactive eligibility will reduce the annual Medicaid services budget.	Medicaid administrative documents are being collected.
Hypothesis 5: Providers will increase initiation of Medicaid applications for eligible patients/clients.	Pilot process results suggest this is the case. Full process evaluation is underway.
Cost Sharing	
Hypothesis 1: Members understand the $8 copayment for non-emergent use of the ER. **Hypothesis 2: Cost sharing improves member understanding of appropriate ER use.**	Cost sharing was suspended during the PHE. Will be addressed with the 2024 Consumer Survey.
Hypothesis 3: Members subject to cost sharing are more likely to establish and utilize of a regular source of care as compared to members not subject to cost sharing.	Will be addressed with the 2024 Consumer Survey. Medicaid claims data are being processed for outcome measures.

Hypothesis	Progress
Hypothesis 4: Cost sharing improves long-term health care outcomes.	Will be addressed with the 2024 Consumer Survey. Medicaid claims data are being processed for outcome measures. HCUP data will be acquired May 2024.
Cost and Sustainability	
Hypothesis 1: Ongoing administrative costs will increase due to implementation of IHAWP **Hypothesis 2: IHAWP will result in short-term outcomes supporting a sustainable program.**	State documents are being collected.
Hypothesis 3: IHAWP results in intermediate outcomes supporting a sustainable program.	Medicaid claims data are being analyzed. TAF data is in the process of being accessed via VRDC. HCUP data will be acquired in May 2024.
Hypothesis 4: IHAWP results in long-term outcomes supporting a sustainable program.	HCRIS data has been analyzed, results reported. Iowa Hospital Association data has been processed. HCUP data will be acquired in May 2024.

Hypothesis	Progress
Non-Emergency Medical Transportation Waiver (NEMT)	
Hypothesis 1: Wellness Plan members without a non-emergency transportation benefit will have equal or lower barriers to care resulting from lack of transportation. **Hypothesis 2: Wellness Plan members without a non-emergency transportation benefit will have equal or lower rates of missed appointments due to access to transportation.** **Hypothesis 3: Wellness Plan members without a non-emergency transportation benefit will report a lower awareness of the non-emergency transportation benefit as a part of their health care plan.** **Hypothesis 4: Wellness plan members without a non-emergency transportation benefit will report similar experiences with health care-related transportation regardless of their location or disability status.**	The consumer survey was completed in 2022, results are reported. Planning is underway to conduct another survey with a sample of IHAWP and Medicaid-enrolled adults in summer/fall of 2024.
Member Experiences – Access to Care	
Hypothesis 1.1: Wellness Plan members will have equal or greater access to primary care and specialty services. **Hypothesis 1.2: Wellness Plan members will have equal or greater access to preventive care services.** **Hypothesis 1.3: Wellness Plan members will have equal or greater access to mental and behavioral health services.**	The consumer survey was completed in 2022, results are reported. Medicaid claims data are being analyzed. Outcome algorithms are currently under development. Planning is underway to conduct another survey with a sample of IHAWP and Medicaid-enrolled adults in summer/fall of 2024.

Hypothesis	Progress
Hypothesis 1.4: Wellness Plan members will have equal or greater access to care, resulting in equal or lower use of emergency department services for non-emergent care.	Medicaid claims data are being analyzed. Qualitative interviews are underway.
Member Experiences – Coverage Continuity	
Hypothesis 2.1: Wellness Plan members will experience equal or less churning.	The consumer survey was completed in 2022, results are reported. Enrollment data are being analyzed.
Hypothesis 2.2: Wellness Plan members will maintain continuous access to a regular source of care when their eligibility status changes.	The consumer survey was completed in 2022, results are reported.
Member Experiences – Quality of Care	
Hypothesis 3.1: Wellness Plan members will have equal or better quality of care. **Hypothesis 3.2: Wellness Plan members will have equal or lower rates of hospital admissions.**	The consumer survey was completed in 2022, results are reported. Medicaid claims data are being analyzed.
Hypothesis 3.3: Wellness Plan members will report equal or greater satisfaction with the care provided.	The consumer survey was completed in 2022, results are reported.

Iowa Health and Wellness Plan
General Background Information

Originally, two demonstrations were approved on December 10, 2013, both to start on January 1, 2014: Iowa Wellness Plan (Project Number 11-W-00289/5) and Iowa Marketplace Choice (Project Number l 1-W-00288/5). Wellness Plan (WP) was a program operated by the Iowa Department of Human Services providing health coverage for uninsured Iowans from 0-100% of the Federal Poverty Level (FPL) and Marketplace Choice (MPC) was a premium support program utilizing Qualified Health Plans through the Marketplace for Iowans from 101-133% FPL. These two demonstrations encompassed a bipartisan solution to health care coverage for low-income adults not otherwise eligible for public supports. The joint program name was Iowa Health and Wellness Plan (IHAWP). More information regarding the formulation and implementation of these two demonstrations can be found online at the link below.

https://www.medicaid.gov/medicaid/section-1115-demo/demonstration-and-waiver-list/81706

The timeline and description of changes since inception of the Iowa Health and Wellness Plan through the COVID-19 PHE are shown in Table 2.

Table 2. Timeline for Iowa Health and Wellness Plan Changes

Date	Change
January 1, 2014	First IWP members enrolled in one of two programs: Wellness Plan for those 0-100% FPL and Marketplace Choice for those 101-133% FPL. Wellness Plan operated within the traditional Medicaid plans while Marketplace Choice utilized Qualified Health Plans.
May 1, 2014	IWP members enrolled in Dental Wellness Plan with Delta Dental of Iowa, a three-tiered benefit program.
July 1, 2014	IWP members enrolled in the Healthy Behaviors Incentive Program
November 1, 2014	Marketplace Choice members in CoOportunity (QHP) were moved to MediPASS (PCCM program), Meridian (HMO), or Coventry (QHP)
November 1, 2015	Marketplace Choice members in Coventry (QHP) were moved to MediPASS or Fee-for-service
December 1, 2015	Marketplace Choice component of IWP demonstration ended, Wellness Plan extended to members 100-133% FPL and renamed Iowa Health and Wellness Plan
April 1, 2016	Medicaid members (with a few exceptions such as PACE members), including IHAWP, moved to one of three MCOs - AmeriGroup Iowa, AmeriHealth Caritas, or UnitedHealthcare Plan of the River Valley

Date	Change
August 1, 2017	All Medicaid, including IHAWP, adults enrolled in Dental Wellness Plan 2.0 with Delta Dental or MCNA a two-tiered benefit plan
August 2, 2017	Iowa files an amendment to the IHAWP requesting a waiver of retroactive eligibility for all Medicaid programs
October 27, 2017	CMS officially approves IHAWP amendment for waiver of retroactive eligibility
November 1, 2017	Waiver of retroactive eligibility begins, including all but pregnant women and children under 1
November 30, 2017	AmeriHealth Caritas exits Medicaid program
July 1, 2018	Waiver of retroactive eligibility is amended to remove nursing home residents
July 1, 2019	UnitedHealthcare exits Medicaid program as an MCO Iowa Total Care enters Medicaid program as an MCO
January 1, 2020	Waiver of retroactive eligibility is renewed for 5 years; children 1-19 years of age are removed from the waiver
January 31, 2020	First federal emergency declaration for COVID-19
February 20, 2020	CDC issues coding guidelines for novel Coronavirus for health care encounters and deaths related to COVID-19.
March 1, 2020	Updates to billing procedure for telehealth services establishing “originating” and “Distant” site changes.
March 6, 2020	New coding for virtual care services, telehealth related services, and Coronavirus lab tests established in light of COVID-19 pandemic.
March 13, 2020	DHS waives all Medicaid co-pays, premiums and contributions, Prescription refill guideline changes, Telehealth streamlining of appropriate service changes including modifier 95 designation and POS codes for telehealth billing. Complete Summary list of submitted federal waivers found Supplemental Materials.
March 18, 2020	All pharmacy PA’s extended through June 30th. Prescription member copayments suspended including potential for refunds. Patient signatures for medication receipt waived.
April 1, 2020	Changing criteria for Prior Authorizations (PAs) for Medicaid members, and also changes to extensions for MCO approved PAs. Changes to claims filing for medical claims including a 90-day extension to first time medical claims and encounters for MC claims.
April 2, 2020	Expansion of list of telehealth services with billing and coding changes. Expansion of provider types included in telehealth services where appropriate. See Supplemental Materials.
May 19, 2020	New guidance on additional codes pertaining to COVID-19 including new diagnostic coding, laboratory tests and specimen collection.
June 1, 2020	The Families First Coronavirus Response Act (FFCRA) establishes a new Medicaid eligibility group for uninsured members for the purposes of COVID-19 testing.
June 19, 2020	Updated Medicaid provider toolkit found here.
January 8, 2021	Federal PHE extended.

Date	Change
April 21, 2021	Federal PHE extended.
March 9, 2023	Notice of PHE unwind.
June 1, 2023	HBI program reinstated.
February 1, 2023	Beginning of Unwind process
June 1, 2023	HBI behavior requirements reinstated
June 1, 2024	Cost sharing reinstated ($8 ED copay for non-emergent visits)
June 30, 2024	Premiums reinstated

Previous findings

This IHAWP waiver evaluation design builds upon the findings of the first demonstration results by providing ongoing evaluation of key experiences and outcomes for the expansion population, improving the evaluation design to capture additional information for ongoing policies, and undertaking an investigation of new policies that were enacted after the first waiver approval. Reports encompassing the first waiver evaluation can be found at https://www.medicaid.gov/medicaid/section-1115-demo/demonstration-and-waiver-list/81706. Additionally, there are a number of reports that have been completed during the first 2 years of this evaluation period.

All related reports can be found at Iowa Research Online by searching for the report title or a key word in the title - https://iro.uiowa.edu/esploro/.

Related publications

- Iowa Wellness Plan Process Evaluation Report 2023
- Iowa Health and Wellness Plan COVID-19 Impacts Report
- Evaluation of the Dental Wellness Plan: 2021 Survey of Iowa Private Practice Dentists
- Healthy Behaviors Incentive Program Survey 2022 Report
- Iowa Health and Wellness Plan 2022 Member Survey Report
- Evaluation of the Dental Wellness Plan 2.0: Member Experiences After Two Years
- Iowa Health and Wellness Plan Process Evaluation Report 2022
- Iowa Health and Wellness Plan Interim Report, Coverage During the PHE
- Iowa Wellness Plan Consumer Survey 2018 Report
- Healthy Behaviors Dis-enrollment Interviews Report: In-depth interviews with Iowa Health and Wellness Plan members who were recently disenrolled due to failure to pay required premiums
- Healthy Behaviors Claims-Based Report #3 and HRA Completion Report

- Healthy Behaviors Claims-Based Outcomes Report #3 and Healthy Behaviors Modeling Report #2
- Healthy Behaviors Incentive Program evaluation
- Healthy Behaviors Cost Analysis Report
- Non-Emergency Medical Transportation and the Iowa Health and Wellness Plan
- Evaluation of Provider Adequacy in the Iowa Health and Wellness Plan during the second year
- Evaluation of the Dental Wellness Plan: Member Experiences in the First Year
- Evaluation of Provider Adequacy in the Iowa Health and Wellness Plan During the First Year
- Iowa Dental Wellness Plan: Evaluation of Baseline Provider Network
- DWP Evaluation: Annual Report 2019
- DWP Evaluation: Annual Report 2018
- Iowa Wellness Plan Evaluation, Claims-based Outcome Report CY 2013 – 2018
- Evaluation of the Dental Wellness Plan: Community Health Center Experiences after Two Years
- Evaluation of the Dental Wellness Plan. Private Practice Dentist Experiences in the First Year
- Access, Utilization, and Cost Outcomes: Iowa Dental Wellness Plan Evaluation 2014-2016
- Evaluation of Provider Network in the Iowa Dental Wellness Plan, 2014-2016
- Iowa Wellness Plan Evaluation - Interim Report CY 2016
- Dental Wellness Plan Evaluation
- Evaluation of the Iowa Wellness Plan (IWP): Member Experiences in 2016
- Evaluation of provider network in the Iowa Dental Wellness Plan during the first year
- Iowa's Marketplace Choice Summative Report
- Evaluation of the Iowa Health and Wellness Plan: Member Experiences in the First Year
- First Look at Iowa's Medicaid Expansion: How Well Did Members Transition to the Iowa Health & Wellness Plan from IowaCare

Additional reports are posted on the Iowa Medicaid and Iowa Research Online as they are approved by CMS and the Iowa Department of Health and Human Services (HHS).

Evaluation questions and hypotheses

Evaluation questions and hypotheses are provided within the “Measures Summary” tables in each component.

Methodology

This section outlines the general methodologic approaches taken to complete the analyses for the interim report.

Evaluation design

This evaluation design is complex and rigorous, encompassing up to 15 years of administrative and survey data. For many hypotheses we are able to take advantage of pre- and post-implementation data at both the state and national level. We have also 1) built in more comparisons to other states, 2) increased our collection and utilization of Social Determinants of Health (SDOH) data, 3) added process measure collection and analysis, and 4) improved processing, maintenance, and use of the Medicaid data lake. Additionally, with the COVID-19 pandemic occurring during the first year of the renewal period, we have incorporated national findings to inform our strategies to reflect related changes in Medicaid policies, the health care system and population norms around health services need and utilization. In some instances, it is best to remove the pandemic period from analyses, leaving a gap period in the analytic, while in others we are able to account for changes in policy during the pandemic through time dependent trigger variables. We include sensitivity testing to determine whether county fixed effects and/or person fixed effects are able to adequately control for pandemic effects.

Target and comparison populations

The current Iowa Health and Wellness Plan program evolved into one demonstration from two separate but linked demonstrations on January 1, 2016, as outlined in Table 2. This change provides multiple possibilities for comparison groups over the life of the demonstration (January 1, 2014, through December 31, 2024).

Medically Frail IHAWP members

IHAWP enrollees who are determined medically exempt (in accordance with the federal definition of medically frail at 42 CFR 431.315(f)) are eligible for Medicaid State Plan benefits versus the IHAWP Alternative Benefit Plan (ABP). The broader range of options provided more access to behavioral health services and eliminated copays and premiums. Members deemed 'Medically Exempt' are removed from the study population for most analyses and are either considered a comparison population or additional target population, depending on the analytical strategy selected in each policy component.

Comparison Population: Adults in families that are income eligible for Medicaid (IE)

The IE group is composed of adult parents/guardians of children in Medicaid in families with incomes less than 50% FPL.

Comparison population: Eligible due to a Disability Determination (DD)

The DD group is composed of Medicaid State Plan members enrolled due to a disability determination. The FPL for these members may range from 0 to 200%. We utilize this

comparison group with caution as Medicaid members enrolled through disability determination may have different trends in cost and utilization than those Medicaid members who enroll due to income eligibility. We expect that their pre-program trends may be steeper. We will test the appropriateness of this comparison group empirically prior to their inclusion in analyses.

Figure 5 provides a visualization of the differences between our target and comparison groups as shown in Table 3 and Table 4. The IHAWP not Medically Exempt population is more likely to be split evenly between male and female, much like the disability determination population and the IHAWP Medically Exempt population, but unlike the income eligible population. The IHAWP not Medically Exempt population is also more likely to be younger than the income eligible population, the disability determination population, and the IHAWP Medically Exempt population.

Table 3. Comparison of Target Population with Three Medicaid Comparison Groups, pre- and post-COVID-19, Number of Members

	IHAWP not Medically Exempt		Income Eligible		Disability Determination		IHAWP Medically Exempt	
	2019	2022	2019	2022	2019	2022	2019	2022
Sex								
Female	104,500	117,996	73,211	99,145	19,858	19,477	14,927	21,904
Male	93,402	113,398	37,568	53,356	20,292	21,190	13,844	21,771
Race								
White	117,499	132,321	60,266	80,313	25,484	250,22	21,134	31,106
Black	18,022	21,480	13,899	18,401	5,069	5,162	1,927	2,995
Hispanic	13,571	18,910	10,700	16,714	1208	1,421	1029	1,952
American Indian	2,998	3,725	2268	3,284	524	598	648	913
Asian/Pacific Islander	6,282	7,870	2,446	4,623	355	353	250	495
Other/Unknown	39,530	47,088	21,200	29,166	7510	8,111	3783	6,214
Age								
19-21 years	26,971	23,825	3,625	6,110	1,660	1,988	649	983
22-30 years	54,731	68,442	22,663	27,521	5,704	5,500	5,996	7,810
31-40 years	45,414	54,353	24,408	36,318	6,278	6,688	7,550	11,000
41-50 years	31,669	39,144	11,046	17,953	6,583	6,471	6,610	9,948
51-64 years	39,117	45,630	49,037	64,599	19,925	20,020	7,966	13,934
Urban/Rural								
Metropolitan	119,617	142,903	65,047	90,939	23,936	24,557	17,535	26,512
Non-metro, urban	34,751	39,825	19,959	27,131	7,339	7,197	5,188	7,996
Non-metro, rural	43,534	48,666	25,773	34,431	8,875	8,913	6,048	9,167
Months of eligibility								
1-6 months	42,245	22,034	13,715	10,433	2,867	1,922	3,135	2,758
7-10 months	28,546	11,129	11,273	6,157	2,066	1,360	2,935	1,769
11-12 months	127,111	198,231	85,791	135,911	35,217	37,385	22,701	39,148
Total	197,902	231,394	110,779	152,501	40,150	40,667	28,771	43,675

Table 4. Comparison of Target Population with Three Medicaid Comparison Groups, CY 2022, Proportion of Members

	IHAWP not Medically Exempt	Income Eligible	Disability Determination	IHAWP Medically Exempt
Sex				
Female	51%	65%	48%	50%
Male	49%	35%	52%	50%
Race				
White	57%	53%	62%	71%
Black	9%	12%	13%	7%
Hispanic	8%	11%	3%	4%
American Indian	2%	2%	1%	2%
Asian/Pacific Islander	3%	3%	1%	1%
Other/Unknown	20%	19%	20%	14%
Age				
19-21 years	10%	4%	5%	2%
22-30 years	30%	18%	14%	18%
31-40 years	23%	24%	16%	25%
41-50 years	17%	12%	16%	23%
51-64 years	20%	42%	49%	32%
Urban/Rural				
Metropolitan	62%	60%	60%	61%
Non-metro, urban	17%	18%	18%	18%
Non-metro, rural	21%	23%	22%	21%
Months of eligibility				
1-6 months	10%	7%	5%	6%
7-10 months	5%	4%	3%	4%
11-12 months	86%	89%	92%	90%

Figure 1. Member Sex by Program Type by Year

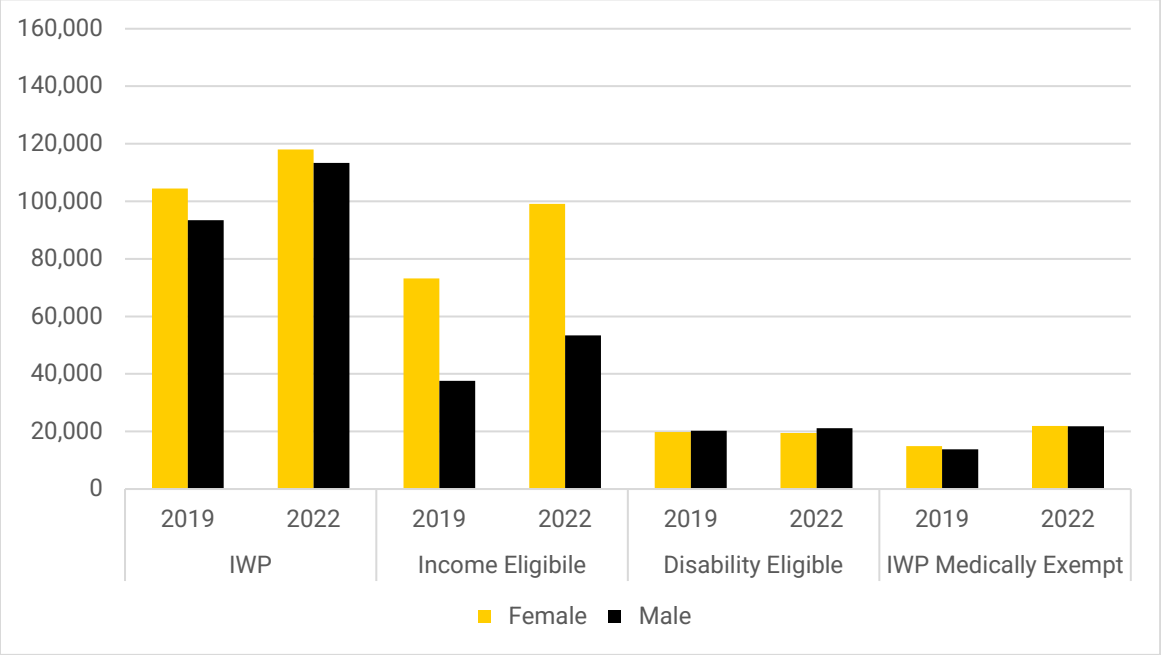


Figure 2. Member Race/Ethnicity by Program Type and Year

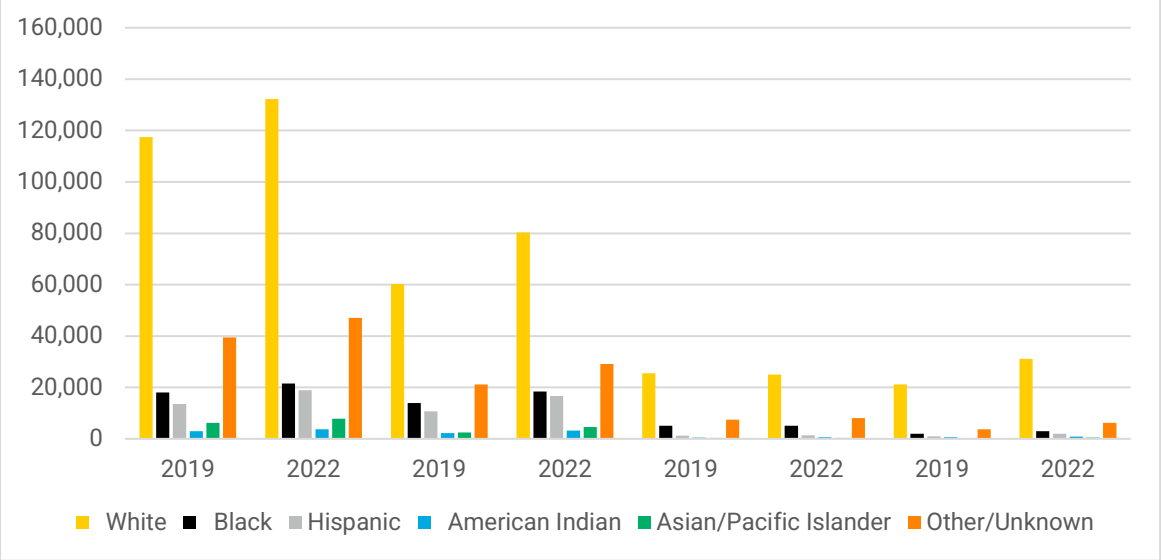


Figure 3. Member Rural/Urban Location by Program Type and Year

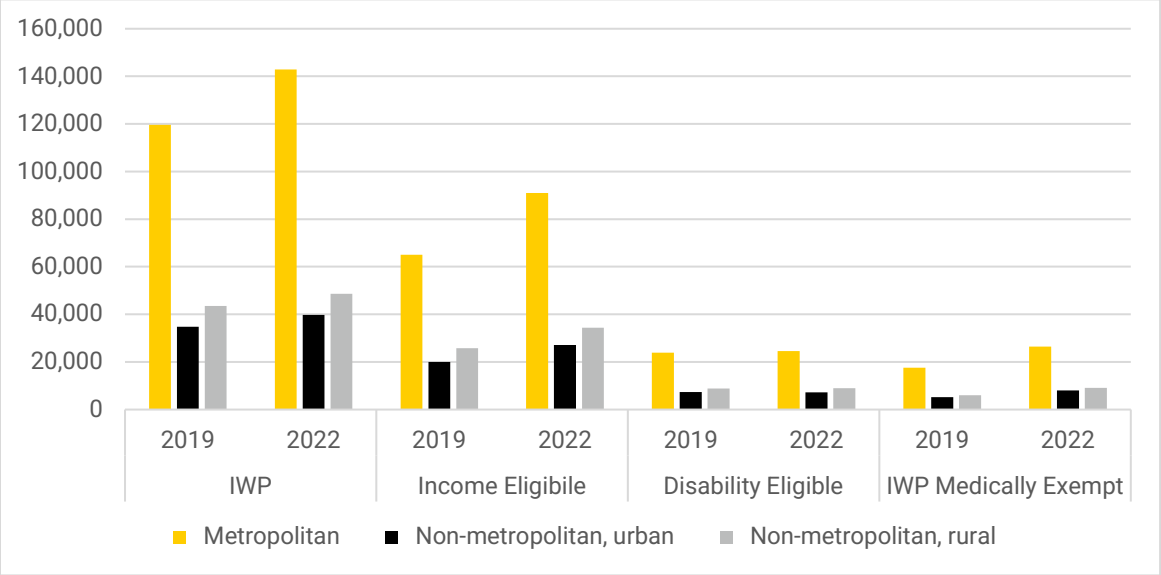


Figure 4. Member Age by Program Type and Year

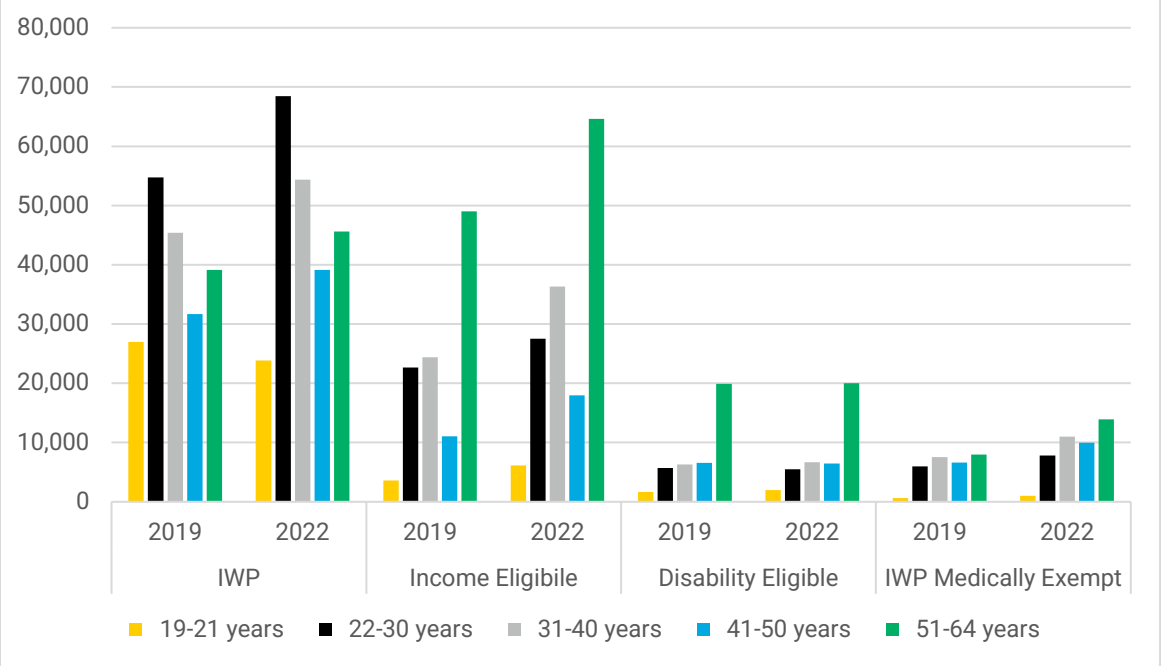
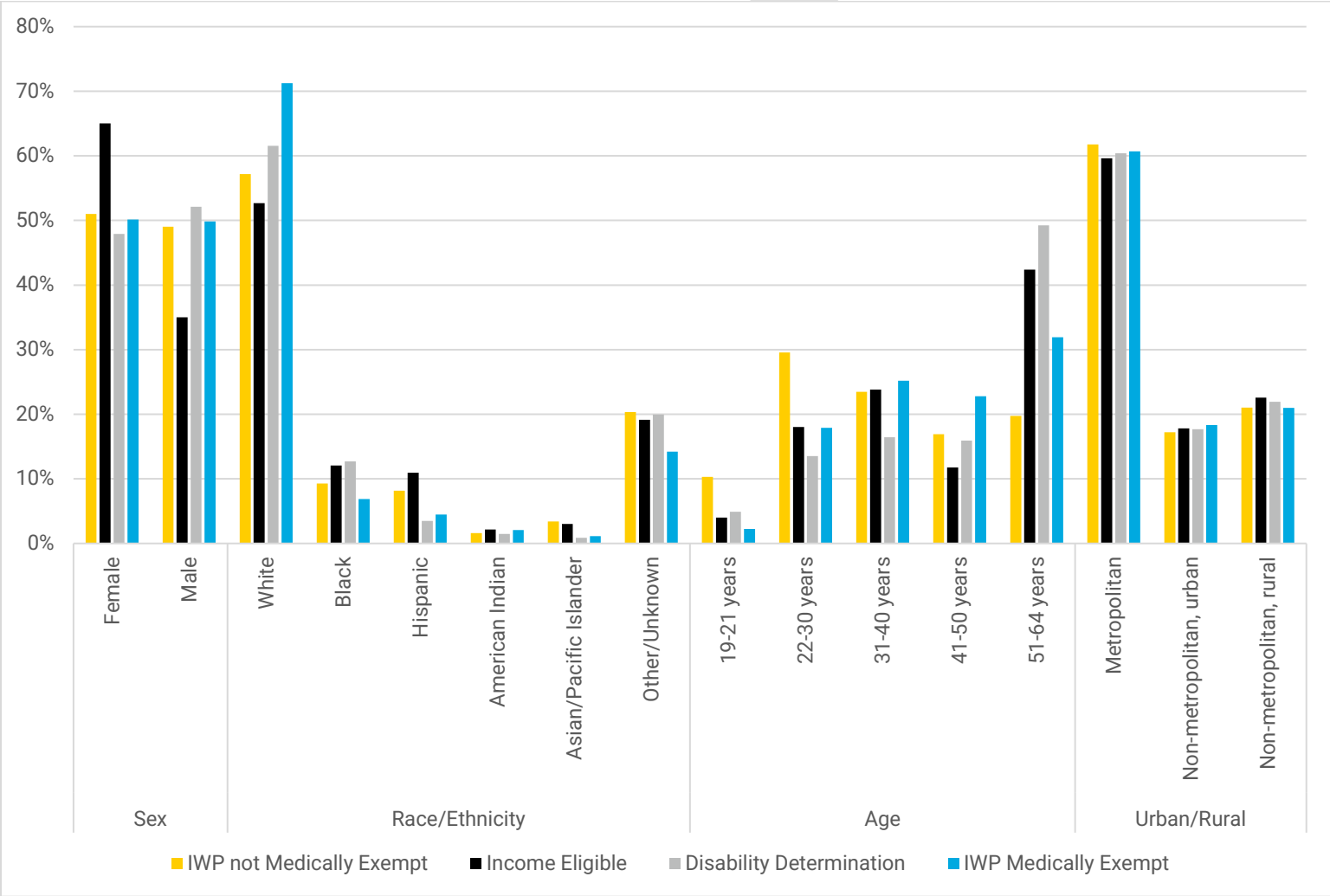


Figure 5. Member Demographics by Program Type, CY 2022



Target population: State of Iowa

For a variety of measures data for the entire state are utilized especially with regard to sustainability, outcomes driven by access to care such as Emergency Department (ED) use, and long-term effects of utilization changes driven through a focus on primary/preventive care such as avoidable hospitalizations.

As a state, Iowa is considered rural with just over 3 million residents. Of these 60% are between the ages of 19 and 64, 50% are female and 91% are white. The largest minority group in Iowa is Hispanic or Latino with 6%. The Black or African American population represents 4% of Iowans. The median income for Iowans is $58,000 with 11% of Iowans living in poverty. Over 85% report having a computer with nearly 80% reporting an internet subscription. Out of the 99 counties comprising Iowa, 20 are considered rural with no metropolitan area, and 58 are considered rural with metropolitan area. Twenty-one are considered urban metropolitan.

Comparison population: Other states

We utilized Synthetic Control Methods (SCM) to identify non-expanding and late expanding states as comparisons. See Appendix A. Additionally, the final choice of Kansas, Maine, Nebraska, and Utah was also driven by the cost of HCUP data and available covariates within the HCUP state inpatient and emergency department data sets.

Target population: Provider entities

Throughout the demonstration many policies and reimbursement/utilization strategies have operated through provider entities. For example, the $8 copayment for non-emergent ED use is charged by the ED. Additionally, many provider entities can choose what covered groups they would like to serve. Not all dentists or physicians are willing to see Medicaid members due to restrictive policies or poor reimbursements. Provider entities are an important target population to understand both the process and outcomes of demonstration activities.

Provider entities may include medical offices, dental offices, hospitals, long-term care facilities, and pharmacies.

Data sources

Secondary data

Iowa Medicaid Administrative files

A synopsis of administrative data types and sources that are used in this report are provided below.

1. Medicaid encounter and claims data
   Contains all claim and encounter data for Medicaid members during the evaluation

period. The data is housed within the Medicaid data repository and is updated monthly

2. Medicaid enrollment data
   Contains data regarding enrollment and eligibility maintenance such as MCO enrollment, presence of an exemption from any demonstration activities, and
   Housed within the Medicaid data repository with monthly updates
3. Medicaid provider certification data
   Housed within the Medicaid data repository with monthly updates

Data access

The University of Iowa has a data sharing Memorandum of Understanding (MOU) with the State of Iowa to utilize Medicaid claims, enrollment, encounter, and provider data for evaluation purposes.

Iowa Hospital Association inpatient and outpatient datasets

The Iowa Hospital Association houses all hospital claims (inpatient and outpatient) for the state of Iowa. These data are available for the period 2013-present. Currently University of Iowa houses the data for 2013-2021.

Data access

University of Iowa has an active DUA to receive, store, and access these data.

Healthcare Cost & Utilization Project (HCUP)

https://www.hcup-us.ahrq.gov/HCUP_Overview/HCUP_Overview/index.html
Synthetic control analyses have identified four non-expansion states with data from 2010-2020 for comparison purposes: Kansas, Maine, Nebraska, and Utah.

Data access

Data is purchased, awaiting access

Transformed Medicaid Statistical Information System (T-MSIS)

https://www.medicaid.gov/medicaid/data-and-systems/macbis/tmsis/index.html
Data for all non-expansion states and Minnesota will be accessed through ResDac and the CCW Virtual Data Research Center.

Data access

Awaiting CMS approval.

Public sources

Behavioral Risk Factor Surveillance System (BRFSS)

Harmonized data 2011-2020 utilized for synthetic control method.

American Community Survey (ACS)

Downloaded from IPUMS, utilized for synthetic control method.

Primary data collection

Surveys

Surveys with IHAWP members and providers were conducted to provide a consumer perspective and provider perspective about the program. Table 5 shows the different types of surveys that we have/are conducting for the IHAWP report. The sample sizes for these surveys are based on a combination of the power calculations that were conducted for the national CAHPS surveys, and our previous survey response rates for Iowa Medicaid enrollees.

Table 5. IHAWP Survey Projects – CY 2021-2024

Survey	Policy Component	Sample Size	Expected N	Field Periods	Incentives
HBI Phone	HBI	6,000	1,800	2021/2022, 2024	$2 pre; $10 GC post
DWP Member mail	DWP	12,000	2,400	In field	$2 pre; GC lottery
DWP Provider mail	DWP	1,300	585	7/23-10/23	$2 pre
New Enrollee Phone	Retroactive Eligibility	5,600	1,200	In field	$20
IHAWP Member mail	Member experiences; NEMT	4,500	900	7/22-10/22	$2 pre; GC lottery

Process evaluation

The IHAWP evaluation plan included a process evaluation to document and describe the implementation of IHAWP and its components. The process evaluation used primary and secondary data sources to determine the adherence to the strategies and plans as described in IHAWP demonstration.

The process evaluation examined the governance and execution of the IHAWP to provide context about the effectiveness of programming as measured by outcome metrics described in other parts of the evaluation plan. In addition, findings from the process evaluation may be used to improve outcome measures of the evaluation, such as informing language in survey items.

Secondary and primary data sources were coalesced to create a comprehensive depiction of the functions and management of IHAWP. The synthesis of these sources provide insight into programming vision, perceptions, governance dynamics, communication and management practices which have implications for the outcomes and strategic direction of IHAWP. Process measures were designed to describe the state of the program or some aspect of the program, but do not lend themselves to testing.

Environmental scan

Existing documents produced for IHAWP implementation were monitored, compiled and synthesized by the research team to track progress and diversions from original program description and objectives, a process known as an environmental scan. State and local secondary sources such as letters to providers, webpages, newsletters, and notices to members have been collected and stored. Two rounds of environmental scans were completed and covered the periods of March 2020–October 2021 and November 2021-October 2022.

Environmental scan data sources:

- Waiver documents
- Quarterly progress reports
- Meeting minutes
- Supplemental materials from relevant advisory groups or committees
- Informational letters
- Member materials (enrollment applications, member handbooks)_
- Contract and RFP documents
- Internal planning documents

Structured Key Informant interviews

Sampling and Recruitment

Sampling for key informant interviews was purposive and the identification of and connection to the target individuals was aided by contacts within the state agency. In the cases of the two statewide provider organizations, these key informants were identified based on participation in public meetings related to IHAWP polices, like the Medical Assistance Advisory Council (MAAC).

Interviewees were selected to represent people working in roles directly involved in implementing various components of IHAWP.

Interview content

Interviews were about 60 minutes long and topics for the interviews were developed to reflect the content of each program and target any areas which were not covered in the environmental scan or areas that could benefit from elaboration from a primary source. The interview guides were semi-structed, meaning questions were included systematically to represent the research questions relevant to each area of emphasis, but were few and open-ended to allow discussion to flow naturally. Interviewers were prepared with probing prompts when applicable for eliciting clarification, elaboration, summarizing reflections, and neutral active listening statements.

While the interview script was structured the same for all interviewees covering the four areas of emphasis, some stakeholders provided disproportionate interview references by topic area their organization was involved in (e.g., MCOs described nuances of role in administering HBI program)

Interview logistics

Group interviews were the chosen method for including multiple participants from a single organization. Because of the wide range of topics covered in the interview and depending on the team size and specialization of team members, several people were sometimes needed to respond to all aspects of the IHAWP waiver components. The group interview method aided in eliciting robust aggregate information from the organization, and mitigated incompleteness due to variations in each respondent's level of interaction with the demonstration. Individual and group interviews were conducted remotely, which eliminated costs associated with travel, enhanced scheduling flexibility to accommodate attendance of the most people, and suited the professional population, meaning interviewees were familiar with the remote interview tools and interface (i.e. zoom invitations in Outlook calendars). A team of two interviewers from the IHAWP evaluation team conducted interviews over video conference (Zoom). Video calls were audio recorded and professionally transcribed. In 2022 and 2023, 34 key informants were interviewed.

Table 6. Process Evaluation Key Informants

Key Informant Working Title	Organization	Report Year
Chief Operating Officer	MCO	2023
Case Management Team Lead x2	MCO	2023
Quality Director	MCO	2023
Director of Growth and Engagement	MCO	2023
Director of Quality Management	MCO	2023
Account Manager	Medicaid Member Services	2023
Operations Manager	Medicaid Member Services	2023
Income Maintenance Workers x3	Iowa Medicaid	2023
Vice President of Legislative and Government Affairs	MCO	2023

Key Informant Working Title	Organization	Report Year
Member-Provider Services Supervisor	MCO	2023
Care Management Manager	MCO	2023
Director of Care Management	MCO	2023
Operations Manager	MCO	2023
Member-Provider Services Manager	MCO	2023
Director of Operations and Provider Engagement	MCO	2023
Community Health Worker x2	Community Health Center	2023
Social Worker	Community Health Center	2023
Plan President	MCO	2022
Government Business Division Finance Director	MCO	2022
Medical Director	MCO	2022
Program Director	MCO	2022
Health Equity Director	MCO	2022
Director Medicaid Plan Marketing	MCO	2022
Chief Executive Officer	Organization to support providers of behavioral health and disability services	2022
Program Manager	Iowa Medicaid	2022
Policy Specialist	Iowa Medicaid	2022
Health Manager	Iowa Primary Care Association	2022
Director of Legal and Regulatory Affairs	Iowa Primary Care Association	2022
Plan President & CEO	MCO	2022

Key Informant Working Title	Organization	Report Year
Vice President, Population Health & Clinical Operations	MCO	2022

Interview analysis

The interview transcripts were uploaded into qualitative analysis software (NVivo) and coded into themes by a single coder. Some themes were pre-determined according to the structured script, and some were emergent and reflect the natural flow of conversations and provide additional context for the structured conversation. Codes were applied to pertinent pieces of interview content and results were reported as succinct theme summary statements, which included exemplary details of the content comprising themes. Reporting of themes followed the codebook structure, with nested sub-themes for content which was contrary, narrowly focused, and unique input (not generalizable to theme level).

Limitations

A sample of 32 clinics were selected for inclusion in the 2023 process evaluation report, based on volume of IHAWP members served according to Medicaid claims data. Clinics were contacted by phone and email 3-5 times each. Of the 32 clinics invited for an interview, only one clinic participated. Clinic representatives who declined interviews cited a lack of time to participate and difficulty coordinating appropriate representatives for the content areas. Because of the small sample size of clinic interviewees experiences reported cannot be generalized to other clinics in the state.

Another limitation of this research is we solicited representatives for their experiences implementing IHAWP. At times, experiences described by interviewees conflict with the delineated expectations and processes of IHAWP. Experiences reported should not be generalized or interpreted as the actual status of IHAWP components.

Analytic methods

The major analytical strategies used in this report are described below.

Bivariate analyses

T-tests and Chi-square tests are provided within the report to compare Medicaid groups across survey measures. Trend analyses are also provided for comparisons of change between groups over time.

Ordinary Least Squares (OLS)

OLS is utilized to predict survey-based outcomes

Methodological limitations

There are five primary sets of limitations within this evaluation: 1) those related to primary data, 2) limitations of secondary data, 3) program selection bias, 4) study populations, and 5) COVID-19 considerations.

Primary data

Primary data collection is based on self-reported information and the recall of the member. This can result in recall bias. Whenever possible, we couple primary data collection with secondary data collection and qualitative data providing an opportunity to describe and analyze hypotheses more fully.

Surveys response rates with Medicaid members in Iowa for this report ranged from 20-30%. Non-response bias tests are conducted to determine if the characteristics of respondents differ significantly from non-respondents on measured qualities.

Secondary data

Administrative data are collected for billing and tracking purposes and may not always reflect the service provided accurately. Payers focus on specific areas that may result in sudden changes in primary diagnoses or care patterns.

Program selection bias

There may be a propensity for enrollees who have the most to gain from insurance coverage to have accessed services earlier than those with less to gain. This has the potential to bias all the estimates of program effects on quality measures and costs for the period prior to Iowa Wellness Plan.

Study populations

Iowa Health and Wellness Plan has undergone many changes during the first demonstration period. In particular, certain aspects of IHAWP have been extended to the general Medicaid population, e.g., PAHP dental coverage, enrollment in MCOs. These changes make it more difficult to identify appropriate comparison populations.

COVID-19 considerations

The COVID-19 pandemic has disrupted established systems of care throughout our nation. Changes such as the increased use of telehealth, increased use of acute care related to COVID-19 concerns, and the avoidance of routine/chronic care make it necessary to adapt methods and analytics to adjust for these changes across all evaluation components.

We originally anticipated three impacts of COVID-19 on the evaluation plan, including methods, analytic considerations, and interpretation of findings. The first report outlining member responses to the PHE (Iowa Health and Wellness Plan COVID-19 Impacts Report included as a partner report) has been included with the current report suite as an added evaluation component.

Adjustments for COVID-19

Methods

At the member level we have created a person-month unit of analyses that utilizes dichotomous variables to identify key trigger points in an effort to estimate the effects of these changes. COVID-19 may also have implications for the comparison groups we use in our analyses. For example, in assessing member access and satisfaction with services, we rely on a national comparison group of CAHPS survey respondents. Our team will need to assess the appropriateness of this group given the different ways states have implemented policy changes related to COVID-19. Similarly, it becomes more and more difficult to identify comparison states as we now add COVID-19 exposure and responses to the list of characteristics that may need to be matched or accounted for.

During November 2021-July 2022 a survey of HBI members was conducted (sample 18,265, final N=2,832). The unadjusted response rate for this survey was low at 15.5%. We believe this was, in part, due to the poor quality of member demographic information related to the lack of disenrollment. Two factors related to the suspension of active disenrollment are at work here: 1) members have no incentive to provide information regarding moves or changes in phone number as there is no chance of losing coverage and 2) members, though not actively disenrolled, may be passively disenrolling and not informing the state that they are no longer using their benefits.

The full report is available at https://iro.uiowa.edu/esploro/outputs/report/Iowa-Health-and-Wellness-Plan-COVID-19/9984469459302771?institution=01IOWA_INST

Results from this survey indicated that 39% of members had contracted COVID-19 and 27% of members delayed medical care due to the COVID-19 pandemic. As we consider these results in amending analyses, we have eliminated the PHE years (2020-2022) from many analyses. However, where possible we will include these years along with interaction terms to account for COVID-19 effects. We are considering the elimination of calendar year 2020 due to the absence of proper diagnosis coding for COVID-19.

Table 7 lists ways that the COVID-19 pandemic, and associated policy changes impact the data, analyses and results of the IHAWP evaluation.

Table 7. Impact of COVID-19 on IHAWP Evaluation Plan

Topic Area	Examples of Potential Impact	Adjustment
Insurance Coverage Gaps and Churning	Monitor changes to churning due to people changing health insurance plans and losing eligibility Increased gaps in insurance coverage Decreased consecutive coverage	2019 will be the last year for churn and gap analyses in the final report. We are using ACS data to provide covariates of SDOH in multivariate analytics at the Census tract level
Dental Wellness Plan	Decreased access to dental care Provider willingness to accept new DWP members	Analyses will include time variant interaction terms to reflect policies that restricted dental practice during the PHE. Analyses will adjust for telehealth service utilization.
Outcomes	Decreased face-to-face primary care, dental, mental health, and preventive care visits.	Healthcare providers have transitioned to virtual appointments. Analyses will adjust for telehealth service utilization.

Timeline

The activities in the timeline below extend past the current waiver period and contract due to the delayed evaluation start date. Activities reflected in the timeline below are in the process of being adjusted to account for Medicaid policy adjustments during the PHE.

	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026
Reports																						
Interim Report																						
Summative Report																						
Process Evaluation																						
Document Review																						
Script development																						
Tiered interviews																						
Qualitative interview and content analysis																						
Healthy Behaviors																						
Claims-based analyses																						
Survey																						
Interviews																						
Dental Wellness Plan																						
Complete revised evaluation																						
Consumer survey																						
Dentist survey																						
Admin. claims outcomes																						

	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026
Member interviews																						
Retroactive Eligibility																						
Stakeholder interviews																						
Enrollment surveys																						
Claims analyses																						
Enrollment data analyses																						
State comparison																						
Provider interviews																						
Cost Sharing																						
Consumer surveys																						
Claims analyses																						
HCUP ER analyses																						
Cost and sustainability																						
Stakeholder interviews																						
Administrative documents																						
Claims analyses																						
IHA data analyses																						
State Comparisons																						
NEMT																						
Stakeholder interviews																						
Survey development																						
Survey data collection																						

	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026
Analyses																						
Member Experiences																						
Consumer survey development																						
Consumer survey data collection																						
Claims data analyses																						

Healthy Behaviors Incentive (HBI)

Executive summary

Key findings

- Survey data indicated that those who were enrolled since 2015 have the highest level of awareness at 47%. Those enrolled before the pandemic began (March 2020) report awareness of the HBI program at 35%, while 27% of those who only enrolled during the pandemic (when the HBI component was paused during the public health emergency) were aware of the program.
- For survey respondents, adjusted percents show higher awareness of the HBI program for White (37%) vs. Black (26%) and Hispanic members (24%) and for those with a 4-year degree (44%) vs. those with less education. Females also had higher adjusted rates than males.
- As members spend more time in the IHAWP program, the likelihood of having a well-visit during the year increases. For example, 40% of members with eight years of enrollment have a well-visit compared to 31% for members with only one year of enrollment.
- Health risk assessment completion remains low and is not as closely associated with time in the program; completion rates are between 10% and 15% for members regardless of the total number of years in the program.
- Of members enrolled for at least eleven months during the year, 41% have a well-visit while only 11% of members have a well-visit if they were enrolled six months or fewer.
- IHAWP members with higher incomes are significantly more likely to have well-visits during the year compared to members with lower incomes.

HBI General background information

One unique feature of the IHAWP is the Healthy Behaviors Incentive Program (HBI). IHAWP members who are above 50% of the Federal Poverty Level (FPL) can avoid paying a monthly premium for their insurance after their first year of coverage by participating in the HBI. Members who are at 0-50% of the FPL are not required to pay monthly premiums. The HBI requires members to have a yearly medical or dental exam (a wellness visit) and complete a health risk assessment (HRA) to avoid paying a premium in the following year. If the member does not complete these requirements during their first year of coverage, they may be required to pay a monthly premium ($5 or $10, depending on income). The member must then pay the monthly premium or claim financial hardship. Members who are above 100% FPL can be disenrolled for failure to pay their premium.

Starting in 2015, a monthly contribution by the member was required depending on family income. Members with incomes above 50% FPL and up to 100% FPL contributed $5 per month, while members with incomes above 100% FPL contributed $10 per month. Members with individual earnings 50% or less of the FPL did not have monthly contributions. IHAWP members who completed the wellness exam and the HRA were not responsible for a monthly contribution.

Members earning over 50% of the FPL were given a 30-day grace period after the enrollment year to complete the healthy behaviors to have the contribution waived. If members did not complete the behaviors after the grace period ended, members received a billing statement and a request for a hardship exemption form. For members with incomes above 50% FPL and up to 100% FPL, all unpaid contributions were considered a debt owed to the State of Iowa but would not, however, result in termination from the IHAWP. If, at the time of reenrollment, the member did not reapply for or was no longer eligible for Medicaid coverage and had no claims for services after the last premium payment, the member's debt would be forgiven. For members with incomes above 100% FPL, unpaid contributions after 90 days resulted in the termination of the member's enrollment status. The member's outstanding contributions were considered a collectable debt and subject to recovery. A member whose IHAWP benefits were terminated for nonpayment of monthly contributions needed to reapply for Medicaid coverage. The Iowa Medicaid Enterprise (IME) would permit the member to reapply at any time; however, the member's outstanding contribution payments would remain subject to recovery.

Wellness Exam and Health Risk Assessment

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 modifier 25 is used. The wellness exam definition was expanded in 2016 to include a dental exam (D0120, D0140, D0150, D0180). A health risk assessment (HRA) is a survey tool that can be used to evaluate a member's health. The Managed Care Organizations (MCOs) are currently encouraging members to complete an HRA. The format of the HRA differs by MCO.

Implementation of the HBI

There were several changes between the planned and actual implementation of the HBI in the original waiver period. Table 8 describes changes to the HBI program. The HBI was reapproved as part of the extension of the IHAWP effective January 1, 2020.

The HBI program was paused during the public health emergency. As of June 1, 2023, Iowa Medicaid has informed members that they should be completing their healthy behaviors. The program has not begun to implement premiums nor disenrollment based on not completing the behaviors and not paying the premiums.

Table 8. Changes to the Healthy Behaviors Incentive Program

Original Planned implementation	Actual implementation	Planned implementation 2020-2025	Changes due to public health emergency (PHE)
Wellness exam defined as CPT codes 99385, 99386, 99395, and 99396 or a "sick visit" with a modifier code of 25.	Members could report having a wellness exam without documentation. In year 2, a preventive dental exam also fulfilled the requirement.	No change.	Exams were not required.
Members needed to complete the Assess My Health HRA tool. The data would be available to IME, providers, and members.	This information is not shared with the providers or the members.	The MCOs are responsible for members completing the HRA.	HRA completion not required.
A communication campaign would ensure members, providers, and clinic staff awareness and knowledge of the program.	There were limited communication efforts.	Unknown.	Members informed of PHE and starting in June 2023 were encouraged to complete wellness exam & HRA.
Members were to be disenrolled for non-payment of contribution and not completing the HRA and wellness exam.	Systems were not in place to make disenrollment possible until the 4th quarter of the 2nd year.	Members are disenrolled for non-payment or not completing the HBI.	Members were not disenrolled.
Members could complete HRA online with/without provider.	Members could report having completed a HRA without documentation. Some health systems helped members complete the HRA over the telephone.	The mode of completion differs by MCO.	N/A

.HBI Goals

The goals of the Healthy Behaviors Incentive program that are included as part of the Iowa Health and Wellness Plan are designed to:

- Empower members to make healthy behavior changes.
- 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.

HBI Methodology

Evaluation design

This section describes our approach for the interim report. We provide a basic overview of the evaluation period and our data sources, including the identification of healthy behaviors.

One objective of these analyses is to document rates of HBI participation and assess HBI participation as a function of several member-level characteristics. Together, this will further our understanding of the extent to which members are engaging in the requirements outlined by the program. We further clarify which members are most and least likely to complete the activities required by the HBI program.

Evaluation period

For the interim report analyses, the claims-based evaluation of the HBI spans from January 2014 through December 2021

Data sources

For all HBI analyses presented in this report, we use Medicaid enrollment and claims data from January 2014 through December 2021 as well as the Iowa Medicaid Enterprise/Iowa Medicaid records on completion of wellness exams and health risk assessments from January 2014 through December 2021

Sample

We sampled from all members enrolled in IHAWP for a minimum of 12 consecutive months any time after January 1, 2014. We assign members to one of three income groups: a **low-income group (≤50% FPL)**, a **medium-income group (51 – 100% FPL)**, and a **high-income group (101 – 138% FPL)** reflecting the categories of incentives that apply to members in these income ranges.

Using monthly data, we created our sample using a rolling cohort method in which we identify the first 12 consecutive months in which a member was continuously and exclusively enrolled in IHAWP. For example, a member enrolled January 2014 through December 2014 would be in cohort 1, while a member enrolled February 2014 through January 2015 would be in cohort 2, and so on. If a member was enrolled for additional 12-month periods beyond their initial 12 months (e.g., a total of 24-, 36-, or 48-months of enrollment), they would be included in those cohorts as well. For example, a member enrolled March 2014 through February 2016 would be in cohort 3 from March 2014 to February 2015, cohort 15 from March 2015 to February 2016, and so on. Essentially, the cohort corresponds to the study month in which the member's 12-month continuous enrollment begins, and they enter a new cohort for each successive 12-month period. However, we will not keep partial years of data. For example, if a member was enrolled for 18 months, we will keep only their initial 12 months, and drop the other 6.

After assigning members to cohorts, we collapse the data to provide one observation per person per cohort. This method ensures that we retain as many Medicaid members in our sample as possible, while also ensuring that all members in our sample are exposed to a full year of the program, providing them equal opportunity for HBI participation, and corresponding to the period of time they have to complete activities before being charged a premium (excluding the additional 30-day grace period).

Identification of Healthy Behaviors and covariates

At the core of the HBI program is the requirement for members to complete both a wellness exam and a health risk assessment (HRA) each year to avoid paying a monthly premium the following year. Completion of these activities is identified in claims or reported by managed care organizations. In fact, members may also call the Iowa Department of Health and Human Services to report completion of the activities. Regardless of the mechanism by which the data are reported, Iowa Medicaid data are used to make official determinations regarding premium waivers for members, and therefore they are the data that we use to identify receipt of a wellness exam and HRA completion.

Methods for survey and interview data

HBI member survey

We conducted a member telephone survey during 2021-2022 during the public health emergency to serve as a baseline for the evaluation.

Panel Sample: The full sample frame for the survey (n = 18,265) was pulled from all IHAWP members in November 2021. Because of the public health emergency, we stratified the sample based on enrollment. We had 3 mutually exclusive groups: those enrolled for at least 6 months and who only became enrolled during the pandemic, those who were enrolled continuously before the pandemic, and those who were enrolled continuously since at least March 2015. This would allow us to look at these three different groups of members and compare them, with the understanding that their experiences and reasons for being enrolled in Medicaid would vary by group. These groups also allow us to look at the length of enrollment as an "exposure" to the program variable. Within these 3 groups, we sampled by age (19-39, 40-49, 50-59, and 60-64). We also sampled by gender as defined by the Medicaid data and race and ethnicity. We selected these additional groups to sample because past evaluations indicated that these groups participated in the survey at differing levels and had different rates of completing the healthy behaviors. For the 2024 survey, we will include all survey respondents who are still enrolled in IHAWP.

Survey protocol: Our survey protocol was informed by the latest research on survey design and our over 20 years of experience with this population. A pre-notification postcard was sent to members before the phone calls began and included information about how members could update their telephone numbers or indicate that they did not wish to participate.

The telephone survey was fielded by the Iowa Social Science Research Center at The University of Iowa. All survey staff were trained on the purpose of the evaluation, human subjects research protections, and the survey instrument. The research team provided specific HBI and Medicaid related information to the survey staff. Every member with a valid telephone number was contacted at least 8 times. At the beginning of the survey, the survey staff introduced the evaluation and reviewed confidentiality, the voluntary nature of participation, and consent was obtained. Those who completed the survey received a $10 gift card. Data collection started in December 2021 and was completed in June 2022. A total of 2,832 people responded to the telephone survey. The AAPOR standard Response Rate 3 (an industry standard for best practices in calculating response rates for telephone data collection projects of this nature) was 22.4%. A similar protocol will be used for the 2024 survey.

Survey measures: This survey serves as a baseline, most of the survey measures are derived from our previous surveys. These items capture self-report of awareness of the program, knowledge of specific program components, completion of the behaviors (HRA and wellness exam), facilitators and barriers to completion, perceptions of the program, self-efficacy, response efficacy, perceived susceptibility, perceived severity, and perceived benefits. We explore how the members received information about the program. The surveys include CAHPS measures and supplemental items. The supplemental items address issues specific to the healthy behaviors. We include several demographic and self-reported health items to be used as adjustment variables in the analyses. The 2021-2022 survey also included COVID-19 related questions.

Analysis: Survey data were weighted as appropriate based on our stratified sampling. For some research questions and hypotheses, descriptive statistics were sufficient. When we compared groups, we used t-tests or chi-squared tests.

Limitations/Challenges: The COVID-19 pandemic may affect our ability to collect accurate and relevant data. First, many survey participants were not aware that the HBI program was paused due to the public health emergency. It is not clear how confusion about the HBI program influenced the survey results we received. It is also not clear if participation in the survey was hampered because people were confused about the status of the program. Additionally, we are not able to assess if the survey respondents were members who under normal circumstances would have been disenrolled from the program and not eligible for participation in the survey. The inclusion of people who typically would be ineligible for the program could result in unknown bias.

HBI Evaluation Measures Summary

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach	
			Original	Revised
Hypothesis 1: The proportion of members who complete a wellness exam, health risk assessment, or both will vary.				
Research Question 1.1: What proportion of members complete a wellness exam in a given year?				
N/A	Binary indicator for completion of wellness exam	DHS Data and Medicaid Enrollment Data, 2014 – present	Univariate analysis stratified by income group, using t-tests to compare the mean completion rate between income groups	Unchanged for summative report
Research Question 1.2: What proportion of members complete an HRA in a given year?				
N/A	Binary indicator for completion of an HRA	DHS Data and Medicaid Enrollment Data, 2014 – present	Univariate analysis stratified by income group, using t-tests to compare the mean completion rate between income groups	Unchanged for summative report
Research Question 1.3: What proportion of members complete both a wellness exam and an HRA in a given year?				
N/A	Binary indicator for completion of both a wellness exam and an HRA	DHS Data and Medicaid Enrollment Data, 2014 – present	Univariate analysis stratified by income group, using t-tests to compare the mean completion rate between income groups	Unchanged for summative report
Hypothesis 2: The proportion of members completing a wellness exam, health risk assessment, or both will change over time and by income level.				
Research Question 2.1: Has the proportion of members completing a wellness exam decreased among lower-income members and increased among higher-income members?				
N/A	Binary indicator for completion of wellness exam	DHS Data and Medicaid Enrollment Data, 2014 – present	Univariate analysis stratified by year and income group, using t-tests to compare the mean completion rate between income groups and within income groups between years	Unchanged for summative report
Research Question 2.2: Has the proportion of members completing an HRA decreased among lower-income members and increased among higher-income members?				
N/A	Binary indicator for completion of an HRA	DHS Data and Medicaid Enrollment Data, 2014 – present	Univariate analysis stratified by year and income group, using t-tests to compare the mean completion rate between income groups and within income groups between years	Unchanged for summative report
Research Question 2.3: Has the proportion of members completing both required activities decreased among lower-income members and increased among higher-income members?				
N/A	Binary indicator for completion of both a wellness exam and an HRA	DHS Data and Medicaid Enrollment Data, 2014 – present	Univariate analysis stratified by year and income group, using t-tests to compare the mean completion rate between income groups and within income groups between years	Unchanged for summative report

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach	
			Original	Revised
Hypothesis 3: Member characteristics are associated with the likelihood of completing both required HBI activities.				
Research Question 3.1: Are older, non-Hispanic white females living in metropolitan counties more likely to complete both required activities?				
N/A	Completion of both a wellness exam and an HRA	DHS Data, Medicaid Claims 2010 – present, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), Census Data, American Community Survey	Multivariable modified Poisson regression model adjusting for member demographics and health status as well as social determinants of health and community level factors. In sensitivity analyses, we will use county-level fixed effects.*	Unchanged for summative report
Research Question 3.2: Are members assigned to some MCOs more likely than members assigned to other MCOs to complete both required activities?				
N/A	Completion of both a wellness exam and an HRA	DHS Data, Medicaid Claims 2010 – present, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), Census Data, American Community Survey	Multivariable modified Poisson regression model adjusting for member demographics and health status as well as social determinants of health and community level factors. In sensitivity analyses, we will use county-level fixed effects.*	Unchanged for summative report
Research Question 3.3: Is the length of time in the program positively associated with the likelihood of completing both required activities?				
N/A	Completion of both a wellness exam and an HRA	DHS Data, Medicaid Claims 2010 – present, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), Census Data, American Community Survey	Multivariable modified Poisson regression model adjusting for member demographics and health status as well as social determinants of health and community level factors. In sensitivity analyses, we will use county-level fixed effects.*	Unchanged for summative report
Research Question 3.4: Are members with more negative social determinants of health (Sodha) less likely to complete both required activities?				
N/A	Completion of both a wellness exam and an HRA	DHS Data, Medicaid Claims 2010 – present, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), Census Data, American Community Survey	Multivariable modified Poisson regression model adjusting for member demographics and health status as well as social determinants of health and community level factors. In sensitivity analyses, we will use county-level fixed effects.*	Unchanged for summative report
Research Question 3.5: Is the highest income group most likely to complete both required activities?				
N/A	Completion of both a wellness exam and an HRA	DHS Data, Medicaid Claims 2010 – present, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), Census Data, American Community Survey	Multivariable modified Poisson regression model adjusting for member demographics and health status as well as social determinants of health and community level factors. In sensitivity analyses, we will use county-level fixed effects.*	Unchanged for summative report

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach: Original	Analytic Approach: Revised
Hypothesis 4: Completing HBI requirements is associated with a member's use of the emergency department (ED).				
Research Question 4.1: Are members who complete the HBI requirements equally likely to have an ED visit?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's likelihood of having any ED visit	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors^	Unchanged for summative report
Research Question 4.2: Do members who complete the HBI requirements have fewer total ED visits annually?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's annual number of ED visits	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors^	Unchanged for summative report
Research Question 4.3: Are members who complete the HBI requirements less likely to have a non-emergent ED visit?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's likelihood of having any non-emergent ED visit (NYU Algorithm)	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors^	Unchanged for summative report
Research Question 4.4: Do members who complete the HBI requirements have fewer total non-emergent ED visits annually?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's annual number of non-emergent ED visits (NYU Algorithm)	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors^	Unchanged for summative report

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach: Original	Analytic Approach: Revised
Research Question 4.5: Are members who complete the HBI requirements less likely to have a 3-day, 7-day, or 30-day return ED visit?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's likelihood of having a 3-day return ED visit, Member's likelihood of having a 7-day return ED visit, Member's likelihood of having a 30-day return ED visit	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors^	Unchanged for summative report
Research Question 4.6: Do members who complete the HBI requirements have fewer total 3-day, 7-day, or 30-day return ED visits annually?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's annual number of 3-day return ED visits, Member's annual number of 7-day return ED visits, Member's annual number of 30-day return ED visits	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Descriptive statistics, time trends, bivariate analysis, multivariate analysis including propensity score adjusted models and DID models^	Unchanged for summative report
Hypothesis 5: Completing HBI requirements is associated with a member's use of hospital observation stays.				
Research Question 5.1: Are members who complete the HBI requirements equally likely to have a hospital observation stay?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's likelihood of having a hospital observation stay	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson regression model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report
Research Question 5.2: Do members who complete the HBI requirements have fewer total hospital observation stays annually?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's annual number of hospital observation stays	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson regression model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach	
			Original	Revised
Hypothesis 6: Completing HBI requirements is associated with a member's use of inpatient hospital care.				
Research Question 6.1: Are members who complete the HBI requirements equally likely to be hospitalized?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's likelihood of being hospitalized	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report
Research Question 6.2: Do members who complete the HBI requirements have fewer total hospitalizations annually?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's annual number of hospitalizations	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report
Research Question 6.3: Are members who complete the HBI requirements less likely to have a potentially preventable hospitalization?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's likelihood of experiencing a potentially preventable hospitalization	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach: Original	Analytic Approach: Revised
Research Question 6.4: Do members who complete the HBI requirements have fewer total potentially preventable hospitalizations annually?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's annual number of potentially preventable hospitalizations	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report
Research Question 6.5: Are members who complete the HBI requirements less likely to have a 30-day all-cause readmission?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's likelihood of experiencing a 30-day all-cause readmission	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report
Research Question 6.6: Do members who complete the HBI requirements have fewer total 30-day all-cause readmissions annually?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Member's annual number of 30-day all-cause readmissions	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach: Original	Analytic Approach: Revised
Hypothesis 7: Completing HBI requirements is associated with shifts in patterns of member's health care utilization.				
Research Question 7.1: Do members who complete the HBI requirements have fewer potentially preventable hospitalizations as a proportion of total hospitalizations?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Potentially preventable hospitalizations as a proportion of total hospitalizations	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report
Research Question 7.2: Do members who complete the HBI requirements have fewer non-emergent ED visits as a proportion of total ED visits?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Non-emergent ED visits as a proportion of total ED visits	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report
Research Question 7.3: Do members who complete the HBI requirements have more primary care visits as a proportion of total outpatient visits?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Primary care visits as a proportion of all outpatient visits	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach: Original	Analytic Approach: Revised
Hypothesis 8: Completing HBI requirements is associated with a member's health care expenditures.				
Research Question 8.1: Do members who complete the HBI requirements have lower spending in all categories?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	Total health care expenditures, Inpatient health care expenditures, Potentially preventable hospitalization expenditures, Outpatient health care expenditures, Primary care expenditures, ED health care expenditures, Non-emergent ED health care expenditures, Pharmacy expenditures	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	Bivariate analysis, comparing means of members who completed vs. did not complete required activities within each income group using t-tests. Multivariable modified Poisson model among our propensity score matched sample, adjusting for member demographics and health status as well as social determinants of health and community-level factors.^	Unchanged for summative report
Hypothesis 9: We will identify disparities in the relationships between HBI completion and outcomes.				
Research Question 9.1: Do disparities exist in the following populations- high utilizers, members with multiple chronic conditions, members with OUD, members from racial and ethnic groups, rural members, and by sex?				
DID and/or propensity score matching based on all-or-none completion of HBI requirements.†	As defined above for research questions 4.1 – 4.6, 5.1 – 5.2, 6.1 – 6.6, 7.1 – 7.3, and 8.1	DHS Data and Medicaid Enrollment Data, Area Health Resources File, Social Vulnerability Index (replaces Area Deprivation Index), American Community Survey, DHS Social Determinants of Health data, 2014 – present, if available	We will repeat the analyses outlined for research questions 4.1-4.6, 5.1-5.2, 6.1-6.6, 7.1-7.3, and 8.1, using interaction terms and/or running stratified models to identify differences in the association between HBI participation and outcomes among the following groups of members: High utilizers (those in the top quintile for number of outpatient, ED, and/or hospital visits) Members with multiple chronic conditions (defined categorically as 0/1, 2-3, 4+) Members with opioid use disorder Race/Ethnicity, Rurality, Sex	This will be completed for the summative report with the exception of the analyses of members with opioid use disorder (OUD) as this data will not be available.

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach Original	Revised
Hypothesis 10: Members who have been enrolled longer are more aware of the HBI program than those who have been enrolled a shorter period of time.				
Research Question 10.1: What is the level of awareness about the HBI program among members?				
Members with awareness of the HBI program and those without awareness	Existing survey items on awareness	HBI Phone Survey 2021-2022 & 2024	Descriptive statistics, t-tests	Unchanged for summative report
Research Question 10.2: How long are members enrolled in the program?				
Members with awareness of the HBI program and those without awareness	Length of enrollment	Eligibility data	Chi-square, t-test	Unchanged for summative report
Research Question 10.3: Is there a relationship between length of enrollment and awareness of the HBI program?				
Members with awareness of the HBI program and those without awareness	Length of enrollment	Eligibility data	Chi-square, t-test	Unchanged for summative report
Hypothesis 11: Members who have been enrolled longer have more knowledge about the HBI program than those who have been enrolled a shorter period of time.				
Research Question 11.1: What specific knowledge about the HBI program do members report?				
Members with knowledge of the HBI program and those without	Existing survey items on knowledge	HBI Phone Survey 2024 Interviews	T-test Qualitative analysis	Unchanged for summative report
Research Question 11.2: Do members understand the incentive/disincentive part of the HBI program?				
Members with knowledge of the HBI program and those without	Existing survey items on knowledge	HBI Phone Survey 2024 Interviews	T-test Qualitative analysis	Unchanged for summative report
Research Question 11.3: Do members know they need to pay a premium monthly?				
Members with knowledge of the HBI program and those without	Existing survey items on knowledge	HBI Phone Survey 2024 Interviews	T-test Qualitative analysis	Unchanged for summative report.

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach	
			Original	Revised
Research Question 11.4: Do members know about the hardship waiver?				
Members with knowledge of the HBI program and those without	Existing survey items on knowledge	HBI Phone Survey 2024	T-test	Unchanged for summative report
		Interviews	Qualitative analysis	
Research Question 11.5: How long have members been enrolled?				
Members with knowledge of the HBI program and those without	Length of enrollment	Eligibility data	T-test	Unchanged for summative report
Hypothesis 12: Those who are aware of the HBI program are more likely to complete the behaviors (HRA and well exam) compared to those who were not aware.				
Research Question 12.1: What is the level of awareness of the HBI program?				
Completion of behaviors of members with awareness will be compared to completion for those without awareness	Existing survey items on awareness	HBI Phone Survey 2021-2022 (wellness exam only), 2024	Chi square, Modified Poisson regression	Unchanged for summative report
Research Question 12.2: What is the level of completion of the HRA and well exam?				
Completion of behaviors of members with awareness will be compared to completion for those without awareness	Binary indicator of completing both a wellness exam and HRA	DHS claims data	Chi square, Modified Poisson regression	Unchanged for summative report

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach: Original	Analytic Approach: Revised
Hypothesis 13: Those who have more knowledge about the HBI program are more likely to complete the behaviors (HRA and well exam) compared to those with less knowledge.				
Research Question 13.1: What is the level of knowledge about the HBI program?				
Completion of the behaviors of members with knowledge about the program will be compared to completion of behaviors for those without knowledge of the program	Existing survey items on program knowledge	HBI Phone Survey 2021-2022 (wellness exam only), 2024	Chi-square, Modified Poisson regression	Unchanged for summative report
Research Question 13.2: What is the level of completion of the HRA and well exam?				
Completion of behaviors of members with awareness will be compared to completion for those without awareness	Binary indicator of completing both a wellness exam and HRA	DHS claims data	Chi-square, Modified Poisson regression	Unchanged for summative report
Hypothesis 14: Members socio-demographic characteristic and perceptions/attitudes are associated with awareness of the HBI program.				
Research Question 14.1: What is the level of HBI program awareness?				
Members based on HBI program awareness	Existing survey items on awareness	HBI Phone Survey 2021-2022, 2024 Interviews	Chi-square, Modified Poisson regression Qualitative analysis	Unchanged for summative report
Research Question 14.2: What socio-demographic characteristics (age, gender, income, education, employment, race, and ethnicity) of members?				
Members based on HBI program awareness	Existing demographic survey items	HBI Phone Survey 2021-2022, 2024 Interviews	Chi-square, Modified Poisson regression Qualitative analysis	Unchanged for summative report

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach: Original	Analytic Approach: Revised
Research Question 14.3: What are the perceptions/attitudes (self-efficacy, response efficacy, perceived susceptibility, perceived severity, and perceived benefit) of members?				
Members based on HBI program awareness	Existing survey items on perceptions and attitudes	HBI Phone Survey 2024	Chi-square, Modified Poisson regression	Unchanged for summative report
		Interviews	Qualitative analysis	
Hypothesis 15: Members socio-demographic characteristic and perceptions/attitudes are associated with knowledge of the HBI program.				
Research Question 15.1: What is the level of HBI program knowledge?				
Members based on HBI program knowledge	Existing survey items on program knowledge	HBI Phone Survey 2021-2022, 2024	Descriptive statistics, Modified Poisson regression	Unchanged for summative report
		Interviews	Qualitative analysis	
Research Question 15.2: What socio-demographic characteristics (age, gender, income, education, employment, race, and ethnicity) of members?				
Members based on HBI program awareness	Existing demographic survey items	HBI Phone Survey 2021-2022, 2024	Logistic regression; Modified Poisson regression	Unchanged for summative report
		Interviews	Qualitative analysis	
Research Question 15.3: What are the perceptions/attitudes (self-efficacy, response efficacy, perceived susceptibility, perceived severity, and perceived benefit) of members?				
Members based on HBI program awareness	Existing survey items on perceptions and attitudes	HBI Phone Survey 20224	Modified Poisson regression, Modified Poisson regression	Unchanged for summative report
		Interviews	Qualitative analysis	
Hypothesis 16: Members socio-demographic characteristic and perceptions/attitudes are associated with completion of the HRA and well exam.				
Research Question 16.1: What is the level of completion of the HRA and well exam?				
Members based on completion of HRA and well exam	Existing survey items on HRA and well exam completion	HBI Phone Survey 2024	Descriptive statistics, Modified Poisson regression	Unchanged for summative report
		Interviews	Qualitative analysis	
Research Question 16.2: What are the socio-demographic characteristics (age, gender, income, education, employment, race, and ethnicity) of members?				
Members based on completion of HRA and well exam	Existing demographic survey items	HBI Phone Survey 2024	Logistic regression, Modified Poisson regression	Unchanged for summative report
		Interviews	Qualitative analysis	
Research Question 16.3: What are the perceptions/attitudes (self-efficacy, response efficacy, perceived susceptibility, perceived severity, and perceived benefit) of members?				
Members based on completion of HRA and well exam	Existing survey items on perceptions and attitudes	HBI Phone Survey 2024	Modified Poisson regression	Unchanged for summative report
		Interviews	Qualitative analysis	

Comparison Strategy	Outcome Measure(s)	Data sources	Analytic Approach Original	Revised
Hypothesis 17: Members are most likely to hear about the HBI program from their MCO.				
Research Question 17.1: Where are members learning about the HBI program and program components?				
Compare sources of information	Existing survey items on where members learn about HBI program	HBI Phone Survey 2021-2022, 2024	Descriptive statistics	Unchanged for summative report
Hypothesis 18: Members report difficult in using hardship waiver.				
Research Question 18.1: What are the perceptions of the ease of use of the hardship waiver?				
N/A	Existing survey items on perception of hardship waiver and barriers to using hardship waiver	HBI Phone Survey 2024 Interviews	Descriptive statistics Qualitative analysis	Unchanged for summative report
Research Question 18.2: What are the challenges members reporting in using the hardship waiver?				
N/A	Existing survey items on perception of hardship waiver and barriers to using hardship waiver	HBI Phone Survey 2024 Interviews	Descriptive statistics Qualitative analysis	Unchanged for summative report
Hypothesis 19: Members who do not complete the HRA and well exam report barriers to completing the behaviors.				
Research Question 19.1: What are the barriers to completing the HRA and wellness exam as reported by the members?				
N/A	Existing measure of barriers to completion of HRA and well exam	HBI Phone Survey 2021-2022, 2024 Interviews	Descriptive statistics Qualitative analysis	Unchanged for summative report
Hypothesis 20: Disenrolled members report no knowledge of the HBI program. No Disenrollments will occur during the waiver				
Hypothesis 21: Disenrolled members describe confusion around the disenrollment process. No Disenrollments will occur during the waiver				
Hypothesis 22: Disenrolled members report consequences to their disenrollment. No Disenrollments will occur during the waiver				

†In analyses designed to test the relationship between completion of HBI requirements and various health care utilization and spending outcomes, we will use propensity score matching to reduce unobserved confounding between members who do and do not complete the requirements. Specifically, we will model the likelihood of completing the HBI requirements and will match members who completed both required activities to members who completed none of the required activities based on their propensity scores using nearest neighbor matching. Members who completed only one of the two required activities will be excluded. After matching, we will visually inspect the covariates to confirm that our target and control groups are balanced with respect to observed covariates.

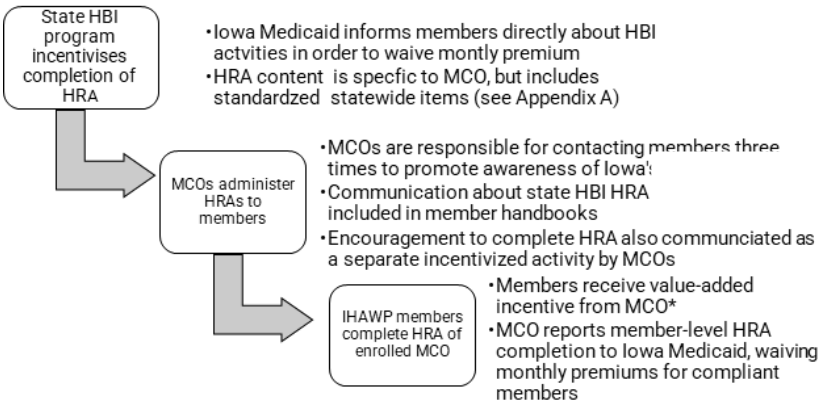
**We will estimate either modified Poisson or ordinary least squares regression models (depending on whether our outcomes are binary, count, or continuous). In some cases, there will be no comparison group. In other cases, we will estimate our models among our propensity score matched sample as described above and earlier in the table that presents our analytic approach. All models will adjust for member demographics including age, gender, race/ethnicity, rurality, and income-group. All models will also adjust for members' health status using a subset of health conditions, including chronic conditions indicators, the number of times during the year that a member's residence changes, an indicator of the MCO in which the member is enrolled, the member's total years of enrollment (as a running count of cohorts), and a cohort fixed effect. Finally, we will adjust for other contextual factors drawn from the Area Health Resources File, CDC Social Vulnerability Index, and the American Community Survey.*

^We will also conduct sensitivity analyses. For example, in lieu of the specific contextual factors described previously, we will adjust for all observed and unobserved variation at the county level using fixed effects. This has the advantage of better controlling for omitted variables but results in a limited ability to identify specific factors. Where feasible, we will also explore the use of individual-level fixed effects for the same reason. Finally, to assess the extent to which there is a dose-response relationship between completing the HBI requirements and our outcomes of interest, we will define our key independent variable in those models as a running count of the number of HBI requirements completed during the period in which a member was enrolled.

HBI Results

HBI Process evaluation

Figure 6. Summation of Healthy Behaviors Incentive Program Process as Described by Key Stakeholders



**Each MCOs value-added benefits (e.g., sending members gift cards) are completely independent from state HBI administration*

Efforts to promote the HBI Program

Stakeholders indicated that Iowa Medicaid and the MCOs used the following methods to communicate with members about the HBI program:

- Member handbooks
- Mailed letters (occasional neon paper): "*We helped them create actually a letter so for a mailing. And they wanted us to use this mailing, so it's one of three letters. There's one that says you still need to complete your screener. You still need to complete your wellness, or you still need to complete both. And so, we email those out 60 days, I believe 60 days prior to the member's annual enrollment date. And so that's just on a rolling basis. So, we're mailing those out monthly to the members that have their annual enrollment date coming up.*" – MCO representative
- Information posted to state and MCO websites
- Texting (cell phone)
- Telephone calls (incoming and outgoing): "*Our call center agents are trained with the appropriate information should they receive a question when a member engages there as well.*" – MCO representative
- Flyers
- Postcards (occasional neon paper)
- Website

Several stakeholders perceived HBI-information campaigns to approach overcommunication (described by some as "ongoing," "nonstop" and "bombarded").

Members' experiences as reported by interviewees

Some interviewees indicated that the promotion campaigns from the state and the MCOs could be challenging for members because of the number of reminders. Another MCO representative commented on the saturated nature of communication efforts, which motivated a change in strategy, saying,

> *"we used to call members as part of that [HBI-related communication] too. And we've stopped that, or actually I stopped that because I think it was causing some abrasion. I just don't think that was a very effective method and people were getting irritated by that. So, we moved to strictly mailers."*

Regarding the MCOs contractual obligation to contact members at least 3 times before removing them from completion reporting denominator, one MCO representative said,

> *"we get feedback from some members saying they think three is a lot and they're not very happy about it."*

The role of MCO in promoting Healthy Behaviors

Representatives from the MCOs reported that the HBI program added to the administrative duties of the MCOs, MCO-based caseworkers' effort in assisting members in navigation of HBI requirements and value-added incentives, the MCOs developed and implemented multi-method communication campaigns and reminders related to HBI, and caseworker time is spent verifying HRA responses, as reported by an MCO representative,

> *"if we get things and they're surveys and they're incomplete, we're calling members reaching out to try to clarify that information."*

One MCO reported strategies to bolster member participation and encourage provider involvement in completion of healthy behaviors, saying,

> *"We've got marketing materials that we promote the screener with and wellness exams. We do education with our providers around the importance of completing this. We've got different reps assigned to the clinics and so they do some education there with it. We do texting campaigns and call campaigns for our members to get them in for their wellness exams."*

One MCO representative commented on the tracking of member compliance with the state's HBI requirements, noting occasional instances of under-reporting credit for completing an MCO HRA within the state's premium enforcement system, but included that MCOs were involved in resolving erroneous premium charges, saying

> *"they've said for some reason I got charged a premium and they'll call us. And we said, 'Yeah. We can see that you completed these things.' So, I mean, generally, or my understanding has been that if the member talks with Iowa Medicaid and says they completed this, that Iowa Medicaid generally waives that requirement, but I know that our case managers have helped facilitate some of that, I believe."*

Regarding member options to complete an HRA to fulfill IHAWP expectations, one MCO reported options to complete the HRA over the phone or in the MCO's member portal. The other MCO reported members are able to complete the MCO's HRA on the web, through

mail (paper HRA), or over the phone. One MCO elaborated on preferences for maintaining up-to-date data in member HRA completion, saying,

> *"we encourage our members to complete it on the web, just because that is the quickest way the information is funneled directly into our system obviously, for them to get a reward and, or make sure that we've captured that data to have their premium waived."*

The role of Clinic Staff in promoting Healthy Behaviors

Clinic staff reported that patients bring mail from Iowa Medicaid and MCOs to the clinic, seeking advice, which staff assist with, saying,

> *"A lot of times I tell people I help, 'If you get anything in the mail, bring it in.' I give them a folder, 'Keep it all in here and I'll help you explain it. I'll help explain it to you. I'll help you fill out the paperwork.' A lot of patients do that with me. I've been here long enough that they know that. Some, yeah, no, they never got anything. Or they move a lot and their mail's three addresses ago."*

It should be noted that while clinic staff are increasing healthcare access for members by assisting with their mail, this work may also be viewed as a "spillover" effect; work that staff do that is not necessarily outlined in their job description.

Iowa Medicaid

Representatives of the state Medicaid program indicated the following administrative duties which were a result of the HBI program:

- Issuing refunds to members erroneously charged premiums
- Coordinating data sharing with MCOs and ensuring accuracy of member completion rates
- Quarterly member completion compliance reporting to CMS
- Coordination of and staff time participating in workgroups to develop program implementation specifics

HBI Quantitative Results

Hypothesis 1: The proportion of members who complete a wellness exam, health risk assessment, or both will vary.

Research Question 1.1: What proportion of members complete a wellness exam in a given year?

Research Question 1.2: What proportion of members complete an HRA in a given year?

Research Question 1.3: What proportion of members complete both required activities in a given year?

As Table 9 shows, there is an overall increase in the percentage of members completing a well-visit over the years of enrollment in the program, with the greatest percentage (39.28%) being in the 8th year. Further evaluation shows that this pattern of increases in

wellness exams over the number of years in the program is statistically significant. The pattern for completion of HRA or of both required activities is less consistent over the years of enrollment. The percentage of people completing either HRA or both activities each year is smaller than the percentage of those completing a well-visit. The largest proportion of members (9.2%) completing both a well-visit and HRA was in the 6th year of enrollment in HBI.

Table 9. Percentages of Members Completing a Well-Visit, an HRA, or Both Required Activities Each Year of Enrollment in HBI, Between 2014 and 2021

HBI year	Had well-visit (%)	Had HRA (%)	Had both well-visit and HRA (%)
1	31.38	14.64	8.61
2	30.59	12.05	7.52
3	32.28	14.79	8.74
4	34.17	10.59	6.82
5	35.34	11.82	7.62
6	37.05	14.33	9.2
7	37.59	12.37	7.39
8	39.28	13.36	8.41

There is an increasing trend in the percentage of members completing a well-visit, an HRA, or both required activities based on the duration of enrollment in a given year (Table 10). Around 40% of members who have been enrolled in HBI for 11 or 12 months completed a well-visit versus roughly 11% of those who have only been enrolled for less than 6 months (this difference is statistically significant). Similarly, a little over 11% of those enrolled for 11 or 12 months completed both activities relative to only 1.15% of members who have been enrolled for half a year or less (these differences are statistically significant).

Table 10. Percentages of Members Completing a Well-Visit, an HRA, or Both Required Activities by Enrollment Duration in Months, Between 2014 and 2021

Months	Had well-visit (%)	Had HRA (%)	Had both well-visit and HRA (%)
0 to 6	10.77	3.74	1.15
7 to 10	27.79	10.19	5.14
11 or 12	40.53	17.69	11.27

Similar to the findings from Table 10, Table 11 shows that a greater percentage of members enrolled in the HBI program for more months complete either or both of the required activities. Furthermore, for a certain period (e.g., 11 or 12 months), a higher

percentage of members who have been in the program for more years complete a well-visit overall. The pattern is less consistent for completion of HRA or both well-visits.

Table 11. Percentage of Members Completing a Well-Visit, HRA, or Both by Enrollment Duration in Months, Each Year in the Program, Between 2014 and 2021

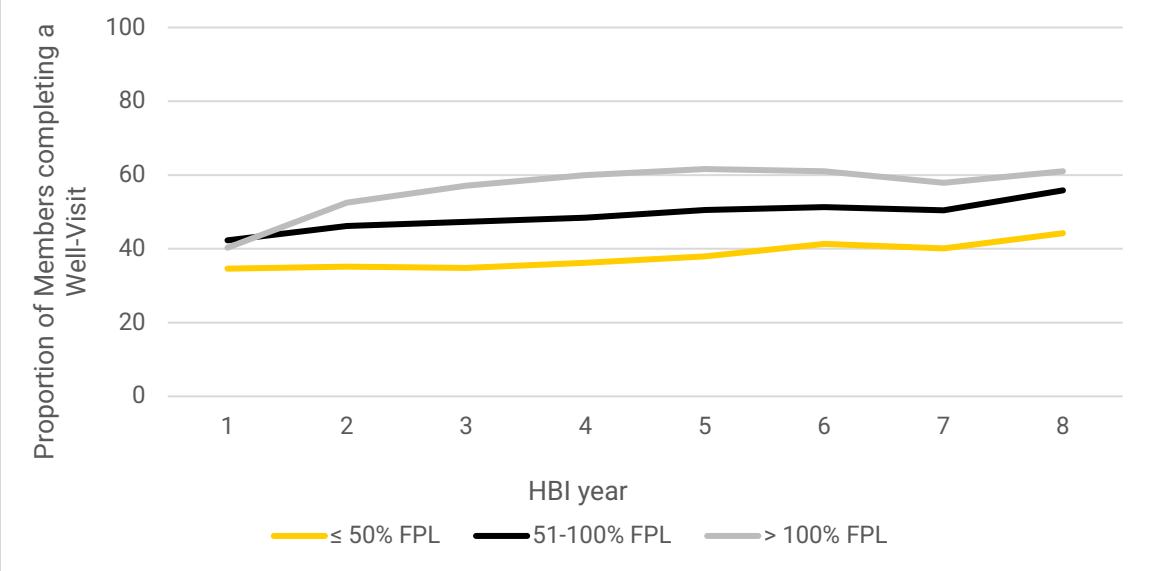
Months	HBI year	Had well-visit (%)	Had HRA (%)	Had both well-visit and HRA (%)
0 through 6	1	10.43	3.7	1.15
	2	10.06	3.56	1.14
	3	11.28	4.05	1.17
	4	12.08	3.57	1.01
	5	12.51	3.87	1.05
	6	12.85	4.41	1.47
	7	16	5.42	1.62
	8	16.33	5.75	1.77
7 through 10	1	25.09	10.56	5.03
	2	29.77	10.07	5.54
	3	28.54	11.38	5.38
	4	29.72	7.45	4.07
	5	29.19	7.85	4.38
	6	33.15	9.96	5.94
	7	34.29	10.68	4.96
	8	39.13	12.27	7.29
11 or 12	1	38.14	18.3	11.23
	2	41.69	16.94	11.26
	3	42.01	20.04	12.62
	4	43.24	13.77	9.48
	5	44.97	15.53	10.67
	6	47.3	19	12.81
	7	45.58	15.05	9.8
	8	49.54	17.16	11.79

Hypothesis 2: The proportion of members completing a wellness exam, health risk assessment, or both will change over time and by income level.

Research Question 2.1: Has the proportion of members completing a wellness exam decreased among lower-income members and increased among higher-income members?

A greater proportion of members belonging to the highest income group (>100% FPL) complete a well-visit, followed by members belonging to the middle-income group (51–100% FPL), and then by members with the lowest income level (≤50%) (Figure 7). We conducted a series of tests to analyze the differences among the three groups across the years of HBI. We compared individuals with incomes over 100% of the Federal Poverty Level (FPL) to those with incomes between 51% and 100% of the FPL, finding statistically significant differences each year. Similarly, the differences between individuals with incomes below 50% of the FPL and those with incomes between 51% and 100% of the FPL (and those with incomes higher than 100% of FPL) were also statistically significant across all years.

Figure 7. Trends in Completion of a Well-Visit by Income Level Between 2014 and 2021

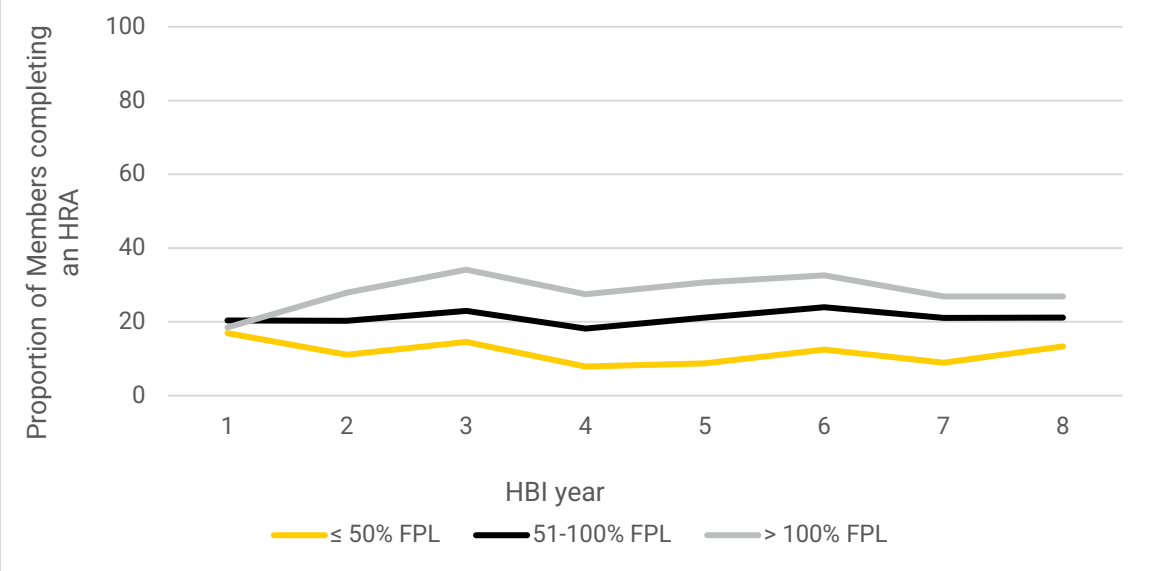


Research Question 2.2: Has the proportion of members completing an HRA decreased among lower-income members and increased among higher-income members?

A greater proportion of members belonging to the highest income group (>100% FPL) complete an HRA, followed by members belonging to the middle-income group (51–100% FPL), and then by members with the lowest income level (≤50%) (Figure 8Figure 8). Completion trends by number of years in the program are relatively flat across all income groups. We conducted a series of tests to analyze the differences among the three groups across the years of HBI. We compared individuals with incomes over 100% of the Federal Poverty Level (FPL) to those with incomes between 51% and 100% of the FPL, finding statistically significant differences each year. Similarly, the differences between individuals with incomes below 50% of the FPL and those with incomes between 51% and

100% of the FPL (and those with incomes higher than 100% of FPL) were also statistically significant across all years.

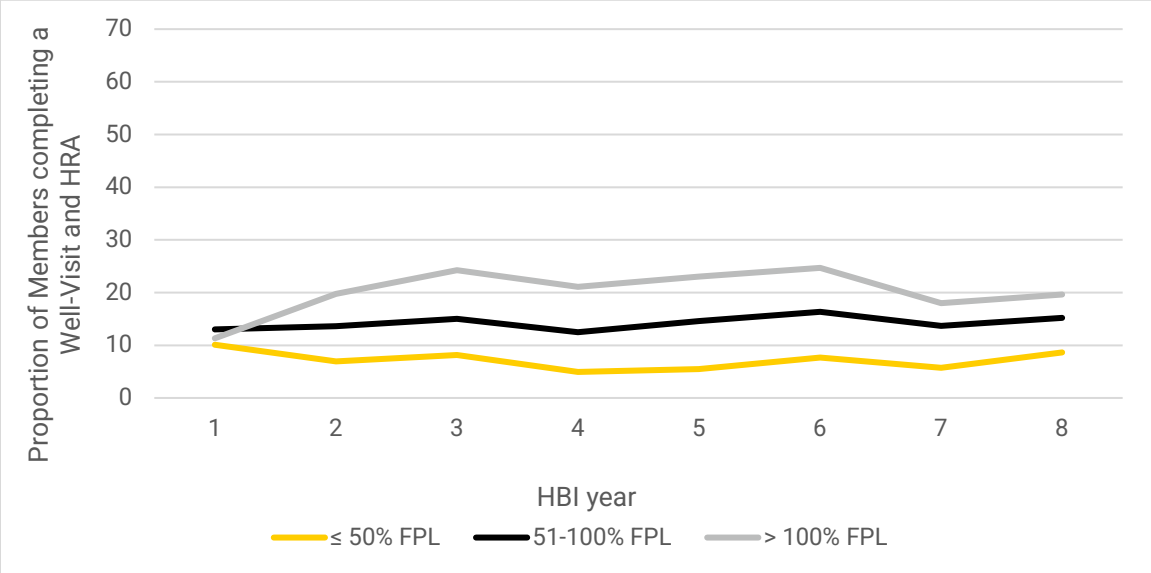
Figure 8. Trends in Completion of an HRA by Income Level Between 2014 and 2021



Research Question 2.3: Has the proportion of members completing both required activities decreased among lower-income members and increased among higher-income members?

A greater proportion of members belonging to the highest income group (>100% FPL) complete both required activities, followed by members belonging to the middle-income group (51–100% FPL), and then by members with the lowest income level (≤50%) (Figure 9). We conducted tests to examine the statistical significance of the differences across the groups when comparing the proportion of individuals completing an HRA. In all enrollment years, the differences were statistically significant when comparing individuals with incomes over 100% of the Federal Poverty Level (FPL) to those with incomes between 51% and 100% of the FPL, as well as when comparing those with incomes between 51% and 100% of the FPL to those with incomes below 50% of the FPL.

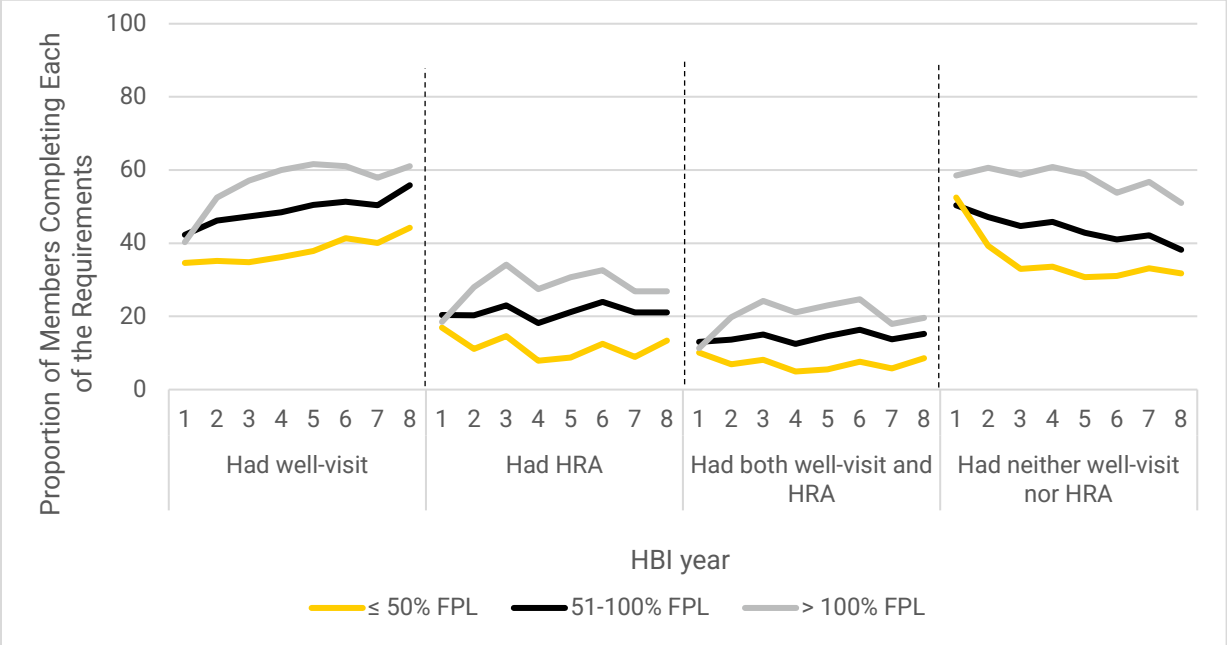
Figure 9. Trends in Completion of Well-Visit and HRA by Income Level Between 2014 and 2021



Overall, the percentage of members completing well-visits is higher than the percentage of those completing an HRA, or both required activities, among all three income groups.

Conversely, a greater proportion of members belonging to the lowest income group (≤50% FPL) complete neither of the required activities, followed by members belonging to the middle-income group (51–100% FPL), and then by members with the highest income level (>100% FPL) (Figure 10). We also conducted tests to examine the statistical significance of differences across the groups for completing an HRA and completing a wellness visit. For all enrollment years, the differences were statistically significant when comparing individuals with incomes over 100% of the Federal Poverty Level (FPL) to those with incomes between 51% and 100% of the FPL, as well as when comparing those with incomes between 51% and 100% of the FPL to those with incomes below 50% of the FPL.

Figure 10. Trends in Completion of a Well-Visit, an HRA, Both, or Neither of the Required Activities by Income Level Between 2014 and 2021

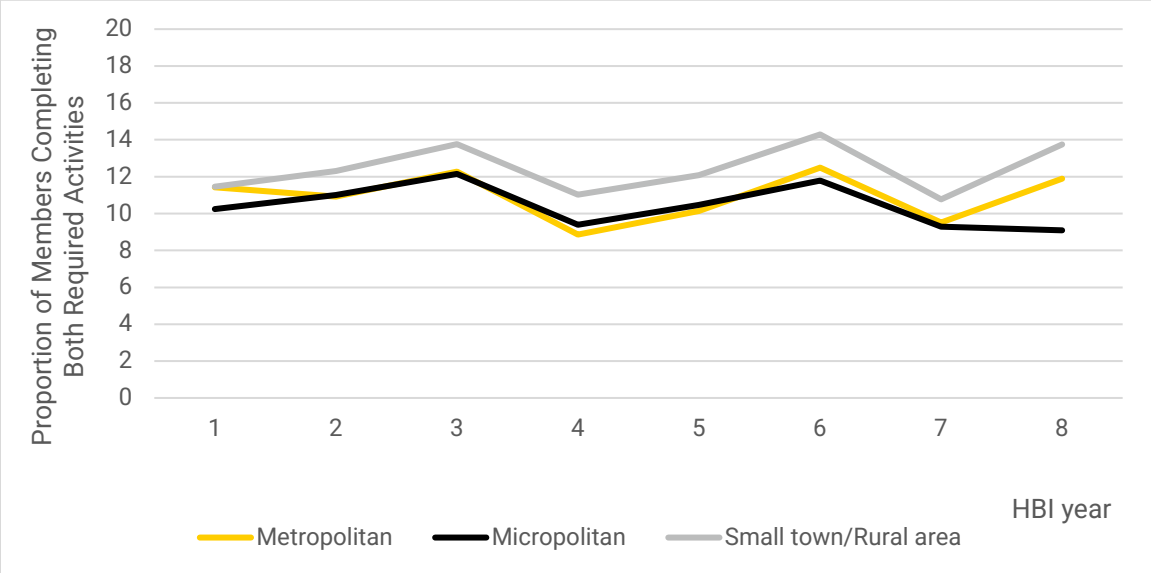


Hypothesis 3: Member characteristics are associated with the likelihood of completing both required HBI activities.

Research Question 3.1: Are older, non-Hispanic white females living in metropolitan counties more likely to complete both required activities? (differences by age and sex will be included in the summative report).

A greater proportion of members residing in small towns/rural areas tend to complete both required activities over time compared to counterparts residing in metropolitan or micropolitan areas (Figure 11). Members living in metropolitan and micropolitan areas tend to have similar trends in completion of both activities over time, although a higher percentage of people residing in metropolitan areas completed both activities in their 8th year in the program compared to micropolitan residents whose percentage completing both activities decreased in the 8th year. Moreover, tests were conducted and confirm that differences between the proportion of members completing both activities in metropolitan areas compared to small/ town/rural areas is statistically significant across all years, with the exception of year 1 in the program.

Figure 11. Trends in Completion of a Well-Visit and HRA by Type of Residence Area Between 2014 and 2021

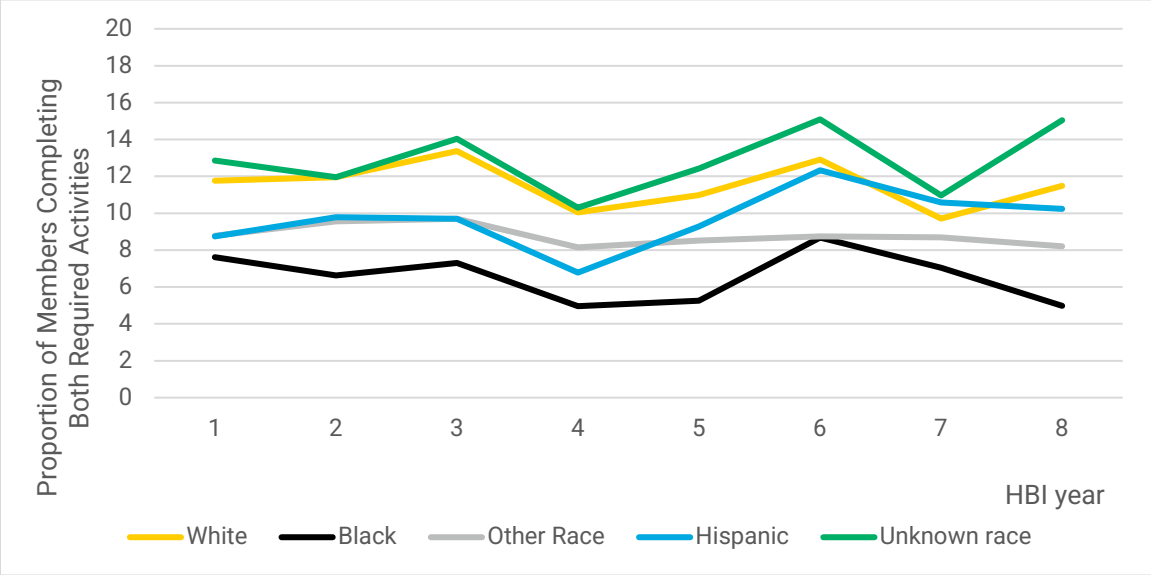


Note: 1,070 observations are missing

The Black population has the smallest percentage of members completing both required activities over time compared to other races/ethnicities (Figure 12). People with "unknown race" have the highest percentages of members completing both activities over time. Overall, populations follow a broadly similar pattern over time, with the highest percentage of members completing both required activities being in the 6th year. We compared the statistical significance of the differences in completing both required activities among the White, Black, and Hispanic populations across all years. The differences were statistically significant across all three groups, with a p-value of less than 0.000 when comparing the White population to the Black population, the White

population to the Hispanic population, and the Black population to the Hispanic population.

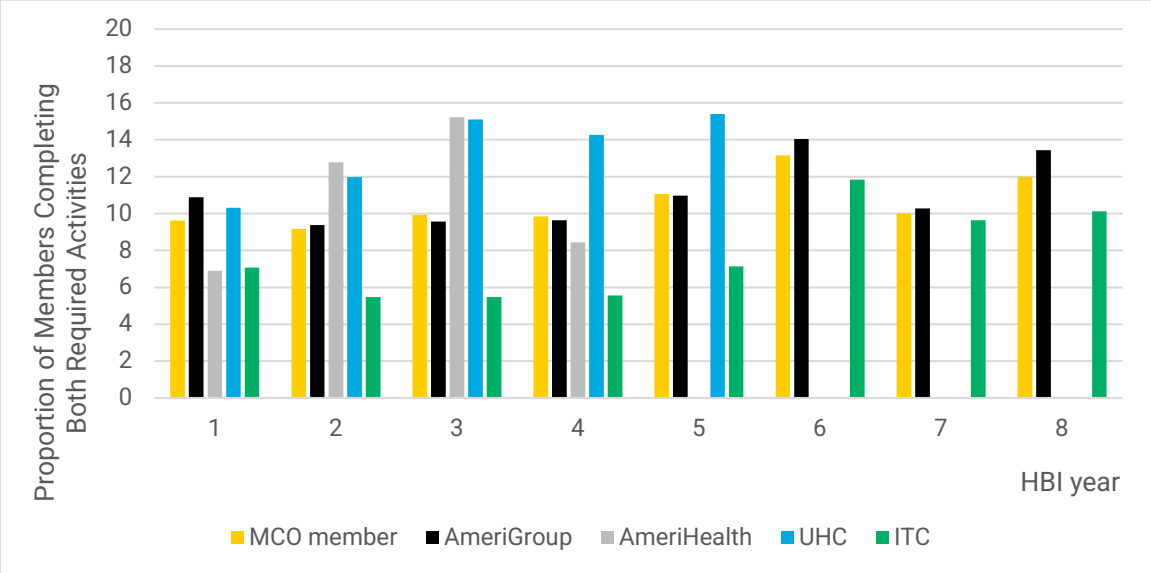
Figure 12. Trends in Completion of Well-Visit and HRA by Race and Ethnicity Between 2014 and 2021



Research Question 3.2: Are members assigned to some MCOs more likely than members assigned to other MCOs to complete both required activities?

With the changes in MCO participation, there is no regular pattern of change over time in the percentages of members completing both required activities by MCO membership status (i.e., MCO versus non-MCO beneficiary), or by MCO type (i.e., AmeriGroup, AmeriHealth, UHC, or ITC beneficiary) (Figure 13). Overall, the percentage of MCO members completing both activities is fairly stable over the first 4 years of HBI enrollment. The proportion of members starts to increase in the 5th year and reaches the highest percentage in year 6, followed by some decrease and increase in the 7th and 8th years, respectively. For members in the two MCOs that were available in all years of current data (Amerigroup and Iowa Total Care (ITC)), we compared rates of activity completion and found Amerigroup members were significantly more likely to complete both activities across the number of years members were in the HBI program (with the exception of those in the program seven years).

Figure 13. Trends in Completion of Well-Visit and HRA by MCO Membership Status and Type Between 2014 and 2021



Research Question 3.3: Is the length of time in the program positively associated with the likelihood of completing both required activities?

Referring to Table 11, length of time in the HBI program is positively associated with the likelihood of having a well-visit, confirmed with statistical tests comparing differences by years in the program. However, the length of time in the HBI program is less predictive of completing an HRA, with the likelihood staying in relatively tight range (11% to 15%) as the years in the program increases. Moreover, there is not a consistent pattern nor any statistically significant differences over time. That pattern

repeats for the likelihood of completing both activities with no clear differences as years in the program increases.

Research Question 3.4: Are members with more negative social determinants of health (SDoH) less likley to complete both required activities?

This outcome will be included in the summative report, we are still working on the group of traits we will use for our SDoH

Research Question 3.5: Is the highest income group most likely to complete both required activities?

Referring to Figures 7-11, the highest income group is most likely to complete both required activities. This pattern was also confirmed with statistical testing showing the highest income group is more likely to compete both activities compared to the other groups and the second highest income group is more likely to complete these activities compared to the income exempt group.

Hypothesis 4: Completing HBI requirements is associated with a member's use of the emergency department (ED).

Data compilation and modeling in progress, outcomes will be included in final report. Please refer to the Revised HBI Data sources, Analysis Methods, and Measures for a complete description of the added analysis components, including DID analyses.

Medicaid claims and enrollment files through CY 2022 are compiled. ED visits for these analyses will include all outpatient ED that did not results in a transfer to another hospital or an inpatient stay. Completed lists of ED visits as defined by the Iowa HHS have been collected and coded for analysis. The John's Hopkins ACG system has been purchased and claims have been processed to determine level of emergency - 1) non-emergent, 2) emergent, primary care treatable, 3) emergent, ED care needed and potentially preventable or avoidable with timely and effective ambulatory care, 4) emergent, ED care needed, and not preventable, 5) injuries, 6) psychiatric conditions, 7) alcohol use, 8) drug use, and 9) unclassified.

Research Question 4.1: Are members who complete the HBI requirements equally likely to have an ED visit?

Research Question 4.2: Do members who complete the HBI requirements have fewer total ED visits annually?

Research Question 4.3: Are members who complete the HBI requirements less likely to have a non-emergent ED visit?

Research Question 4.4: Do members who complete the HBI requirements have fewer total non-emergent ED visits annually?

Research Question 4.5: Are members who complete the HBI requirements less likely to have a 3-day, 7-day, or 30-day return ED visit?

Research Question 4.6: Do members who complete the HBI requirements have fewer total 3-day, 7-day, or 30-day return ED visits annually?

Hypothesis 5: Completing HBI requirements is associated with a member's use of hospital observation stays.

Data compilation and modeling in progress, outcomes will be included in final report. Please refer to the Revised HBI Data sources, Analysis Methods, and Measures for a complete description of the added analysis components, including DID analyses.

Medicaid claims and enrollment files have been compiled through CY 2022. Observation stays are a relatively unique area of investigation requiring additional investigation to ensure the latest coding is utilized. Currently, we code all outpatient ED visits not resulting in an inpatient stay with an observation stay code and all observation only visits as observation stays.

Research Question 5.1: Are members who complete the HBI requirements equally likely to have a hospital observation stay?

Research Question 5.2: Do members who complete the HBI requirements have fewer total hospital observation stays annually?

Hypothesis 6: Completing HBI requirements is associated with a member's use of inpatient hospital care.

Data compilation and modeling in progress, outcomes will be included in final report. Please refer to the Revised HBI Data sources, Analysis Methods, and Measures for a complete description of the added analysis components, including DID analyses.

Medicaid claims and enrollment files have been compiled through CY 2022. Inpatient visits are currently being categorized utilizing HEDIS specifications and avoidable hospitalization coding through the AHRQ QI software.

Research Question 6.1: Are members who complete the HBI requirements equally likely to be hospitalized?

Research Question 6.2: Do members who complete the HBI requirements have fewer total hospitalizations annually?

Research Question 6.3: Are members who complete the HBI requirements less likely to have a potentially preventable hospitalization?

Research Question 6.4: Do members who complete the HBI requirements have fewer total potentially preventable hospitalizations annually?

Research Question 6.5: Are members who complete the HBI requirements less likely to have a 30-day all-cause readmission?

Research Question 6.6: Do members who complete the HBI requirements have fewer total 30-day all-cause readmissions annually?

Hypothesis 7: Completing HBI requirements is associated with shifts in patterns of member's health care utilization.

Data compilation and modeling in progress, outcomes will be included in final report. Please refer to the Revised HBI Data sources, Analysis Methods, and Measures for a complete description of the added analysis components, including DID analyses.

Research Question 7.1: Do members who complete the HBI requirements have fewer potentially preventable hospitalizations as a proportion of total hospitalizations?

Research Question 7.2: Do members who complete the HBI requirements have fewer non-emergent ED visits as a proportion of total ED visits?

Research Question 7.3: Do members who complete the HBI requirements have more primary care visits as a proportion of total outpatient visits?

Hypothesis 8: Completing HBI requirements is associated with a member's health care expenditures.

Data compilation and modeling in progress, outcomes will be included in final report. Please refer to the Revised HBI Data sources, Analysis Methods, and Measures for a complete description of the added analysis components, including DID analyses.

Research Question 8.1: Do members who complete the HBI requirements have lower spending in all categories?

Hypothesis 9: Disparities exist in the relationships between HBI completion and outcomes.

Data compilation and modeling in progress, outcomes will be included in final report. Please refer to the Revised HBI Data sources, Analysis Methods, and Measures for a complete description of the added analysis components, including DID analyses.

Research Question 9.1: Do disparities exist in the populations based on number of chronic conditions, race and ethnicity, rurality, and sex?

Hypothesis 10: Members who have been enrolled longer are more aware of the HBI program than those who have been enrolled a shorter period of time.

Figure 14 shows awareness of the HBI Program at 35% as reported by survey respondents.

This hypothesis appears to be supported as there is relationship between awareness of the HBI program and length of enrollment. In Figure 15, awareness of the HBI program is compared by length of enrollment. Those who were enrolled since 2015 have the highest level of awareness at 47%. Those enrolled before the pandemic began (March 2020) report awareness of the HBI program at 35%, while 27% of those who only enrolled during the pandemic are aware of the program.

Figure 14. Weighted Percent of Respondents Aware of the HBI Program (N=2,832)

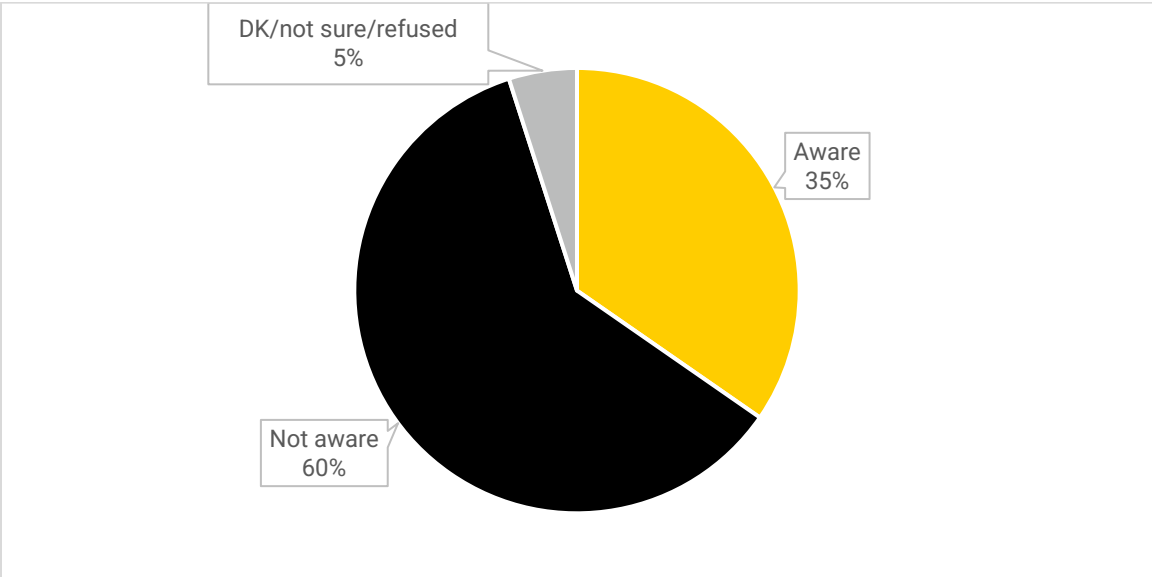
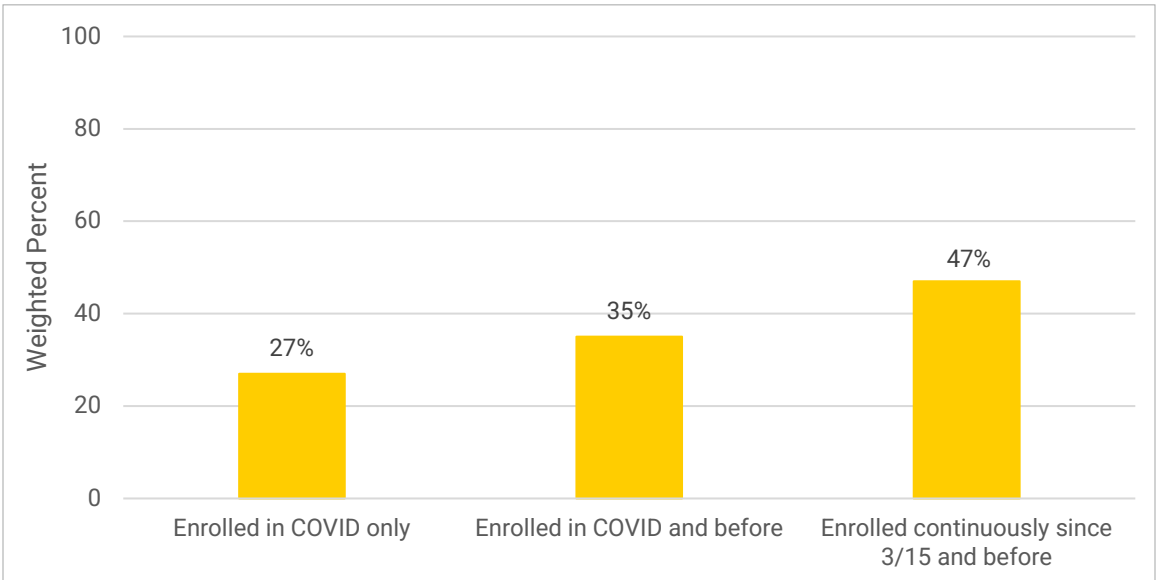


Figure 15. Percent of Respondents Aware of the HBI Program by IHAWP Enrollment Duration (N=2,832)



Chi-square p<.05, Don't know coded as not aware

Hypothesis 11: Members who have been enrolled longer have more knowledge about the HBI program than those who have been enrolled a shorter period of time.

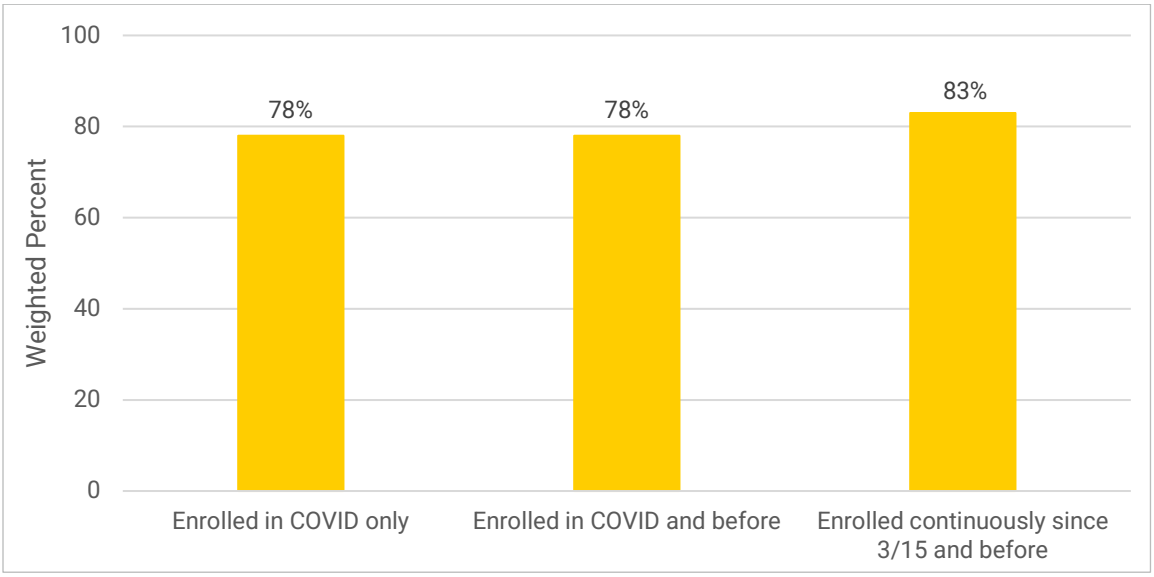
Due to the public health emergency, we were unable to ask members about their knowledge of the HBI program. Table 12 shows reported understanding of health insurance coverage. Many members agreed that they understood their coverage and benefits (59%) but only 18% strongly agreed with this. Just under 20% indicated strong agreement that they understood their insurance plan premiums or strong agreement that they understood what to do to prevent disenrollment prior to the pandemic.

Table 12. Understanding of Specific Aspects of their Health Insurance Plan as Reported by Respondents (N= 2,832)

Statement/Response	Weighted Percent
I understand my insurance coverage and benefits	
Strongly disagree	2%
Disagree	8%
Neither agree nor disagree	12%
Agree	59%
Strongly agree	18%
Don't know/not sure/refused	1%
I understand my insurance plan's premiums	
Strongly disagree	3%
Disagree	11%
Neither agree nor disagree	13%
Agree	52%
Strongly agree	19%
Don't know/not sure/refused	2%
Prior to the pandemic, I understood what I needed to do to prevent from being disenrolled from my insurance	
Strongly disagree	6%
Disagree	15%
Neither agree nor disagree	12%
Agree	45%
Strongly agree	17%
Don't know/not sure/refused	5%

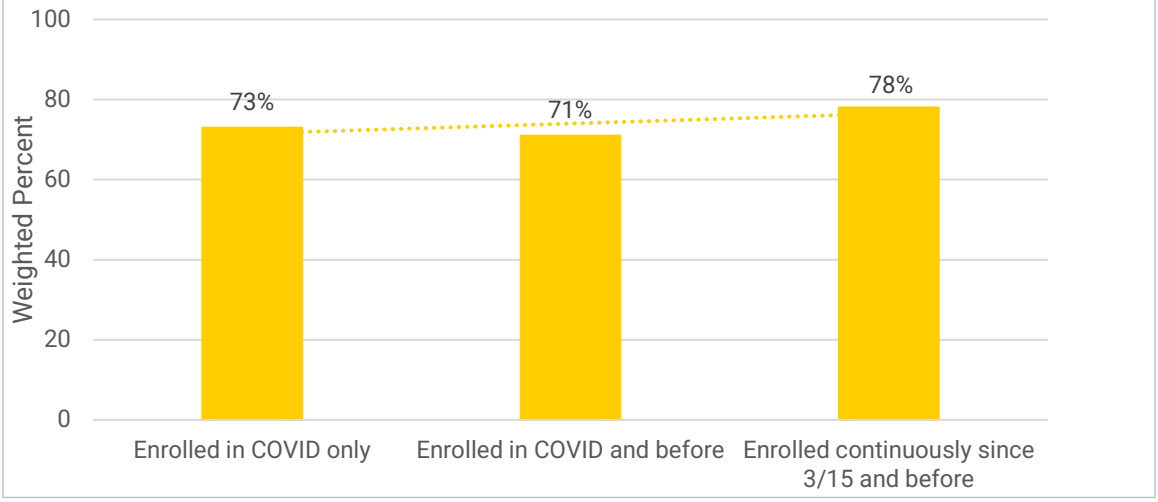
Figure 16-Figure 18 show reported health plan knowledge by IHAWP enrollment duration. Enrollment duration was not associated with overall health plan understanding. The continuously enrolled group also reported the highest rate of understanding how to prevent disenrollment prior to the pandemic.

Figure 16. Percent of Respondents who Agreed or Strongly Agreed they Understood their Insurance Coverage and Benefits by IHAWP Enrollment Duration (N=2,806)



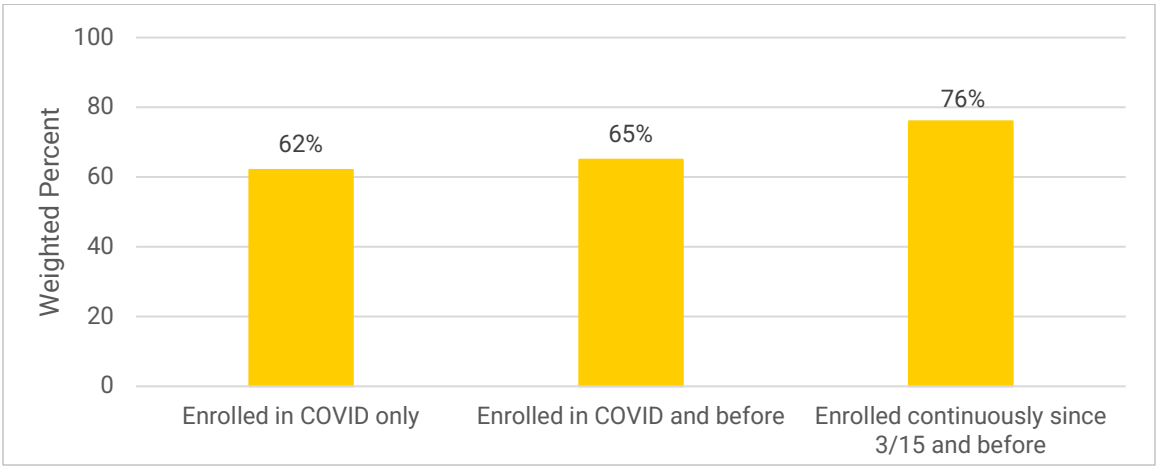
Chi-square not significant, Don't know/refused coded as missing

Figure 17. Percent of Respondents who Agreed or Strongly Agreed they Understood their Insurance Premiums by IHAWP Enrollment Duration (N=2,760)



Chi-square p<.05, Don't know/refused coded as missing

Figure 18. Percent of Respondents who Agreed or Strongly Agreed they Understood How to Prevent being Disenrolled Prior to the Pandemic by IHAWP Enrollment Duration (N=2,685)

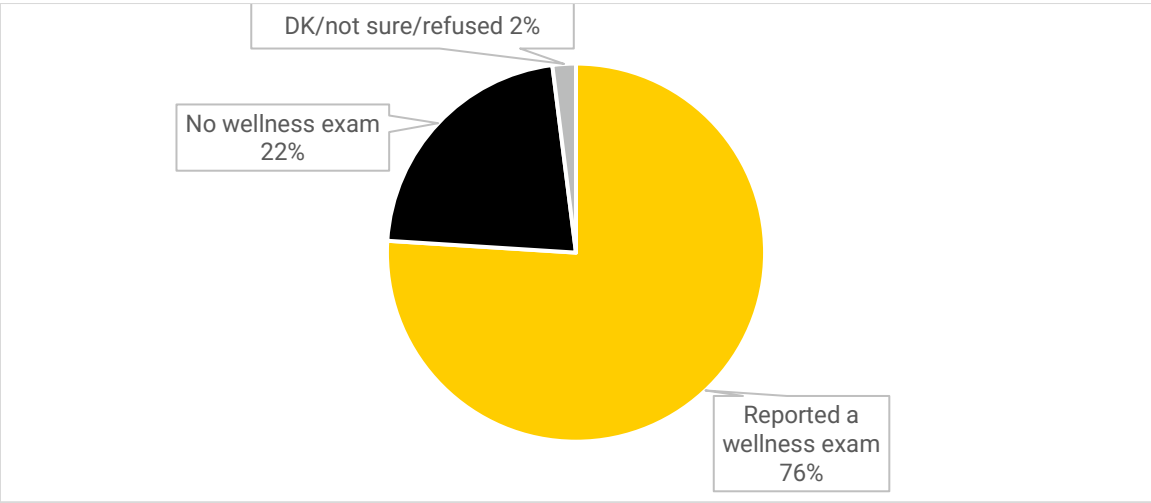


Chi-square p<.05, Don't know/refused coded as missing

Hypothesis 12: Those who are aware of the HBI program are more likely to complete the behaviors (HRA and well exam) compared to those who are not aware.

Over three-fourths (76%) of the members reported having completed a wellness exam in the past year (Figure 19) according to survey respondents.

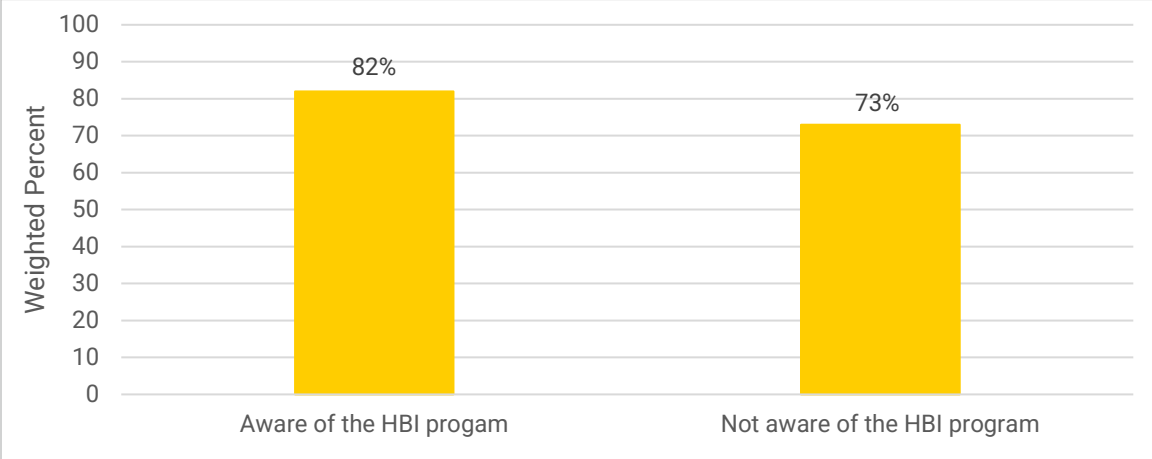
Figure 19. Weighted Percent of Respondents Reporting a Wellness Exam in the Past Year (N=2,832)



There is evidence that those who were aware of the HBI program were more likely to complete a wellness exam compared to those who were unaware. Figure 20 shows completion of a wellness exam by awareness of the HBI program. People who were aware

of the HBI program were more likely to report having completed a wellness exam (82% vs. 73%).

Figure 20. Percent of Respondents Reporting a Wellness Exam by HBI Program Awareness (N=2,832)



Chi-square p<.05, Don't know coded as not having a wellness exam

Hypothesis 13: Those who have more knowledge about the HBI program are more likely to complete the behaviors (HRA and well exam) than those with less knowledge.

Because of the public health emergency, we were unable to ask members about the HBI program. Table 13 shows that reporting more health plan knowledge was associated with a higher likelihood of reporting a well child visit. For example, 80% of those who agreed/strongly agreed they understood how to prevent disenrollment prior to the pandemic reported they had a wellness exam. This compares to 68% of those who disagreed/strongly disagreed that they understood how to prevent disenrollment.

Table 13. Reported Wellness Exam Completion in Past Year by Health Insurance Plan Knowledge

	Weighted percent with wellness exam	Chi-square
Understood insurance coverage and benefits (N=2,806)		
Disagree/strongly disagree	62%	p<.05
Neither agree nor disagree	63%	
Agree/strongly agree	80%	
Understood insurance premiums (N=2,760)		
Disagree/strongly disagree	61%	p<.05
Neither agree nor disagree	68%	
Agree/strongly agree	81%	
Understood how to prevent disenrollment prior to pandemic (N=2,685)		
Disagree/strongly disagree	68%	p<.05
Neither agree nor disagree	69%	
Agree/strongly agree	80%	

Hypothesis 14: Member socio-demographic characteristics and perceptions/attitudes are associated with awareness of the HBI program.

Disparities in HBI program awareness remained mostly unchanged in a logistic regression model controlling for enrollment duration and demographics (Table 14). Adjusted percents show higher awareness for White (37%) vs. Black (26%) and Hispanic members (24%) and for those with a 4-year degree (44%) vs. those with less education. Females also had higher adjusted rates than males.

Table 14. Factors Associated with HBI Program Awareness in Multivariable Logistic Regression Model (N = 2,755)

	Adjusted percent aware of HBI program	Adjusted difference in percent
IHAWP enrollment duration		
Enrolled in COVID only	28%	Reference
Enrolled in COVID & before	34%	+6.7 p<.05
Enrolled continuously since 3/15 & before	44%	+16.8 p<.05
Race/Ethnicity		
White	37%	Reference
Black	26%	-10.3 p<.05
Hispanic	24%	-13.1 p<.05
Multiple race/other	21%	-15.2 p<.05
Age		
19-34 years old	27%	Reference
35-54 years old	37%	+10.0 p<.05
55 years and over	36%	+9.2 p<.05
Education		
High school diploma or less	29%	Reference
Some college	35%	+6.4 p<.05
4-year degree or more	44%	+14.8 p<.05
Gender		
Male	31%	Reference
Female	38%	+6.8 p<.05

Hypothesis 15: Member socio-demographic characteristics and perceptions/attitudes are associated with knowledge of the HBI program.

Due to the public health emergency, we were unable to ask about knowledge of the HBI program. A composite indicator of health plan knowledge indicates agreement or strong agreement with 3 items: understood health plan, understood insurance premiums, and understood how to prevent disenrollment prior to the pandemic. In adjusted logistic regression, those enrolled longer, older members, females, and those with less education reported more understanding of their health insurance plan (Table 15).

Table 15. Factors Associated with Understanding Health Insurance Plan, Premiums, and How to Prevent Disenrollment in Multivariable Logistic Regression Model (N=2,565)

	Adjusted percent: understood insurance plan, premiums, and how to prevent disenrollment	Adjusted difference in percent
IHAWP enrollment duration		
Enrolled in COVID only	51%	Reference
Enrolled in COVID & before	51%	+0.6 NS
Enrolled continuously since 3/15 & before	60%	+8.6 p<.05
Race/Ethnicity		
White	52%	Reference
Black	58%	+6.4 NS
Hispanic	52%	-0.2 NS
Multiple race/other	43%	-8.9 NS
Age		
19-34 years old	47%	Reference
35-54 years old	53%	+5.9 NS
55 years and over	57%	+9.9 p<.05
Education		
High school diploma or less	59%	Reference
Some college	50%	-8.7 p<.05
4-year degree or more	44%	-15.0 p<.05
Gender		
Male	48%	Reference
Female	57%	+9.0 p<.05

Hypothesis 16: Member socio-demographic characteristics and perceptions/attitudes are associated with completion of the HRA and well exam.

Table 16 shows adjusted percents from a logistic regression model predicting reported wellness exam completion. Those aware of the HBI program were more likely than those not aware of the program to report completing a wellness exam (81% vs. 73%). This finding was not explained by basic underlying demographic differences. Wellness exam completion was also higher for females and older members in adjusted models.

Table 16. Factors Associated with Reported Wellness Exam Completion in Past Year in Multivariable Logistic Regression Model (N = 2,755)

	Adjusted percent reporting wellness exam	Adjusted difference in percent
Aware of HBI program		
No	73%	Reference
Yes	81%	+7.9 p<.05
IHAWP enrollment duration		
Enrolled in COVID only	76%	Reference
Enrolled in COVID & before	76%	-0.2 NS
Enrolled continuously since 3/15 & before	79%	+2.9 NS
Race/Ethnicity		
White	76%	Reference
Black	81%	+5.2 NS
Hispanic	72%	-4.1 NS
Multiple race/other	76%	+0.4 NS
Age		
19-34 years old	72%	Reference
35-54 years old	73%	+1.7 NS
55 years and over	86%	+14.6 p<.05
Education		
High school diploma or less	74%	Reference
Some college	78%	+3.4 NS
4-year degree or more	77%	+2.9 NS
Gender		
Male	72%	Reference
Female	82%	+10.4 p<.05

Hypothesis 17: Members are most likely to hear about the HBI program from their MCO.

Table 17 shows the mechanism by which respondents heard about the HBI program. Most (37%) reported receiving a letter from their MCO, while 19% remember some communication from an unknown source, and 11% indicated they heard about the program from Iowa Medicaid.

Table 17. How Respondents Heard About the HBI Program (Among those Aware of the Program, N=1,044)*

	Weighted Percent
Received a letter from my MCO (Amerigroup and Iowa Total Care) telling me about the Healthy Behaviors Program	37%
Received a letter/brochure/pamphlet but don't remember from who	19%
Received a letter from DHS/IME/Medicaid/Iowa Health Link telling me about the Healthy Behaviors Program	11%
My healthcare provider told me about the Healthy Behaviors Program while I was at the clinic	10%
Received a call from my MCO (Amerigroup and Iowa Total Care) telling me about the Healthy Behaviors Program	7%
Heard from family, friends, a coworker, or workplace	7%
Found out about it on the internet	6%
Found out about it via email	2%
Received a call or notification from the clinic I go to telling me about the Healthy Behaviors Program	1%
Found out when completing the HRA	1%
Found out when I applied or in initial health care information packet	1%
Found out when I received a bill or was disenrolled	<0.5%
Other	4%
Don't know/not sure	7%

**Respondents could select more than one place where they heard about the HBI program*

Figure 21 shows the percentage of respondents that were aware that the HBI program was on pause due to the federal public health emergency. Only 15% of the respondents who were aware of the HBI program knew that the program was on pause.

Figure 21. Weighted Percent of Respondents Aware of the HBI Program was on Pause (Among those Aware of the HBI Program, N=1,044)

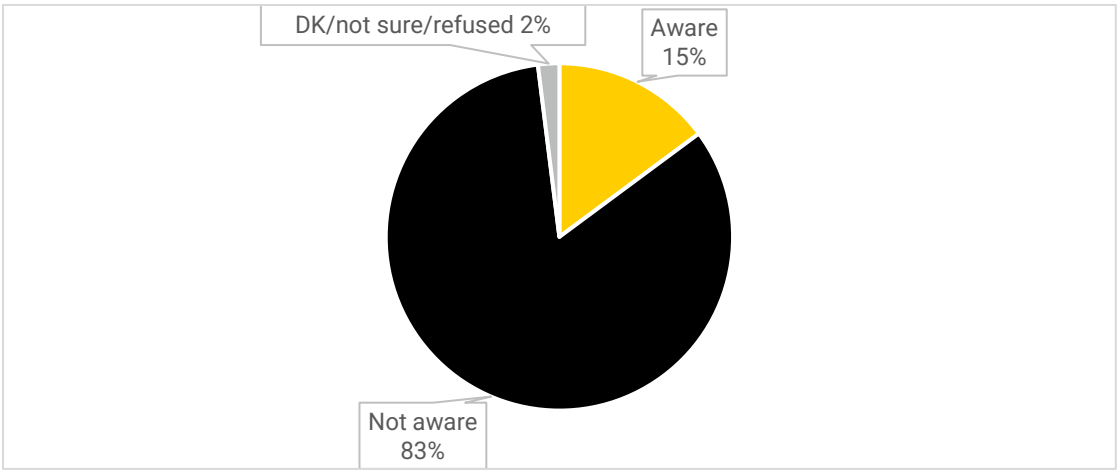


Table 18 illustrates how members reported hearing about the HBI program being on pause due to the public health emergency. Over a quarter (28%) had heard about this change through some communication with the Managed Care Organizations or Iowa Medicaid.

Table 18. How Respondents Heard the HBI Program was on Pause (N = 162)*

	Weighted Percent
Received a call/letter from my MCO (Amerigroup and Iowa Total Care) telling me	15%
Received a letter from DHS/IME/Medicaid/Iowa Health Link telling me	13%
My healthcare provider told me	12%
Found out about it on the internet	9%
Received a letter/brochure/pamphlet but don't remember from who	8%
Heard from family, friends, a coworker, or workplace	8%
Received a call or notification from the clinic I go to telling me	4%
Heard on the television/news	4%
Found out when I received a bill	2%
Called in to ask	1%
Other	8%
Don't know/not sure	18%

**Respondents could select more than one place where they heard the HBI program was on pause*

Hypothesis 19: Members who do not complete the HRA and wellness exam, report barriers to completing the behaviors.

For those who did not complete a wellness exam, the most often selected barriers were "not believing one needed a medical check-up" (30%), "being too busy" (20%), and "it being hard to schedule an appointment" (11%) (Table 19).

Table 19. Barriers to Completing a Wellness Exam (Among those with No Exam, N=563)*

	Weighted Percent
I don't believe I need a medical check-up	30%
I am too busy	20%
Hard to schedule an appointment for a medical check-up/no availability	11%
COVID concerns	9%
Getting transportation to my doctor's office is hard	6%
I don't like getting a medical check-up	6%
I don't currently have a doctor/switched doctors	6%
I can't get time off from work	6%
Forgot or just didn't go	5%
Intend to soon or appointment scheduled	5%
Dealing with other health issues	3%
Insurance coverage issues or unaware could get check-up	3%
Not sure where to go to get a medical check-up	3%
Caregiver responsibilities and challenging life circumstances	3%
I don't like my current doctor	2%
Can't get childcare	<0.5%
No HBI penalty/it was not required	<0.5%
Other	5%
No barriers	6%
Don't know/not sure	2%

**Respondents could select more than one reason for not completing a wellness exam*

Additional analyses related to the COVID-19 Pandemic

Table 20. Factors Associated with Reported Receipt of at Least One Dose of a COVID-19 Vaccine (N=2,503), Bivariate Associations and Multivariable Logistic Regression

	At least 1 dose of a COVID-19 vaccine		Adjusted % point difference in predicted probability of reporting a COVID-19 vaccine (95% CI)
	Weighted %	Chi- square	
Race/Ethnicity			
White, non-Hispanic	67%	p<.05	Reference
Black, non-Hispanic	63%		-1.4 (-8.5 pp, 5.7 pp)
Hispanic	75%		11.9 pp (2.5 pp, 21.3 pp)*
Multiple race/other	52%		-14.2 pp (-24.7 pp, -3.6 pp)*
Age			
19-34 years old	64%	p<.05	Reference
35-54 years old	63%		-1.1 pp (-7.0 pp, 4.7 pp)
55 years and over	76%		10.7 pp (4.4 pp, 17.1 pp)*
Education			
Less than high school	54%	p<.05	Reference
High school diploma	59%		5.9 pp (-4.4 pp, 16.2 pp)
Some college	66%		11.8 pp (1.6 pp, 22.0 pp)*
4-year degree or more	83%		30.7 pp (20.2 pp, 41.1 pp)*
Gender			
Male	65%	NS	Reference
Female	68%		-2.6 pp (-7.4 pp, 2.1 pp)
Employment status			
Employed full-time	65%	NS	Reference
Employed part-time	68%		0.7 pp (-5.4 pp, 6.8 pp)
Not working	67%		1.8 pp (-3.7 pp, 7.4 pp)
IHAWP enrollment duration			
Enrolled in COVID only	68%	NS	Reference
Enrolled in COVID and before	65%		-3.5 pp (-8.2 pp, 1.3 pp)
Enrolled continuously since 3/15 and before	71%		1.7 pp (-3.0 pp, 6.4 pp)
Wellness exam in past year			
No	52%	p<.05	Reference
Yes	71%		11.5 pp (5.2 pp, 17.9 pp)*
Personal Doctor			
No	47%	p<.05	Reference
Yes	70%		16.2 pp (9.0 pp, 23.4 pp)*

**p<.05 for comparison vs. reference group in multivariable logistic regression model*

Table 21. Factors Associated with Ever Having COVID-19 by Self-Report (N=2,523), Bivariate Associations and Multivariable Logistic Regression

	Ever had COVID-19		Adjusted percentage point difference in predicted probability of reporting ever having COVID-19 (95% CI)
	Weighted %	Chi- square	
Race/Ethnicity			
White, non-Hispanic	40%	p<.05	Reference
Black, non-Hispanic	34%		-6.9 pp (-14.4 pp, 0.5 pp)
Hispanic	54%		12.9 pp (1.5 pp, 24.4 pp)*
Multiple race/other	44%		2.9 pp (-8.8 pp, 14.7 pp)
Age			
19-34 years old	46%	p<.05	Reference
35-54 years old	40%		-2.9 pp (-9.1 pp, 3.3 pp)
55 years and over	31%		-9.3 pp (-16.2 pp, -2.4 pp)*
Education			
Less than high school	39%	NS	Reference
High school diploma	39%		-1.9 pp (-12.3 pp, 8.4 pp)
Some college	43%		1.3 pp (-9.1 pp, 11.6 pp)
4-year degree or more	36%		-3.9 pp (-15.3 pp, 7.4 pp)
Gender			
Male	39%	NS	Reference
Female	42%		5.2 pp (0.2 pp, 10.2 pp)*
Employment status			
Employed full-time	46%	p<.05	Reference
Employed part-time	41%		-2.6 pp (-9.1 pp, 3.9 pp)
Not working	33%		-10.0 pp (-15.9 pp, -4.1 pp)*
IHAWP enrollment duration			
Enrolled in COVID only	41%	p<.05	Reference
Enrolled in COVID and before	42%		0.3 pp (-4.7 pp, 5.3 pp)
Enrolled continuously since 3/15 and before	30%		-8.8 pp (-13.7 pp, -3.9 pp)*
At least one dose of a COVID-19 vaccine			
No	51%	p<.05	Reference
Yes	35%		-15.1 pp (-20.6 pp, -9.5 pp)*

**p<.05 for comparison vs. reference group in multivariable logistic regression model*

Dental Wellness Plan

DWP Executive summary

A plan to evaluate the dental portions of Iowa Medicaid's 1115 waiver (also known as the Dental Wellness Plan-DWP) was originally approved by CMS in 2020 as part of the comprehensive IHAWP evaluation plan. In December 2021, however, Iowa Medicaid made significant programmatic changes to the DWP that necessitated a new evaluation plan, such as eliminating the healthy behavior requirements as described in the Iowa Wellness Plan Section 1115 Demonstration Waiver,

This new DWP evaluation plan was submitted and approved by CMS in early 2023 with new hypotheses and research questions appropriate to the new design of the program. The new evaluation plan focuses on access to care, particularly on member knowledge of the program changes and access to a dental wellness exam, in addition to the use of Hospital Emergency Department for non-emergent dental care.

The primary analytic results thus far have been from a mail survey called the 2021 Survey of Iowa Private Practice general dentists, which evaluated the level of dentist Medicaid participation and attitudes toward the program, as one perspective on access to care. About two-thirds of dentists had an adult Medicaid patient in their practice, with participation varying significantly between the two dental carriers contracted with the program. Less than one in three Iowa dentists were accepting new adult Medicaid patients (most with some limits such as the number of Medicaid patients or the type of patients such as only family members of current patients in the practice).

Key progress in the dental portion of the IHAWP evaluation included the development, fielding, data analysis, submission and approval of a report from the 2021 Survey of Iowa Private Practice Dentists; development, fielding, and preliminary data analysis of a follow-up survey of Iowa private practice dentists in 2023; and the development and fielding of an Iowa Medicaid Member Survey regarding member's access to and use of dental services.

DWP General background information

A plan to evaluate the dental portions of Iowa Medicaid's 1115 waiver (also known as the Dental Wellness Plan-DWP) was submitted to the Center for Medicare and Medicaid Services (CMS) as part of the comprehensive IHAWP evaluation plan in 2020. However, in December 2021, the Iowa Medicaid Program made significant programmatic changes to the DWP that affected the original DWP evaluation design. Most impactful on the evaluation was that the Iowa Medicaid program retroactively discontinued the dental healthy

behavior portion of the DWP as described in the Iowa Wellness Plan Section 1115 Demonstration Waiver.

Originally IHAWP members were required to have a dental check-up and complete a dental health risk assessment or potentially pay a monthly premium for their dental coverage. These DWP healthy behaviors were suspended in March 2020 with the introduction of the COVID-19 federal Public Health Emergency (PHE) and the decision was made by the Iowa Medicaid Program to not reinstate the dental healthy behaviors after the PHE ended in May 2023.

Evaluation of the DWP portion of Iowa Medicaid's 1115 waiver remained relevant, however, as receipt of a preventive dental exam continued to be one of two options for IHAWP members to meet the wellness exam component of the Medical Healthy Behaviors—the medical healthy behaviors were going to be reinstated after the PHE ended. Thus, these programmatic changes necessitated modifications to the dental portions of the Iowa Health and Wellness Plan (IHAWP) evaluation which was rewritten and approved by CMS in late 2022.

The updated hypotheses and research questions are predicated on the current goals for the DWP portion of the IHAWP as listed below.

- Goal 1: IHAWP members will have an increase in preventive care use as a result of the HBI requirements (receipt of a dental examination meets the HBI requirement for a preventive visit).
- Goal 2: IHAWP members will have increased access to covered services.
- Goal 3: IHAWP members will experience improved oral health.
- Goal 4: Support members' re-entry into the dental care delivery system post-COVID shutdowns.

DWP Evaluation hypotheses, research questions and current status (2022 version approved by CMS)

DWP Evaluation Measures Summary

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach: Original	Analytic approach: Revised
Topic 1: Member perceptions and experiences with receiving a dental wellness exam to meet the Healthy Behavior (HB) program requirements				
Hypothesis 1: Higher levels of awareness and perceived ability to comply with requirements will be associated with receiving a dental wellness exam.				
Research Question 1A: What level of awareness do members have of a dental wellness exam qualifying as a HB?				
Subsidiary Hypothesis 1A.1: *Members who have been enrolled longer will have higher levels of awareness that the dental wellness exam can satisfy the HB requirement than new enrollees.*				
Newly enrolled members (less than one year) vs. longer-term enrollees (more than one year)	Member awareness that a dental wellness exam qualifies as meeting the requirement for the HB	DWP Member Survey	Descriptive, Bivariate	No change
Research Question 1B: What are the barriers to receiving a dental wellness exam in order to meet the HB requirements?				
Subsidiary Hypothesis 1B.1 *Members who are exempt from the HB Program will identify the same barriers to dental care as members subject to the HB requirements.*				
Members who are exempt from the HB requirement vs members who have to meet the HB requirement	Member reported barriers to receipt of a dental wellness exam	DWP Member Survey	Descriptive, Bivariate	No change
Research Question 1C: What member characteristics are associated with awareness that dental wellness exams qualify for HB requirements?				
Members who are aware that a dental wellness exam qualifies for the HB requirement vs members who are not aware	Member awareness that a dental wellness exam qualifies as meeting the requirement for the HB	DWP Member Survey	Descriptive, Bivariate, Logistic regression	No change
Research Question 1D: How are members learning that receiving a dental wellness exam qualifies for HB requirements?				
Subsidiary Hypothesis 1D.1: *Members will report receiving information about how a dental wellness exam meets the HB exam requirement from multiple sources.*				
Only members who were aware that the dental wellness exam meets the HB exam requirement	Source of information about the dental wellness exam meeting the HB requirement	DWP Member Survey	Descriptive	No change
Subsidiary Hypothesis 1D.2: *Members will report that information from their prepaid ambulatory health plan* (PAHP) *helped them understand how they could use a dental wellness exam to meet the HB requirements*				
Only members who were aware that the dental wellness exam meets the HB exam requirement	Perceived value of the information about the dental wellness exam meeting the HB requirement that they receive from the PAHPs	DWP Member Survey	Descriptive	No change

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
Research Question 1E: Do members view receiving a dental wellness exam as a favorable alternative to monthly premiums?				
Subsidiary Hypothesis 1E.1: *Receiving a dental wellness exam will be preferred over monthly premiums.*				
Only members who qualify for the HBI requirement	Member preference for receipt of a dental wellness exam to qualify for the requirement for the HBI vs paying a monthly premium	DWP Member Survey	Descriptive	No change
Topic 2: Impact of the healthy behavior requirement on members' access to and utilization of dental care				
Hypothesis 2: IHAWP members will have equal or greater access to a dental wellness exam and other dental services because dental wellness exams qualify as a healthy behavior.				
Research Question 2A: What proportion of IHAWP members receive a dental wellness exam annually?				
Subsidiary Hypothesis 2A.1: *IHAWP members who are at or above 50% of the federal poverty level (FPL) and at risk of paying a premium are more likely to receive a dental wellness exam than Medicaid members who are not subject to potential premiums.*				
Newly enrolled members vs. longer-term enrollees	Preventive dental visit (HDB requirement)	Administrative data	Descriptive; Chi-square test of homogeneity	No change
Subsidiary Hypothesis 2A.2: IHAWP members with longer lengths of enrollment are more likely to receive a dental wellness exam.				
Newly enrolled members vs. longer-term enrollees	Preventive dental visit (HDB requirement)	Administrative data	Descriptive; Chi-square test of homogeneity	No change
Research Question 2B: Are adults in the IHAWP more likely to have had a dental wellness exam than other adults in Medicaid?				
Newly enrolled members vs. longer-term enrollees	Completion of self-risk assessment	Administrative data	Descriptive; Chi-square test of homogeneity	No change
Research Question 2C: Are IHAWP members able to find a dental home where they can receive a dental wellness exam?				
Subsidiary Hypothesis 2C.1: *Likelihood of having a regular source of dental care will increase with length of enrollment.*				
Members enrolled for less than one year vs. members enrolled for more than one year	Having a regular source of dental care	DWP Member Survey	Descriptive, Bivariate	No change
Subsidiary Hypothesis 2C.2: *Newly enrolled members will be able to find a participating dental provider.*				
Only members enrolled for less than one year	Having a regular dentist	DWP Member Survey	Descriptive	No change

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
Research Question 2D: Are adults in the IHAWP less likely to visit the ED for non-traumatic dental conditions (NTDCs) than other adults in Medicaid?				
Subsidiary Hypothesis 2D.1: Members who receive a dental wellness exam will have fewer ED visits for NTDCs annually.				
Independent variables include demographic and health-related survey items, and plan awareness, ability to complete requirements, and program attitudes	Predictors of HDB completion	Administrative data (HDBs); DWP Member survey	Bivariate; Multivariable logistic regression analysis	No change
Subsidiary Hypothesis 2D.2: Members who receive a dental wellness exam will be more likely to follow-up with a dentist after an ED visit for a NTDC.				
Independent variables include demographic and health-related survey items, and plan awareness, ability to complete requirements, and program attitudes	Predictors of HDB completion	Administrative data (HDBs); DWP Member survey	Bivariate; Multivariable logistic regression analysis	No change
Research Question 2E: Are IHAWP members less likely to have transportation-related barriers to dental care than other adult Medicaid members who are eligible for NEMT benefits?				
Subsidiary Hypothesis 2E.1: IHAWP members will be less likely to report transportation-related barriers to dental care.				
IHAWP members without the NEMT benefit vs IHAWP and traditional Medicaid members with the NEMT benefit	Having a transportation-related barrier to dental care	DWP and IHAWP Member Survey	Descriptive, bivariate	No change
Topic 3: Impact of the receipt of a dental wellness exam on members' oral health				
Hypothesis 3: The oral health status of IHAWP members who receive a dental wellness exam will improve over time.				
Research Question 3A: How do members who have received a dental wellness exam in the past year rate their oral health as compared to those that did not?				
Subsidiary Hypothesis 3A.1: Members who receive a dental wellness exam will rate their oral health as better.				
IHAWP members who have had a dental exam in the past year vs IHAWP members who have not had a dental exam in the past year	Self-rating of oral health	DWP Member Survey	Descriptive, bivariate	No change
Members who are exempt from HDBs vs. members who are not (including categorically eligible and hardship waivers)	Preventive dental visit (HDB requirement) by member exemption	Administrative data; DWP Member survey	Multivariable logistic regression	No change
Members who are exempt from HDBs vs. members who are not (including categorically eligible and hardship waivers)	Any dental visit by member exemption	Administrative data; DWP Member survey	Multivariable logistic regression	No change

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
Topic 4: Impact of the COVID-19 pandemic on receipt of a dental wellness exam				
Hypothesis 4: Utilization of a dental wellness exam among IHAWP members will change due to system changes associated with the COVID-19 pandemic.				
Research Question 4A: Have IHAWP members' ability to access a dental wellness exam changed during the COVID-19 pandemic?				
Subsidiary Hypothesis 4A.1: Members will be less likely to have had a dental wellness visit during the COVID-19 pandemic				
Full population Trend over time (FY2018 onward)	Preventive dental visit	Administrative and claims data	Descriptive	No changes
Research Question 4B: Is the COVID-19 pandemic associated with members' use of the emergency department (ED) for NDTCs?				
Subsidiary Hypothesis 4B.1: Members will be more likely to have ED visits for NTDCs during the COVID-19 pandemic.				
Full population Trend over time (FY2018 onward)	ED visit for NTDCs	Administrative and claims data	Descriptive	No changes

Topic 1: Member perceptions and experiences with receiving a Dental Wellness Exam to meet the Healthy Behaviors Incentive (HBI) requirements.

Hypothesis 1: Higher levels of awareness and perceived ability to comply with requirements will be associated with receiving a dental wellness exam.

Research Question 1A: What level of awareness do members have of a dental wellness exam qualifying as a healthy behavior?

Subsidiary Hypothesis 1A.1: Members who have been enrolled longer will have higher levels of awareness that the dental wellness exam can satisfy the HBI requirement than new enrollees.

Status: 2024 Dental member survey is in the field. Data collection should be completed fall 2024.

Research Question 1B: What are the barriers to receiving a dental wellness exam in order to meet the HBI requirements?

Subsidiary Hypothesis 1B.1 Members who are exempt from the HBI Program will identify the same barriers to dental care as members subject to the HBI requirements.

Status: 2024 Dental member survey is in the field. Data collection should be completed fall 2024.

Research Question 1C: What member characteristics are associated with awareness that dental wellness exams qualify for HBI requirements?

Status: 2024 Dental member survey is in the field. Data collection should be completed fall 2024.

Research Question 1D: How are members learning that receiving a dental wellness exam qualifies for HBI requirements?

Subsidiary Hypothesis 1D.1: Members will report receiving information about how a dental wellness exam meets the HBI exam requirement from multiple sources.

Status: 2024 Dental member survey is in the field. Data collection should be completed fall 2024.Subsidiary Hypothesis 1D.2: Members will report that information from their prepaid ambulatory health plan (PAHP) helped them understand how they could use a dental wellness exam to meet the HBI requirements.

Status: 2024 Dental member survey is in the field. Data collection should be completed fall 2024.

Research Question 1E: Do members view receiving a dental wellness exam as a favorable alternative to monthly premiums?

Subsidiary Hypothesis 1E.1: Receiving a dental wellness exam will be preferred over monthly premiums.

Status: 2024 Dental member survey is in the field. Data collection should be completed fall 2024.

Topic 2: Impact of the HBI requirement on members' access to and utilization of dental care

Hypothesis 2: IHAWP members will have equal or greater access to a dental wellness exam and other dental services because dental wellness exams qualify as a healthy behavior.

Research Question 2A: What proportion of IHAWP members receive a dental wellness exam annually?

Subsidiary Hypothesis 2A.1: IHAWP members who are at or above 50% of the federal poverty level (FPL) and at risk of paying a premium are more likely to receive a dental wellness exam than Medicaid members who are not subject to potential premiums.

Subsidiary Hypothesis 2A.2: IHAWP members with longer lengths of enrollment are more likely to receive a dental wellness exam

Research Question 2B: Are adults in the IHAWP more likely to have had a dental wellness exam than other adults in Medicaid?

Research Question 2C: Are IHAWP members able to find a dental home where they can receive a dental wellness exam?

Subsidiary Hypothesis 2C.1: Likelihood of having a regular source of dental care will increase with length of enrollment.

Status: 2024 Dental member survey is in the field. Data collection should be completed fall 2024.

Subsidiary Hypothesis 2C.2: Newly enrolled members will be able to find a participating dental provider.

Status: 2024 Dental member survey is in the field. Data collection should be completed fall 2024.

Research Question 2D: Are adults in the IHAWP less likely to visit the ED for non-traumatic dental conditions (NTDCs) than other adults in Medicaid?

Subsidiary Hypothesis 2D.1: Members who receive a dental wellness exam will have fewer ED visits for NTDCs annually.

Dataset is nearly completed for period 2011-2021. Eligibility and visit data have been assimilated, need to assign ED visit NTDC status.

Subsidiary Hypothesis 2D.2: Members who receive a dental wellness exam will be more likely to follow-up with a dentist after an ED visit for a NTDC.

Dataset is nearly completed for period 2011-2021. Eligibility and visit data have been assimilated, need to assign ED visit NTDC status and presence of follow-up visit.

Research Question 2E: Are IHAWP members less likely to have transportation-related barriers to dental care than other adult Medicaid members who are eligible for NEMT benefits?

Subsidiary Hypothesis 2E.1: IHAWP members will be less likely to report transportation-related barriers to dental care.

Status: 2024 Dental member survey is in the field. Data collection should be completed fall 2024.

Topic 3: Impact of the receipt of a Dental Wellness Exam on members' oral health

Hypothesis 3: The oral health status of IHAWP members who receive a dental wellness exam will improve over time.

Research Question 3A: How do members who have received a dental wellness exam in the past year rate their oral health as compared to those that did not?

Subsidiary Hypothesis 3A.1: Members who receive a dental wellness exam will rate their oral health as better.

Status: 2024 Dental member survey is in the field. Data collection should be completed fall 2024.

Dataset containing all members who received a dental wellness exam is complete through 2021. Additional data through the survey period will be added at the completion of the survey and linked to survey responses.

Topic 4: Impact of the COVID-19 Pandemic on receipt of a Dental Wellness Exam

Hypothesis 4: Utilization of a dental wellness exam among IHAWP members will change due to system changes associated with the COVID-19 pandemic.

Research Question 4A: Have IHAWP members' ability to access a dental wellness exam changed during the COVID-19 pandemic?

Subsidiary Hypothesis 4A.1: Members will be less likely to have had a dental wellness visit during the COVID-19 pandemic.

Data is complete through 2021. Currently, we are adding information from 2022.

Research Question 4B: Is the COVID-19 pandemic associated with members' use of the emergency department (ED) for NDTCs?

Subsidiary Hypothesis 4B.1: Members will be more likely to have ED visits for NTDCs during the COVID-19 pandemic.

Dataset is nearly completed for the period 2011-2021. Eligibility and visit data have been assimilated, need to assign ED visit NTDC status. Currently, we are adding information from 2022.

DWP methodology

Data sources

The three primary data sources being used to evaluate the DWP portion of the IHAWP are listed below.

- Dental Provider survey
- Member survey
- Administrative claims and enrollment files

Dental provider survey

To evaluate the levels of Medicaid participation (a key factor in access to care) as well as other attitudinal issues, our research team has utilized a mixed mode survey with all private practice dentists in Iowa (n=1,219), excluding orthodontists. For this particular evaluation, a survey was conducted in 2021, right as the evaluation plan was being redesigned and is once again being fielded in 2023. Dentist addresses and demographic data are drawn from the Iowa Dentist Tracking System (IDTS). IDTS tracks state dentist workforce information and is part of the University of Iowa's Office of Statewide Clinical Education Programs. Survey topics included dentist participation in DWP, awareness of policy changes, and experiences with the DWP program. Items in both surveys are mostly consistent with previous DWP provider surveys administered by this evaluation team. Prior to survey fielding, the Iowa Dental Association (IDA) assists by placing a notice about the upcoming survey in their newsletter that goes out by email to all IDA members. The survey instrument is reviewed by Iowa Medicaid prior to distribution. A $2 bill incentive is included in the first mailing. A reminder postcard is then sent one week after the initial mailing, and a second survey is sent three weeks after the postcard. Dentists also have the option to complete the survey online in Qualtrics, using their unique ID code to access the survey.

The complete results from the 2021 survey with Iowa Dentists are available at: https://iro.uiowa.edu/esploro/outputs/report/Evaluation-of-the-Dental-Wellness-Plan/9984404350202771?institution=01IOWA_INST

The most 2023 dental provider survey is currently in the field with a 43% unadjusted participation rate following the first mailing. The second mailing was recently sent with a final report expected spring of 2024.

Member survey

Information about IHAWP member experiences with the DWP has also been collected routinely has a part of this evaluation using a sequential mixed-mode strategy, combining mail (with web option) and a telephone follow-up to non-respondents-similar to previous IHAWP member surveys. The next DWP consumer survey will happen during 2024. The sampling frame will be comprised of 6,000 IHAWP members, and 6,000 traditional Medicaid members who are eligible as adult members of a family not covered due to pregnancy or a disability. The traditional Medicaid comparison group is primarily associated with families eligible through the Temporary Assistance to Needy Families (TANF), which is termed the Family Investment Program (FIP) in Iowa. The random samples for each group will be drawn from IHAWP and Medicaid enrollment data current as of the month prior to the first mailing. Members are considered eligible if they have been in their current plan for at least the previous six months, are between the ages of 19 and 64, living in Iowa, are not enrolled in Medicare, and have a valid address and phone number. We will only include one person per household to reduce the relatedness of the responses and respondent burden.

Respondents will be given the option to complete the survey on paper or online by entering a unique access code. Nominal monetary pre-incentives will be utilized to maximize response rates for mailed surveys. Both a pre-incentive and gift card lottery will be used in the first mailing: each initial survey packet will include a $2 bill and respondents who complete and return the survey within two weeks of the mailing will be entered into a random drawing for one of twenty $100 Walmart gift cards.

A reminder postcard will be sent to the entire sample one week after the initial mailing. Five weeks after the first mailing, a second survey and cover letter will be sent to those who had not responded to the initial mailing. Approximately three weeks after the second mailing, the phone follow-up for non-respondents will begin. At least two attempts will be made to each viable number.

Survey instrument

As indicated, we will be fielding a sequential mixed-mode survey, combining mail (with web option) and a telephone follow-up to non-respondents-similar to previous IHAWP member surveys during 2024. The sampling frame will be comprised of 6,000 IHAWP members, and 6,000 traditional adult Medicaid members. Results from this survey will be presented as part of a final report to the Iowa Medicaid program as well as in the Final Evaluation report to CMS in June 2026. The foundation for the 2024 survey instrument will be the survey instrument used in the 2019 DWP member survey, which will also allow for comparisons between the 2019 and 2024 surveys.

- Awareness that having received a dental wellness exam qualifies for completion of the preventive exam component of the HBI requirement
- Access to dental care including barriers to receipt of a dental wellness exam
- Dental care received in an emergency department
- Emergency dental care
- Carrier communication to members
- Oral health status
- Demographic information

Iowa Medicaid administrative data

See discussion in Secondary data.

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Waiver of Retroactive Eligibility

WRE Executive Summary

Key findings from the process evaluation

- Information provided through the process evaluation indicates that providers have increased their role in initiating Medicaid applications.

Results

There are no results linked to the state's goals for WRE to date. We have determined that the analyses will not include data beyond 2019 as the PHE interrupts the natural inflow and outflow of members.

WRE General background information

An amendment to the IHAWP demonstration was submitted on August 10, 2017, requesting a waiver of retroactive eligibility for all but pregnant women and children under 1. The waiver was granted on October 27, 2017, with members enrolling on or after November 1, 2017, subject to the waiver. New members were no longer granted 90 days of retrospective enrollment, instead they were guaranteed enrollment from the first day of the month in which they applied. On July 1, 2018, nursing home residents were no longer subject to the waiver. On January 1, 2020, the waiver was renewed for another 5 years and children 1-19 years of age were no longer subject to the waiver.

Table 22. Waiver of Retroactive Eligibility Significant Policy Changes

Date IL Number	Policy changes
11/1/2017 1847-MC-FFS-D	Waiver of retroactive eligibility begins for all eligible groups except pregnant women and those women within the 60 days following delivery and infants under 1 year of age.
7/1/2018 1955-MC-FFS-D	In accordance with Senate File 2418 passed by the Iowa Legislature during the 2018 session, DHS is revising its policy and will reinstate a 3-month retroactive Medicaid coverage benefit for applicants who are residents of a nursing facility at the time of application and are otherwise Medicaid-eligible.
1/1/2020 2085-MC-FFS-D	Retroactive eligibility is reinstated for children under 19

WRE Goals

In the most recent amendment, November 2019, the state provided a table of goals and questions as shown below.

Table 23. State Waiver Goals

Waiver Policy: Waiver of Retroactive Eligibility	
Goal: Encourages members to obtain and maintain health insurance coverage, even when healthy.	
Eliminating retroactive eligibility will increase the likelihood of enrollment and enrollment continuity.	Do eligible people subject to retroactive eligibility waivers enroll in Medicaid at the same rates as other eligible people who have access to retroactive eligibility?
	What is the likelihood of enrollment continuity for those subject to a retroactive eligibility waiver compared to other Medicaid beneficiaries who have access to retroactive eligibility?
	Do beneficiaries subject to retroactive eligibility waivers who disenroll from Medicaid have shorter enrollment gaps than other beneficiaries who have access to retroactive eligibility?

The State also proposed the following hypotheses and research questions. Additionally, in the original amendment the waiver of retroactive eligibility is proposed to reduce annual costs in excess of $36M with the federal share topping $26M due to a reduction in total member months.

Table 24. State-Specified Hypotheses and Research Questions

Hypothesis	Research Question(s)
Eliminating retroactive eligibility will increase enrollment of eligible people when they are healthy relative to those eligible people who have the option of retroactive eligibility.	Do newly enrolled beneficiaries subject to the waiver of retroactive eligibility have higher self-assessed health status than other newly enrolled beneficiaries who have access to retroactive eligibility?
Through greater continuity of coverage, health outcomes will be better for those subject to retroactive eligibility waivers compared to other Medicaid beneficiaries who have access to retroactive eligibility.	Do beneficiaries subject to the retroactive eligibility waiver have better health outcomes than other beneficiaries who have access to retroactive eligibility?
Elimination or reduction of retroactive coverage eligibility will not have adverse financial impacts on consumers.	Does the retroactive eligibility waiver lead to changes in the incidence of beneficiary medical debt?

WRE Methodology

We combine survey and administrative data to address hypotheses related to the WRE. The PHE interrupted the natural inflow and outflow of member enrollment in IHAWP. To address this, we will limit analyses to the period 2014-2019.

Evaluation design

Target and comparison populations

Target populations

November 1, 2017, through December 31, 2019

Children and adults who were subject to the waiver of retroactive eligibility including all adults in Iowa Health and Wellness Plan (IHAWP) and adults and children in the Family Medical Assistance Program (FMAP), we may include children in the Children's Medical Assistance Program (CMAP). Eligibility for these coverage types is determined using the Modified Adjusted Gross Income (MAGI) methodology.
Although members receiving Long-Term Services and Supports (LTSS) were subject to the waiver during this time, their utilization patterns vary significantly from any other group within Medicaid precluding their use in these analyses.

January 1, 2023, through December 31, 2024

Adults subject to the waiver of retroactive eligibility including all adults in IHAWP and FMAP coverage. Children were no longer subject to the waiver during this time frame. We have purposely eliminated any Public Health Emergency (PHE) years from the analyses.

Comparison populations

January 2011 through October 31, 2017

Pre-waiver population of adults and children in groups that are later subject to retroactive eligibility including all adults in IHAWP and FMAP coverage and children in CMAP.

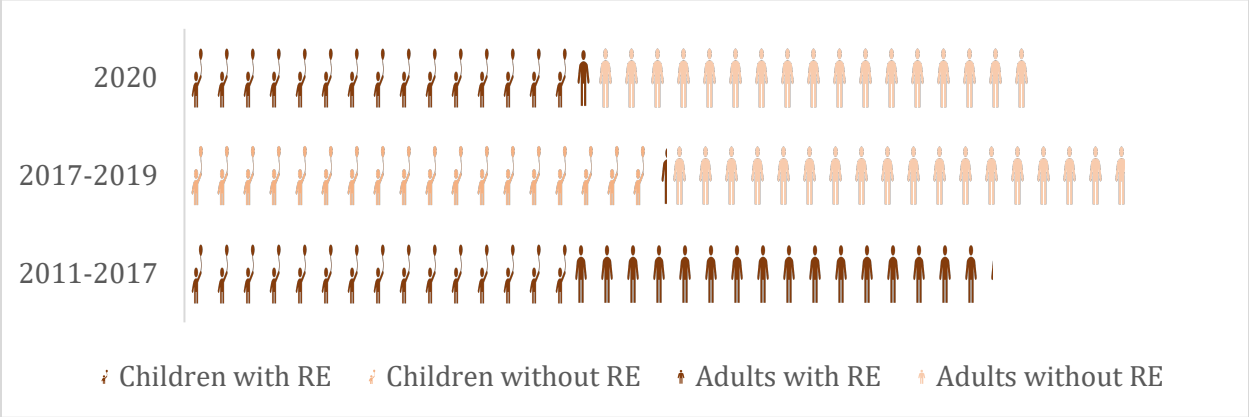
January 1, 2020, through December 31, 2024

Children in CMAP are no longer subject to the waiver of retroactive eligibility at this time.
There are no adult comparisons groups due to the provision of presumptive eligibility.

Error! Reference source not found. provides a visualization of the number of adults and children subject to the waiver of retroactive eligibility within three key time periods: prior

to the waiver, during the first 2 years of the waiver and following adjustments to the waiver on January 1, 2020. Each figure represents 15,000 members.

Figure 22.Visualization of Study Groups



Target population: Provider entities

Provider entities such as medical offices, public health offices, hospitals and long-term care facilities help patients/clients who may be eligible for Medicaid apply for benefits by initiating and, in some cases, following-up to make certain the application was filed in an effort to improve their ability to get paid for services. These activities may be performed by front office staff, billing and claim staff, discharge planners, care coordinators, outreach workers, peer counselors and a host of other staff. Additionally, service providers such as physicians, pharmacists, therapists, ARNPs, and PAs may act to trigger application assistance or may direct patients/clients to apply directly when application assistance is not available at their entity. Information from these sources is critical to understand entity/facility changes that may have occurred due to the waiver of retroactive eligibility. We will utilize process measures to understand and assess the effects of the waiver of retroactive eligibility on health care providers.

Data sources

Iowa Medicaid administrative data

See Secondary Data.

New Enrollee Survey

We are currently surveying newly enrolled members to learn about their experiences prior to and during Medicaid enrollment to address evaluation questions related to the impacts of the waiver of retroactive eligibility on enrollment, enrollment continuity and financial wellbeing.

The survey is cross-sectional and was initially planned to field in Spring, 2021. The COVID-19 pandemic and related PHE pausing Medicaid disenrollment postponed the fielding of the survey until August 2023.

Sample

All newly enrolled adults in Iowa Health and Wellness plan (subject to the waiver) and newly enrolled children under 13 years the Family Medical Assistance Program (not subject to the waiver), are drawn on a monthly basis. We exclude members who have been eligible in the last 12 months, who are living out of state, or are without a valid phone number. Only one person is selected per household to ensure the independence of sample variance and reduce the respondent burden. For children as new members, parents or guardians provide the responses on behalf of them. To determine the sample size, we used a combination of strategies, including power calculation, previous survey evaluations with Medicaid members, and a one-month pilot survey. We plan to have a final sample of 1,200 new members, with a target of 100 completed surveys per month.

The Medicaid enrollment files contain a 'Language' variable which allows us to determine whether members prefer to receive communications in Spanish. The Spanish versions of the postcard and survey are sent to those indicating Spanish as their preferred language.

Survey measures

The survey contains several domains, including new members' enrollment reasons and experiences, previous health insurance coverage and current coverage expectation, access to and use of health care, affordability of healthcare, and self-reported health status and financial well-being. The initial survey measures were informed by our previous member survey, disenrollment survey, the latest literature, and the relevant national surveys (e.g., Health Reform Monitoring Survey, National Health Interview Survey). We also involved The Iowa Social Science Research Center (ISRC) at The University of Iowa, our fielding partner, during the measurement development phase given their experience and expertise in other evaluation surveys with the Medicaid population. Additionally, using our pilot survey feedback, we further refined our health care use preference and medical debt measures, and edited response options for some enrollment related questions to improve clarity and better reflect this population's experiences. The survey instruments are offered in English and Spanish (see Supplemental Materials). Akorbi (https://akorbi.com) a professional translation company, was hired to provide the Spanish instrument translation.

Survey administration

The data collection started in August 2023 and is planned to close in July 2024. It is a telephone-administered survey. In an effort to maximize response rates for this telephone survey, an introductory postcard with our survey info and a post-completion $20 cash incentive are used. (See Supplemental Materials Document).

All the postcards are sent out using first-class mail service at the beginning of each month, which is at least one week prior to the telephone contact. For people who identify Spanish

as their preferred first language in the Medicaid eligibility file, Spanish postcards are mailed, and telephone calls are conducted accordingly by Spanish-speaking interviewers.

The ISRC at The University of Iowa is responsible for fielding and survey data collating. All survey staff are trained on the human subjects research protections, background of the Medicaid evaluation, and the survey instrument. Up to six call attempts are made to reach each potential respondent. Members who explicitly refuse to take the survey or hang up during survey introduction are removed from the contact list. For those who ask, a call backs are arranged at a convenient time for the respondent. The English version of the survey takes about 20 minutes to complete, while the Spanish version has taken approximately 30 minutes to complete.

Pilot survey

To have a better understanding of the response rates for a newly enrolled population and the performance of the survey instruments, we conducted a one-month pilot survey in June 2023. Postcards were mailed to 381 members (359 in English, and 22 in Spanish) On June 3. Calling was started on June 7. The overall response rate was 27%, with 26% for those presented with the English version and 48% for those presented with the Spanish version. We further adjusted the rates using AAPOR calculator by excluding ineligible members when surveying in the denominators, which result in 30%, 29%, and 69%, respectively. Table 25 presents the response rates by program and income level within the IHAWP program: 0-100% FPL childless adults in IHAWP program, 101-133% FPL childless adults in IHAWP program and parents of children in FMAP coverage program.

Table 25. Response Rates by Program

Group	Sample	Completes	Response Rate
0-100% FPL childless adults	283	73	26%
101-133% FPL childless adults	45	10	22%
parents of children	53	19	36%

For the survey instruments, the pilot tested both English and Spanish versions to ensure the survey domains and questions accurately addressed the research questions for this policy evaluation. Additionally, it tested whether the questions were defined in a clear and consistent manner, asked in an appropriate and easy way, and understood well by our target population.

Comments and feedback obtained from the pilot included:

- Length of the survey (plan was 15 minutes; pilot survey mean and median were at 20 and 19 minutes)
- Understanding of the questions and response options, including the logic, wording, content, and consistency.
- Commonly mentioned open-ended responses

- Structured response format (e.g., binary-option, multi-option)
- Other field notes

We discussed with the ISRC, and incorporated all the comments and feedback as we revised our introductory postcards and instruments. The ISRC re-trained and practiced the updated instruments with all their field staff.

Response bias and missing data

After the survey is closed, we will assess whether those who respond to the survey compare favorably with those who do not on demographic characteristics. We will also learn about the missing data (i.e., nonresponses) we may have from this survey, make plans for variables missing at different percentages and patterns, and consult statistician to explore the post-survey adjustments.

Healthcare Provider Cost Reporting Information System (HCRIS)

See Secondary data.

National Survey Options

Though previous work, we have found that national surveys, such as the Medical Expenditure Panel Survey (MEPS) and the National Financial Capability Survey, do not recruit Iowans in sufficient numbers to allow for state-level comparisons. However, we may be able to utilize the American Community Survey (ACS) and/or the Behavioral Risk Factor Surveillance System (BRFSS) to assess some state level effects.

See discussion Secondary data.

Covid-19 Adjustments

The following text has been taken from a report 'Iowa Health and Wellness Plan Interim Report: Coverage during the PHE' which was produced to determine the effects of the PHE on churning and gaps in coverage in preparation for WRE analyses.

The eligibility adjustments related to the federal PHE prevented Medicaid members from being disenrolled for any reason including non-payment of premiums or non-completion of Healthy Behaviors.

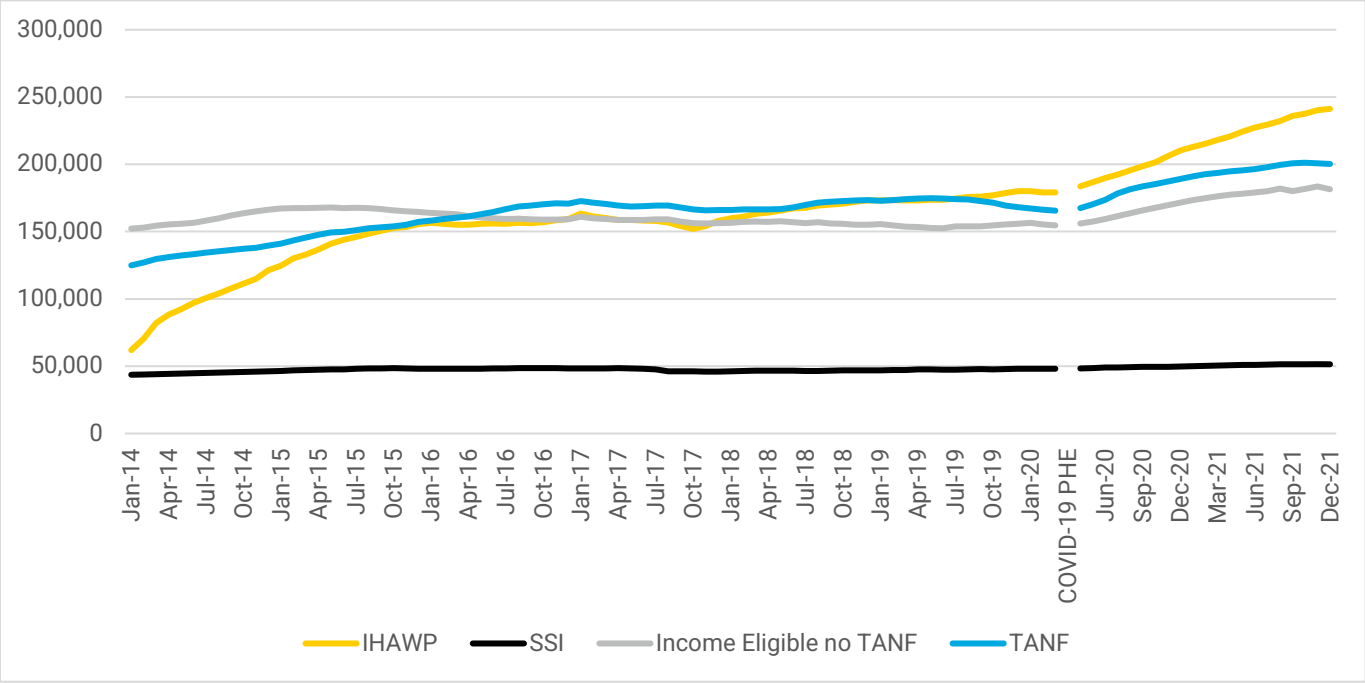
The following notification was provided to members:

> *No one will be disenrolled or have their Medicaid services reduced due to an inability to pay a premium, incomplete Healthy Behaviors, or other means throughout the*

duration of the COVID-19 pandemic. (Disenrollment will still occur for those who are no longer a resident of Iowa, deceased, or requested benefits to be canceled.)[1]

This resulted in members experiencing longer periods of enrollment without disruption. Additionally, we expected that more people would enroll for Medicaid as people who were unable to maintain employment sought help to pay for healthcare. Figure 23 portrays the increase in Medicaid membership following the COVID-19 Public Health Emergency declaration for 4 groups of Medicaid members: 1) IHAWP, 2) SSI – adults provided Medicaid coverage through a disability determination, 3) Income Eligible no TANF – includes adults and children eligible through programs directed to mothers and children and 4) TANF – adults as members of families eligible for Temporary Assistance to Needy Families.

Figure 23. Number of Medicaid members per month by program – January 2014 – December 2021



Two factors affect the rising number of Medicaid members per month. First, enrollments may increase to include people who are losing jobs and/or benefits due to the pandemic. Second, the curtailment of disenrollment allows people to retain coverage.

[1] No Medicaid Disenrollments or Reduced Services During COVID-19 Pandemic | Iowa Department of Human Services, accessed 12/1/2021

Membership changes over time

Figure 24 provides some insight into the mechanism at work by showing the number of members moving into and out of Medicaid and Medicaid programs.

Gray – Not in a Medicaid program.

Red – Marketplace Choice (Folded into Iowa Health and Wellness Plan December 31, 2015)

Yellow – Iowa Health and Wellness Plan

Dark blue – IowaCare (ended December 31, 2013)

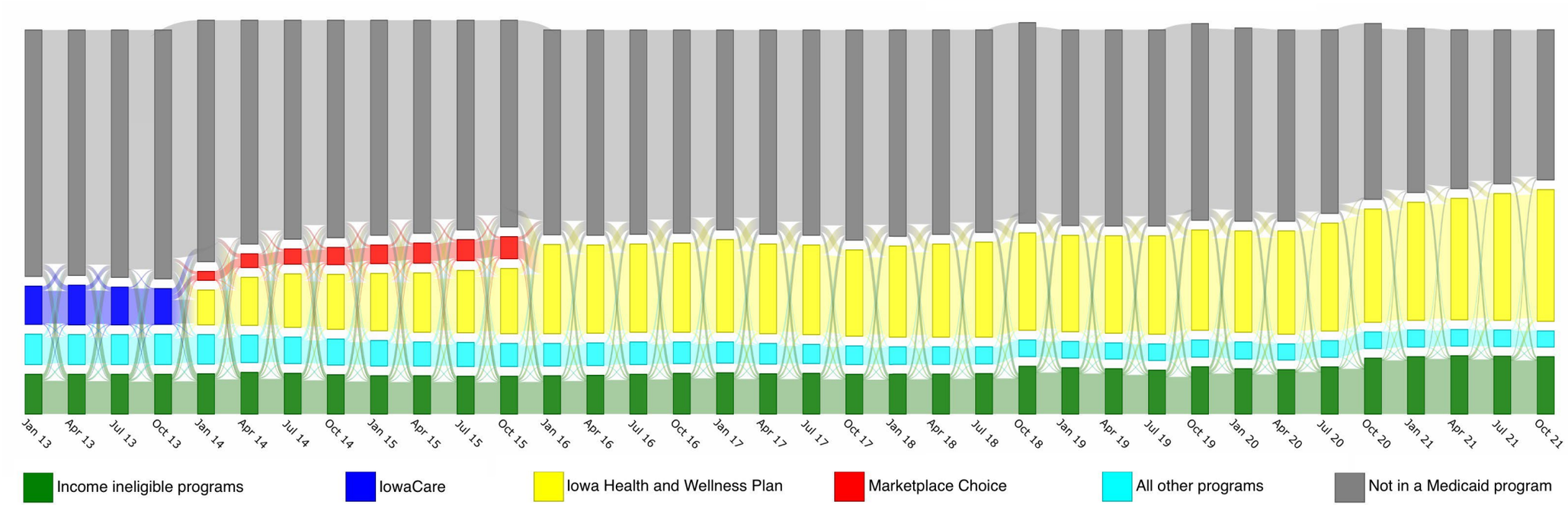
Green – Income eligible programs such as MAC – medical assistance to Mothers and Children

Teal – All other programs.

We focus particularly on the grey, those not in Medicaid, and the yellow, those in Iowa Health and Wellness Plan with attention paid to the lines moving from grey to yellow and yellow to gray.

Lines moving from grey to yellow (left to right) represent the number of people entering Iowa Health and Wellness Plan after having no Medicaid-funded coverage option, while those lines moving from yellow to grey (left to right) represent those moving out of Iowa Health and Wellness Plan to having no Medicaid-funded coverage. We are interested in the period immediately before and during the pandemic. During the time prior to the pandemic, these two lines are even and fairly thick meaning that as many members were entering as were leaving Iowa Health and Wellness Plan. After April 2020, during the pandemic, the line moving from no coverage to Iowa Health and Wellness Plan remains similar to the pre-April pattern; however, the line moving from Iowa Health and Wellness Plan to no coverage nearly disappears. This indicates that we are not seeing more people entering Iowa Health and Wellness Plan (these numbers are staying relatively stable), but there are far fewer members leaving Iowa Health and Wellness Plan, as one might expect given the suspension of disenrollment.

Figure 24. Alluvial Chart of member movement by quarter



To assess whether there are increases in the number of people applying for and receiving Medicaid coverage, we determined the number of new members per month for the period one year prior to the PHE (March 2019) through December 2021.

New – Member who became enrolled in Medicaid and had no Medicaid-funded coverage in the previous year.

Disenrolled – Member who is not covered for at least 6 months following loss of coverage.

IHAWP – Iowa Health and Wellness Plan

IE – Income eligible members 19-64 years of age

SSI – Disability determination eligible members 19-64 years of age

Generally, Figure 25 shows that, generally there were no increases in new enrollees from April 2020 through December 2021 as compared to the pre-PHE period (March 2019-March 2020). This suggests that the increased member numbers over time are due to members remaining on the program longer. This is evident in Figure 26. The number of members disenrolled drops sharply in April 2020, at the beginning of the PHE and does not increase over time.

Figure 25. Number of new members per month by program – March 2019 – December 2021

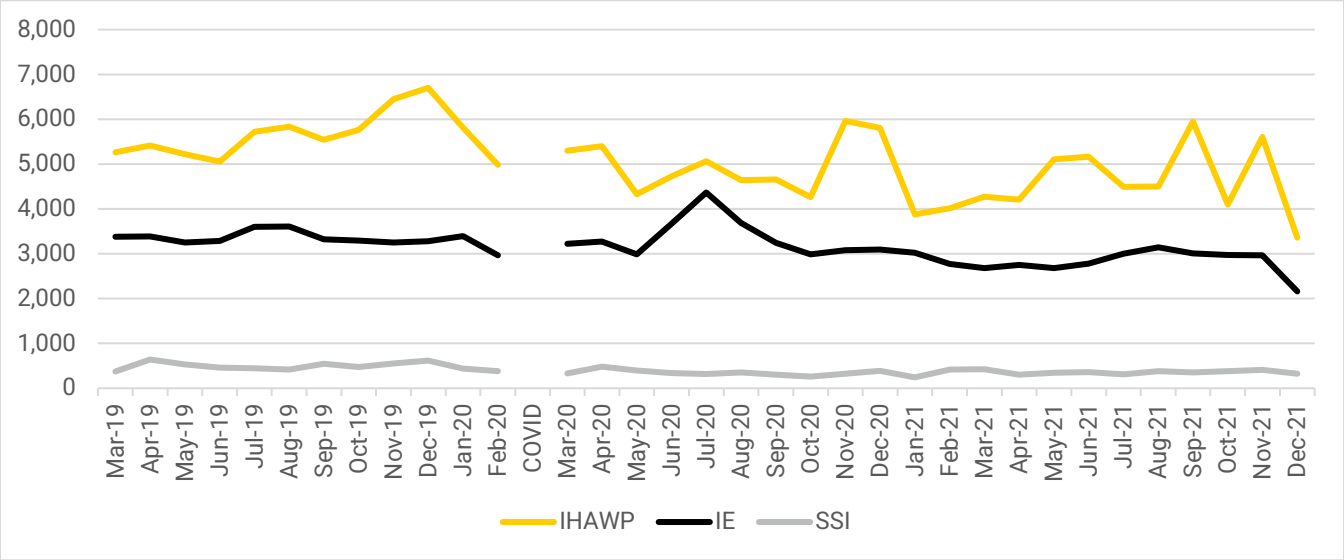
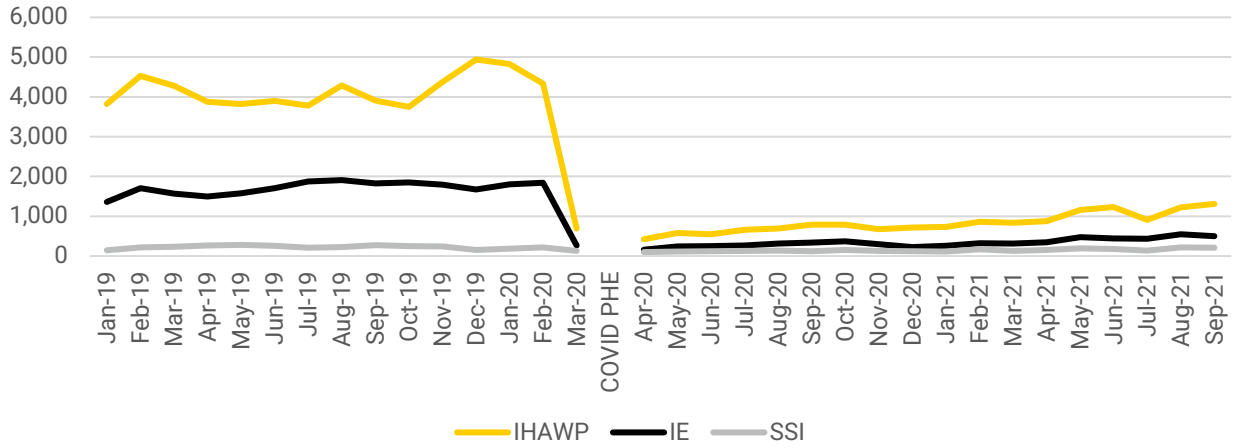


Figure 26. Number of members disenrolled by program and month – March 2018 - September 2021



Churn

Medicaid member churn describes the movement of individuals in and out of the Medicaid program. **Error! Reference source not found.** provides a visualization of the changes in membership over time, highlighting the increased membership and reduced churn during the PHE. Further evidence of the stability in membership during the PHE is discussed below.

Study period – March 2018 through December 2020.

Program – Medicaid program member was enrolled with at beginning of churn event (switch, gap).

Study groups – Members who were enrolled in Iowa Health and Wellness Plan (IHAWP) or due to income eligibility (IE) or due to a disability determination (SSI) at the time that the churn occurred.

*Switch – A change in program **without a gap** in coverage.*

Gap – A period of Medicaid coverage lapse lasting at least one month with coverage before and after the non-covered period.

Coverage switches

Medicaid members may switch programs for a variety of reasons including a change in health care needs leading to reduced income or increased disability, changes in economic situation such as increased income or reductions in paid time, or alterations in household composition with the addition of a new child, divorce or death.

Switches are considered successes of the program as they allow coverage to continue as member circumstances change. In particular, movement from the income eligible programs to the Iowa Health and Wellness Plan (IHAWP) provides evidence of members being able to maintain coverage as they increase their income.

There were 82,907 Medicaid members who switched: 48,366 in IE, 3,981 in SSI, and 30,560 in IHAWP. There was a total of 103,689 switches with 56,820 from IE, 5,680 from SSI, and 41,189 from IHAWP. The distribution of switches by year is shown in

Figure 27. Program switches by year – March 2018-December 2020

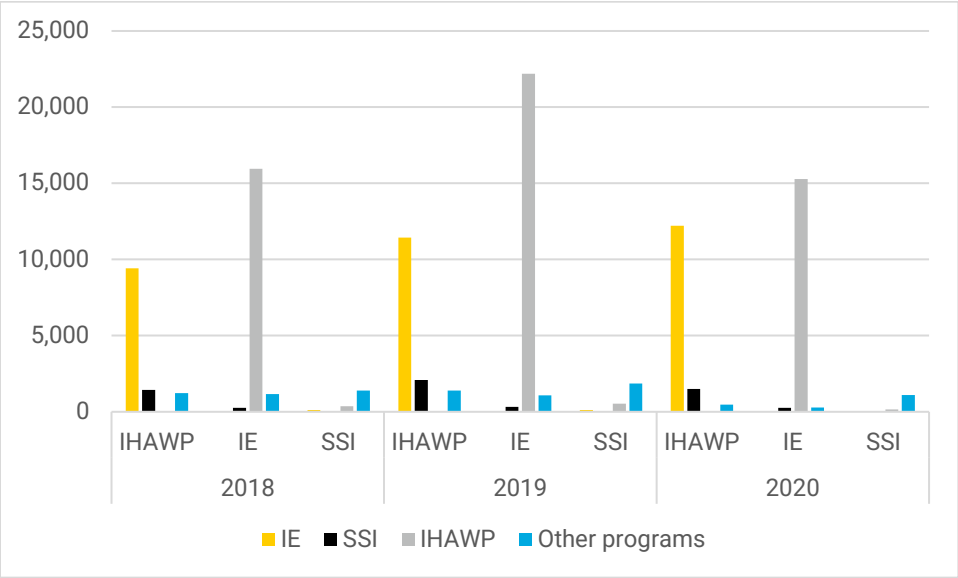


Figure 27 shows that most switches either occur from IHAWP to an IE program or from and IE program to IHAWP, even during the PHE. Members in SSI normally switch to another coverage option such as dual eligibility with Medicare or the Medicaid for Employed People with Disabilities (MEPD).

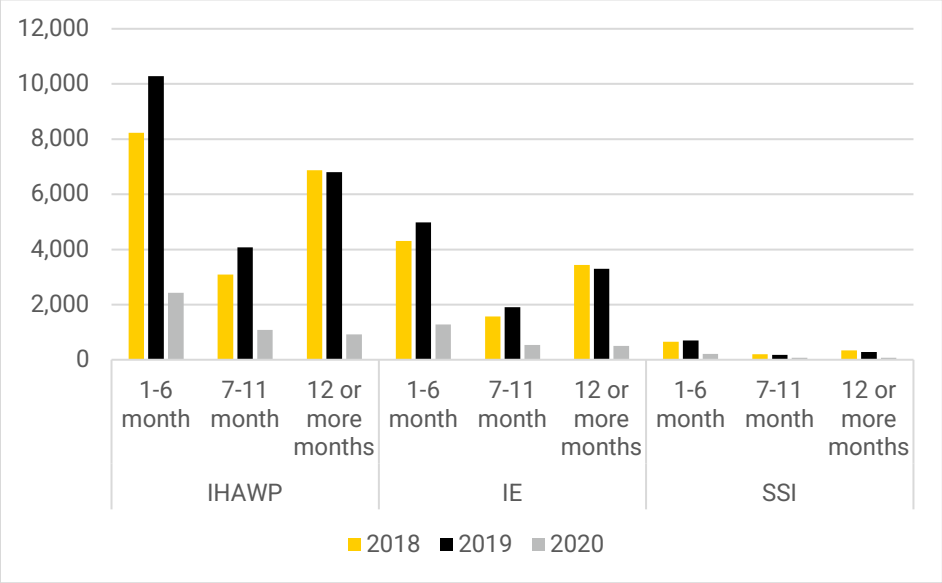
Coverage gaps

Within the Medicaid program, gaps in coverage may arise for many reasons, however, one primary reason for a gap in coverage may result from members not providing needed documentation regarding eligibility such as income information. When there is little or no immediate need for care the time and effort required to gather documentation may be overwhelming compared to the other needs of an individual or family. The PHE halted all disenrollment except as requested by a member.

There were 64,204 members who had at least one gap during the period March 2018 through December 2020. Of these, 20,355 were in IE, 2,589 were in SSI, and 41,260 were in IHAWP. Medicaid members experienced 68,303 gaps with 21,801 for IE members, 2,709 for

SSI members, and 43,793 for IHAWP members. Figure 28 shows the gaps by length, program and year. The outcome of the PHE is clear in the significant reduction in gap numbers and length during CY 2020.

Figure 28. Gap length by program and year – March 2018 - December 2020



Conclusion

WRE analyses will include data through 2019. These results indicate clearly that the data during the PHE is not useful for assessing the results of WRE.

WRE Evaluation Measures Summary (See attached Evaluation Plan for question detail)

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach: Original	Analytic approach: Revised
Hypothesis 1: Eliminating retroactive eligibility will increase the likelihood of enrollment and enrollment continuity.				
Primary Research Question 1.1: Are people subject to the waiver of retroactive eligibility more likely to enroll in Medicaid relative to members in the same programs prior to the waiver?				
Subsidiary Research Question 1.1a: Are people subject to the waiver of retroactive eligibility more likely to enroll while still healthy relative to members in the same programs prior to the waiver?				
Study group: Medicaid members subject to waiver – IHAWP, FMAP, SSI Comparison group: Medicaid members not subject to the waiver – Parents of children as proxy	In general, how would you rate your (your child's) physical health (mental and behavioral health, dental health) now?	New enrollee survey	OLS August 2023-July 2024	Unchanged for summative report.
Study group: Adults in IHAWP, FMAP, SSI CY 2018-2021 and children in Medicaid CY 2018-2019 Comparison group: Adults in IHAWP, FMAP, SSI CY 2014-2017 and children in Medicaid CY 2014-2017 and 2020-2024	Hospitalizations per 1,000 members per month ED visits per 1,000 member per month Ambulatory care visits per 1,000 member per month Average number of prescriptions per member per month	Medicaid claims	ITS Pre-REW CY 2014-2017 Post-REW CY 2018-2024	The post-REW period has been changed to CY 2018-2019 due to continuous enrollment during PHE.
	PMPM Medicaid reimbursement in first 3 months of enrollment		CITS Pre-REW CY 2014-2017 Post-REW,2018-2024	

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
Subsidiary Research Question 1.1b: Are people subject to the waiver of retroactive eligibility more likely to enroll earlier?				
Study group: Medicaid members subject to waiver – IHAWP, FMAP, SSI Comparison group: Medicaid members not subject to the waiver – Parents of children as proxy, SSI members	In the year prior to joining [PLAN NAME], so since [CURRENT MONTH] [CURRENT YEAR-1], were you covered by any kind of health insurance? Was the most recent insurance private insurance? (Private means you or your family got it through an employer or individually purchased it). In which year did that earlier coverage end? In which month in (previous answer year) did that earlier coverage end? Thinking about your recent application to [PLAN NAME], how long ago did you start thinking about applying?	New enrollee survey	Means test August 2023-July 2024	Unchanged for summative report.
Primary Research Question 1.2: Do people subject to the waiver of retroactive eligibility have increased enrollment continuity relative to members in the same programs prior to the waiver?				
Subsidiary Research Question 1.2a: Do people subject to the waiver of retroactive eligibility understand that they will not be covered during enrollment gaps?				
Study group: Medicaid members subject to waiver – IHAWP, FMAP, SSI Comparison group: Medicaid members not subject to the waiver – Parents of children as proxy, SSI members	For some people, [PLAN NAME] may pay the costs of medical care they received before joining the plan. When you applied for [PLAN NAME], did you think that the plan would pay for any of the medical care you received BEFORE joining?	New enrollee survey	Means tests and descriptive analyses August 2023-July 2024	Unchanged for summative report.
Subsidiary Research Question 1.2b: What are the barriers to timely renewal for those subject to the waiver of retroactive eligibility?				
Study group: Medicaid members subject to waiver – IHAWP, FMAP, SSI Comparison group: Medicaid members not subject to the waiver – Parents of children as proxy, SSI members	How easy or difficult was it to apply for [PLAN NAME]? What difficulties did you have when applying?	New enrollee survey Member survey	Descriptive analyses August 2023-July 2024	Unchanged for summative report.

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
Subsidiary Research Question 1.2c: Among members subject to the retroactive eligibility waiver, is timely renewal more likely by those who might be expected to value coverage highly, relative to those who might value coverage less?				
Study group: Medicaid members subject to waiver – IHAWP, FMAP, SSI Comparison group: Medicaid members not subject to the waiver – Parents of children as proxy, SSI members	Everyone has their own opinion about health insurance: What about you? Would you say that, for you, having health insurance coverage is...?	New enrollee survey	Descriptive analyses August 2023-July 2024	Unchanged for summative report.
Study group: Adults in IHAWP, FMAP, SSI CY 2018-2019 and 2023-2024 Comparison group: Adults in IHAWP, FMAP, SSI CY 2014-2017	Number of enrollment gaps over 2 months within the calendar year Average length of enrollment gap in the calendar year Risk stratified by prescription use and presence of chronic conditions as measured by CCS	Medicaid enrollment files	CITS Pre-REW CY 2014-2017 Post-REW, Non-PHE CY 2018-2019 and 2023-2024	The post-REW period has been changed to CY 2018-2019 due to continuous enrollment during PHE.
	Length of enrollment period Total months of enrollment from first enrollment in period to end of enrollment or end of period, whichever comes first, adjusted for months remaining in period at enrollment.			
Subsidiary Research Question 1.2d: Are people subject to the waiver of retroactive eligibility more likely to remain continuously enrolled relative to members in the same programs prior to the waiver?				
Study group: Adults in IHAWP, FMAP, SSI CY 2018-2019 and 2023-2024 and children in Medicaid CY 2018-2019 Comparison group: Adults in IHAWP, FMAP, SSI CY 2014-2017 and children in Medicaid CY 2014-2017 and 2023-2024	Longer periods of continuous enrollment Average months of continuous enrollment, adjusted for months remaining in period at enrollment	Medicaid enrollment files	CITS Pre-REW CY 2014-2017 Post-REW, non-PHE CY 2018-2019 and 2023-2024	The post-REW period has been changed to CY 2018-2019 due to continuous enrollment during PHE
	Time to first enrollment gap		Survival analysis CY 2014-2019, 2023-2024 Time dependent covariates including REW, PHE	The post-REW period has been changed to CY 2018-2019 due to continuous enrollment during PHE.

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
Subsidiary Research Question 1.2e: Are people subject to the waiver of retroactive eligibility more likely to re-enroll following a voluntary or administrative disenrollment relative to members in the same programs prior to the waiver?				
Study group: Adults in IHAWP, FMAP, SSI CY 2018-2019 and 2023-2024 and children in Medicaid CY 2018-2019 Comparison group: Adults in IHAWP, FMAP, SSI CY 2014-2017 and children in Medicaid CY 2014-2017 and 2023-2024	Length of enrollment gap Number of months between disenrollment (forced or voluntary) and re-enrollment	Medicaid enrollment files	CITS Pre-REW CY 2014-2017 Post-REW, non-PHE CY 2018-2019 and 2023-2024	Will include PHE period with appropriate interaction terms, CY 2018-2024.
	Rates of re-enrollment Proportion of members disenrolled (forced or voluntary) who re-enroll within 1 year		Descriptive analyses CY 2014-2019 and 2023-2024	Will include PHE period with appropriate interaction terms, CY 2018-2024.
Hypothesis 2: Eliminating retroactive eligibility will not increase the likelihood of negative financial impacts on members.				
Primary Research Question 2.1: Are there any negative financial impacts on consumers because of the waiver of retroactive eligibility relative to members in the same programs prior to the waiver?				
Subsidiary Research Question 2.1a: Do beneficiaries subject to the waiver of retroactive eligibility experience greater 'medical debt' relative to members in the same programs prior to the waiver?				
Study group: Medicaid members subject to waiver – IHAWP, FMAP, SSI Comparison group: Medicaid members not subject to the waiver – Parents of children as proxy	In the last 3 months [coverage gap time if fewer than 3 months], did you have any health care bills? Include bills such as from doctors, dentists, hospitals, therapists, and pharmacies etc. *(Yes, No)* Did you have any difficulty paying these bills? *(Yes, No)* Were these bills for any of the following types of services? Medical care; Dental care; Prescription medication; *(Yes, No)* For this question, think about your [IF DOV_FAMSIZE>1: and your family's] health care experiences over the past 12 months, that is, since [CURRENT MONTH] [CURRENT YEAR-1]. Did you [IF DOV_FAMSIZE>1: or anyone in your family] have problems paying any medical bills? Include bills for doctors, dentists, hospitals,	New enrollee survey	OLS August 2023-July 2024 OLS August 2023-July 2024	Unchanged for summative report.

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
	therapists, medication, equipment, nursing home, or home care. *(Yes, No)* Do you [IF DOV_FAMSIZE>1: or anyone in your family] currently have any medical bills that are being paid off over time? This could include medical bills being paid off with a credit card, through personal loans, or bill paying arrangements with hospitals, doctors, or other health care providers. The bills can be from earlier years as well as this year. *(Yes, No)* Do you [IF DOV_FAMSIZE>1: or anyone in your family] currently have any unpaid medical bills that are past due? Include bills for doctors, dentists, hospitals, therapists, medication, equipment, nursing home, or home care. This could include medical bills owed directly to health care providers or paid with a credit card or personal loan. The bills can be from earlier years as well as this year. *(Yes, No)* About how much do you [IF DOV_FAMSIZE>1: or your family] currently owe for medical bills that are past due? Exclude bills that will likely be paid by an insurance company. Your best estimate is fine. *(Less than $500, $500-less than $1,000, $1,000-less than $2,500, $2,500-less than $5,000, $5,000-less than $10,000, $10,000 or more)*			
Subsidiary Research Question 2.1b:Do hospitals experience higher rates of uncompensated care after the enactment of the waiver of retroactive eligibility?				
Iowa Hospitals before and after the waiver	Reported rate of uncompensated care	HCRIS	ITS Pre-REW CY 2014-2017 Post-REW, CY 2018-2024	The post-REW period has been changed to CY 2018-2019 due to continuous enrollment during PHE.

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
Hospitals in comparison states without waivers	Reported rates of uncompensated care		CITS Pre-REW CY 2014-2017 Post-REW CY 2018-2024	The post-REW period has been changed to CY 2018-2019 due to continuous enrollment during PHE.
Hypothesis 3: Eliminating retroactive eligibility will improve member health.				
Primary Research Question 3.1: Do people who are subject to waiver of retroactive eligibility have better health outcomes?				
Study group: Adults in IHAWP, FMAP, SSI CY 2018-2021 Comparison group: Adults in IHAWP, FMAP, SSI CY 2014-2017	Avoidable inpatient admissions	Medicaid claims files	Descriptive analyses Pre-REW CY 2014-2017 Post-REW CY 2018-2024	The post-REW period has been changed to CY 2018-2019 due to continuous enrollment during PHE.
Hypothesis 4: Eliminating retroactive eligibility will reduce the annual Medicaid services budget.				
Primary Research Question 4.1: What are the effects on the Medicaid services budget?				
Study group: Iowa Medicaid CY 2013-2017 Comparison group: Iowa Medicaid CY 2018-2024	Total annual Medicaid health care services expenditures	Medicaid claims	ITS Pre-REW CY 2013-2017 Post-REW CY 2018-2024	The post-REW period has been changed to CY 2018-2019 due to continuous enrollment during PHE.
Study group: Iowa Medicaid CY 2013-2017 Comparison group: Iowa Medicaid CY 2018-2022	Total number of months Medicaid eligibility	Enrollment files	Descriptive analyses Pre-REW CY 2013-2017 Post-REW, non-PHC CY 2018-2019 and 2023-2024	
Hypothesis 5: Providers will increase initiation of Medicaid applications for eligible patients/clients.				
Primary Research Question 5.1: Have health care providers increased the initiation of Medicaid application for eligible patients/clients?				
Providers at the individual, MCO, ACO level	Provider reports of Medicaid application initiation process and follow-up	Key stakeholder interviews	Descriptive analyses July 2021-June 2022	Unchanged for summative report.

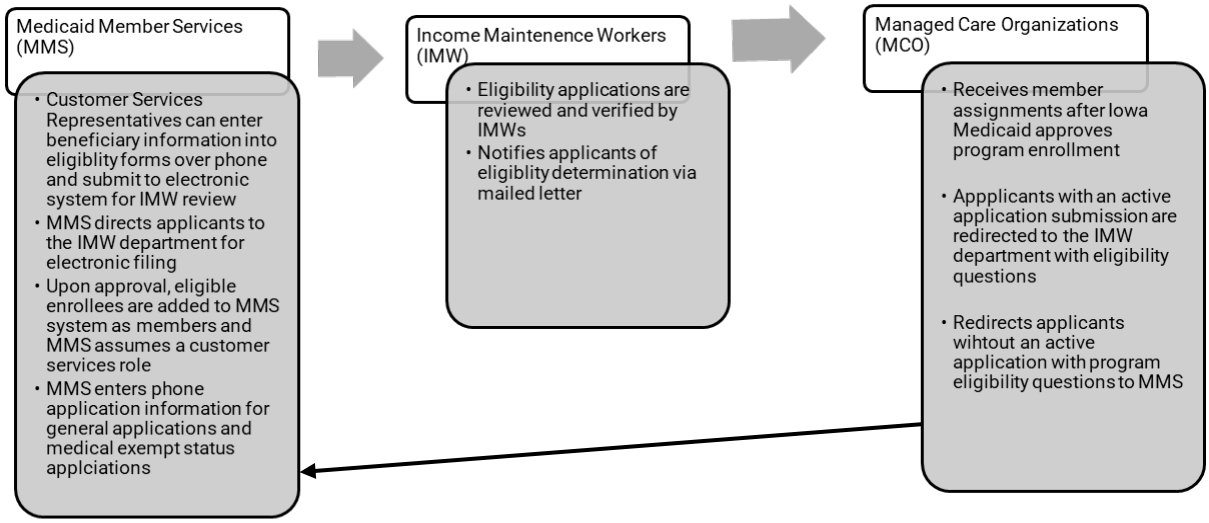
WRE Results

WRE Process evaluation

General

Interviewees described how steps of member enrollment are managed across organizations. Figure 29 summarizes the flow of applications and roles of each organization in the process.

Figure 29. Retroactive Eligibility and Medicaid Enrollment Process



Enrollment and enrollment continuity

Interviewees noted some areas in which the retroactive eligibility waiver intention could be compromised, including provider's ability to attend to enrollment logistics, situations in which an uninsured person could be incapacitated and unable to apply for enrollment in a timely fashion, and, generally, a provider association representative stated, "I think the intent is good. I think that the implementation is still rather messy."

A representative from Iowa Medicaid described the categorical eligibility policy as so nuanced that it is difficult to communicate to members en masse, saying, "I don't know that there's anything on the website specific to retroactive eligibility. I think it's more just part of the application process, since it's so specific to either age or other requirements."

Representatives from an MCO and provider association elaborated that the intention of retroactive eligibility waiver to encourage proactive enrollment amongst eligible populations may lack effectiveness due to a complex design, more immediate competing priorities, and a general lack of awareness of potential eligibility, saying:

"That would make sense. I mean, that might be how I would think about it. I don't know if that's how the average person who's eligible for the Iowa Health and Wellness Plan thinks about it, but I understand the design." — MCO representative

"If you're just barely paying your bills, you're just not thinking about, "Hey, maybe I'll go try to buy insurance, or I'll try to qualify for Medicaid." You just may not have thought of that." — MCO representative

"Just by the nature that folks don't always know that those items can be covered by Medicaid…a lot of times, they don't know that they have those benefits."— Provider Group representative

Interviewees shared experiences of how uninsured Iowans eligible for retroactive Medicaid coverage initiate the enrollment process. Stakeholders described various avenues to enrollment, including provider direction and initiation.

"I think it's situational. It [provider involvement in enrollment] depends on how the member presents the information. And we say this a lot member services because it really does depend on how someone says everything. If they have everything together, they might not mention that they've worked with their provider at all. It really would be hard to drill down to that level." – Medicaid Member Services representative

"They're the ones who've completed that application [providers] for the client in the portal and their name's on it and they list themselves as the representative." – Income Maintenance worker

"Well, that would be, for the most part, when somebody calls in and wants to do an application, we tend to not really know whether a provider assisted them unless they are coming through the DHS, the qualified entities that the hospitals and clinics all have, where they can do an application online with a member if there's an issue or something, they contact us and we help walk them through those processes. So other than that, we would not know probably whether this member worked with their provider or not. Only to say, somebody may say, "Well, I went to the doctor and they told me to call and apply." – Medicaid Member Services representative

Medicaid representatives also described member-initiated applications (as opposed to provider initiated), noting that members may apply via the **online portal, fax or email, or filling out applications in person at a clinic.**

"I'm guessing a lot of it is word of mouth between clients too, especially when they realize they don't have coverage or the smaller clinics like [clinic name]. It's not a big hospital, but they serve a lot of people…they'll help them with an application or I'm not sure if they're telling them to go online to do it.. Most of my applications come in online versus them going to the office and filling out an application." – Income Maintenance worker

"They could drop it off or fax it in or email... Well, they could email it in, but most of the time they go to the office, fill it out or drop it off." – Income Maintenance worker

Interviewees described the types of provider staff who work with uninsured people admitted to the emergency room or hospital to gain access to Medicaid retroactive coverage, which included examples like **patient advocates, social workers, and financial counselors.**

"I don't know if say a patient comes in, in the middle of the month. I don't know how soon it is before that person knows, "Hey, room 502, they don't have health insurance. Someone needs to get up and talk to them." Possibly put in a presumptive eligibility application or a Medicaid application. I don't know how the process works on the hospital side of it as far as when they get notification that someone needs help." – Income Maintenance worker

"And usually with the presumptive apps I get, if they're working with a patient advocate or financial counselor with the hospital or provider, they aren't shy about emailing us regarding the status or what potentially is needed to determine eligibility for that particular patient or client." – Income Maintenance worker

One interviewee noted the variation in access to staff who can assist with Medicaid applications, depending on the timing of healthcare utilization (whether it was during regular business hours).

"Locally, our hospital, the moment you walk into the ER, they're asking for your insurance coverage. At that moment, that person knows you don't have insurance. That's our social worker at our hospital, that's their job from that point on to get them insurance. Do not let them walk out the door until they fill out that application. Now, if it is a weekend or sometime that maybe the social worker isn't there, and honestly, I'm not sure that we have more than one at our small hospital. I really do think that that person that took your insurance information is going to give you an application before you leave and have that social worker follow up on Monday morning, because locally our county would have to write that off if they didn't pay their bill." – Income Maintenance worker

Clinic staff shared comments about member experiences with **wait times** when calling Medicaid to update members' personal information such as an address change or a name change.

"We found that there's very, very long wait times…I have been on hold with these people for 45 minutes with Medicaid to get through to them." – Clinic staff

"Well 45 minutes or even longer because I've heard you even say that." – Clinic staff

"Like [STAFF] said, it is a barrier. More often than not, I can honestly say there's only been one time I was able to get right through and it was very early in the morning, like 7:30 in the morning. Otherwise, the minimum has been a 45-minute wait most of the time. It's frustrating. I mean that's a lot of time to wait to just change it, to update your information with Medicaid. That's if you want to report an address change even. Or phone number change or that you got married or had a baby." – Clinic staff

Verification

Interviewees described the verification process, including timeline between application and member ability to utilize their coverage to access care, noting up to a 45-day processing timeline (although generally actual processing time is shorter) and no ability to process applications in an expedited manner for uninsured people with urgent health needs (in contrast to other benefits like SNAP).

"We don't have expedited medical. We don't expedite Medicaid. We do SNAP benefits, but we don't do Medicaid…When work comes into our number or into our queues to work, we don't rush medical in

any way. It gets processed in date stamp order. Unless we're told by a supervisor like, "This needs to be expedited," which does not happen very often." – Income Maintenance worker

"It varies from worker to worker. I know for us; I think we have 45 days to process a medical application. Very rarely in my case does it ever take that long but we have the expectation in my service area that we have to have all of our applications touched within seven days of it coming in, of it being pushed into our queue to process, to either have it processed or at least have a request out or contact made somehow with whether it's SNAP Medical or cash assistance, it doesn't matter." – Income Maintenance worker

"I feel like right now it's in our busiest time of the year to begin with. We were in open enrollment. People always apply more during the holidays, which Thanksgiving then turnaround right away, it's Christmas. We are always the busiest this time of year but normally just on a regular scale, I feel like we can get medical applications processed within five days, easy. They're easy because you don't have to request anything. If everything passes through the system, you don't have to request and wait the 10 days to have them provide something back to you. So, you can literally take an application and it may take you five minutes from start to finish to approve that application and moving on." – Income Maintenance worker

Enrollment

Stakeholders shared perspectives about the Medicaid enrollment process within the scope of the retroactive eligibility waiver, noting the various roles and steps involved. Interviewees reported hospital-based advocates, MCO case managers, administrative positions, community health workers, hospital social workers, healthcare staff and socialized enrollment staff as having roles in guiding newly identified eligible members through the enrollment process and maintaining related records.

One provider association representative described the staff involved in implementing retroactive coverage, saying,

"in our smaller [provider settings], it's much more likely to be a provider or administrative position [managing enrollment]. In our larger [provider settings], a lot of those have hired social workers, community health workers, or just enrollment staff. And a lot of those enrollment staff assist with just the day-to-day insurance checks and eligibility checks."

A representative from Iowa Medicaid noted that typically, MCO case workers would be relied upon for care coordination tasks, but people in the process of applying for retroactive coverage don't have access to that support, saying,

"If they're enrolled in MCO, the case management on medical management will work with social workers at the hospital to assist in any of those needs [enrollment]. But if they're not enrolled, then I'm not sure."

A provider association representative reported efforts to connect patients with a provider once coverage is verified, saying,

"their [health care staff] goal with the patients, if they can, is to make sure they're enrolled, then that they know that they have coverage, and then get them into some kind of treatment plan and work to

get them back in a timely fashion. And once a patient comes in, they try really hard to make sure that they understand if the patient is eligible and help them get into that."

Representatives from both MCOs acknowledged the expectation of provider intervention in assisting uninsured members in the prerequisite enrollment process for retroactive coverage, saying,

"Different providers have varying levels of sophistication about enrolling Medicaid. If you're a hospital and somebody has no insurance, they come in and they maybe had something pretty major, the hospitals are pretty motivated to see if they can't qualify for Medicaid. They lead the process there, but other providers may not be that sophisticated and motivated, and so then the members end up getting medical bills they can't pay or something. Then it doesn't go quite as well.

In response to the question, "Do you think this has any kind of impact on provider workflow or administrative burden?" an MCO representative replied,

"I'm sure it does. I don't hear about that as much from providers, but I can't imagine it wouldn't. Because they're trying to make sure that those members are getting the paperwork in with Iowa Medicaid to get the eligibility that they need. I'm not familiar with the ins and outs of the process, but it would be work on their end for sure."

In contrast, a representative from Iowa Medicaid, denied provider involvement prior to confirmation of Medicaid eligibility, saying,

"Generally, providers aren't involved until we know that the member is eligible, of course. If they're working together, if there's a miss, as far as the potential for retroactive eligibility, and it didn't happen at the time of application, then we might have some provider involvement in it at that point, but generally not do the providers." This account from Iowa Medicaid of providers not being involved in enrollment processes conflicts with MCO and provider association representative accounts in which healthcare providers reportedly do assist with verifying eligibility and initiating enrollment.

An Iowa Medicaid representative talked about how various positions interact to verify Medicaid eligibility and coverage, saying,

"the enrollment process, well, it's kicked off by the members' application, of course, but then it's our field operations, and income maintenance field staff that process the applications."

Interviewees reported about the various eligibility categories within the retroactive eligibility waiver, noting the difference between coverage for members who are and are not eligible for 90-day retroactive eligibility. A representative from Iowa Medicaid elaborated, saying,

"If they're not eligible for retroactive coverage, the notice of decision that we send indicating approval would just be effective the month of application…Their effective date, if they're approved, then their effective date of eligibility would be reflected, whether it be one, or all three months of the retroactive coverage, or just from the month of application forward, because they don't meet the criteria to be eligible for retroactive coverage."

In prior sections of the key stakeholder interview findings, several spillover effects (e.g., impacts not directly intended by the policy) related to the retroactive eligibility waiver for the IHAWP members emerge from the content, described below:

A representative from a provider association discussed the role of providers and clinic staff in operationalizing retroactive eligibility, reporting that providers are burdened with additional administrative work to verify member eligibility and funding care at the time of service, describing the process as, "back sorting through a lot of paperwork" and "navigating a number of players involved in getting reimbursement." This representative continued, noting challenges assessing eligibility with patients unfamiliar with Medicaid and lacking information needed to determine eligibility.

Illustrations of the provider experience

> *"We also have a patient population which I would say it's harder to get that stuff out of. and it's just not a population like you and I, who has at our fingertips and can scan it or send it in or whatever. So, I think that puts some burdens on our providers as well."*
>
> *"A lot of times, they [uninsured patients] don't know that they have those benefits and don't communicate that possibly to a center and then they are treated as a slide patient…from what I've seen, we probably have a bigger risk of missing somebody or using that money and finding out there's coverage later… Just by the nature that folks don't always know that those items can be covered by Medicaid."*
>
> *"You asked a question about providers being paid. From our perspective, that continues to be an issue. Providers are having to reach out to their associations to get help. If there is an issue where the service plan is not developed in authorizations, dated as such…any work that's done is after the fact, and it is to adjust for decisions that have been made and denials for payment…and it is still a bit of a struggle, I think that the MCO staff on the ground are willing to work with us, but that is not the way the system is set up."*

A provider association representative described their response to challenges and barriers encountered while navigating retroactive eligibility waiver, saying staff has "to go back and do the legwork themselves, but we can at least say,

> *"Hey, you have this, let's say, 20% of your population that hasn't given you any updates as to what their insurance is. And you have nothing on file as to what their family income is either. What workflows can we help you put in place to help winnow through that list a little better and get that list a little bit more accurate." Of course, then you're just always still riding up against our patient population and also staff resources too."*

The representative also noted,

> *"we do have a little bit more of a hands-on approach with some of our patients, that maybe that continuity issue isn't lost as much, thanks to our staff."*

Financial impacts on members

One interviewee talked about the specific content in the application form regarding financial hardship paying medical bills in the last three months, which, regardless of

answer, the IHAWP-eligible population is expected to apply within the calendar month for coverage, saying,

> *"There's a question on the applications that states, "Do you need help paying medical bills for the past three months?" That's a question the client answers on the application….And so if they are actually only eligible for IHAWP, they could answer yes to that and then kind of find out that they are actually only eligible for that kind of coverage for the calendar month."*

Interviewees described the experiences of uninsured people applying for coverage and submit their applications too late, missing the calendar month application window.

> *"Yeah, or they have services and somehow the hospital or provider doesn't realize that they don't have coverage, which doesn't happen very often. But we do get, or I get, I shouldn't say for all of us, but I get quite a few applications where the adult is asking for retro coverage and they're not eligible for it." – Income Maintenance worker*

"It [retroactive coverage] would go back to the first of the month in which they applied, but a lot of the times that doesn't benefit some people if they've waited too long." – Income Maintenance worker

One interviewee described how providers **leverage alternative funding sources** to assist uninsured or underinsured patients with medical bills, saying,

> *"I've worked a lot of applications where they get in an accident not expecting a $250,000 bill deductible. They meet may be very high. They have health insurance, the [hospital] wants them... they want them to apply because if they're denied over income for Medicaid, then they can step in for that financial assistance. So, I know that we do applications like that to help them get assistance. They don't want to deny that they are withdrawing the application because they know they make too much. They need that for the [hospital]. I know some workers will deny at their request because they know they're not eligible. That's not what the [hospital] wants. They want them denied over income then financial assistance can step in for them."- Income maintenance worker*

> *"I take it as that's just from the provider at the hospital. They just have to have that kind of to back them up why they're doing financial assistance. They want the client to reach out and extend all options that no one else can pay that bill, then they'll step back in and do either... And I think I've heard it's one of two things. They can do financial assistance and hopefully write the bill off, or what they do is they'll say, "We can do so much of it," but they'll make the patient pay a percentage still." – Income Maintenance worker*

Clinic staff shared member experiences related to retroactive eligibility, noting low awareness amongst members and reluctance to utilize healthcare because of past unpaid bills or expectation of payment.

> *"I do know that that retroactive for the three months, not everyone is still... Some people still think that's in action and it's not." – Clinic staff*

> *"Yeah, very difficult. Along with what we were talking about in regards to the retro with the benefits and stuff, it can be very, I think that's very difficult because like [STAFF] and [STAFF] have both said here is that then they just give up and those members don't... Whoever it is, patients don't want to take*

that time then because it's so long. Then they come in and by the time they realize, "Oh, I have [STAFF] or I have [STAFF] that can help me out with this." Then it's like, "Oh, now you know what? I saw a doctor two months ago." Now they're very concerned because now they have to pay that past bill and that too." – Clinic staff

"That's losing that 90-day retroactive I think also is that barrier too, because then here they are... I've had patients say they don't want to even make an appointment or come in because they know they already owe. They don't know how they're going to pay that. It's like, no, no, no, no, no, no, no. You need to come in, you need to see a doctor. We don't want you not to see a doctor. Anyways, wrapping that back to the retro piece of it, at least that's my opinion." – Clinic staff

A representative from Iowa Medicaid spoke to the positive impact for uninsured people gaining coverage to relieve financial burden from a medical crisis, saying,

"In general, it's a wonderful thing for people. Because it really helps them out when they're in a bad crunch. So, no, I haven't heard anything negative." Along with a dearth of negative feedback, an Iowa Medicaid representative cited changes to benefit eligible populations as evidence for effectiveness, saying "I would assume [policy effectiveness] because they gradually added populations back to allow retro that those were lessons learned, or there was feedback that contributed to making those changes."

Improve member health

An MCO representative shared perceptions about retroactive coverage positively influencing future care utilization and behaviors, saying,

"[Does] giving people eligibility, even retroactive eligibility, motivates them to get insurance in the future and whatnot. I would probably say yes. Maybe their situation changes. They've maybe established care with the provider, and they see the importance of it, especially if they have a chronic issue. They probably realize, 'Hey, I thought I [was] healthy and immortal before I had this other issue that then got me on Medicaid, and now I need to think about that going forward.' I do think it probably does influence them."

Medicaid services budget

Program Level Financial Solvency

"I think there was probably some cost concern in it too…I know it's been re-extended to a couple of provider types. We don't necessarily get the total reason and rhyme for that and why not others, but we also know what the price tag was to re-extend to everybody, the fiscal note for the legislature. And that was not something that would be appealing to the legislature at that time. So, guess that's my basic understanding, assumptions of it." – Provider group representative

In response to whether the state has seen any cost saving impact from the retroactive eligibility waiver, a representative from Iowa Medicaid responded,

"That, I'm not sure. I don't have the numbers on that. So, I can't really say to that."

Promoting efficiency in the enrollment, care management, and reimbursement processes

"The tighter the retroactive timeframe, the more efficient it would be for a provider. And so, if you're working in a scenario where you have six months of retroactive eligibility, which is not what we have in

place here, just from a provider perspective that's six months where, from an accounts receivable standpoint, they're carrying those balances on the books until they know where to bill appropriately. So, the tighter the timeframe, the more efficient ultimately." – MCO representative

Initiation of Medicaid applications

Member Awareness

In regard to the ability of calendar month-limited retroactive coverage to influence member decisions to proactively enroll in Medicaid, two stakeholders perceived limited awareness amongst members, with an MCO representative saying,

"that distinction is, I don't think, common knowledge," and a provider association representative saying, "I would say, across the board, patients have no idea."

Interviewees shared perceptions that the IHAWP-eligible population has limited awareness of Medicaid eligibility, in part due to limited interactions with the healthcare system.

Interviewees commented on how the improved awareness amongst providers has, in turn, benefited awareness amongst people eligible for IHAWP coverage. Increased awareness, amongst both stakeholder types, supports the retroactive eligibility waiver's utilization and successful access to retroactive coverage within the calendar month timeframe.

"I don't think that's something that your average Medicaid recipient is clued in on, just because it does get a little technical. Again, those that are seeking the coverage possibly because they might have had that conversation with a hospital or a provider's office when they were there with their financial assistance staff, but I would say most probably are not." – Medicaid Member Services representative

"We have seen it [retroactive eligibility] utilized, especially when the program was first coming up and people were not aware that there was an option. I would say, generally, people might not be aware of their insurance options until they're in a healthcare need, so I don't know if it's necessarily Medicaid specific. I think that's probably more collective healthcare system based. At least what we see, it doesn't feel like a lack of education on the Medicaid Program. It feels just a little bit more of a lack of awareness of resources in general about health insurance and how to get services covered." – Medicaid Member Services representative

"So it's a little bit tough to say whether or not people know about it is a gauge of the effectiveness or anything like that because it does seem to us that when people are presented with a healthcare challenge, it's them navigating the whole process, not necessarily not aware of Medicaid members that have been on Medicaid, it's something that people know. Like I said, especially when we first were launching, we did see a lot of it because people didn't have other options before, so it was something that people seem to be aware of that they could apply." – Medicaid Member Services representative

Provider awareness

Interviewees described increased provider awareness through experience with the stipulations of the IHAWP retroactive eligibility policy, noting a motivation to avoid the consequence of unpaid services if care is provided to an uninsured person. Interviewees agreed that providers are likely to direct uninsured people to apply for Medicaid within the calendar month services are received to ensure compensation for care.

"I think most providers know if we're getting to the end of the month, we better be getting them coverage for this month if they're there. There's always going to be that fine line of, it was a weekend and it was the last day of the month and things like that, but I think they've probably learned the hard way since 2016 that that day is not going to be covered if you don't apply." – Income Maintenance worker

A representative from a provider association discussed the role of providers and clinic staff in operationalizing retroactive eligibility, reporting that providers are burdened with additional administrative work to verify member eligibility and funding care at the time of service.

WRE Quantitative results

Hypothesis 1: Eliminating retroactive eligibility will increase the likelihood of enrollment and enrollment continuity.

Primary Research Question 1.1: Are people subject to the waiver of retroactive eligibility more likely to enroll in Medicaid relative to members in the same programs prior to the waiver?

Subsidiary Research Question 1.1a: Are people subject to the waiver of retroactive eligibility more likely to enroll while still healthy relative to members in the same programs prior to the waiver?

The new enrollee survey is currently in field.

Subsidiary Research Question 1.1b: Are people subject to the waiver of retroactive eligibility more likely to enroll earlier?

The new enrollee survey is currently in field.

Primary Research Question 1.2: Do people subject to the waiver of retroactive eligibility have increased enrollment continuity relative to members in the same programs prior to the waiver?

Subsidiary Research Question 1.2a: Do people subject to the waiver of retroactive eligibility understand that they will not be covered during enrollment gaps?

The new enrollee survey is currently in field.

Subsidiary Research Question 1.2b: What are the barriers to timely renewal for those subject to the waiver of retroactive eligibility?

The new enrollee survey is currently in field.

Subsidiary Research Question 1.2c: Among members subject to the retroactive eligibility waiver, is timely renewal more likely by those who might be expected to value coverage highly, relative to those who might value coverage less?

The new enrollee survey is currently in field.

Subsidiary Research Question 1.2d: Are people subject to the waiver of retroactive eligibility more likely to remain continuously enrolled relative to members in the same programs prior to the waiver?

Dataset complete, analyses underway.

Subsidiary Research Question 1.2e: Are people subject to the waiver of retroactive eligibility more likely to re-enroll relative to members in the same programs prior to the waiver?

Dataset complete, analyses underway

Hypothesis 2: Eliminating retroactive eligibility will not increase negative financial impacts on members.

Primary Research Question 2.1: Are there any negative financial impacts on consumers because of the waiver of retroactive eligibility relative to members in the same programs prior to the waiver?

Subsidiary Research Question 2.1a: Do beneficiaries subject to the waiver of retroactive eligibility experience greater 'medical debt' relative to members in the same programs prior to the waiver?

Data has been curated.

Subsidiary Research Question 2.1b: Do hospitals experience higher rates of uncompensated care after the enactment of the waiver of retroactive eligibility?

HCRIS Data has been curated, analyses underway, preliminary analyses complete.

Preliminary data through 2019 are provided below. Our data encompassed 116 Iowa hospitals. 82 of the hospitals were designated CAHs and 34 hospitals were not designated CAHs. Iowa expanded Medicaid under the ACA January 1st, 2014, between fiscal year 2013 and 2014. Source: CMS Hospital Cost Report Information System 2011-2019. These results were previously published in a Policy Brief entitled 'The effects of the ACA on uncompensated care, bad debt, and charity care in Iowa Critical Access Hospitals'.

Figure 30 - Figure 32 provide insights into the positive effects that the ACA had on Critical Access Hospitals, an important health asset in rural states such as Iowa. To provide a preliminary assessment of the waiver of retroactive eligibility on these outcomes, we implemented an event study model, comparing results from 2016-2017 versus 2018-2019 for CAH hospitals compared to non-CAH hospitals. We do not find that changes in uncompensated care, charity care, or bad d debt were different when comparing CAH versus non-CAH hospitals before and after the change in retroactive eligibility. We caution that this is not a complete modeling effort as no covariates that might affect these outcomes were included in the event study. We anticipated that eliminating retroactive eligibility would initially result in an increase in uncompensated care and charity care as hospitals are not reimbursed for care provided prior to the

member application date. However, it also possible that hospitals quickly adapt, as has been indicated in the process evaluation, resulting in eligible members being enrolled quickly. A complete modeling exercise will be part of the summative report.

Figure 30. Uncompensated Care as a Share of Operating Expenses by Fiscal Year for Iowa Hospitals

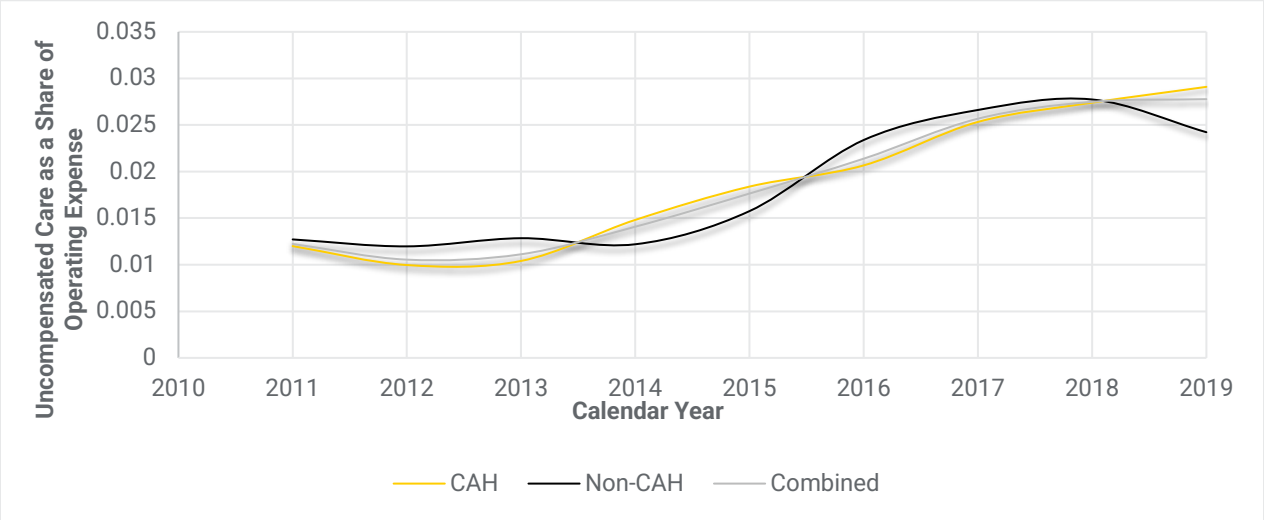


Figure 31. Charity Care as a Share of Operating Expenses per Fiscal Year

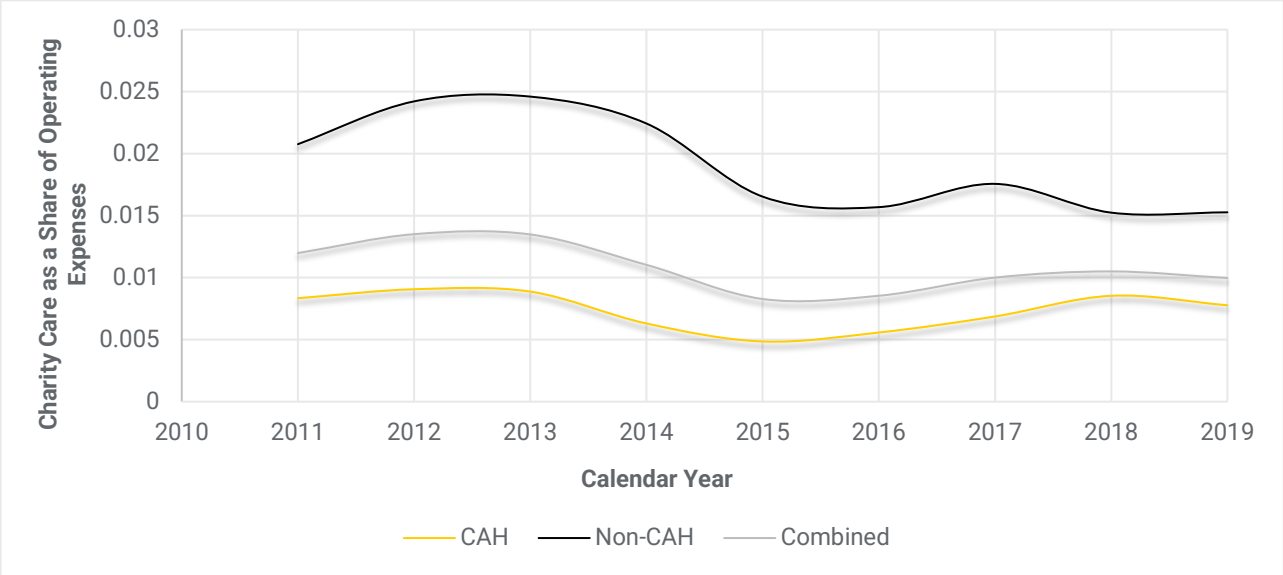
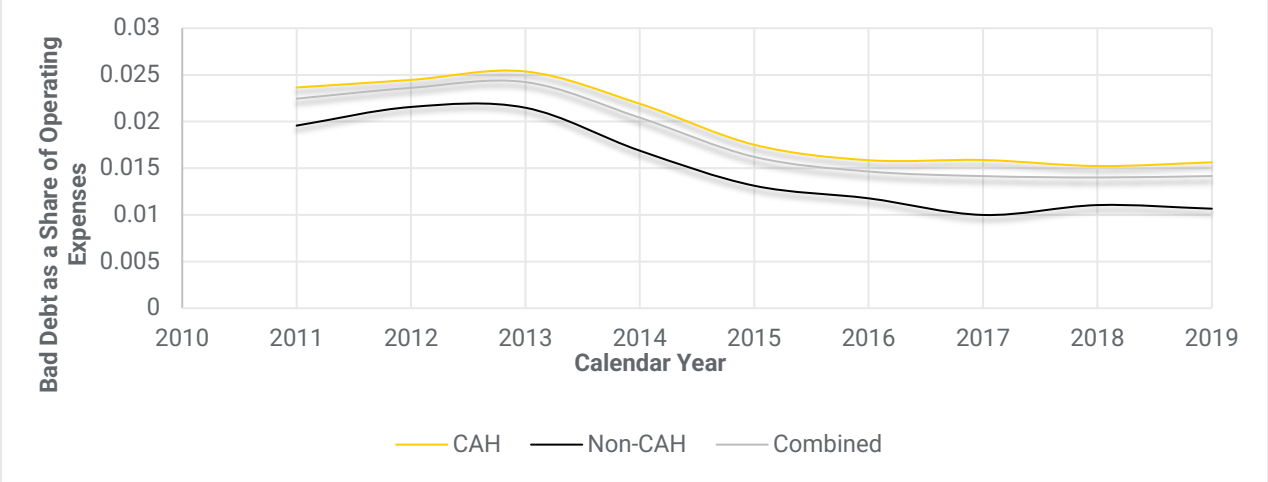


Figure 32. Bad Debt as a Share of Operating Expenses per Fiscal Year



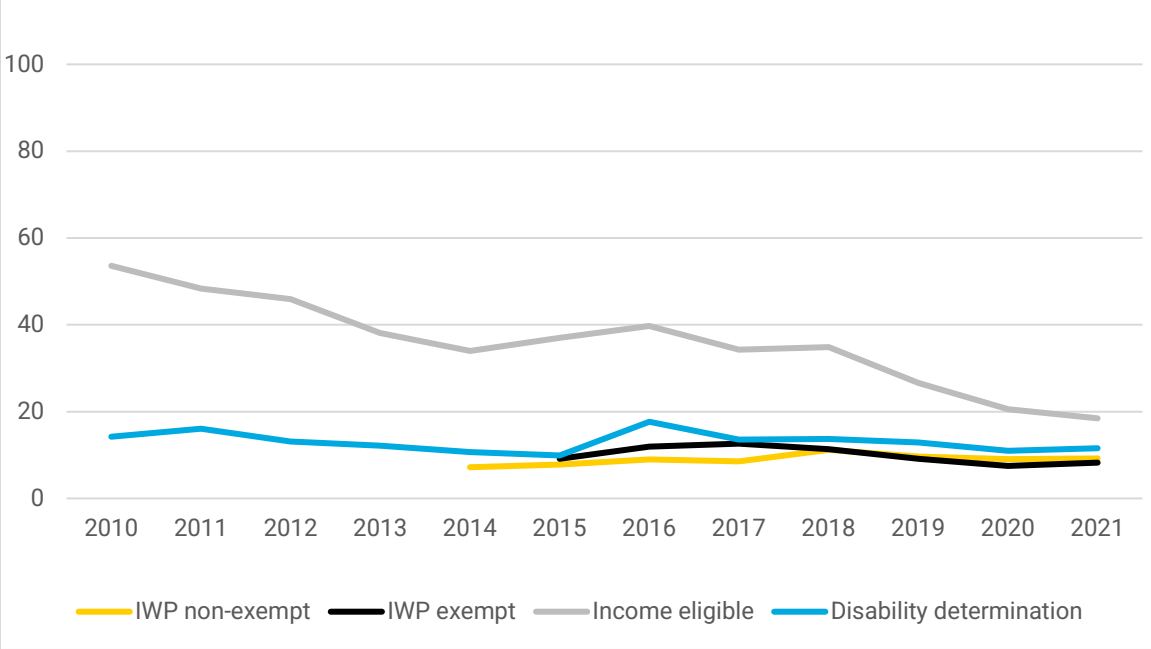
Hypothesis 3: Eliminating retroactive eligibility will improve member health.

Primary Research Question 3.1: Do people who are subject to waiver of retroactive eligibility have better health outcomes?

Though inpatient hospital data has not been processed, we have been able to utilize emergency department data that has been assimilated for other analyses. These data provide an additional insight into the effects of the retroactive eligibility waiver. Preliminary data has been analyzed to determine the pattern of ED visits per 1,000 member months for 4 specific groups. We included IHAWP members who were not exempt from the Healthy Behaviors Incentive (HBI) requirements (would need a preventive visit to avoid a premium), IHAWP members who are exempt from the HBI requirements (medically exempt or in exempted population such as American Indian or FPL under 50%), adults in households that are income eligible for Medicaid, and adults in households who are eligible for Medicaid due to a disability determination.

Figure 33 shows the pattern of outpatient ED visits/1,000 member months for the period 2011-2021. The members enrolled due to a disability determination (DD) have a unique pattern. Prior to 2014 (year IHAWP was instituted) the trend is stable. There is a spike in outpatient ED visits for this group during 2016, the year Iowa Medicaid moved to an all MCO model of care. The outpatient ED rate for these members never returned to pre-MCO levels. For members enrolled due to income eligibility the outpatient ED rates have continued to fall over the 12 years shown in the trend. Rates for IHAWP non-exempt members and IHAWP exempt members have fallen since IHAWP began in 2014, with the greatest drop in the IHAWP exempt group. Statistical tests show that the ED visit rates for the income eligible group (gray line) started and continue to be higher than all other groups over this study period.

Figure 33. Outpatient ED Rates by Program and Year



IHAWP exempt group rates begin in 2015 as HBI exemption was not determined until 1 year post HBI initiation 2014

Hypothesis 4: Eliminating retroactive eligibility will reduce the annual Medicaid services budget.

Primary Research Question 4.1: What are the effects on the Medicaid services budget?

This research question will not be addressed due to the effects of COVID-19 on costs.

Hypothesis 5: Providers will increase initiation of Medicaid applications for eligible patients/clients

Primary Research Question 5.1: Have health care providers increased the initiation of Medicaid applications for eligible patients/clients?

Information provided through the process evaluation indicates that providers have increased their role in initiating Medicaid applications.

Cost Sharing

Executive summary

Key progress

- Medicaid emergency department data compiled for 2010-2022 with indicators as to whether the state considers the visit emergency and ACG level assignments for emergent level.
- Synthetic control analyses were used to determine comparison states for emergency department comparisons: Kansas, Nebraska, Maine, and Utah.

Cost sharing general background information

Prior to the IHAWP program, Medicaid recipients were required to pay a $3 copayment for non-emergent care received in an emergency room. The IHAWP cost sharing component provides for an $8 copayment for non-emergent care within the ED. Iowa Medicaid provides a listing of the diagnosis codes that qualify as an emergency visit on the Medicaid 'Provider Claims and Billing' webpage. This page is updated at least annually but may be updated more frequently, for example, it was updated on April 1, 2020, to reflect emergency diagnoses related to COVID-19.

The $8 copayment was suspended during the PHE.

Cost sharing goals

- Educate members the ED is not the appropriate place for all care
- Educate members about the cost of emergency department care
- Build relationships with primary care providers improving preventive and chronic care
- Increase the availability of emergency departments for those who need them

Cost sharing evaluation design

Many of the analyses rest on determining whether an ED visit is non-emergent. We originally experimented with using the New York University Emergency Department algorithm to assign outpatient ED visits. This algorithm indicates what proportion of the visit can be attributed as non-emergent, emergent/primary care treatable, ED care needed preventable/avoidable, and ED care needed not preventable or avoidable. This method required that we determine a cutoff related to the proportion of the visit attributed as non-emergent. Our results would differ given changes in the cutoff levels. Visits that were attributed to injury, mental health related, alcohol related, or substance abuse related are not categorized in the algorithm. Additionally, this algorithm consistently resulted in approximately 16% of the visits being 'unclassified', leaving data 'on the table' that we could not use.

We are now utilizing 2 methods for assignment as non-emergent. First, we utilize the lists of emergent diagnoses that are provided by Iowa Medicaid. Lists from 2011 through present have been assimilated. Diagnoses are considered non-emergent if they do not appear on the state's 'emergency diagnosis' listing for the time period of the visit. Second, we are utilizing the John's Hopkins ACG software to assign visits to the following categories: non-emergent, emergent primary care treatable, emergent ED needed potentially avoidable, emergent ED needed not potentially avoidable. Additionally, visits are categorized into mental health/substance use, injury and unclassified. This method yields less than 1% of visits as unclassified.

Quantitative analyses

See General Methods: Analytic Methods

Cost sharing target and comparison populations

IHAWP members

See discussion General Background Information: IHAWP members.

Comparison populations

Income eligible Medicaid members (IE)

See discussion General Background Information: Income eligible members.

Disability Determination Medicaid members (DD)

See discussion General Background Information: Members eligible due to a disability determination.

Other states

HCUP data for states that do and do not utilize an ED copayment will be compared to Iowa for the period CY 2014-2022.

Data sources

We will utilize data from the Iowa Medicaid Administrative files, Iowa Hospital Association, and Healthcare Cost & Utilization Project – HCUP. Descriptions of these data sources are found in Secondary Data.

Member surveys

We utilize CAHPS survey measures to conduct enrollee surveys for Iowa Medicaid. Surveys are completed every 18 months for a representative sample of Medicaid enrollees. In the past, specific questions related to ED use and beliefs around ED use have been included. These will be refined and included in future surveys.

Emergency Department use survey

The research team will develop a telephone survey to be administered to members who utilize the ED for non-emergent diagnoses in Spring 2024. We anticipate recruiting 50

members per month for 1 year. This should yield 300 completed surveys (100 per group) with sufficient power to detect moderate differences at.05.

Evaluation period

Pre- Post-Implementation period (CY 2012-2022)

Analyses involving state-level data will be conducted for the period CY 2012-2022. Though we do not have an adequate pre-implementation group for direct comparison to the IHAWP population, we will utilize pre-implementation trends for the adult members in income eligible categories.

Post-Implementation period (CY 2014-2022)

The post-implementation period provides a very interesting opportunity to assess the effect of the $8 copayment. The copayment was in place from January 2014-March 2020, then waived due to COVID-19 from March 2020 through end of PHE when it will be reinstated.

COVID-19 adjustments

During the COVID-19 pandemic Iowa Medicaid waived the $8 copayment for inappropriate ED use and updated the ICD-10 diagnosis codes that could be used to determine appropriate use to reflect COVID-related visits. Additionally, health care utilization, in particular ED use, was affected by a general avoidance of the ED to help hospitals preserve much needed PPE and lessen members' exposure to COVID-19. We will continue to monitor policies and activities, utilize the data to try to account for COVID-19 effects and monitor best practices as other researchers also adjust analyses for these effects. We are currently developing a regression model that will utilize this break in the policy to enhance our ability to determine the effects.

Cost Sharing Evaluation Measures Summary (see Evaluation Plan for question detail)

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
Hypothesis 1: Members understand the $8 copayment for non-emergent use of the ER.				
Research Question 1: Do members understand the $8 copayment for non-emergent use of the ER?				
Study group: IHAWP members completing the consumer survey Two comparison groups: 1: FMAP adult members completing the consumer survey 2: SSI adult members completing the consumer survey	Sometimes health plans require members to pay part of cost when they use the emergency room. This is considered a copayment. Are you required to pay any part of the cost when you use the emergency room? If yes, do you know how much you will need to pay? If yes, are there any reasons why you might not have to pay? What are these reasons?	Consumer survey	Descriptive analyses 2024	Unchanged for summative report
Hypothesis 2: Cost sharing improves member understanding of appropriate ER use.				
Research Question 2.1: Do members subject to an $8 copayment understand appropriate use of the ER better than members who are not subject to the copay?				
Study group: IHAWP members completing the consumer survey Two comparison groups: 1: FMAP adult members completing the consumer survey 2: SSI adult members completing the consumer survey	In the last 6 months, how many times did you go to an emergency room (ER) to get care for yourself. Do you think the care you received at your most recent visit to the ER could have been provided in a doctor's office? What was the main reason you did not go to a doctor's office or clinic for the care you received at your most recent visit to the ER? Choose only one response.	Consumer survey	Descriptive analyses; DID 2017 and 2024 consumer surveys	We are eliminating the DID analyses.
Research Question 2.2: Do members subject to an $8 copayment understand cost of the ER better than members who are not subject to the copay?				
For those indicating they had an ER visit in the last 6 months. Study group: IHAWP members completing the consumer survey indicating they understand the $8	[Measure under development] Thinking back to the last time you went to the emergency room: How much did the care cost you? How much did the emergency room charge your insurance?	Consumer survey	Descriptive analyses 2024 Consumer survey	Unchanged for summative report.

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
copayment Comparison group: IHAWP members who said they did not understand the $8 copayment on the 2017 consumer survey				
Research Question 2.3: Are members subject to an $8 copayment for non-emergent use of the ER less likely to use the ER for non-emergent care?				
Study group: IHAWP members who indicated they understood the $8 copayment on the 2024 consumer survey Comparison group: IHAWP members who said they did not understand the $8 copayment on the 2024 consumer survey	Member probability of a non-emergency ED visit Newly developed measure indicating whether there was a claim in measurement period for a non-emergent diagnosis which is defined as NOT on the list of emergency diagnoses provided by IDHS	2024 Consumer survey Medicaid claims	DID 1-year period surrounding the 2024 survey	Unchanged for summative report.
Study group: IHAWP members Two comparison groups 1: FMAP adult members 2: SSI adult members	Rate of a non-emergency ED claims Newly developed measure indicating number of ED visits for a non-emergent diagnosis (see above) during the measurement period	Medicaid claims	CITS Pre-COVID PHE $8 copay present, COVID PHE $8 copay suspended, Post-COVID PHE $8 copay reinstated	Unchanged for summative report.
	Rate of ER readmission 7 days and 30 days This measure has been used in other studies by the research team. It is based upon the hospital readmission measure in HEDIS but substitutes ED visit for hospitalization throughout.			
Comparable states with no copayment required	Rate of ER readmission 7 days and 30 days	HCUP ER files	Comparison of rates CY 2013 and CY 2014	Unchanged for summative report.
	Rate of ER use for non-emergent acute care			
Research Question 2.4: Are members subject to an $8 copayment for non-emergent use of the ER more likely to use the primary care providers for non-emergent care?				
Study group: IHAWP members Two comparison groups	Rate of primary care provider office use for non-emergent acute care	Medicaid claims	CITS Pre-COVID PHE $8 copay present, COVID PHE $8 copay suspended, Post-	Unchanged for summative report.

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
1: FMAP adult members 2: SSI adult members	Newly developed measure indicating proportion of population that utilized an MD, DO, ARNP, PA, rural health clinic, FQHC or otherwise identified primary care clinic during the measurement year for non-emergent care.		COVID PHE $8 copay reinstated	
Hypothesis 3: Members subject to cost sharing are more likely to establish and utilize of a regular source of care as compared to members not subject to cost sharing.				
Research Question 3.1: Are members who are subject to the $8 copayment for non-emergent ER use more likely to have a regular source of care than those not subject to the copayment?				
Study group: IHAWP members completing the consumer survey indicating they understand the $8 copayment Three comparison groups 1: FMAP adult members 2: SSI adult members 3: IHAWP members who said they did not understand the $8 copayment on the consumer survey	A personal doctor is the person you would see if you need a check-up, want advice about a health problem, or get sick or hurt. Do you have a personal doctor? (The answer to this question will focus on members who did not have a personal doctor in a 2017 survey.)	Consumer survey	DID 2017 and 2021 consumer surveys	We are eliminating the DID analyses.
Study group: IHAWP members Two comparison groups 1: FMAP adult members 2: SSI adult members	Utilization of a regular source of care New developed measure one visit to an MD, DO, ARNP, PA, rural health clinic, FQHC or otherwise identified primary care clinic during the measurement year for preventive care or 2 or more visits for acute care.	Medicaid claims	Means tests CY 2014-2022	Study period will change to CY 2014-2019.
Research Question 3.2: Are members who are subject to the $8 copayment for non-emergent ER use more likely to receive preventive care and chronic care monitoring than those not subject to the copayment?				
Study group: IHAWP members Three comparison groups	Rates of annual well-person visit	Medicaid claims	CITS Pre-IHAWP CY 2012-2013 Post-IHAWP CY 2014-2022	Post-IHAWP period will change to CY 2014-2019

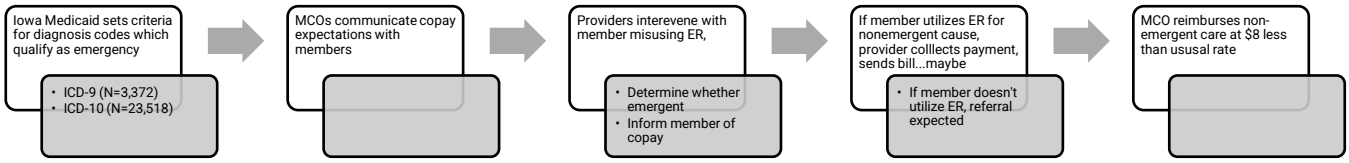
Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	**Revised**
1: FMAP adult members 2: SSI adult members	Based on HEDIS Adult Access to Ambulatory/Preventive Care (utilize the preventive codes only)			
	Rates of HbA1c monitoring for persons with Diabetes HEDIS Comprehensive Diabetes Care measure component		DID CY 2014-2022	Study period will change to CY 2014-2019.
	Rates of primary care follow-up visit within 7 days of ER use Based on HEDIS Follow-up After Emergency Department Visit for Mental Illness and Emergency Department Utilization measures			
Hypothesis 4: Cost sharing improves long-term health care outcomes.				
Research Question 4.1: Do members who are subject to the $8 copayment for non-emergent ER use have more favorable long-term health care outcomes?				
Study group: IHAWP members Two comparison groups 1: FMAP adult members 2: SSI adult members	In general, how would you rate your overall health now? (*Excellent*; *Very good*; *Good*; *Fair*; *Poor*)	Consumer surveys	DID 2017 and 2021 consumer surveys	We are eliminating the DID analyses.
	In general, how would you rate your overall mental and emotional health now? (*Excellent*; *Very good*; *Good*; *Fair*; *Poor*)		Means tests 2017 and 2021 consumer surveys	Unchanged for summative report.
	Rates of avoidable inpatient admissions AHRQ measure incorporating Ambulatory Care-Sensitive Condition	Medicaid claims	DID CY 2014-2022	We will utilize OLS/Logistic regression rather than DID.
Comparable states with no copayment required	Rates of avoidable inpatient admissions	HCUP ER files	Descriptive analyses CY 2012-2015	Unchanged for summative report.

Cost Sharing Results

Cost sharing process evaluation

General

Figure 34. Cost Sharing Process as Described by Key Stakeholders



A large body of research shows premiums serve as a barrier to obtaining and maintaining Medicaid coverage. Cost sharing can decrease enrollment, decrease access to essential health care, and increase use of more expensive health care services such as the emergency department. States may also experience increased administrative burden when implementing cost sharing with enrollees. "Even relatively small levels of cost-sharing are associated with reduced care, including necessary services, as well as increased financial burden for families; and state savings from premiums and cost-sharing in Medicaid are limited."

$8 Copayment billing and collection process

Within the conversation about the effectiveness of the co-pay, stakeholders commented on the amount of the co-pay charged ($8) and perceptions about that amount, with one MCO representative saying, "I respect the amount. It's not a lot, but I think it's more than five bucks. It's more than a buck. It's enough to... It's $8. It's almost awkward. You almost have to think about it. Oh, I need to give you five and three?"

MCO representatives doubted the impact of the $8 copay, suggesting the amount was too nominal to impact member decision-making or incentivize enforcement, saying:

> *"I will say that it's been my observation historically, whether $8 is an effective deterrent or not. It's $8. It's $8. And then again, does the emergency room even try to collect it, how they use it...I would not say $8 is a material enough of a number to probably have an impact on that one way or the other." – MCO representative*

> *"Now, if an $8 copay has a negative impact or deterrent there, I don't believe so. I really don't." – MCO representative*

Regarding whether an $8 copay is substantive enough, stakeholders suggested that for low-income members, the amount could be effective in decisions about type of care, saying:

"$8 doesn't sound like a lot for someone that's working, but for someone who is not working, it may be impactful, and it may make them think twice." – MCO representative

"I think it's an interesting amount, and I don't know if it works in the Iowa Health and Wellness Program, but I am pretty confident that copays work in terms of helping people think through their decisions about do I go, or do I not go?" – MCO representative

Representatives from Iowa Medicaid and an MCO shared perceptions about whether a copay might interfere with necessary use of the emergency room, reporting that $8 was unlikely to cause financial strain or a barrier to needed care.

"Even prior to PHE, we never really heard any complaints about it or any hardship things." – Iowa Medicaid representative

"I worry a lot about copays, especially in emergent care. I think there's been enough research that says when a copay gets hefty enough, it can discourage people from early presentation of serious emergent care. I think the state put a lot of thought into what's too hefty and what's not hefty enough. I don't know the right answer, but $8 certainly seems like something that would get me thinking, but is also probably not a serious... barrier is too strong a word, but stepping stone... It's not a serious barrier to seeking care when you really need it." – Iowa Medicaid representative

Interviewees shared skepticism about whether members were solicited to pay or actually paid the $8 copay for non-emergent care, suggesting that the rationale behind cost sharing (promote member investment in healthcare decisions) is not consistently realized.

"So, I can tell you from my experience when I worked at our ER that they didn't charge copays. They asked, but nobody paid, and you can't deny care. Whether or not they ever got that $8 later, I don't know. Doubtful. Honestly, it was probably written off is my guess." – Clinic staff

"As far as the copays, I don't think that most people don't pay them." – Clinic staff

"I think it's accountability. I think that maybe for the people that are using the ER who shouldn't be, maybe they should, in my opinion, you only get two times and if it was an emergency, then you can't use the ER or you'll be billed and Medicaid won't pay for it type of thing. Make them accountable. Right now, I don't think there's any accountability. It's being paid for. They don't care how much it costs. The $8 copay, that's nothing if they pay it or not." – Clinic staff

"Yeah, $25 gift card is a lot cheaper than paying for an ER visit for a child that's vomiting, or you know what I'm saying?" – Clinic staff

One MCO representative shared the perception that determination of emergency care stems from location, which is not consistent with Informational Letter 2259 (issued August 10, 2021), which delineated appropriate **diagnosis codes** for full emergency room claim reimbursement to providers.

"The billing of these services are based on not the diagnosis in an ED, but the location. So, whether it's something that they should have gone to the emergency room or not, it's billed as an ED visit." – MCO representative

Enforcement and collection

Representatives from MCOs reported that the **$8 copay** is deducted from the claim's reimbursement amount sent to providers, and members with questions about the co-pay usually interact with providers, except in cases of financial hardship, which can involve MCO support. One MCO representative also mentioned that collection of the copay due by IHAWP members is contingent on provider awareness of copay due at time of service.

> *"It's a deduction from the payment to the provider. So often they're probably calling whoever billed them for the $8 copay to ask questions about it. They also can be subject to have that waived if they say that they can't afford to pay that copay. So that's in place. They could call us to get support." – MCO representative*

> *"It [co-pay collection] would be based on that education and awareness of the Iowa Medicaid rules. Hopefully that's known upfront so they can collect that at the time of service. But yeah, if for some reason it's not at that point in time, we would basically short pay it by that copayment amount." – MCO representative*

> *"I think where the impact may be is, and you'd mentioned it a little bit, is administratively. It's the awareness of and the collection upfront of that copayment. So those who may not be aware or in tune with that and know that that's part of the Iowa Medicaid requirement, I think that's where we may have issue. Because obviously if we receive a claim and it was for non-emergent type services, but in an ER setting, we'll pay the claim, but we would still assume that the provider's going to have to go back and collect that copayment." – MCO representative*

> *"We don't have anybody from claims on specifically. At this point in time, I don't know. I do know that we have gotten claims where there's been an $8 copayment that was collected. I don't know if I have any specific detailed breakdowns as to the percentage that might be collected at the time of service versus unable to be collected versus collected post service. But we do know that there are situations where we have seen that sent over with the claim form where it was collected. So, our assumption is that the provider is collecting that in certain circumstances or at least certainly asking for it upfront." – MCO representative*

Interviewees were skeptical that providers expend effort in coordinating collection of the $8 copay from IHAWP members, suggesting that providers usually absorbed the loss of the $8 short payment in claims reimbursement. Interviewees shared that data tracking whether copays are collected is not available and few questions arise about provider collection.

> *"I don't think they are, in my experience. But there's higher dollar payments they're probably chasing, not from Medicaid necessarily, but other patients. That's probably one they're pretty willing to write off." – MCO representative*

> *"We'd work with the hospital if the hospital is truly chasing that payment. But we don't generally get a lot of questions about that non-emergent use cost share." – MCO representative*

> *"We don't know if a provider collects. If that's what the question is." – MCO representative*

"It could be that the providers are writing at all for all we know, but unfortunately, yeah, we don't have that level of insight." – MCO representative

"When providers call in, really within the calls they haven't called us and complained about the copay on the claims. So, I don't think it's very impactful, from what I've witnessed them calling in for." – MCO representative

"I would say whether the copay is collected or not does not impact our processes." – MCO representative

"I don't believe we collect that [receipt of copays]. We don't collect it and I'm not aware of any effort on behalf of the state." – MCO representative

"So, I can tell you from my experience when I worked at our ER that they didn't charge copays. They asked, but nobody paid, and you can't deny care. Whether or not they ever got that $8 later, I don't know. Doubtful. Honestly, it was probably written off is my guess." – Clinic staff

Interviewees discussed whether the $8 copay presented a financial strain for IHAWP members, noting that ensuring members won't avoid care due to cost as a priority. MCO representatives also mentioned various outlets for financial support in a Social Determinants of Health department and a grievance and appeal process to waive the copay.

"If the provider doesn't submit the claim, Member Services calls the billing company and handles the situation, so it is between the provider and the MCO not the provider and the member. We need to eliminate as much abrasion to the member as possible. We don't want them thinking next time that they can't seek services at an ER because of a previous bill situation." – MCO representative

"So, I think we might not, as the insurance company, always know about the times when a member does declare a hardship. I think they were probably directly calling the hospital to say, "Hey, I can't afford $8." And if that's not successful, then they could reach out to us, and we expect them to file a grievance with us. And that would lead our grievance team to go on behalf of them, reach out to the provider to work through that if that was what was needed." – MCO representative

"If we do receive a phone call about that $8 being a deterrent, we do have a department in the quality team, it's called housing and resources for SDOH needs. So, we can refer them to our SDOH team, and they can help find resources that may be available to them to help them with that copay." – MCO representative

"And like we said, we do have that housing and resource team, so if we are aware, it is a deterrent then we can work with them and help with them." – MCO representative

"Yeah, we would usually engage our grievance and appeal staff. And I could say since we've been in Iowa now seven years, it's not happened as far as I'm aware. But there is an option if that were to occur where a member could say they couldn't afford it and we would work on behalf of them with the hospital to have that waived." – MCO representative

Provider understanding and implementation of $8 copayment

A representative from Iowa Medicaid suggested that member utilization of emergency care is generally validated by providers, avoiding the imposition of a copay altogether, saying, "I think they are seen and, it sounds me, which I'm not real sure that there aren't very many that end up even owing that $8. I don't know numbers…Typically the hospital does not deem it as not an emergency."

Regarding the motivation of providers to enforce cost sharing and solicit copays from members, stakeholders acknowledged wide recognition of inefficiency, noting that the nominal amount of money to collect is not worthwhile for providers. One MCO stakeholder summarized, saying,

> *"ultimately a provider would be in the best position to answer that question because they're the one that would be collecting the copay or the cost share. I think from their experience and whether or not they actually collect them or not, or they simply waive it."*

Additionally, stakeholders report that in cases that members don't pay the copay at time of admission, providers absorb the copay charged to members rather than collecting payment via billing, a decision which could vary by hospital size.

> *"It's not widely used. That it is at the discretion of the hospital. And they often do not seek that $8 reimbursement." – Iowa Medicaid representative*

> *"In terms of, if the provider actually goes and gets the $8, we really don't know. Presume not, because it's not worth the time to chase it. They're probably just writing it off is my guess. Yeah." – MCO representative*

> *"The estimate is that it cost about $9 to send a bill out. It's not uncommon for some providers to say, "If they didn't pay upfront, is it even worth sending a bill," or is there a level at which you write things off because it's costs more to try to collect it? Everybody has a different level. Is it at $5? Is it $8 or something? Depending on the healthcare organization, and again with the ER, typically you are not allowed to refuse service if they don't have the copay with them at the time, so I'm sure there are some that may make that as that it's not worth sending the bill out." – MCO representative*

> *"I think sometimes the hospitals have a hard time even collecting the $8. So, just because of all of the issues that come with it, patients won't always come in with the $8, and so you can't get it. And then when you go to bill them, there are lots of things that can happen just in that part of it." – Provider group representative*

A provider association representative suggested that better tracking of payments and follow-through from providers would be needed to understand the effectiveness of cost sharing, saying,

> *"I think that to answer that question really well, you'd have to see some kind of data on how often it's collected, as to compared to how many times is it paid and how many times should have been paid, would give you a better information than anything else."*

Effectiveness

Interviewees discussed perceptions of the effectiveness of the cost sharing component of the IHAWP program in reducing preventative emergency room use, noting that member awareness of alternative care settings is an important factor in determining effectiveness. Interviewees shared other factors involved in a member's decision to use the emergency room (other than the $8 copay), including a lack of viable in-person alternatives (scarcity of urgent care options due to location or timing), experiencing severe symptoms or pain (not technically determined as emergent), and habitual or learned use of the emergency room for healthcare. An MCO representative noted a 24-hour nurse hot line available to members.

> *"I think probably sometimes it comes down to education on where their resources are, what's available to them, where there's an urgent care. And what emerging services are, and where their needs can be met otherwise. So sometimes there's a member education component to it." – MCO representative*

> *"I think that sometimes people don't understand what emergent means. It means something different to us than it does to them. Sometimes to a member an ear infection is emergent because their child's screaming and stuff, but that's not emergent to us. Right?" – MCO representative*

> *"I was going to say too it does have a lot to do with the educational piece and providing them the nearest urgent cares. And sometimes it's just out of habit. They're so used to doing it over time and maybe their older family members did it over time. And so, it's kind of this generational thing that kind of keeps occurring. But once they get that education and we send them where the locations are, sometimes that does help deter that and they use those avenues for the minor issues. Or they can call our nurse line. We have a 24-hour nurse line for questions and some members use it and some members don't. But it's there if they want to use it." – MCO representative*

Interviewees from both MCOs shared perceptions that the $8 copay requirement for non-emergent ER utilization was **not** an effective motivator to deter emergency department use among IHAWP members.

> *"Based on my experience and what I've seen in the past, it's [$8 copay] generally not a deterrent from use of the emergency department compared to members who don't have cost sharing, I guess that is."- MCO representative*

> *"I don't think it's a deterrent in the way it's probably intended to be a deterrent." - MCO representative*

> *"From my perspective, I don't think so. I don't know if our member services team, if we ever hear much about members saying, well, I don't want to go to the ER for emergency services because I have to pay a copay." - MCO representative*

An MCO representative described the various settings for care and options for member who are considering using the emergency room, saying,

> *"There's different levels of access 24 hours a day. We have emergency room, we have urgent cares and provider offices that stay open a little later, but if they're curious, they can call into our 800*

number and they can either ask for the nurse line or they can talk to member services and find out what's the available tool in their area. And then we have telehealth as well."

Another MCO representative talked about education efforts aimed at providers, aimed at increasing alternatives to IHAWP member ED use, saying,

"We do annual training across the state with all of our providers on all the services we provide in conjunction with the other MCOs and Iowa Medicaid. And at the provider level from [MCO name], we do have provider engagement staff that are nurses that go into provider offices, primary care providers, and OB-GYNs on the majority. And we educate on the same available benefits for members such as our telehealth, our 24-hour nurse line, and the availability. And then they know that the access to care regulations that they have, that they refer somebody to emergency room or that they have a 24 hour access on their phone system if it's an emergency, go to the emergency room, that kind of thing, they have some access and availability requirements to be part of our network." – MCO representative

Improved ED availability for emergent care

One interviewee suggested that providers may advise members to utilize the emergency room, in non-emergent situations, which could have been handled in less intensive settings, like urgent care clinics. Interviewees noted **same-day and after-hours access to the ER as important characteristics for members seeking care**.

"So, it's not just individual members, but even those providers. Because even they were using the ERs many times where they could have used urgent care clinics. Member stubs their toe or something, you don't need to take them to the ER. But they feel that they have to take them somewhere. They were using the ER instead of urgent cares." – MCO representative

"Well, they have most of the same services other than they may have to go to the hospital for something. But I think the access part is really big, and not only for our members, but for the providers that are serving our members…That they have somewhere they can take them into the evening versus just until 5:00." – MCO representative

[Prompt: Do you think that's another piece of it [non-emergent ED use] as far as having that same day access?] "Absolutely." – MCO representative

When discussing topics related to cost sharing and ER use, clinic staff shared perspectives about Medicaid member use of the ER (emergency vs. non-emergency) and about Medicaid members who have a PCP vs. members who do not have a PCP:

"Because honestly, most of the people, and I don't want to sound biased, but most of the people that would come to the ER that were on Medicaid truly didn't need to be in the ER. They needed to go through their doctor, but it was just easier for them to just go into the ER." – Clinic staff

"I think also people don't have PCPs, so because they don't have an identified PCP they just go to the ER. That's what they know. Because I know there's been... I feel like we get lots of new patients and that have not had a PCP, and it's like how have you not had a PCP? Also, that's probably something that they've not been used to. They have a primary care physician that is there for them to call. I think that that also plays into it because then they're like, who do they call? They go to the ER because they don't have anyone else." – Clinic staff

Cost sharing quantitative results

Hypothesis 1: Members understand the $8 copayment for non-emergent use of the ER.

Research question 1: Do members understand the $8 copayment for non-emergent use of the ER?

Due to the PHE this question was not included on the 2021 consumer survey but will be included in the 2024 consumer survey.

Hypothesis 2: Cost sharing improves member understanding of appropriate ER use.

Research Question 2.1: Do members subject to an $8 copayment understand appropriate use of the ER better than members who are not subject to the copay?

Research Question 2.2: Do members subject to an $8 copayment understand the cost of the ER better than members who are not subject to the copay?

Research Question 2.3: Are members subject to an $8 copayment for non-emergent use of the ER less likely to use the ER for non-emergent care?

Research Question 2.4: Are members subject to an $8 copayment for non-emergent use of the ER more likely to use the primary care providers for non-emergent care?

The research questions above are addressed through surveys and outcomes analyses. Due to the PHE this question was not included on the 2021 consumer survey but will be included in the 2024 consumer survey. Datasets are currently being curated and cleaned for analyses.

Hypothesis 3: Members subject to cost sharing are more likely to establish and utilize a regular source of care as compared to members not subject to cost sharing.

Research Question 3.1: Are members who are subject to the $8 copayment for non-emergent ER use more likely to have a regular source of care than those not subject to the copayment?

Research Question 3.2: Are members who are subject to the $8 copayment for non-emergent ER use more likely to receive preventive care and chronic care monitoring than those not subject to the copayment?

Datasets are currently being curated and cleaned for analyses.

Hypothesis 4: Cost sharing improves long-term health care outcomes.

Research Question 4.1: Do members who are subject to the $8 copayment for non-emergent ER use have more favorable long-term health care outcomes?

Datasets are currently being curated and cleaned for analyses

Cost and Sustainability

Executive Summary

Key progress

- Sources identified for administrative data related to state budgets.
- HCRIS data obtained, and preliminary analyses completed.

Cost and sustainability general background information

A number of external changes affect the revenue and expenditure streams in Iowa Medicaid making this component of the evaluation more difficult: 1) the PHE has increased costs for care due to pandemic related care and also seen an increase in revenue due to federal supports, 2) Iowa Medicaid is now part of a combined Iowa Department of Health and Human Services, which aligns the Iowa Department of Public Health with the Iowa Department of Human Services and 3) expenditures related to state-level changes such as implementation of the MCOs, may be difficult to separate from IHAWP administrative costs.

Cost and sustainability goals

The goals of the IHAWP program as they pertain to cost are likely going to impact the following:

1. Short term-increase FMAP payments and reduce bankruptcies
2. Intermediate term- Increased preventive care use, Decreased ED cost/use, Decreased inpatient admissions/cost, Decreased uncompensated care
3. Longer term-Statewide cost reductions

CMS guidance outlines the following key questions for investigation. (https://www.hhs.gov/guidance/sites/default/files/hhs-guidance-documents/ce-evaluation-design-guidance-sustainability-appendix_0.pdf)

1. What are the administrative costs to operate the demonstration?
2. What are the short- and long-term effects of eligibility and coverage policies on health service expenditures?
3. What are the impacts of eligibility and coverage policies on provider uncompensated care costs?

Cost and Sustainability Methodology

Evaluation design

Quantifying and evaluating the cost and sustainability of the Iowa Health and Wellness Plan is being expanded for this waiver period to include state-level sustainability. Two phases of data collection will be utilized: Phase 1 to gather process information that will inform the analytical strategies (Phase 2).

Process analyses

Qualitative analyses

See discussion in Empirical Strategy.

Target and comparison populations

Comparison states

We have used synthetic controls to narrow the comparison states to Kansas, Maine, Nebraska, and Utah. These non-expansion states have comparable pre-expansion year trends and have available data for the period 2010-2022.

Target population: IHAWP members

See discussion in General Background Information: IHAWP members.

Comparison population

See discussion in General Background Information: Income eligible members and members due to a disability determination.

Data sources

We will utilize data from the Iowa Medicaid Administrative files, Iowa Hospital Association Files, HCRIS, Transformed Medicaid Statistical Information System - TMSIS, and Healthcare Cost and Utilization Project – HCUP. For a description of these data sources please see Secondary Data.

Cost and Sustainability Evaluation Methods Summary

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
Hypothesis 1: Ongoing administrative costs will increase due to implementation of IHAWP				
Primary Research Question 1.1: What are the administrative costs associated with IHAWP?				
Subsidiary Research Question 1.1a: How did the Medicaid program administrative costs change with implementation and ongoing support of IHAWP?				
Pre- and post-IHAWP state fiscal years	Administrative costs	MCO capitation payments/budget documents	Descriptive analyses SFY 2011-2021	Study period will change to SFY 2011-2019.
Hypothesis 2.1: IHAWP will result in short-term outcomes supporting a sustainable program.				
Primary Research Question 2.1: What are the changes in revenue streams as a result of IHAWP?				
Subsidiary Research Question 2.1a: How do Federal Medical Assistance Percentage (FMAP) payments change as a result of IHAWP?				
Pre- and post-IHAWP state fiscal years	FMAP percentages	ASPE Website	Descriptive analyses SFY 2011-2021	Study period will change to SFY 2011-2019.
	Proportion of Medicaid budget covered through FMAP payments	Iowa Medicaid budget documents		
Subsidiary Research Question 2.1b: How does the rate of individual bankruptcies in the state change with implementation of IHAWP?				
Pre- and post-IHAWP state fiscal years	Bankruptcy rates	State fiscal reports	Descriptive analyses SFY 2011-2021	Study period will change to SFY 2011-2019.
Hypothesis 3: IHAWP results in intermediate outcomes supporting a sustainable program.				
Primary Research Question 3.1: How does IHAWP change healthcare expenditures?				
Subsidiary Research Question 3.1a: How does IHAWP change healthcare expenditures in the Medicaid program?				
Study group: IHAWP members Two comparison groups 1: FMAP adult members 2: SSI adult members	Per member per year (PMPY) expenditures on preventive care Total Medicaid reimbursement per person per year for services considered preventive such as annul well visit, monitoring labs, and vaccines.	Medicaid claims	CITS Pre-IHAWP CY 2012-2013 Post-IHAWP CY 2014-2021	Study period will change to CY 2012-2019.
	PMPY expenditures on ED visits Total Medicaid reimbursement per person per year for emergency		DID CY 2014-2021	Study period will change to CY 2011-2019.

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
	department use not resulting in hospitalization			
	PMPM expenditures on inpatient admissions Total Medicaid reimbursement per person per year for hospitalizations			
Study group: Iowa pre- and post-IHAWP implementation Comparison group: Kansas, Maine, Nebraska, Utah	PMPY expenditures on ED visits Total Medicaid reimbursement per person per year for emergency department use not resulting in hospitalization	TMSIS	DID CY 2015-2021 (year limitations due to cutover dates)	Study period will change to CY 2015-2019.
	PMPM expenditures on inpatient admissions Total Medicaid reimbursement per person per year for hospitalizations			
Subsidiary Research Question 3.1b: How does IHAWP change state-wide healthcare expenditures?				
Study group: Iowa pre- and post-IHAWP implementation Comparison group: Kansas, Maine, Nebraska, Utah	Rate of self-pay/charity care	HCRIS	CITS Pre-IHAWP CY 2012-2013 Post-IHAWP CY 2014-2021	Study period will change to CY 2012-2023.
	Reported rates of uncompensated care			
Iowa Hospitals pre- and post-IHAWP	ED expenditures Total all-payor charges for ED care at Iowa hospitals	Iowa Hospital Association files	Descriptive analyses CY 2012-2021	Study period will change to CY 2015-2019.
	Inpatient expenditures Total all payor charges for hospitalizations at Iowa hospitals.			
Study group: Iowa pre- and post-IHAWP implementation	ED expenditures Total all-payor charges for ED care at Iowa hospitals	HCUP	CITS Pre-IHAWP CY 2012-2013 Post-IHAWP CY 2014-2021	Study period will change to CY 2012-2019.

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
Comparison group: Kansas, Maine, Nebraska, Utah	Inpatient expenditures Total all payor charges for hospitalizations at Iowa hospitals.			
Primary Research Question 3.2: How does IHAWP change healthcare utilization?				
Subsidiary Research Question 3.2a: How does IHAWP change healthcare utilization in the Medicaid program?				
Study group: IHAWP members Three comparison groups 1: FMAP adult members 2: SSI adult members	Preventive care utilization Whether or not member obtain an annual wellness exam.	Medicaid claims	CITS Pre-IHAWP CY 2012-2013 Post-IHAWP CY 2014-2021	Study period will change to CY 2012-2019.
	Avoidable hospitalizations			
Members who used the ED during the calendar year Study group: IHAWP members Two comparison groups 1: FMAP adult members 2: SSI adult members	Non-emergent ED use Whether or not ED visit was for a non-emergent reason as defined by the IDHS.		DID	Unchanged for summative report.
Study group: Iowa pre- and post-IHAWP implementation Comparison group: Kansas, Maine, Nebraska, Utah	Non-emergent ED use	TMSIS		
	Avoidable hospitalizations	TMSIS/HCUP		
Subsidiary Research Question 3.2b: How does IHAWP change healthcare utilization in Iowa?				
Study group: Iowa pre- and post-IHAWP implementation Comparison group: Kansas, Maine, Nebraska, Utah	Preventive care utilization	BRFSS	CITS	Unchanged for summative report.
Iowa Hospitals pre- and post-IHAWP	Non-emergent ED use	Iowa Hospital Association Files		
	Avoidable hospitalizations			

Comparison Strategy	Outcomes measures(s)	Data sources	Analytic approach	
			Original	Revised
Study group: Iowa pre- and post-IHAWP implementation Comparison group: Kansas, Maine, Nebraska, Utah	Non-emergent ED use	HCUP	DID	Unchanged for summative report.
	Avoidable hospitalizations			
Hypothesis 4: IHAWP results in long-term outcomes supporting a sustainable program.				
Primary Research Question 4.1: What are the long-term, state-wide changes resulting from IHAWP?				
Study group: Iowa pre- and post-IHAWP implementation Comparison group: Kansas, Maine, Nebraska, Utah	Self-ratings of physical health	BRFSS	CITS	Unchanged for summative report
	Self-ratings of mental health			
	Annual average (median) per person healthcare expenditures	ACS		
	Rate of private insurance coverage			
	Rates of unemployment			

Cost and sustainability results

Hypothesis 1: Ongoing administrative costs will increase due to implementation of IHAWP.

Primary Research Question 1.1: What are the administrative costs associated with IHAWP?

Subsidiary Research Question 1.1a: How did the Medicaid program administrative costs change with implementation and ongoing support of IHAWP?

We are working with the IDHHS to gather historical documents related to this question.

Subsidiary Research Question 1.1b: How do the contractor/agency/provider costs change after implementation of IHAWP?

We are removing this subsidiary question from the evaluation as it has proven nearly impossible to gather the required information.

Hypothesis 2: IHAWP will result in short-term outcomes supporting a sustainable program.

Primary Research Question 2.1: What are the changes in revenue streams as a result of IHAWP?

Subsidiary Research Question2.1a: How do Federal Medical Assistance Percentage (FMAP) payments change as a result of IHAWP?

We know that there is an increase in FMAP payments due to the enhanced ACA match. This data is being assimilated for analysis.

Subsidiary Research Question 2.1b: How does the rate of individual bankruptcies in the state change with implementation of IHAWP?

We are conducting an analysis of the impact of the Medicaid expansion in Iowa in 2014 on bankruptcy filings. The specific outcomes of interest are total bankruptcy filings, total personal bankruptcy filings, chapter 7 bankruptcy filings, and chapter 13 bankruptcy filings. Quarterly data are available from the US Bankruptcy Courts. In Iowa, the number of personal bankruptcy filings fell from 1,350 during the first quarter of 2013 to 1,076 during the first quarter of 2015. Chapter 7 is the most common type of bankruptcy in Iowa; due to the income eligibility requirements, chapter 7 is also the most applicable type of bankruptcy for low-income members who could be eligible for Medicaid after the expansion. The number of chapter 7 personal bankruptcy filings fell from 1,234 during the first quarter of 2013 to 972 during the first quarter of 2015. These decreases spanned the expansion of Medicaid in Iowa; but

there was an economic expansion, and the trends in states that did not expand Medicaid also show that bankruptcy filings decreased during this period. We are in the process of selecting the most appropriate comparison group for Iowa, based on the trends in bankruptcy filings prior to 2014, to determine the changes due to the expansion of Medicaid.

Hypothesis 3: IHAWP results in intermediate outcomes supporting a sustainable program.

Primary Research Question 3.1: How does IHAWP change healthcare expenditures?

Subsidiary Research Question 3.1a: How does IHAWP change healthcare expenditures in the Medicaid program?

We have created a longitudinal monthly dataset with all members eligible for at least one month for the period CY 2011-CY 2022. This dataset is the foundation for many of the outcome related questions within the evaluation, this one included. We will create a per member per month cost to add to this dataset. Though this does not provide true costs for all periods (MCO per capita costs are not included and would be relevant since 2016), this allows for comparisons of cost for care, which may be more relevant. Additionally, all costs will be adjusted to present day dollars.

Subsidiary Research Question 3.1b: How does IHAWP change state-wide healthcare expenditures?

Data related to state-wide healthcare expenditures has been difficult to obtain. We are anticipating a change to look at the state-wide cost of ED visits and inpatient visits as proxies for total expenditure. We would expect to see these reduced over time due to the improved access provided through IHAWP.

Primary Research Question 3.2: How does IHAWP change healthcare utilization?

Subsidiary Research Question 3.2a: How does IHAWP change healthcare utilization in the Medicaid program?

Subsidiary Research Question 3.2b: How does IHAWP change healthcare utilization in Iowa?

See response to Subsidiary Question 3.1b.

Hypothesis 4: IHAWP results in long-term outcomes supporting a sustainable program.

Primary Research Question 4.1: What are the long-term, state-wide changes resulting from IHAWP?

ACS data has been accessed through IPUMS. We are assessing the census level at which this data will provide the most useful information. BRFSS data will be accessed at the state level.

Non-Emergency Medical Transportation

Executive summary

A survey was conducted with IHAWP members to evaluate the impact of the waiver for the coverage of non-Emergency Medical Transportation (NEMT). The results in this report are based on a comparison of the experience of IHAWP members who do not have the NEMT benefit (i.e., all IHAWP members except those who are medically needy or EPSDT exempt) with traditional Medicaid members who retained their NEMT coverage.

Overall, adults in the IHAWP program with their NEMT waived had similar or better transportation-related access to health care than other Iowa Medicaid-enrolled adults with the NEMT benefit, as underlying risk factors were more important than the NEMT benefit itself.

Regardless of NEMT waiver status, transportation was an important issue for all Medicaid members. One in nine (11%) traditional Medicaid members had a missed health appointment in the last 6 months due to transportation issues and one in 15 (7%) IHAWP members without the NEMT benefit had a missed health appointment. Around one in three Medicaid members overall indicated a concern for the cost of transportation to health care.

Awareness of the NEMT benefit was not well understood by IHAWP or traditional Medicaid members. About one in five (20%) Medicaid members with the NEMT benefit knew that they had transportation coverage and about one in 14 (7%) IHAWP members without NEMT “thought” they had NEMT coverage.

Key progress included development, fielding, analyzing and submitting a report on the impact of the NEMT waiver. Planning is underway to conduct a follow up survey in summer/fall of 2024.

NEMT general background information

Programmatically, the IHAWP was designed to include a benefit structure more like commercial insurance than traditional Medicaid. Specifically, IHAWP benefits were based on the state of Iowa employees' commercial health insurance plan. The State of Iowa received a waiver from the Centers for Medicare and Medicaid Services (CMS), so they did not have to provide some of the extensive benefits traditionally associated with Medicaid under the State Plan. One change approved by CMS in 2014 was that Iowa Medicaid does not have to include non-emergency medical transportation (NEMT) as a benefit for IHAWP members. NEMT services continue to be available for other adults in the Medicaid program. IHAWP members are eligible for NEMT services only if they qualify as medically or EPSDT exempt. When the IHAWP waiver renewal was approved on January 1, 2020, the waiver of NEMT was extended through December 2024. Medically frail beneficiaries and those eligible for EPSDT services are exempt from this waiver.

The goals of the NEMT waiver as stated in the original "Iowa Wellness Plan 1115 Waiver Application" from August 2013 and the state's discussion in CMS's letter to the state granting the latest 1115 renewal are:

1. To align benefits with those specified by the enabling legislation and make the benefits consistent with those offered by commercial insurers.
2. To help Iowa improve the fiscal sustainability of its Medicaid program, without significant negative effects on beneficiary access to services.

This report presents results of NEMT, and transportation-related questions included in a 2022 survey with IHAWP and Medicaid members about their experiences with the program.

NEMT methodology

Member experience survey

Information about the potential impact on Medicaid members of IHAWP's waiver to provide NEMT and other transportation-related issues was collected as part of the 2022 Member Experience Survey, conducted during the summer/fall of 2022. This survey utilized a sequential mixed-mode strategy, combining mail (with web option) and a telephone follow-up to non-respondents. The sampling frame included 6,000 IHAWP members, and 6,000 traditional Medicaid members who were eligible as adult members of a family not covered due to pregnancy or a disability. The traditional Medicaid comparison group is primarily associated with families eligible through Temporary Assistance to Needy Families (TANF), which is termed the Family Investment Program (FIP) in Iowa. Random samples for each group were drawn from IHAWP and Medicaid enrollment data current as of June 2022. Members were considered eligible if they had been in their current plan for at least the previous six months, were between the ages of 19 and 64, living in Iowa, were not enrolled in Medicare, and with a phone number. To reduce respondent burden, we

excluded members who had been selected for the HBI phone survey, and one person was selected per household to reduce the relatedness of the responses and respondent burden.

Surveys were first sent by mail on June 29, 2022. Respondents were given the option to complete the survey on paper or online by entering a unique access code. Nominal monetary pre-incentives were utilized to maximize response rates for mailed surveys. Both a pre-incentive and gift card lottery were used in the first mailing: each initial survey packet included a $2 bill and respondents who completed and returned the survey within two weeks of the mailing were entered into a random drawing for one of twenty $100 Walmart gift cards.

A reminder postcard was sent to the entire sample one week after the initial mailing. Five weeks after the first mailing (August 2, 2022), a second survey and cover letter were sent to those who had not responded to the initial mailing. Approximately 3 weeks after the second mailing, the phone follow-up for non-respondents began. At least two attempts were made to each viable number. The phone follow-up field period closed at the end of October.

Survey instrument

The foundation for the survey instrument was the most recent versions of the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) 5.1 Health Plan Survey[2] and the CAHPS Clinician and Group Survey.[3] Additional items were included to provide information about the following topic areas:

- Need and Unmet Need for Health Care Services (derived from National Health Interview Survey)
- Quality of Primary Care Delivery (derived from the CAHPS Patient-Centered Medical Home Item Set and Original items)
- Emergency Room Care and Hospitalizations (Original items)
- Mental Health and Emotional Health Care (Original Items)
- Non-Emergency Medical Transportation (Original Items)
- Functional Limitations (derived from the Behavioral Risk Factor Surveillance System)
- Chronic Physical and Mental Health Conditions (Original Items)
- Managed Care Organizations (Original Items)
- Dental Health Care (Original Items)

[2] Agency for Healthcare Research and Quality (AHRQ). CAHPS Surveys and Tools to Advance Patient-Centered Care. CAHPS Health Plan Survey. Available at https://cahps.ahrq.gov/surveys-guidance/hp/index.html

[3] AHRQ. CAHPS Surveys and Tools to Advance Patient-Centered Care. CAHPS Clinician and Group Survey. Available at https://cahps.ahrq.gov/surveys-guidance/cg/index.html

The full survey instrument can be found in the appendix of the Iowa Health and Wellness Plan 2022 Member Survey Report available here: https://doi.org/10.17077/rep.006599.

The results presented in this report focus on the transportation-related issues and the potential impact on other issues such as access to health care.

Response rates

There were 1,216 IHAWP members and 1,055 adult Medicaid members who responded to the survey for overall adjusted response rates of 26% for the IHAWP sample and 21% for the Medicaid sample [Table 26]. Response rates were adjusted by removing from the denominator those ineligible to complete a survey because of undeliverable survey, out-of-state addresses, or because the intended respondent was deceased or incarcerated.

Table 26. Survey Response Rates for IHAWP and Traditional Medicaid Members

Program	Total Sampled	Adjusted*	Completed	Adj. Response Rate*
IHAWP	6,000	4,668	1,216	26%
Traditional Medicaid	6,000	4,913	1,055	21%
Total	12,000	9581	2271	24%

**Adjusted for ineligibles: Removed respondents who no longer had a valid address or were out of Iowa or had died.*

A breakdown of responses by mode is provided in Table 27. IHAWP respondents were more likely to have completed the survey by mail than Medicaid respondents (67% and 56% respectively). Medicaid respondents were more likely than IHAWP respondents to complete the survey by phone (27% and 18% respectively).

Table 27. Survey Responses by Mode for IHAWP and Traditional Medicaid Members*

Program	Mail	Online	Phone
IHAWP	67%	15%	18%
Traditional Medicaid	56%	17%	27%
Total	61%	16%	22%

** Statistically significant difference at p<.05*

Data analysis

For this report, we focused on IHAWP members for whom the NEMT benefit was waived, excluding those who retained the NEMT benefit through medical or EPSDT exemption when making comparisons between IHAWP members without the NEMT benefit (n=957) and traditional Medicaid members who have the NEMT benefit (n=1,055). Our primary analyses make comparisons between IHAWP members without NEMT and traditional Medicaid members for different transportation-related measures. Some of these comparisons were also made among specific subgroups including those in rural and non-rural areas and those with and without activity limitation.

Data were tabulated and bivariate analyses (i.e., chi-square tests) were conducted using SPSS and Stata. Group differences are considered statistically significant if the p-value was less than 0.05. When there were statistically significant differences, they are noted in the text and within the relevant tables and figures.

The sample was randomly selected from all eligible members of IHAWP and Medicaid. Because all analyses compared IHAWP and Medicaid members, findings are not impacted by the sampling strategy, and we are reporting unweighted results in this report.

Limitations

There are some limitations with survey research that can affect the interpretation of the results. First, while a comparison is being made throughout between IHAWP without NEMT and traditional Medicaid members, it is understood that these two groups differ considerably based on their Medicaid eligibility categories and thus their demographics. Traditional Medicaid members are initially eligible only up to 50% of the federal poverty level, whereas IHAWP members are eligible up to 133% of the federal poverty level and tend to be more likely male.

Second, those who choose to respond to the survey may be different from those who choose not to respond, and this can create biased results. In this survey, respondents in both groups (IHAWP, traditional Medicaid) were more likely to be female, white, and older than those who did not respond to the surveys (See Table 28 and Table 29). Finally, respondents may have difficulty accurately remembering events which may introduce recall bias. This risk may not be high because of the relatively short time period for recalling events in this survey (6 months).

Table 28. Demographic Characteristics of IHAWP Respondents and Non-respondents*

	Respondents (n=1,216)	Non-respondents (n=4,784)	Total (n=6,000)
Age in Years†			
19-34	31%	51%	47%
35-54	38%	38%	38%
55-64	31%	12%	16%
Sex†			
Female	63%	53%	55%
Race/Ethnicity†			
White	68%	61%	62%
Black or African American	5%	11%	9%
Hispanic/Latino (all races)	7%	7%	7%
Other^	4%	6%	5%
Unknown	17%	16%	16%

** Demographic information is taken from Medicaid Eligibility data and does not necessarily match the self-reported*

demographic information provided by survey respondents
† Statistically significant difference at p<.05.
^ Includes American Indian, Asian, Pacific Islander and multiple races

Table 29. Demographic Characteristics of Medicaid Respondents and Non-respondents*

	Respondents (n=1,055)	Non-respondents (n=4,945)	Total (n=6,000)
Age in Years†			
19-34	50%	58%	56%
35-54	46%	41%	32%
55-64	4%	1%	2%
Sex†			
Female	90%	86%	87%
Race/Ethnicity†			
White	65%	60%	61%
Black or African American	10%	14%	13%
Hispanic/Latino (all races)	9%	10%	9%
Other^	5%	7%	6%
Unknown	11%	11%	11%

** Demographic information is taken from Medicaid Eligibility data and does not necessarily match the self-reported demographic information provided by survey respondents*
† Statistically significant difference at p<.05.
^ Includes American Indian, Asian, Pacific Islander and multiple races

NEMT Evaluation Measures Summary

Comparison Strategy	Outcome Measures(s)	Data sources	Analytic Approach	
			Original	Revised
Hypothesis 1: Wellness Plan members without a non-emergency transportation benefit will have equal or lower barriers to care resulting from lack of transportation.				
Research Question 1.1: Are adults in the IHAWP less likely to report barriers to care due to transportation than other adults in Medicaid?				
Adults in Medicaid	Member experiences with transportation issues to and from health care visits	IHAWP Member Survey	Means tests	Chi-square test: A similar test that is better suited for dichotomous outcomes.
Research Question 1.2: Are adults in the IHAWP less likely to report transportation-related barriers to complete HBI requirements than other adults in Medicaid who report awareness of the NEMT benefit?				
Adults in Medicaid	Member experiences with completing HBI requirements to avoid premiums	IHAWP Member Survey	Means tests	Chi-square test: A similar test that is better suited for dichotomous outcomes.
Research Question 1.3: Are adults in the IHAWP less likely to report barriers to care for chronic condition management due to transportation than other adults in Medicaid who report awareness of the NEMT benefit?				
Adults in Medicaid	Member experience with transportation issues for chronic condition management	IHAWP Member Survey	Means tests	Chi-square test: A similar test that is better suited for dichotomous outcomes.
Research Question 1.4: Are adults in the IHAWP less likely to report unmet need for transportation to health care visits than other adults in Medicaid (~~who report awareness of the NEMT benefit~~)?				
Adults in Medicaid	Member experience with unmet need for transportation	IHAWP Member Survey	Means tests	Chi-square test: A similar test that is better suited for dichotomous outcomes.

Comparison Strategy	Outcome Measures(s)	Data sources	Analytic Approach	
			Original	Revised
Research Question 1.5: Are adults in the IHAWP less likely to report worry about the ability to pay for cost of transportation than other adults in Medicaid (~~who report awareness of the NEMT benefit~~)?				
Adults in Medicaid	Member experience with cost of transportation	IHAWP Member Survey	Means tests	Chi-square test: A similar test that is better suited for dichotomous outcomes.
Hypothesis 2: Wellness Plan members without a non-emergency transportation benefit will have equal or lower rates of missed appointments due to access to transportation.				
Research Question 2.1: Are adults in the IHAWP less likely to report transportation-related missed appointments than other adults in Medicaid who receive the NEMT benefit?				
Adults in Medicaid	Member reports of transportation-related missed appointments	IHAWP Member Survey	Means tests	Chi-square test: A similar test that is better suited for dichotomous outcomes.
Hypothesis 3: Wellness Plan members without a non-emergency transportation benefit will report a lower awareness of the non-emergency transportation benefit as a part of their health care plan.				
Research Question 3.1: Do adults in the IHAWP less frequently report that their health care plan provides non-emergency transportation than other adults in Medicaid who receive the NEMT benefit?				
Adults in Medicaid	Member reports of health care plan providing NEMT	IHAWP Member Survey	Means tests	Chi-square test: A similar test that is better suited for dichotomous outcomes.

Comparison Strategy	Outcome Measures(s)	Data sources	Analytic Approach	
			Original	Revised
Hypothesis 4: Wellness plan members without a non-emergency transportation benefit will report similar experiences with health care-related transportation regardless of their location or disability status.				
Research Question 4.1: Do adults in the IHAWP who live in rural areas report similar experiences with health-care related transportation as other adults in Medicaid who receive the NEMT benefit?				
Adults in Medicaid	Subgroup analyses of 1-3 by rurality	IHAWP Member Survey	Means tests	Chi-square test: A similar test that is better suited for dichotomous outcomes.
Research Question 4.2: Do adults in the IHAWP who have limitations to activities of daily living (ADLs) report similar experiences with health-care related transportation as other adults in Medicaid who receive the NEMT benefit?				
Adults in Medicaid	Subgroup analyses of 1-3 by ADLs	IHAWP Member Survey	Means tests	Chi-square test: A similar test that is better suited for dichotomous outcomes.

NEMT-Related Quantitative Results

Table 30 - Table 32 show the overall results for each of the hypotheses and research questions for the 2021 Member survey related to the waiver of Non-Emergency Transportation (NEMT). More details about the results for each of the hypotheses and research questions (e.g., text, table/figures) presented in the summary results, follow the tables.

Table 30. Transportation-Related Outcomes for IHAWP without NEMT vs. Traditional Medicaid Members

	IHAWP without NEMT (n=957)	Traditional Medicaid (n=1,055)
Hypothesis 1: Wellness Plan members without a non-emergency transportation benefit will have equal or lower barriers to care resulting from lack of transportation.		
Research Question 1.1: Are adults in the IHAWP less likely to report barriers to care due to transportation than other adults in Medicaid?		
Any Unmet Health Care Need Due to Transportation Problems in Past 6 Months	6%	9%*
Transportation Problems as A Reason for Unmet Check-up or Routine Medical Care Need (among those with an unmet need)	17%	24%
Transportation Problems as A Reason for Unmet Preventive Medical Care Need (among those with an unmet need)	23%	18%
Transportation Problems as A Reason for Unmet Mental Health Care Need (among those with an unmet need)	16%	13%
Transportation Problems as A Reason for Unmet Dental Health Care Need (among those with an unmet need)	22%	21%
Research Question 1.4: Are adults in the IHAWP less likely to report unmet need for transportation to health care visits than other adults in Medicaid?		
Had a Time in Past 6 Months when Transportation to Health Visit was Needed but Not Received	6%	9%*
Research Question 1.5: Are adults in the IHAWP less likely to report worry about the ability to pay for cost of transportation than other adults in Medicaid?		
How often Worried about Cost of Transportation to Health Visits in Past 6 Months		
Never	71%	60%*
Sometimes/Usually/Always	29%	40%*

	IHAWP without NEMT (n=957)	Traditional Medicaid (n=1,055)
Hypothesis 2: Wellness Plan members without a non-emergency transportation benefit will have equal or lower rates of missed appointments due to access to transportation.		
Research Question 2.1: Are adults in the IHAWP less likely to report transportation-related missed appointments than other adults in Medicaid who receive the NEMT benefit?		
Any Missed Health Appointment Due to Transportation Problems in Past 6 Months	6%	11%*
Hypothesis 3: Wellness Plan members without a non-emergency transportation benefit will report a lower awareness of the non-emergency transportation benefit as a part of their health care plan.		
Research Question 3.1: Do adults in the IHAWP less frequently report that their health care plan provides non-emergency transportation than other adults in Medicaid who receive the NEMT benefit?		
Thought Health Plan Provided Transportation to Regular Health Visits	7%	19%*

*Chi-square <0.05

Table 31. Transportation-Related Outcomes for IHAWP without NEMT vs. Traditional Medicaid Members by Location

	Rural		Non-Rural	
	IHAWP without NEMT (%)	Traditional Medicaid (%)	IHAWP without NEMT (%)	Traditional Medicaid (%)
Hypothesis 4: Wellness plan members without a non-emergency transportation benefit will report similar experiences with health care-related transportation regardless of their location or disability status.				
Research Question 4.1: Do adults in the IHAWP who live in rural areas report similar experiences with health-care related transportation as other adults in Medicaid who receive the NEMT benefit?				
Any Unmet Health Care Need Due to Transportation Problems in Past 6 Months	7%	10%	6%	8%
Had a Time in Past 6 Months when Transportation to Health Visit was Needed but Not Received	6%	7%	6%	10%*
Any Worry about the Cost of Transportation to Health Visits in Past 6 Months	32%	41%*	27%	39%*
Any Missed Health Appointment Due to Transportation Problems in Past 6 Months	5%	9%*	6%	13%*

*Chi-square <0.05

Table 32. Transportation-Related Outcomes for IHAWP without NEMT vs. Traditional Medicaid Members by Activity Limitations Status

	Activity Limitation		No Activity Limitation	
	IHAWP without NEMT (%)	Traditional Medicaid (%)	IHAWP without NEMT (%)	Traditional Medicaid (%)
Hypothesis 4: Wellness plan members without a non-emergency transportation benefit will report similar experiences with health care-related transportation regardless of their location or disability status.				
Research Question 4.2: Do adults in the IHAWP who have limitations to activities of daily living (ADLs) report similar experiences with health-care related transportation as other adults in Medicaid who receive the NEMT benefit?				
Any Unmet Health Care Need Due to Transportation Problems in Past 6 Months	13%	18%	4%	6%
Had a Time in Past 6 Months when Transportation to Health Visit was Needed but Not Received	14%	18%	3%	6%*
Any Worry about the Cost of Transportation to Health Visits in Past 6 Months	46%	57%*	23%	34%*
Any Missed Health Appointment Due to Transportation Problems in Past 6 Months	15%	23%*	2%	7%*

*Chi-square <0.05

Hypothesis 1: Wellness Plan members without a non-emergency transportation benefit will have equal or lower barriers to care resulting from lack of transportation.

Research Question 1.1: Are adults in the IHAWP less likely to report barriers to care due to transportation than other adults in Medicaid?

Barriers to care were assessed with four questions about unmet needs for health care services that also had follow-up questions asking members to select from a checklist the reasons they did not get the care they needed. Transportation problems were included in the list of possible reasons they did not get each type of care they needed. Members were asked if in the last 6 months they:

Had a time when a check-up or routine care was needed but they were unable to get it.

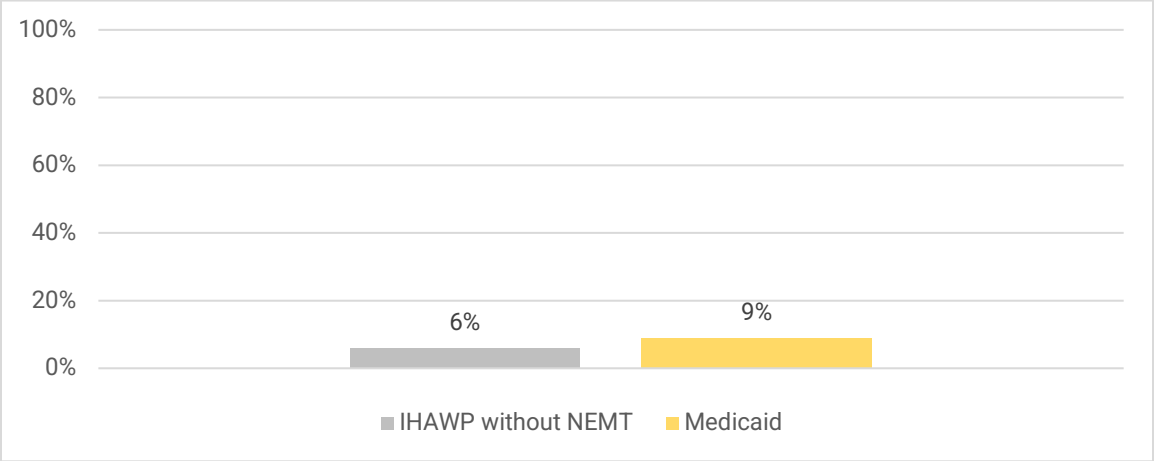
Had a time when preventive care (e.g., check-up, physical exam, mammogram, or pap smear test) was needed but they were unable to get it.

Had a time when treatment or counseling for a mental or behavioral health problem was needed but they were unable to get it (asked of those who first indicated a need for mental health services).

Had a time when dental care was needed but they were unable to get it.

An indicator of unmet health care need due to transportation problems was constructed to show the proportion of respondents who had any unmet care need (check-up or routine care, preventive care, mental health care, dental care) attributed to transportation issues. Overall, 6% of IHAWP members without NEMT reported having any unmet health care need due to transportation problems and 9% of Medicaid members reported an unmet health care need due to transportation (Figure 35). This difference was statistically significant.

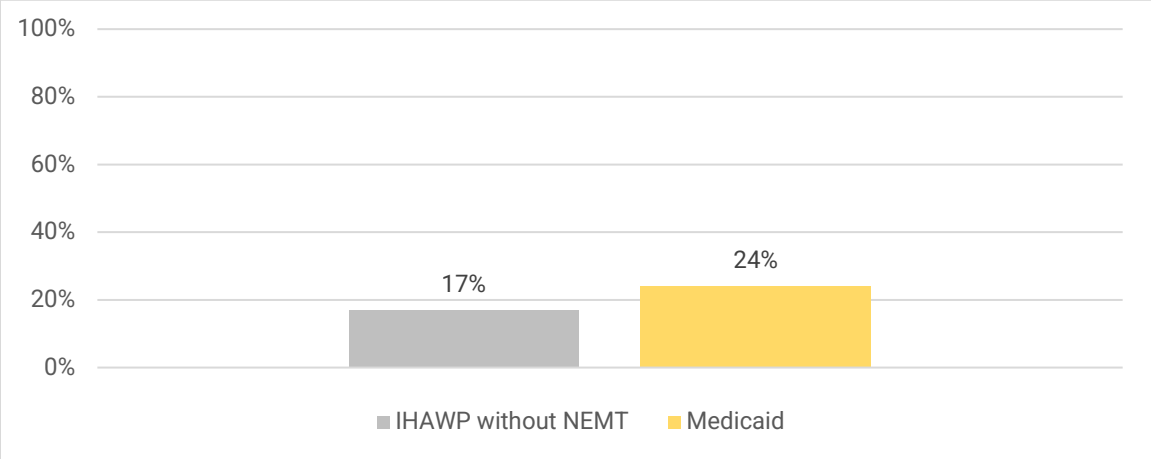
Figure 35. Unmet Health Care Need Due to Transportation Problems in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid)



Chi-square p<.05.

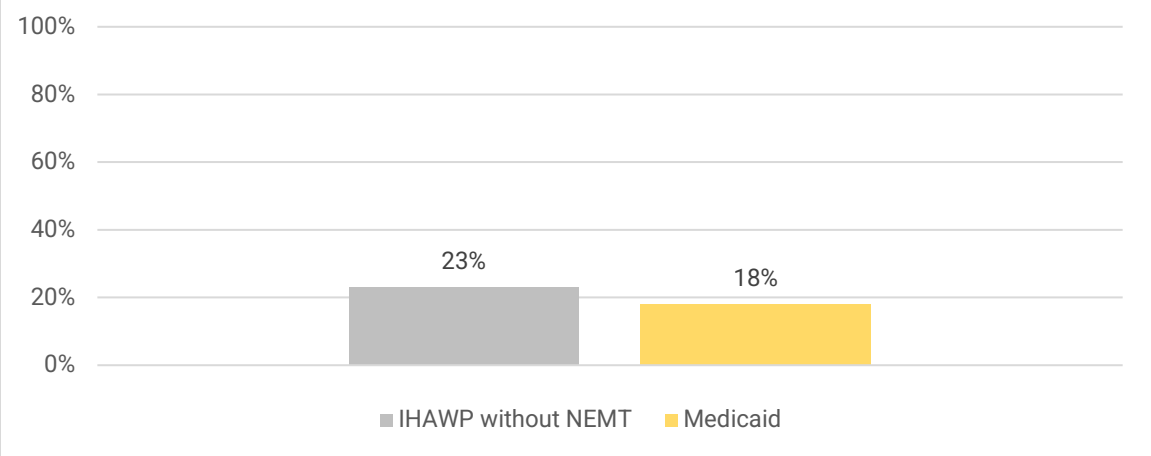
Among respondents with an unmet health care need, comparisons were made between IHAWP without NEMT and Medicaid for the proportion who selected transportation problems as one of the reasons for their unmet need. Figure 36 shows that 17% of IHAWP members without NEMT indicated transportation problems as a reason for their unmet check-up or routine medical care need and this did not differ significantly compared with 24% for Medicaid members. Figure 37 shows a similar pattern for selecting transportation problems as a reason for unmet preventive medical care needs (23% IHAWP vs. 18% Medicaid, chi-square not significant).

Figure 36. Transportation Problems as a Reason for Unmet Check-up or Routine Medical Care Need



Chi-square not significant. Sample includes only respondents with an unmet check-up or routine medical care need (IHAWP without NEMT N=86, Traditional Medicaid N=132).

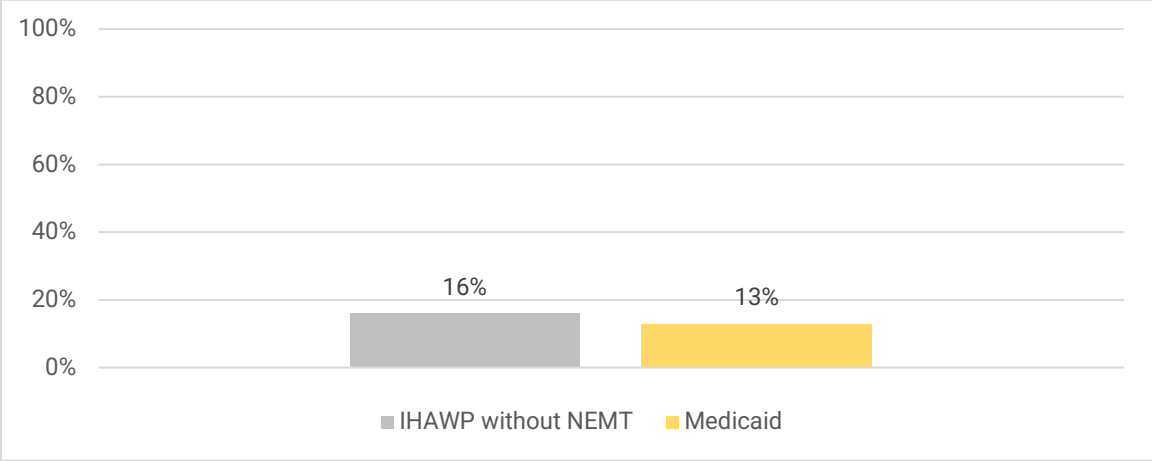
Figure 37. Transportation Problems as a Reason for Unmet Preventive Medical Care Need



Chi-square not significant. Sample includes only respondents with an unmet preventive medical care need (IHAWP without NEMT N=66, Traditional Medicaid N=73).

Among those with an unmet mental health care need, 16% of IHAWP members without NEMT selected transportation problems as one of the reasons for their unmet need and 13% percent of Medicaid members selected transportation problems as a reason for their unmet need (Figure 38). This difference was not statistically significant.

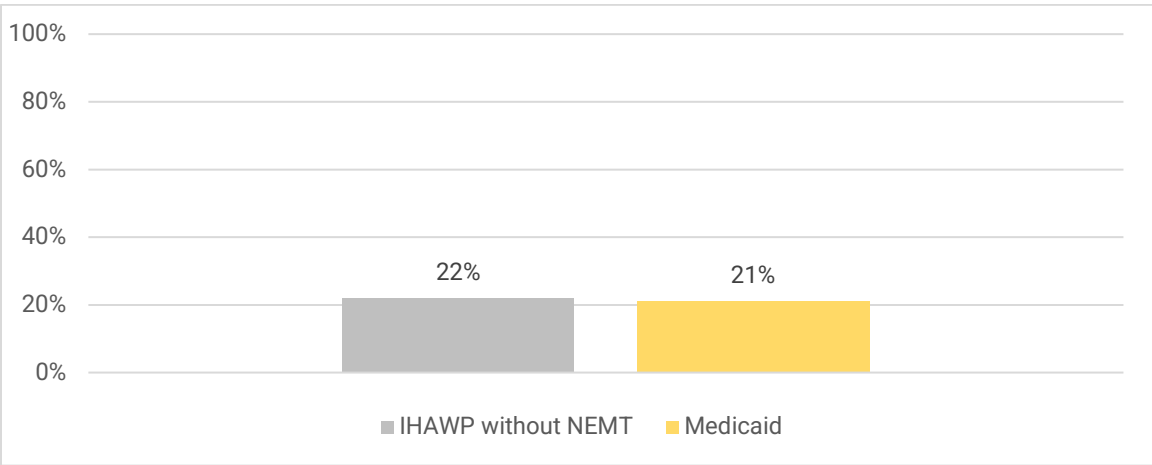
Figure 38. Transportation Problems as a Reason for Unmet Mental Health Care Need



Chi-square not significant. Sample includes only respondents with an unmet mental health care need (IHAWP without NEMT N=44, Traditional Medicaid N=102).

Figure 39 shows that among those with an unmet dental care need, just over 20% of respondents in each program indicated travel distance or transportation problems as a reason for their unmet need (22% IHAWP without NEMT vs. 21% Medicaid, chi-square not significant).

Figure 39. Travel Distance or Transportation Problems as a Reason for Unmet Dental Care Need



Chi-square not significant. Sample includes only respondents with an unmet dental care need (IHAWP without NEMT N=221, Traditional Medicaid N=327).

Research Question 1.2: Are adults in the IHAWP less likely to report transportation-related barriers to complete HBI requirements than other adults in Medicaid who report awareness of the NEMT benefit?

Due to the Public Health Emergency, when the HBI requirements were waived, this question was not relevant and thus not included in the 2022 Member Experience Survey.

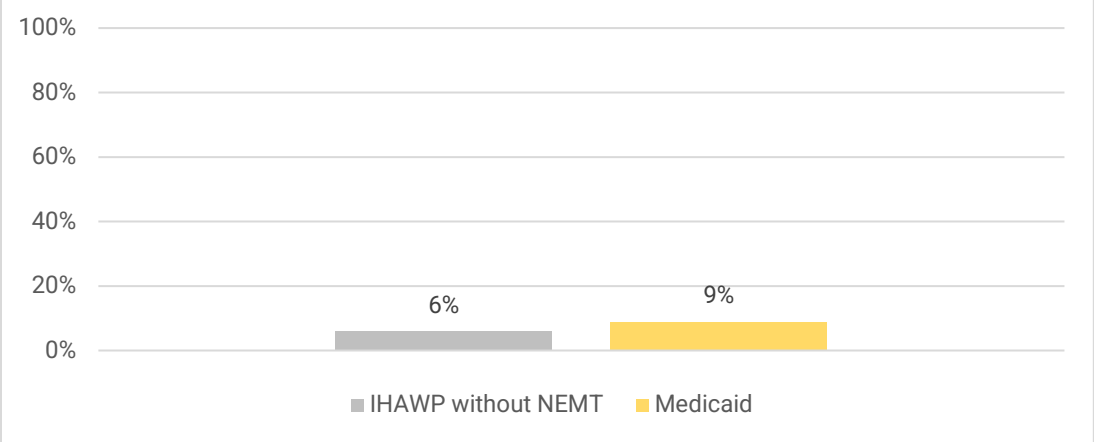
Research Question 1.3: Are adults in the IHAWP less likely to report barriers to care for chronic condition management due to transportation than other adults in Medicaid who report awareness of the NEMT benefit?

This question was not included in the 2022 Member Experience Survey and will be considered for inclusion in the next member survey.

Research Question 1.4: Are adults in the IHAWP less likely to report unmet need for transportation to health care visits than other adults in Medicaid?

All respondents were asked if they had any time in the past 6 months when they needed transportation for a healthcare visit but couldn't get it for any reason. Figure 40 shows that comparing IHAWP members without NEMT to all Medicaid members, the reported unmet need for transportation in the past 6 months was similar (6% IHAWP without NEMT and 9% Medicaid).

Figure 40. Unmet Need for Transportation to Health Care Visits in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid and IHAWP)



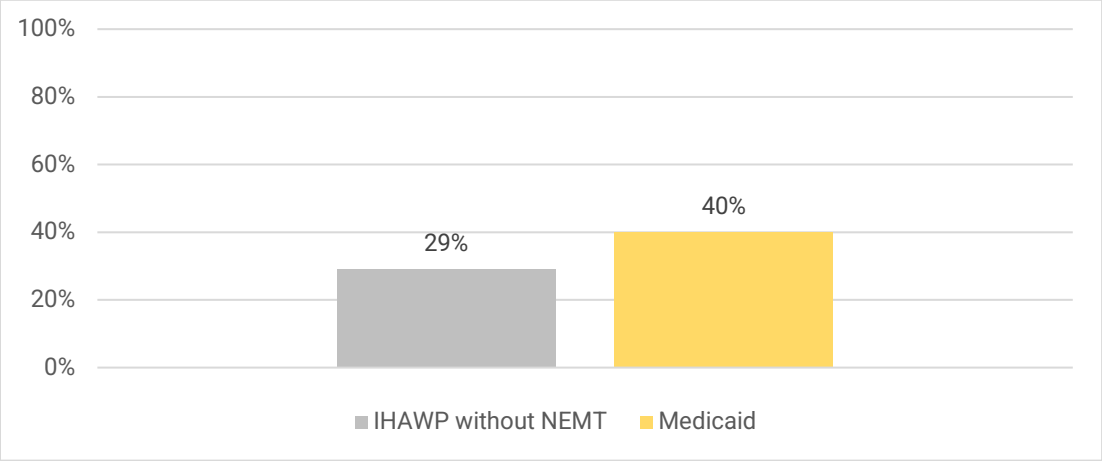
Chi-square p<.05.

Research Question 1.5: Are adults in the IHAWP less likely to report worry about the ability to pay for cost of transportation than other adults in Medicaid?

Respondents were asked how much they worried about their ability to pay for the cost of transportation to health care visits in the past 6 months. Responses of a little, somewhat, or a great deal were coded as expressing worry over their ability to pay for transportation.

Figure 41 shows that around one-third of all members expressed concern about the ability to pay for the cost of health care-related transportation, but significantly fewer IHAWP members without NEMT expressed concern (29%) compared to Medicaid members (40%).

Figure 41. Worry about Cost of Transportation to Health Visits in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid)



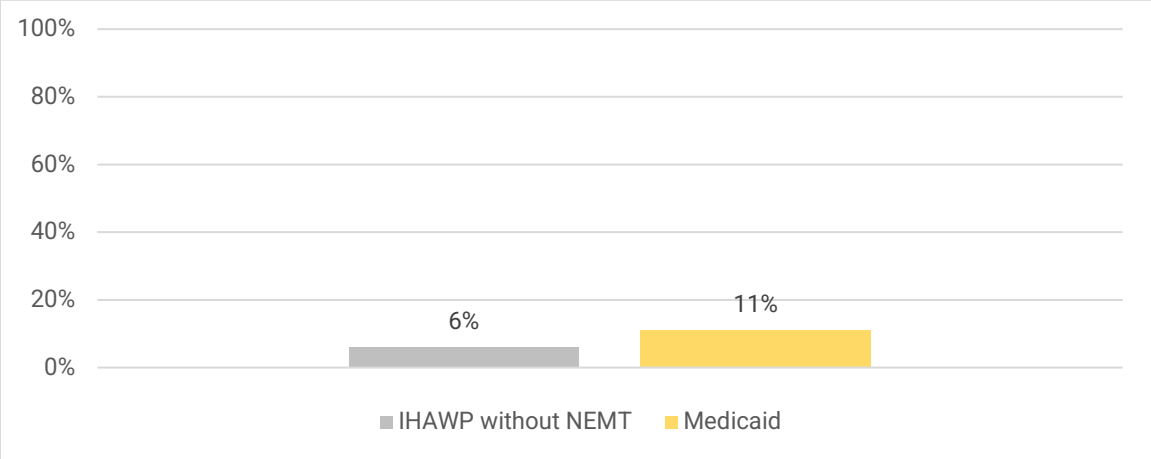
Chi-square p<.05.

Hypothesis 2: Wellness Plan members without a non-emergency transportation benefit will have equal or lower rates of missed appointments due to access to transportation.

Research Question 2.1: Are adults in the IHAWP less likely to report transportation-related missed appointments than other adults in Medicaid who receive the NEMT benefit?

About one-tenth of members reported having missed an appointment for a regular health care visit in the past 6 months due to problems with transportation, however, fewer IHAWP members without NEMT (6%) reported missing an appointment than Medicaid members (11%) and this difference was found to be statistically significant (p<.05, Figure 42).

Figure 42. Reported Missed Appointment(s) Due to Transportation Problems in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid)



Chi-square p<.05.

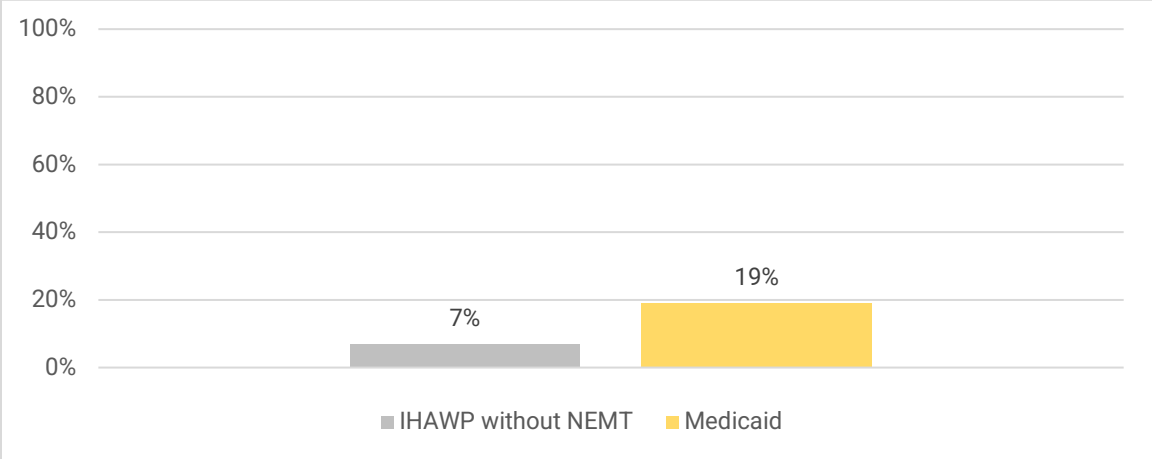
Hypothesis 3: Wellness Plan members without a non-emergency transportation benefit will report a lower awareness of the non-emergency transportation benefit as a part of their health care plan.

Research Question 3.1: Do adults in the IHAWP less frequently report that their health care plan provides non-emergency transportation than other adults in Medicaid who receive the NEMT benefit?

Figure 43 summarizes responses for IHAWP and Medicaid members to the question: Does your MCO/Medicaid provide transportation services for regular health care visits?

Fewer IHAWP members without NEMT than Medicaid members indicated that their health plan offered NEMT services (7% IHAWP without NEMT, 19% Medicaid) and this difference was found to be statistically significant.

Figure 43. Thought Health Plan Provided NEMT Services (IHAWP without NEMT vs. Traditional Medicaid)



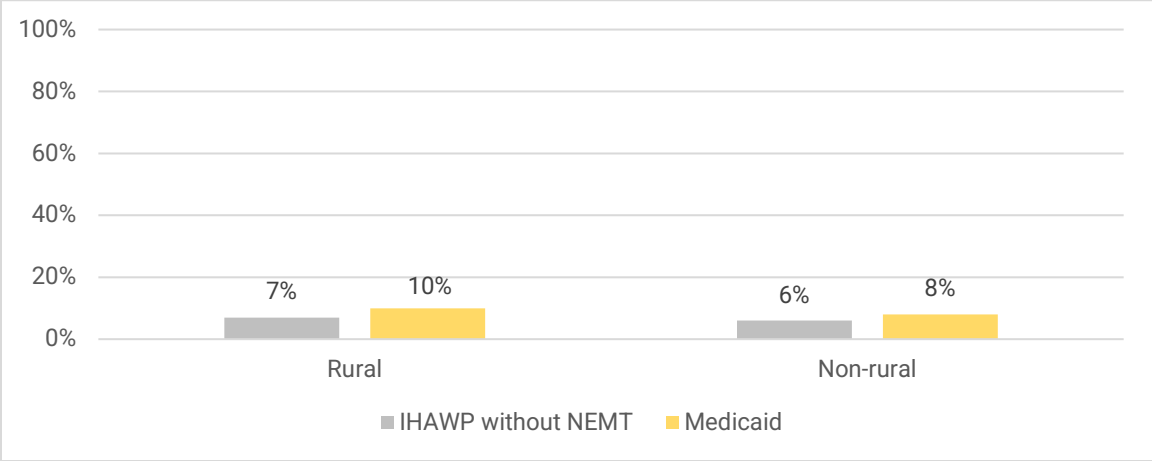
Chi-square p<.05.

Hypothesis 4: Wellness plan members without a non-emergency transportation benefit will report similar experiences with health care-related transportation regardless of their location or disability status.

Research Question 4.1: Do adults in the IHAWP who live in rural areas report similar experiences with health-care related transportation as other adults in Medicaid who receive the NEMT benefit?

Figure 44 shows rates of reported unmet health care needs due to transportation problems for IHAWP members without NEMT vs. Medicaid members in rural areas and those in non-rural areas. Among those residing in rural areas, 7% of IHAWP members without NEMT reported an unmet health care need (routine or preventive medical care, mental health care, or dental care) due to transportation problems in the past 6 months. The rate for rural Medicaid members was 10% and not significantly different compared to IHAWP.

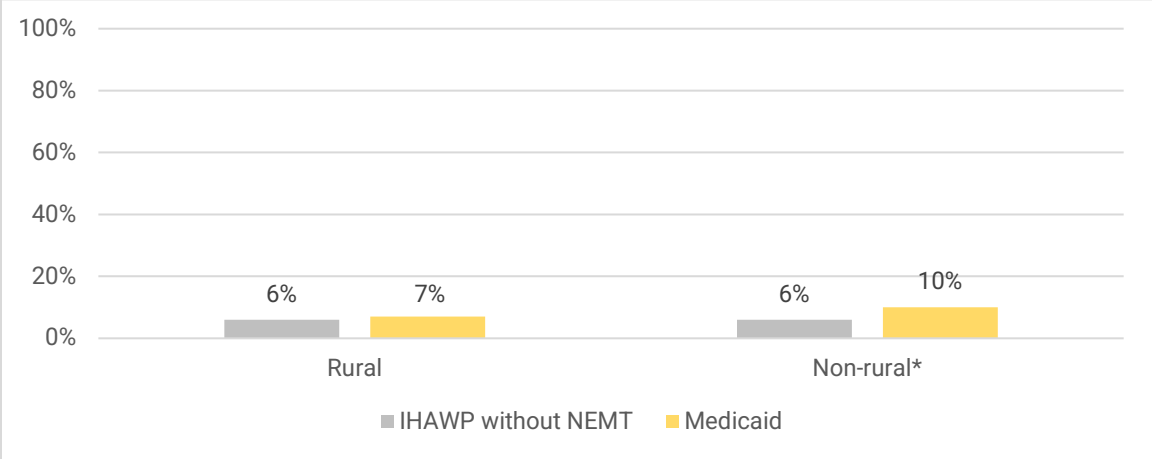
Figure 44. Unmet Health Care Need Due to Transportation Problems in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid by Rural and Non-Rural Location)



Chi-square tests for IHAWP without NEMT vs. Traditional Medicaid not significant.

Figure 45 shows that reported rates of unmet need for transportation to health care visits in the past 6 months were 6% for IHAWP members without NEMT and 7% for Medicaid members living in rural areas. These rates were slightly higher for Medicaid members (10%) than IHAWP members without NEMT (6%) in non-rural areas and this difference was found to be statistically significant.

Figure 45. Unmet Need for Transportation to Health Visits in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid by Rural and Non-Rural Location)

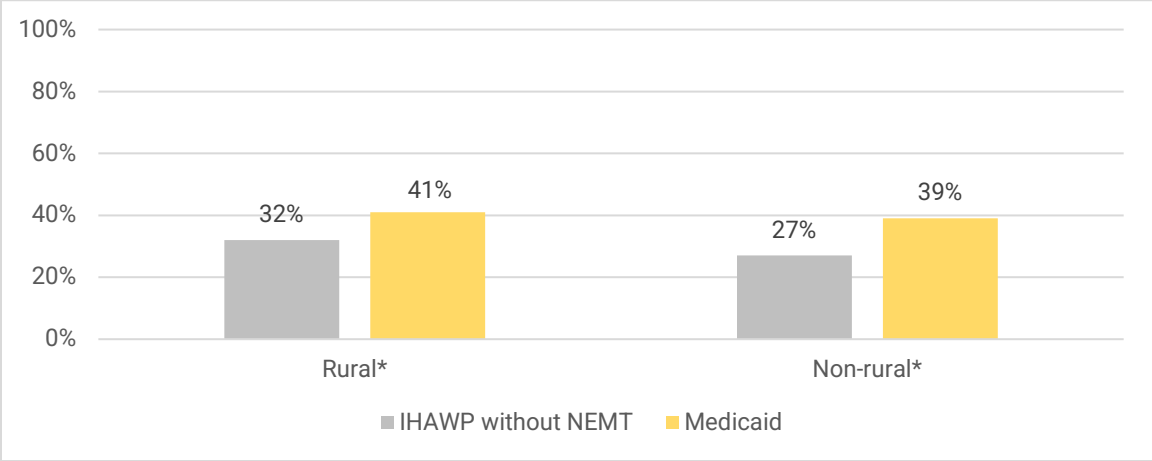


** Chi-square p<.05 for IHAWP without NEMT vs. Traditional Medicaid in urban/suburban locations.*

Figure 46 shows that having concerns about the cost of transportation to health care visits was less frequent for IHAWP members without NEMT in rural areas (32%) than for

Medicaid members in rural areas (41%). A similar pattern was found for IHAWP members without NEMT vs. Medicaid members in non-rural areas (27% vs. 39%). These differences were found to be statistically significant.

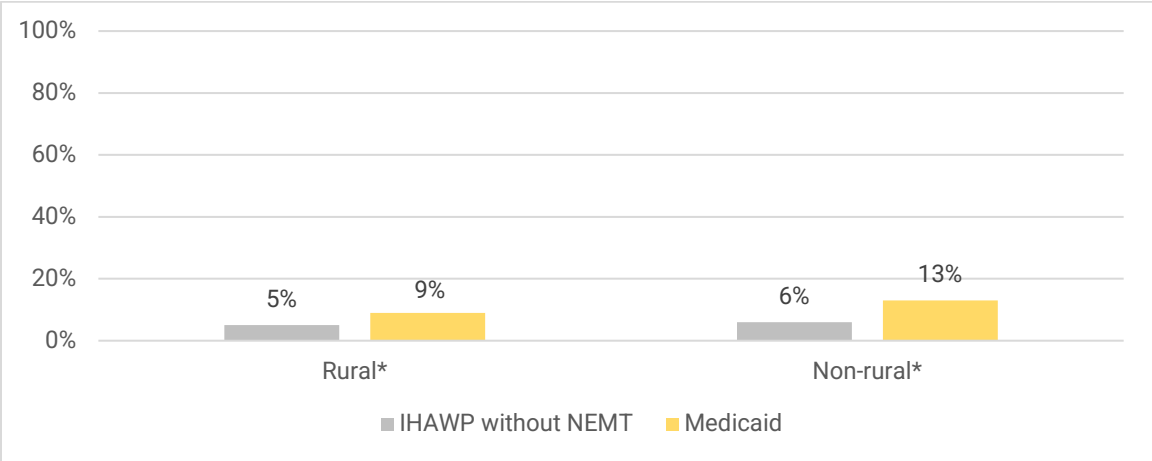
Figure 46. Worry about Cost of Transportation to Health Visits in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid by Rural and Non-Rural Location)



** Chi-square p<.05 for tests comparing IHAWP without NEMT vs. Traditional Medicaid.*

Reported missed appointments due to transportation problems in the past 6 months were more frequent in Medicaid than in IHAWP without NEMT for those living in both rural (5% IHAWP without NEMT, 9% Medicaid) and non-rural areas (6% IHAWP without NEMT, 13% Medicaid), Figure 47. These differences were found to be statistically significant.

Figure 47. Reported Missed Appointments(s) Due to Transportation Problems in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid by Rural and Non-Rural Location)

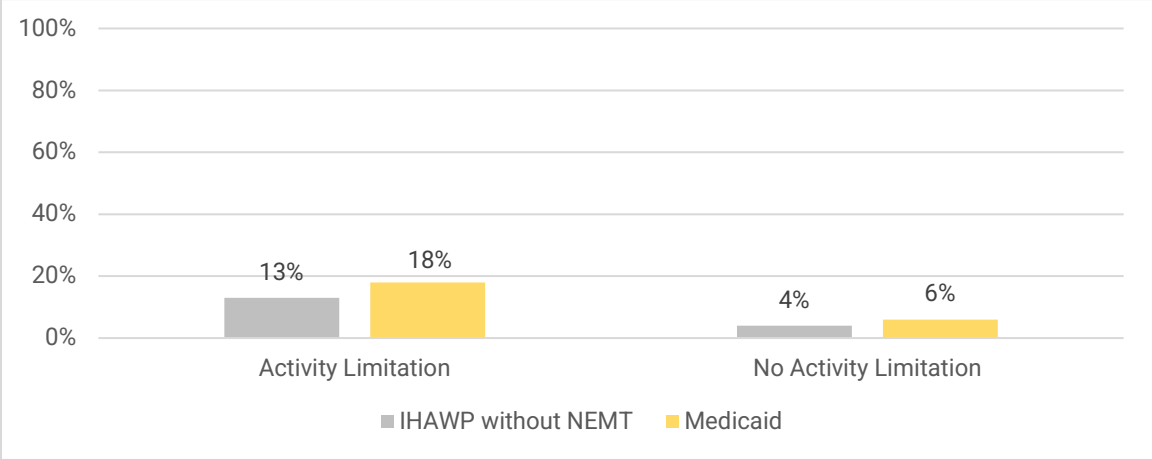


** Chi-square p<.05 for tests comparing IHAWP without NEMT vs. Traditional Medicaid.*

Research Question 4.2: Do adults in the IHAWP who have limitations to activities of daily living report similar experiences with health-care related transportation as other adults in Medicaid who receive the NEMT benefit?

Figure 48 shows rates of reported unmet health care needs due to transportation problems for IHAWP members without NEMT vs. Medicaid members with an activity limitation and those without. Among those with an activity limitation, 13% of IHAWP members without NEMT reported an unmet health care need (routine or preventive medical care, mental health care, or dental care) due to transportation problems in the past 6 months. The rate for Medicaid members was 18% and not significantly different compared to IHAWP without NEMT.

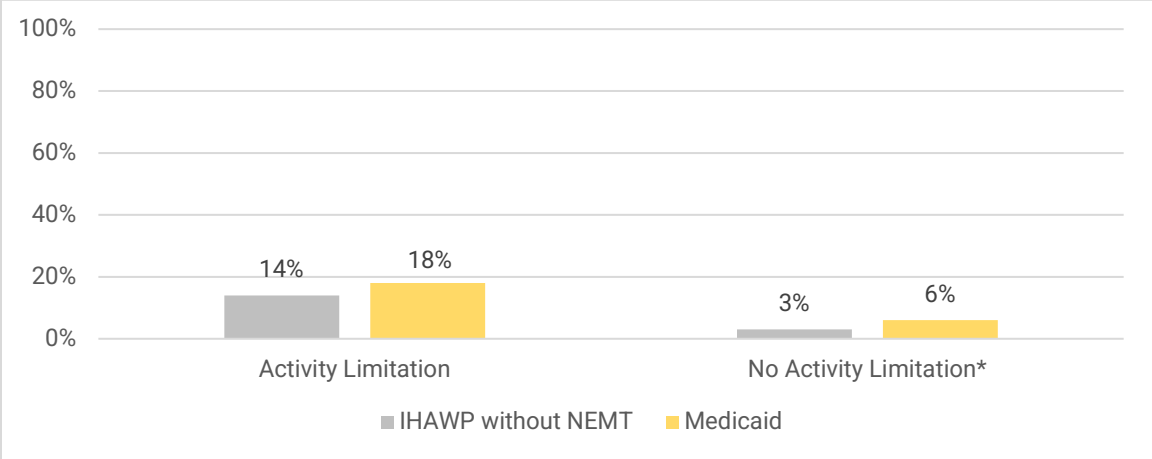
Figure 48. Unmet Health Care Need Due to Transportation Problems in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid by Activity Limitation Status)



Chi-square tests for IHAWP without NEMT vs. Traditional Medicaid not significant.

Figure 49 shows that reported rates of unmet need for transportation to health care visits in the past 6 months were high for both IHAWP members without NEMT (14%) and Medicaid members (18%) with an activity limitation. These rates were lower among those without an activity limitation and were found to be significantly different for IHAWP members without NEMT (3%) vs. Medicaid members (6%).

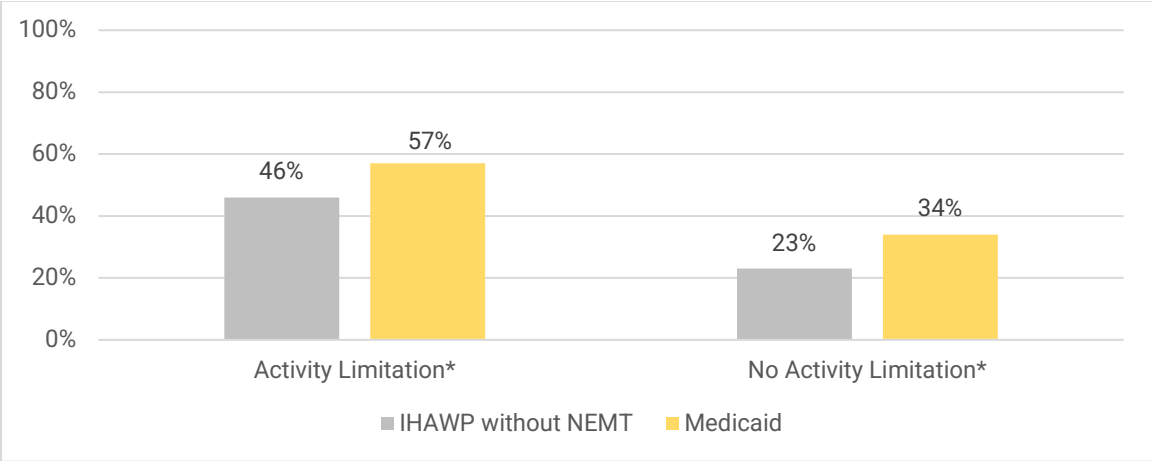
Figure 49. Unmet Need for Transportation to Health Visits in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid by Activity Limitation Status)



** Chi-square p<.05 for IHAWP without NEMT vs. Traditional Medicaid with no activity limitation.*

Figure 50 shows that having concerns about the cost of transportation to health care visits was common among those with an activity limitation. Cost concerns were more frequent for Medicaid members with an activity limitation (57%) than for IHAWP members without NEMT with an activity limitation (46%). Overall rates were lower among those without an activity limitation and less frequent in IHAWP without NEMT (23%) than in Medicaid (34%).

Figure 50.Worry about Cost of Transportation to Health Visits in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid by Activity Limitation Status)

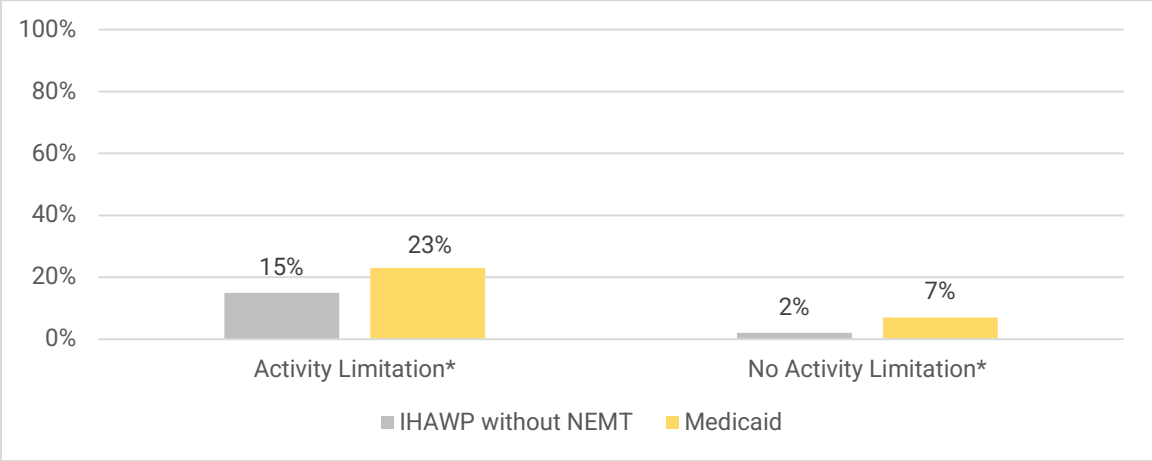


** Chi-square p<.05 for tests comparing IHAWP without NEMT vs. Traditional Medicaid.*

Reported missed appointments due to transportation problems in the past 6 months were more frequent in Medicaid (7%) than in IHAWP without NEMT (2%) for those without an activity limitation (Figure 51). Among those with an activity limitation, 23% of Medicaid

members reported missed appointments due to transportation problems and this was significantly different from 15% for IHAWP members without NEMT with activity limitation.

Figure 51. Missed Appointment(s) Due to Transportation Problems in Past 6 Months (IHAWP without NEMT vs. Traditional Medicaid by Activity Limitation Status)



** Chi-square p<.05 for tests comparing IHAWP without NEMT vs. Traditional Medicaid.*

Member Experiences

ME Executive Summary

The 2022 IHAWP member survey was used to assess the experience of members with access to care, health status and quality of the care they received. Results were compared to either national data from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey or the data from traditional Iowa Medicaid adult members, where appropriate.

Even though the IHAWP members were generally older and had a condition that affected their activities of daily living, their overall health status was rated similarly. There were more similarities than differences on a number of utilization measures: about three-quarters of all had a personal doctor, about half of all had received preventive care in the last 6 months, three-fifths had reported use of routine care, about one in three reported seeing a specialist and 40% needed urgent care and one in 11 were hospitalized in the previous 6 months.

Regarding access, again more similarities than differences between IHAWP and Medicaid members with about one in 10 having reported an unmet need for preventive care, one in 12 reported an unmet need for routine care, one in four an unmet need for a specialist and one in five reported an unmet need for urgent care.

IHAWP members did report lower rates of need, use and unmet need for mental health care and were more likely to report having received a seasonal flu vaccine and at least one COVID-19 vaccine. A smaller proportion of IHAWP members used the emergency department in the past 6 months than Medicaid members and among those who used the ED, significantly more Medicaid members than IHAWP members reported that the care they received in the ED could have been provided in a doctor's office.

Member experiences general background information

The experiences of members of the Iowa Health and Wellness Plan (IHAWP) is an important aspect of the overall evaluation of the IHAWP program, as mentioned in both the STCs and other CMS correspondence with Iowa Medicaid. The topic areas of interest include access to care, coverage gaps and churning, and quality of care. These are all areas that would be expected to improve because of Medicaid coverage gained by the IHAWP population.

This is an interim report to the Centers for Medicare and Medicaid Services (CMS) as part of the evaluation of the Iowa Health and Wellness Plan (IHAWP) being conducted by researchers at the University of Iowa for the Iowa Department of Health and Human Services. This report is specific to the evaluation of member experiences associated with

the IHAWP program. The content of this report is based on a plan to evaluate the IHAWP that was approved by CMS in 2021.

Member experiences goals

The goals being evaluated for this portion of the IHAWP evaluation derive from the expansion of eligibility to populations not previously eligible for Medicaid coverage, those between 0-138% FPL not categorically eligible for Medicaid. This increased coverage has the following goals:

- Goal 1: IHAWP members will have increased access to covered services.
- Goal 2: IHAWP members will experience consistent, reliable coverage.
- Goal 3: IHAWP members will experience improved quality of care.

Member experiences methodology

The information and data presented in this report indicate the current status of the analytic methods and results that are derived from three primary data sources used for our IHAWP evaluation research: 1) the IHAWP Consumer survey 2) the 2022 CAHPS Health Plan Survey Database, and 3) Medicaid claims and eligibility files provided to the evaluators by the Iowa Medicaid program.

Data sources

Member Experiences Survey

See description under Member Experiences Survey NEMT.

2022 CAHPS Health Plan Survey Database

The CAHPS Health Plan Survey Database collects standardized information on enrollee experiences with health plans and their services. Various survey sponsors across the United States, including State Medicaid agencies, CHIP programs, and individual health plans voluntarily submit data collected using the CAHPS Health Plan Survey instrument to be included in the database. The 2022 results are based on survey data collected between July 2021 and July 2022.

For adult Medicaid enrollees included in the 2022 database, all information was collected using the 5.1 version of the CAHPS Health Plan Survey and supplemental items from the Healthcare Effectiveness Data and Information Set were also included. A total of 50,336 adult Medicaid enrollees who participated in CAHPS surveys conducted by various State Medicaid survey sponsors across many different states in the US are included in the database. For basic demographics of the adult Medicaid sample, 60% were female, 41% had some college or higher education, and 64% were age 45 years or over.

Data Analysis

There were two main ways we focused our comparative analysis: 1) comparisons between members of IHAWP and adult members of the traditional Medicaid program in the 2022 Consumer Survey, and 2) comparisons between IHAWP members and national data on adult Medicaid recipients from the 2022 CAHPS Health Plan Survey database.

Data were tabulated and bivariate analyses were conducted using SPSS and Stata. Chi-square tests were used to examine differences between IHAWP members and traditional Medicaid members in the Consumer Survey. One sample z-tests for proportion were used to examine differences between IHAWP members and adult Medicaid enrollees from CAHPS National Benchmarking data. Group differences were considered statistically significant if the p-value was less than 0.05.

The Consumer Survey sample was randomly selected from all eligible members of IHAWP and Medicaid. Because all analyses compared IHAWP and Medicaid members, findings are not impacted by the sampling strategy, and we are reporting unweighted results in this report.

Limitations

While the CAHPS Health Plan Survey Database is commonly used as a source of national benchmarking data, it is important to note that organizations from across the country voluntarily contribute data to the CAHPS database. Health plans choose whether or not to participate in the database. Therefore, data cannot be assumed to be representative of all US Medicaid enrollee populations.

Iowa Medicaid administrative data

See discussion under Secondary data.

Emergency Department Use Survey

The survey team is developing a telephone survey to be administered to members who utilize the ED for non-emergent diagnoses. We anticipate recruiting 50 members per month for 1 year. This should yield 300 completed surveys (100 per group) with sufficient power to detect moderate differences at.05.

Analyses

See discussion under Empirical Strategy in General Methods.

Evaluation measures summary

The tables below present an updated list of the hypotheses, research questions, comparison strategy, outcome measures, data sources and analytic approach that was included in the 2021 IHAWP evaluation plan.

Any variances from the approved 2021 IHAWP evaluation plan design in the tables that follow reflect methodologic adjustments that were made based on available data and other methodologic issues (e.g., where CAHPS benchmarking data is no longer available). For

example, “National CAHPS benchmarking database” was changed to “Medicaid” because the data are no longer available in the National CAHPS benchmarking database. Therefore, we modified the methods to be a comparison of IHAWP to Medicaid. Other items were struck through because they were either redundant or no longer possible. Items that have not yet been completed as part of this evaluation may be included in the 2026 final evaluation report. Where methods are updated, the original language from the 2021 IHAWP evaluation is included in parentheses.

Member Experiences Evaluation Measures Summary – Access to Care (see Evaluation Plan for measure detail)

Current Comparison Strategy (Originally Proposed)	Current Outcome Measure(s) (Originally Proposed)	Data sources	Analytic Approach	
			Original	Revised
Hypothesis 1.1: Wellness Plan members will have equal or greater access to primary care and specialty services.				
Research Question 1.1.1: Are adults in the IHAWP more likely to have had an ambulatory or preventive care visit than other adults in Medicaid?				
Study group: IHAWP members	Percent of members who had an ambulatory care visit in the measurement year (*HEDIS AAP*)	Medicaid claims	Means tests CY 2014-2022	Study period will be changed to CY 2014-2019 due to PHE.
Comparison group: FMAP adult members	Whether a member had an ambulatory or preventive care visit (*HEDIS AAP*)		DID CY 2014-2022	Analyses will be changed to OLS with PHE adjustments as we do not have pre-IHAWP data for the study group.
Research Question 1.1.2: Are adults in the IHAWP more likely to report greater access to urgent care (UC) than other adults in national estimates from National CAHPS Benchmarking Database?				
Adults in national estimates from National CAHPS Benchmarking Database	Single item assessing timely access to UC (	Member Survey	Means tests	Z-test: A similar test that is better suited for dichotomous outcomes.
Research Question 1.1.3: Are adults in the IHAWP more likely to report greater access to routine care (RC) than other adults in national estimates from National CAHPS Benchmarking Database?				
Adults in national estimates from National CAHPS Benchmarking Database	Item assessing timely access to RC	Member Survey	Means tests	Z-test: A similar test that is better suited for dichotomous outcomes.
Research Question 1.1.4: Are adults in the IHAWP more likely to get timely appointments, answers to questions, and have less time in waiting room than other adults in national estimates from National CAHPS Benchmarking Database?				
Adults in national estimates from National CAHPS Benchmarking Database	Two-item CAHPS composite, "Getting Care Quickly."	Member Survey	DID	Z-test: A more appropriate test as there were significant differences in how the CAHPS and Iowa data were collected.
Research Question 1.1.5: Are adults in the IHAWP more likely to know what to do to obtain care after regular office hours than other adults in Medicaid?				
Adults in Medicaid (Adults in national estimates from National CAHPS Benchmarking Database)	Member experience with knowing what to do to obtain care after regular office hours (*CAHPS question*)	Member Survey	DID	Chi-square test: A more appropriate test as there were no policy changes related to after-hours care.

Current Comparison Strategy (Originally Proposed)	Current Outcome Measure(s) (Originally Proposed)	Data sources	Analytic Approach	
			Original	Revised
Research Question 1.1.6: Are adults in the IHAWP more likely to report greater access to specialist care than other adults' national estimates from National CAHPS Benchmarking Database?				
Adults in national estimates from National CAHPS Benchmarking Database	Item assessing timely access to specialist care	Member Survey	DID	Z-test: A more appropriate test as there were significant differences in how the CAHPS and Iowa data were collected.
Research Question 1.1.7: Are adults in the IHAWP more likely to report greater access to prescription medication than other adults in Medicaid? (national estimates from National CAHPS Benchmarking Database?				
Adults in Medicaid (Adults in national estimates from National CAHPS Benchmarking Database)	Two items assessing access to and unmet need for prescription medication.	Member Survey	DID	Chi-Square tests: A more appropriate test as there were no policy changes related to after-hours care.
Hypothesis 1.2: Wellness Plan members will have equal or greater access to preventive care services.				
Research Question 1.2.1: Are women aged 50-64 in the IHAWP more likely to have had a breast cancer screening than other adults in Medicaid?				
Study group: Female IHAWP members 50-64 yrs.	Percent of women 50-64 years of age who had a mammogram to screen for breast cancer (*HEDIS BCS*) during the measurement year	Medicaid claims	Means tests CY 2014-2022	Study period will be changed to Cy 2014-2019 due to PHE.
Comparison group: Female FMAP members 50-64 yrs.	Whether a woman 50-64 years of age had a mammogram to screen for breast cancer		DID CY 2014-2022	Analyses will be changed to OLS with PHE adjustments as we do not have pre-IHAWP data for the study group.
Research Question 1.2.2: Are women aged 21-64 in the IHAWP more likely to have had a cervical cancer screening than other adults in Medicaid?				
Study group: Female IHAWP members 21-64 yrs. Comparison group: Female FMAP members 21-64 yrs.	Percent of women 21-64 years of age who were screened for cervical cancer (*HEDIS CCS*)	Medicaid claims	Means tests CY 2017-2022	Study period will be changed to CY 2016-2019 due to PHE.
Adults in Medicaid	Whether a woman 21-64 years of age was screened for cervical cancer		DID CY 2017-2022	Analyses will be changed to OLS with PHE adjustments as we do not have pre-IHAWP data for the study group.

Current Comparison Strategy (Originally Proposed)	Current Outcome Measure(s) (Originally Proposed)	Data sources	Analytic Approach	
			Original	Revised
Research Question 1.2.3: Are adults in the IHAWP more likely to have had a flu shot in the past year than other adults in national estimates from National CAHPS Benchmarking Database?				
Adults in national estimates from National CAHPS Benchmarking Database	Percent of members 21-64 years of age who received an influenza vaccination (*CAHPS question*)	Member Survey	Means tests	Z-test: A similar test that is better suited for dichotomous outcomes.
Research Question 1.2.4: Are adults with diabetes in the IHAWP more likely to have had Hemoglobin A1c testing than other adults with diabetes in Medicaid?				
For those identified as having diabetes Study group: IHAWP members 2 comparison groups: FMAP adult members SSI adult members	Percent of members with type 1 or type 2 diabetes who had Hemoglobin A1c testing	Medicaid claims	Means tests CY 2012-2022	Study period will be changed to CY 2015-2019 due to PHE.
	Whether a member with type 1 or type 2 diabetes had Hemoglobin A1c testing		CITS Pre-IHAWP CY 2011-2013 Post-IHAWP CY 2014-2022	Analyses will be changed to OLS with PHE adjustments as we do not have pre-IHAWP data for the study group.
Research Question 1.2.5: Are adults in the IHAWP more likely to report greater access to preventive care than other adults in Medicaid? national estimates from National CAHPS Benchmarking Database?				
Adults in Medicaid (Adults in national estimates from National CAHPS Benchmarking Database)	Two items assessing access to and unmet need for preventive care (*CAHPS question*)	Member Survey	DID	Chi-square tests: A more appropriate test as there were no policy changes related to preventive care.
Hypothesis 1.3: Wellness Plan members will have equal or greater access to mental and behavioral health services.				
Research Question 1.3.1: Are adults in IHAWP with major depressive disorder more likely to have higher anti-depressant medication management than other adults with major depressive disorder in Medicaid?				
For those identified as having major depressive disorder Study group: IHAWP members 2 comparison groups FMAP adult members SSI adult members	Percent of members with major depressive disorder who remained on antidepressant medication (*HEDIS AMM*)	Medicaid claims	Means tests CY 2015-2022	Study period will be changed to CY 2015-2019 due to PHE.
	Time to first lapse in anti-depressant medication		Survival analyses CY 2015-2022	

Current Comparison Strategy (Originally Proposed)	Current Outcome Measure(s) (Originally Proposed)	Data sources	Analytic Approach	
			Original	Revised
Research Question 1.3.2: Are adults in the IHAWP more likely to utilize mental health services than other adults in Medicaid?				
Study group: IHAWP members 2 comparison groups: FMAP adult members SSI adult members	Percent of members receiving any mental health services	Medicaid claims	Means tests CY 2014-2022	Study period will be changed to CY 2014-2019 due to PHE.
For those identified as having mental health diagnosis Study group: IHAWP members Two comparison groups 1: FMAP adult members 2: SSI adult members	Whether member with mental health diagnosis received mental health services		DID CY 2015-2022	Analyses will be changed to OLS with PHE adjustments as we do not have pre-IHAWP data for the study group.
Members having an ED visit for a mental health illness Study group: IHAWP members 2 comparison groups FMAP adult members SSI adult members	Whether member had a follow-up visit after ED visit for mental illness (*HEDIS FUM*)			
Research Question 1.3.3: Are adults in the IHAWP more likely to have greater access to preventive care than other adults in national estimates from National CAHPS Benchmarking Database? (Redundant item)				
~~Adults in national estimates from National CAHPS Benchmarking Database~~	~~Access to and unmet need for preventive care (CAHPS question)~~	~~Member Survey~~	~~DID~~	Removed. See Research Question 1.2.5.

Current Comparison Strategy (Originally Proposed)	Current Outcome Measure(s) (Originally Proposed)	Data sources	Analytic Approach	
			Original	Revised
Hypothesis 1.4: Wellness Plan members will have equal or greater access to care, resulting in equal or lower use of emergency department services for non-emergent care.				
Research Question 1.4.1: Are adults in the IHAWP more likely to have fewer non-emergent ED visits than other adults in Medicaid?				
Study group: IHAWP members Comparison group: FMAP adult members	Number of non-emergent ED visits per 1,000 member months (*HEDIS AMB*) in the measurement year	Medicaid claims	Means tests CY 2014-2022	Study period changed to CY 2014-2019 due to PHE.
	Whether member had a non-emergent ED visit (*HEDIS AMB*) in the measurement period		DID CY 2014-2022	Analyses will be changed to OLS with PHE adjustments as we do not have pre-IHAWP data for the study group.
Research Question 1.4.2: Are adults in the IHAWP more likely to have fewer follow-up ED visits than other adults in Medicaid?				
Study group: IHAWP members Comparison group: FMAP adult members	Percent of members with ED visit within the first 30 days after index ED visit in the measurement year *Newly developed measure using the structure of hospital readmission from HEDIS and ED value set to define the visits*	Medicaid claims	Means tests CY 2014-2022	Study period changed to CY 2014-2019 due to PHE.
Research Question 1.4.3: Are adults in the IHAWP more likely to utilize ambulatory care than other adults in Medicaid?				
Study group: IHAWP members Comparison group: FMAP adult members	Rate of outpatient and emergency department visits per 1,000 member months (*HEDIS AMB*)	Medicaid claims	Means tests CY 2014-2022	Study period changed to CY 2014-2019 due to PHE.
Research Question 1.4.4: What other circumstances are associated with overutilization of ED?				
Members utilizing the ED ED providers	Identification of facilitators and barriers to other types of care and factors related to non-emergent ED use (e.g., knowledge of alternatives, access, ease of use, up-front cost, work or childcare coverage, financial stress)	Qualitative member interviews, ED provider interviews	Qualitative thematic coding	Unchanged for summative report.

Member Experiences Evaluation Measures Summary – Coverage Continuity (see Evaluation Plan for measure detail)

Current Comparison Strategy (Originally Proposed)	Current Outcome Measure(s) (Originally Proposed)	Data sources	Analytic Approach	
			Original	Revised
Hypothesis 2.1: Wellness Plan members will experience equal or less churning.				
Research Question 2.1.1: Are adults in the IHAWP less likely to have gaps in health insurance coverage over the past 12 months than other adults in Medicaid?				
Study group: IHAWP members Comparison group: FMAP adult members	Number of months in the previous year when the respondent did not have health insurance coverage	Member Survey	DID	In consideration for future analyses
Research Question 2.1.2: Are adults in the IHAWP more likely to have higher rates of consecutive coverage than other adults in Medicaid?				
Study group: IHAWP members Comparison group: FMAP adult members	Percent of members with 6 months continuous eligibility and 12 months continuous eligibility	Enrollment files	CITS Pre–CY 2010-2013 Post–CY 2014-2021	Analyses will be changed to OLS with PHE adjustments as we do not have pre-IHAWP data for the study group.
Research Question 2.1.3: Are adults in the IHAWP less likely to change plans or lose eligibility during the year than other adults in Medicaid?				
Study group: IHAWP members Comparison group: FMAP adult members	Whether member did not change plans or lose eligibility, changed plans or lost eligibility once, changed plans or lost eligibility 2-3 times or changed plans or lost eligibility 4 or more times	Enrollment files	CITS Pre–CY 2010-2013 Post–CY 2014-2021	Analyses will be changed to OLS with PHE adjustments as we do not have pre-IHAWP data for the study group.
Hypothesis 2.2: Wellness Plan members will maintain continuous access to a regular source of care when their eligibility status changes.				
Research Question 2.2.1: Are adults in the IHAWP more likely to have a personal doctor than other adults in national estimates from National CAHPS Benchmarking Database?				
Adults in national estimates from National CAHPS Benchmarking Database	The percent who respond that they currently have a personal doctor *(CAHPS question)*	Member Survey	Means tests	Z-test: A similar test that is better suited for dichotomous outcomes.

Current Comparison Strategy (Originally Proposed)	Current Outcome Measure(s) (Originally Proposed)	Data sources	Analytic Approach	
			Original	Revised
Research Question 2.2.2: Are adults in the IHAWP more likely to have an easier time changing personal doctor/PCP than other adults in Medicaid(than in prior years)?				
Study group: IHAWP members Comparison group: Adults in Medicaid (FMAP adult members)	Item addressing ease of changing personal doctor (for those who attempted to change personal doctors).	Member Survey	DID	Chi-square test: A more appropriate test as there were no policy changes related to changing PCP.

Member Experiences Evaluation Measures Summary – Quality of Care (see Evaluation Plan for measure detail)

Current Comparison Strategy	Current Outcome Measure(s)	Data sources	Analytic Approach	
			Original	Revised
Hypothesis 3.1: Wellness Plan members will have equal or better quality of care.				
Research Question 3.1.1: Are adults in the IHAWP less likely to receive antibiotic treatment for acute bronchitis than other adults in Medicaid?				
Study group: IHAWP members 2 Comparison groups: FMAP adult members SSI adult members	The percent of members 19–64 years of age with a diagnosis of acute bronchitis who were not dispensed an antibiotic prescription (*HEDIS AAB*)	Medicaid claims	Means tests CY 2014-2022	Study period changed to CY 2014-2019 due to PHE.
Research Question 3.1.2: Are adults aged 40-64 with COPD in IHAWP more likely to have pharmacotherapeutic management of COPD exacerbation than other adults in Medicaid?				
Study group: IHAWP members 2 Comparison groups: FMAP adult members SSI adult members	The percent of COPD exacerbations for members aged 40-64 years of age	Medicaid claims	Means tests CY 2014-2022	Study period changed to CY 2014-2019 due to PHE.

Current Comparison Strategy	Current Outcome Measure(s)	Data sources	Analytic Approach	
			Original	Revised
Research Question 3.1.3: Are adults in the IHAWP more likely to self-report receipt of flu shot than other adults in Medicaid?				
Study group: IHAWP members Comparison group: Adults in Medicaid (FMAP adult members, SSI adult members)	Percent of respondents who reported having a flu shot *(CAHPS question)*	Member Survey	Means tests	Chi-Square test: A similar test that is better suited for dichotomous outcomes.
Research Question 3.1.4: Are adults in the IHAWP less likely to report visiting the ED for non-emergent care than other adults in Medicaid?				
Study group: IHAWP members Comparison group: Adults in Medicaid (FMAP adult members, SSI adult members)	Percent of respondents who reported that the care they received at their most recent visit to the emergency room could have been provided in a doctor's office if one was available at the time	Member Survey	Means tests	Chi-Square test: A similar test that is better suited for dichotomous outcomes.
Hypothesis 3.2: Wellness Plan members will have equal or lower rates of hospital admissions.				
Research Question 3.2.1: Are adults in the IHAWP less likely to have hospital admissions for COPD, diabetes short-term complications, CHF, or asthma than other adults in Medicaid?				
Study group: IHAWP members 2 Comparison groups: FMAP adult members SSI adult members	The number of discharges for COPD, CHF, short-term complications from diabetes or asthma per 100,000 Medicaid members *(PQI)*	Medicaid claims	Means tests CY 2014-2022	Study period changed to CY 2014-2019 due to PHE.
Research Question 3.2.2: Are adults in the IHAWP less likely to utilize general hospital/acute care than other adults in Medicaid?				
Study group: IHAWP members 2 Comparison groups: FMAP adult members SSI adult members	This measure summarizes utilization of acute inpatient care and services in the following categories: total inpatient, surgery, and medicine	Medicaid claims	Means tests CY 2014-2022	Study period changed to CY 2014-2019 due to PHE.

Current Comparison Strategy	Current Outcome Measure(s)	Data sources	Analytic Approach	
			Original	Revised
Research Question 3.2.3: Are adults in the IHAWP less likely to have an acute readmission within 30 days of being discharged for acute inpatient stay than other adults in Medicaid?				
Study group: IHAWP members 2 Comparison groups: FMAP adult members SSI adult members	For members aged 19-64 years, the number of acute inpatient stays that were followed by an acute readmission for any diagnosis within 30 days	Medicaid claims	Means tests CY 2014-2022	Study period changed to CY 2014-2019 due to PHE.
Research Question 3.2.4: Are adults in the IHAWP less likely to have a self-reported hospitalization in the previous 6 months than other adults in Medicaid?				
Study group: IHAWP members Comparison groups: FMAP adult members SSI adult members	Hospitalization reported in the previous 6 months	Member Survey	Means tests	Chi-Square test: A similar test that is better suited for dichotomous outcomes.
Research Question 3.2.5: Are adults in the IHAWP less likely to have a self-reported 30-day hospital readmission in the previous 6 months than other adults in Medicaid?				
Study group: IHAWP members Comparison groups: FMAP adult members SSI adult members	30-day readmissions reported in last 6 months	Member Survey	Means tests	Chi-Square test: A similar test that is better suited for dichotomous outcomes.
Hypothesis 3.3: Wellness Plan members will report equal or greater satisfaction with the care provided.				
Research Question 3.3.1: Are adults in the IHAWP more likely to report that their personal doctor communicated well with them during office visits than other adults in national estimates from National CAHPS Benchmarking Database?				
Adults in national estimates from National CAHPS Benchmarking Database	This is a CAHPS composite measure designed to assess respondent perception of how well their personal doctor communicated with them during office visits.	Member Survey	Means tests	Z-test: A similar test that is better suited for dichotomous outcomes.
Research Question 3.3.2: Are adults in the IHAWP more likely to report that their provider supported them in taking care of their own health than other adults in Medicaid?				
Adults in Medicaid (Adults in national estimates from National CAHPS Benchmarking Database)	This is a CAHPS Patient-Centered Medical Home (PCMH) composite measure designed to assess respondent perception of how well their provider supported them in taking care of their own health.	Member Survey	Means tests	Z-test: A similar test that is better suited for dichotomous outcomes.

Current Comparison Strategy	Current Outcome Measure(s)	Data sources	Analytic Approach	
			Original	Revised
Research Question 3.3.3: Are adults in the IHAWP more likely to report that their provider paid attention to their mental or emotional health than other adults in Medicaid?				
Adults in Medicaid (Adults in national estimates from National CAHPS Benchmarking Database)	This is a CAHPS PCMH composite measure designed to assess respondent perception of how well their provider paid attention to their mental or emotional health.	Member Survey	DID	Chi-Square test: A more appropriate test as there were no policy changes related to PCMH.
Research Question 3.3.4: Are adults in the IHAWP more likely to report that their provider talked with them about their prescription medications than other adults in national estimates from National CAHPS Benchmarking Database? (Redundant item)				
~~Adults in national estimates from National CAHPS Benchmarking Database~~	~~This is a CAHPS PCMH composite measure designed to assess respondent perception of how well their provider talked with them about their prescription medications which is the CAHPS way to assess the shared decision-making component of the PCMH.~~	~~Member Survey~~	~~DID~~	Removed. See Research Question 1.1.7.
Research Question 3.3.5: Are adults in the IHAWP more likely to report that their provider paid attention to the care they received from other providers than other adults in national estimates from National CAHPS Benchmarking Database?				
Adults in Medicaid (Adults in national estimates from National CAHPS Benchmarking Database)	There are four individual items from the CAHPS PCMH items designed to assess respondent perception of their provider's attention to the care they received from other providers.	Member Survey	DID	Chi Square-test: A more appropriate test as there were no policy changes related to PCMH.
Research Question 3.3.6: Are adults in the IHAWP more likely to report higher ratings of their personal doctor than other adults in national estimates from National CAHPS Benchmarking Database?				
Adults in national estimates from National CAHPS Benchmarking Database	Rating of personal doctor on 0-10 scale *(CAHPS question)*	Member Survey	Means tests	Z-test: A similar test that is better suited for dichotomous outcomes.
Research Question 3.3.7: Are adults in the IHAWP more likely to report higher ratings of their overall care than other adults in national estimates from National CAHPS Benchmarking Database?				
Adults in national estimates from National CAHPS Benchmarking Database	Rating of all care received on 0-10 scale *(CAHPS question)*	Member Survey	Means tests	Z-test: A similar test that is better suited for dichotomous outcomes.

Current Comparison Strategy	Current Outcome Measure(s)	Data sources	Analytic Approach	
			Original	Revised
Research Question 3.3.8: Are adults in the IHAWP more likely to report higher ratings of their MCO health plan than other adults in national estimates from National CAHPS Benchmarking Database?				
Adults in Medicaid (Adults in national estimates from National CAHPS Benchmarking Database)	Rating of MCO health care plan on 0-10 scale *(CAHPS question)*	Member Survey	Means tests	Chi-square test: A similar test that is better suited for dichotomous outcomes.

Member experiences results

This section presents results of the analyses associated with each of the hypotheses and research questions proposed for the member experiences portion of the evaluation. Modifications to the methods originally proposed in the 2021 evaluation plan were noted in the previous methods tables.

Table 33 and Table 34 show the overall results for each of the hypotheses and research questions for the 2021 Member survey related to member experiences with the IHAWP program. More details about the results for each of the hypotheses and research questions (e.g., text, table/figures) presented in the summary results, follow the tables.

Table 33. Health Care Outcomes for IHAWP vs Traditional Iowa Medicaid

	IHAWP (%) (n=1,216)	Traditional Iowa Medicaid (%) (n=1,055)
Hypothesis 1.1: Wellness Plan members will have equal or greater access to primary care and specialty services.		
Research Question 1.1.5: Are adults in the IHAWP more likely to know what to do to obtain care after regular office hours than other adults in Medicaid?		
Informed about What to do if Care Needed on Weekends, Evenings, Holidays	41%	49%*
Research Question 1.1.7: Are adults in the IHAWP more likely to report greater access to prescription medication than other adults in Medicaid?		
Any Unmet Need for Prescription Medication in Past 6 Months	13%	17%*
Hypothesis 1.2: Wellness Plan members will have equal or greater access to preventive care services.		
Research Question 1.2.5: Are adults in the IHAWP more likely to report greater access to preventive care than other adults in Medicaid?		
Got Preventive Care, Such as a Check-up, Physical Exam, Mammogram, or Pap Smear Test in Past 6 Months	49%	49%
Unmet Need for Preventive Care in Past 6 Months	7%	7%
Hypothesis 2.2: Wellness Plan members will maintain continuous access to a regular source of care when their eligibility status changes.		
Research Question 2.2.2: Are adults in the IHAWP more likely to have a positive experience with changing personal doctor/PCP than other adults in Medicaid?		
Somewhat or Very Easy to Change Personal Doctor	71%	63%

	IHAWP (%) (n=1,216)	Traditional Iowa Medicaid (%) (n=1,055)
Hypothesis 3.1: Wellness Plan members will have equal or better quality of care.		
Research Question 3.1.3: Are adults in the IHAWP more likely to self-report receipt of flu shot than other adults in Medicaid?		
Received a Flu Shot Since September 1	40%	31%*
Research Question 3.1.4: Are adults in the IHAWP less likely to report visiting the ED for non-emergent care than other adults in Medicaid?		
Any ED Visit in Past 6 Months	26%	32%*
Care from Most Recent ED Visit Could have been Provided at Doctor Office if One was Available	37%	46%*
Hypothesis 3.2: Wellness Plan members will have equal or lower rates of hospital admissions.		
Research Question 3.2.4: Are adults in the IHAWP less likely to have a self-reported hospitalization in the previous 6 months than other adults in Medicaid?		
Any Hospitalization in Past 6 Months	8%	9%
30-day Hospital Readmission Among Those with Any Hospitalization in Past 6 Months	18%	23%
Hypothesis 3.3: Wellness Plan members will report equal or greater satisfaction with the care provided.		
Research Question 3.3.2: Are adults in the IHAWP more likely to report that their provider supported them in taking care of their own health than other adults in Medicaid?		
Received Self-Management Support- Doctor Discussed Health Goals, Difficulties Taking Care of Health	48%	45%
Research Question 3.3.3: Are adults in the IHAWP more likely to report that their provider paid attention to their mental or emotional health than other adults in Medicaid?		
Provider Paid Attention to Mental or Emotional Health Among Those with a Health Visit in Past 6 Months	50%	51%
Research Question 3.3.5: Are adults in the IHAWP more likely to report that their provider paid attention to the care they received from other providers than other adults in Medicaid?		
Usually or Always Received Good Care Coordination	80%	78%
Research Question 3.3.8: Are adults in the IHAWP more likely to report higher ratings of their health plan than other adults in Medicaid?		
High Rating of Health Plan	50%	47%

**Chi-square test <0.05*

Table 34. Health Care Outcomes for IHAWP vs National CAHPS Medicaid

	IHAWP (%) (n=1,216)	National CAHPS Medicaid (%)
Hypothesis 1.1: Wellness Plan members will have equal or greater access to primary care and specialty services.		
Research Question 1.1.2: Are adults in the IHAWP more likely to report greater access to urgent care than other adults in national estimates from National CAHPS Benchmarking Database?		
Always Got Care for Illness, Injury, or Condition as Soon as Needed in Past 6 Months	58%	59%
Research Question 1.1.3: Are adults in the IHAWP more likely to report greater access to routine care than other adults in national estimates from National CAHPS Benchmarking Database?		
Always Got Check-up or Routine Care Appointment as Soon as Needed in Past 6 Months	53%	52%
Research Question 1.1.6: Are adults in the IHAWP more likely to report greater access to specialist care than other adults in national estimates from National CAHPS Benchmarking Database?		
Always Got Appointment with Specialist as Soon as Needed in Past 6 Months	51%	50%
Hypothesis 1.2: Wellness Plan members will have equal or greater access to preventive care services.		
Research Question 1.2.3: Are adults in the IHAWP more likely to have had a flu shot in the past year than other adults in national estimates from National CAHPS Benchmarking Database?		
Received a Flu Shot in Past Year	40%	40%
Hypothesis 2.2: Wellness Plan members will maintain continuous access to a regular source of care when their eligibility status changes.		
Research Question 2.2.1: Are adults in the IHAWP more likely to have a personal doctor than other adults in national estimates from National CAHPS Benchmarking Database?		
Have a Personal Doctor (Person to See for Check-up, Advice, Illness, or Injury)	78%	81%
I. Hypothesis 3.3: Wellness Plan members will report equal or greater satisfaction with the care provided.		
Research Question 3.3.1: Are adults in the IHAWP more likely to report that their personal doctor communicated well with them during office visits than other adults in national estimates from National CAHPS Benchmarking Database?		
Personal Doctor Usually or Always Communicated Well	93%	93%
Research Question 3.3.6: Are adults in the IHAWP more likely to report higher ratings of their personal doctor than other adults in national estimates from National CAHPS Benchmarking Database?		
High Rating of Personal Doctor	69%	68%
Research Question 3.3.7: Are adults in the IHAWP more likely to report higher ratings of their overall care than other adults in national estimates from National CAHPS Benchmarking Database?		
High Rating of Overall Health Care	52%	56%*

*** One-sample Z-test for proportion <0.05**

Access to care

Hypothesis 1.1: Wellness Plan members will have equal or greater access to primary care and specialty services.

Research Question 1.1.1: Are adults in the IHAWP more likely to have had an ambulatory or preventive care visit than other adults in Medicaid?

Dataset is curated for the period 2011-2021. Preliminary model building is underway.

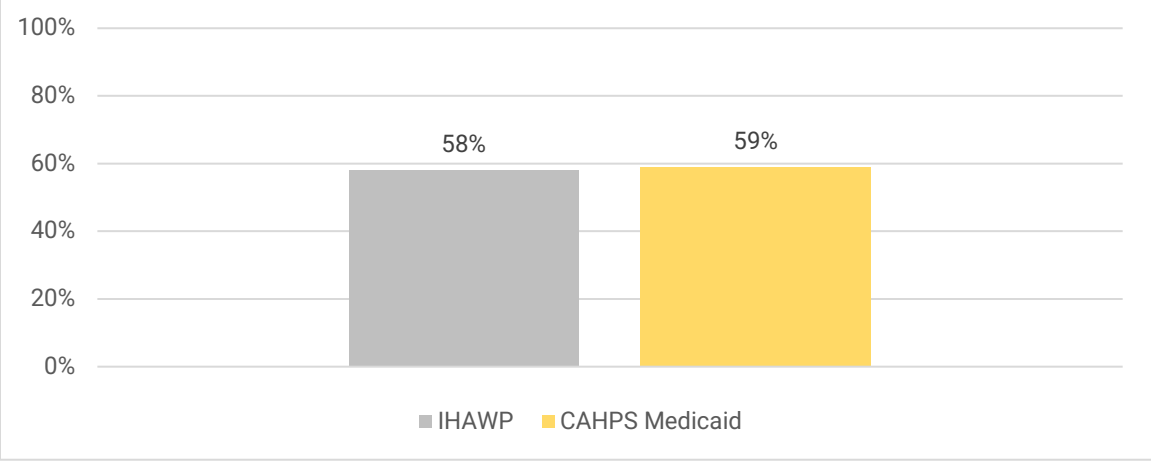
Research Question 1.1.2: Are adults in the IHAWP more likely to report greater access to urgent care than other adults in national estimates from National CAHPS Benchmarking Database?

Respondents were asked if they had an illness, injury, or condition that needed care right away in the last six months. Among those who responded yes, the following question was asked to assess access to urgent care:

> *In the last 6 months, was there any time when you needed care right away but could not get it for any reason?*

Figure 52 shows the percent of IHAWP members and adult Medicaid members in the 2022 National CAHPS Benchmarking database who indicated always getting the care they needed right away. Rates are very similar between the two groups with 58% of IHAWP members indicated always getting the care they needed right away compared to 59% of CAHPS Medicaid participants.

Figure 52. Always Got Care for Illness, Injury, or Condition as Soon as Needed in Past 6 Months



One sample z-test for proportion: not significant

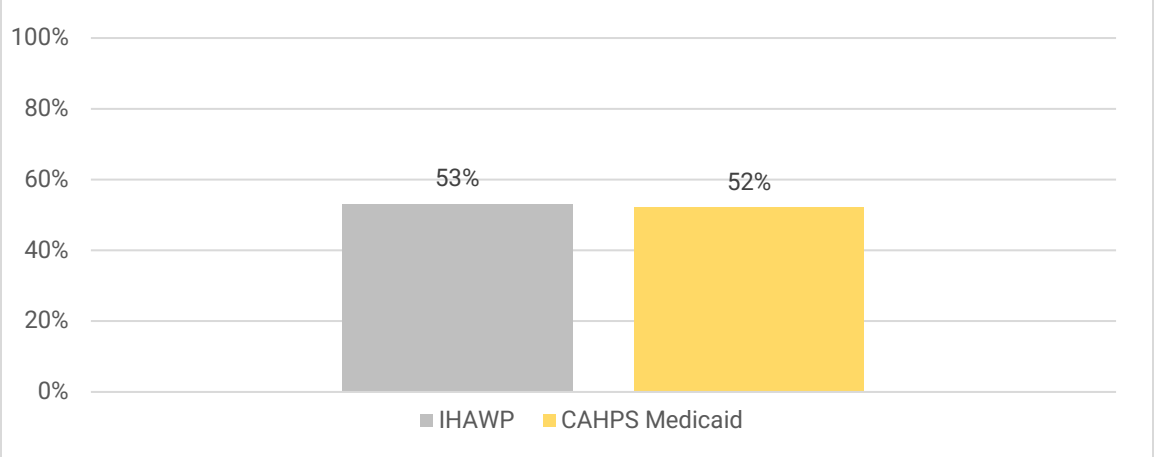
Research Question 1.1.3: Are adults in the IHAWP more likely to report greater access to routine care than other adults in national estimates from National CAHPS Benchmarking Database?

Respondents were asked if they made an appointment for a check-up or routine care in the last 6 months. Among those who responded yes, the following question was asked to assess access to routine care:

> *In the last 6 months, how often did you get an appointment for a check-up or routine care as soon as you needed?*

Figure 53 shows the percent of IHAWP members and adult Medicaid members in the 2022 National CAHPS Benchmarking database who indicated always getting a check-up or routine care appointment as soon as needed. Rates were very similar between the two groups with just over half of IHAWP members (53%) and CAHPS Medicaid participants (52%) reporting that they were able to get a check-up or routine care appointment as soon as they needed.

Figure 53. Always Got Check-up or Routine Care Appointment as Soon as Needed in Past 6 Months (IHAWP vs. CAHPS Medicaid)



One sample z-test for proportion: not significant

Research Question 1.1.4: Are adults in the IHAWP more likely to get timely appointments, answers to questions, and have less time in waiting room than other adults in national estimates from National CAHPS Benchmarking Database?

This question was not included in the 2022 Member Survey and will be considered for inclusion in the next member survey.

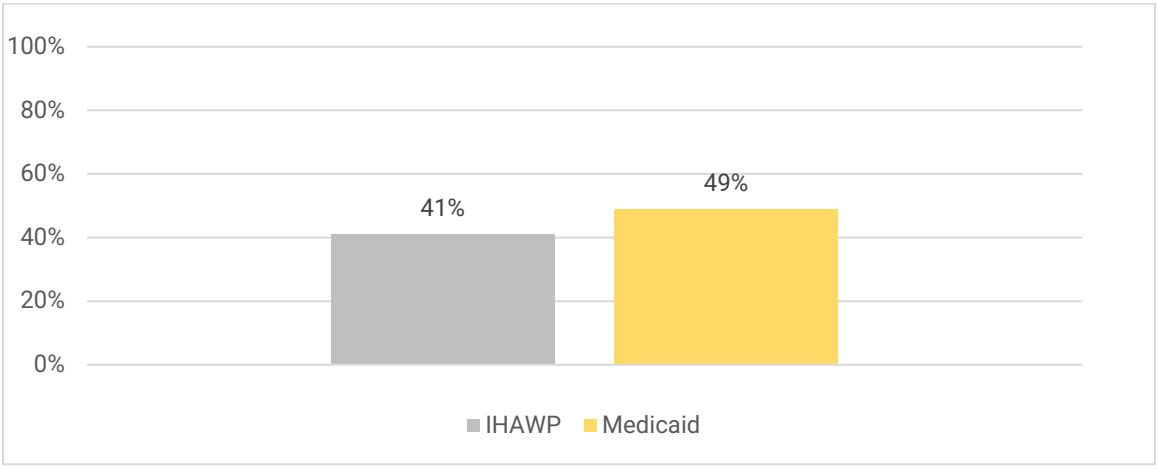
Research Question 1.1.5: Are adults in the IHAWP more likely to know what to do to obtain care after regular office hours than other adults in Medicaid?

Access to after-hours care was assessed using one item that asked respondents whether a provider gave them information about how to access care after hours:

> *Did a doctor's office give you information about what to do if you needed care during evenings, weekends, or holidays?*

Figure 54 provides the percentages of IHAWP and Medicaid members who reported that they had been informed about how to access care after hours. Half of Medicaid members (49%) reported receiving information from their doctor's office about what to do if they needed care after-hours, which was significantly higher than reported by IHAWP members (41%).

Figure 54. Informed about After-Hours Care (IHAWP vs. Traditional Medicaid)



Chi-square p<.05

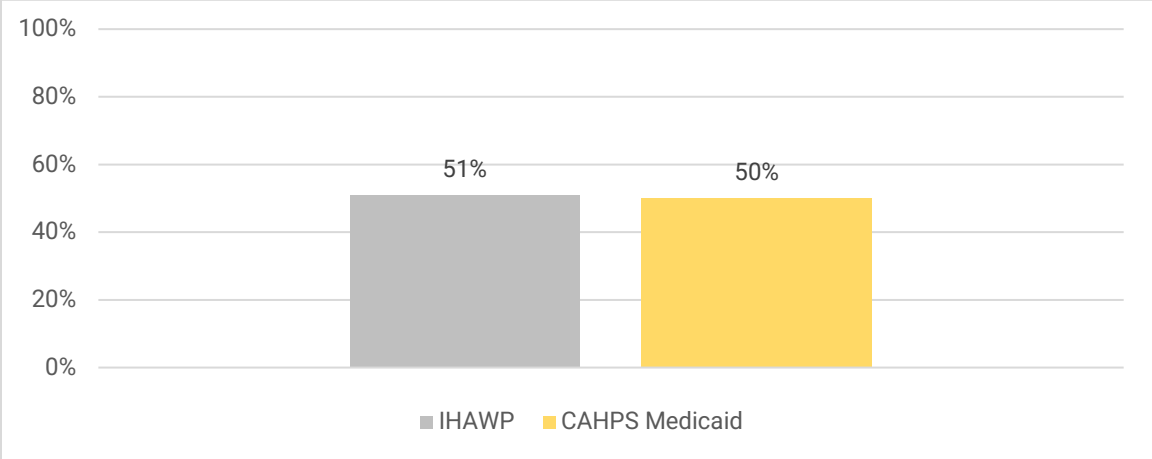
Research Question 1.1.6: Are adults in the IHAWP more likely to report greater access to specialist care than other adults in national estimates from National CAHPS Benchmarking Database?

Respondents were asked if they needed specialist care in the last 6 months. Among those who responded yes, the following question was asked to assess access to specialist care:

> *In the last 6 months, how often did you get an appointment to see a specialist as soon as you needed?*

Figure 55 shows the percent of IHAWP members who indicated always getting specialist care as soon as they needed compared to results from the 2022 National CAHPS Benchmarking Database. Rates were very similar between the two comparison groups with just over half of IHAWP members (51%) reporting getting care from a specialist as soon as needed and half of CAHPS adult Medicaid participants (50%) reporting getting specialist care as soon as needed in the past 6 months.

Figure 55. Always Got Appointment with Specialist as Soon as Needed in Past 6 Months (IHAWP vs. CAHPS Medicaid)



One sample z-test for proportion: not significant

Research Question 1.1.7: Are adults in the IHAWP more likely to report greater access to prescription medication than other adults in Medicaid?

Member experiences with prescription medication were assessed by asking respondents if, in the last six months:

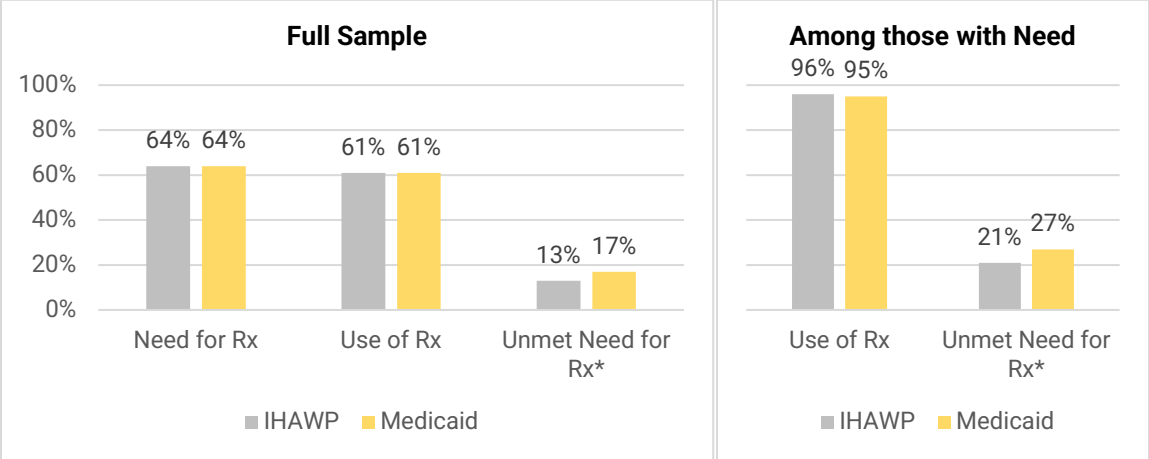
They (or a doctor) thought they needed prescription medication (Need); If YES:

If they took any prescription medication, excluding birth control (Use)

If there was any time when prescription medication was needed but they were unable to get it (Unmet Need)

Figure 56 provides the results of the comparison between IHAWP and Medicaid member responses regarding prescription medications. Two-thirds of IHAWP and Medicaid members (64%) reported needing prescriptions in the last six months. When looking at the proportion who used a prescription medication, over three-fifths indicated use of prescriptions, with no significant differences between IHAWP and Medicaid (61%). The vast majority of those who expressed a need for prescriptions indicated use of prescription medication, again with no difference between IHAWP and Medicaid members (96% and 95% respectively). IHAWP members reported significantly lower rates of unmet need for prescription medication: 13% of IHAWP members overall indicated that there was a time when they needed prescriptions but were unable to get them, while 17% of Medicaid members overall reported unmet need. Among those who indicated a need for prescription medications in the past six months, one-fifth of IHAWP members and a quarter of Medicaid members expressed an unmet need.

Figure 56. Access to and Use of Prescription Medication in Past 6 Months (IHAWP vs. Traditional Medicaid)



** Chi-square p<.05*
Chi-square not significant for indicators without asterisk

Hypothesis 1.2: Wellness Plan members will have equal or greater access to preventive care services.

Research Question 1.2.1: Are women aged 50-64 in the IHAWP more likely to have had a breast cancer screening than other adults in Medicaid?

Dataset is curated for the period 2011-2021. Additional data for 2022 and 2023 will be added in July 2024. Analyses will be completed by December 2024.

Research Question 1.2.2: Are women aged 21-64 in the IHAWP more likely to have had a cervical cancer screening than other adults in Medicaid?

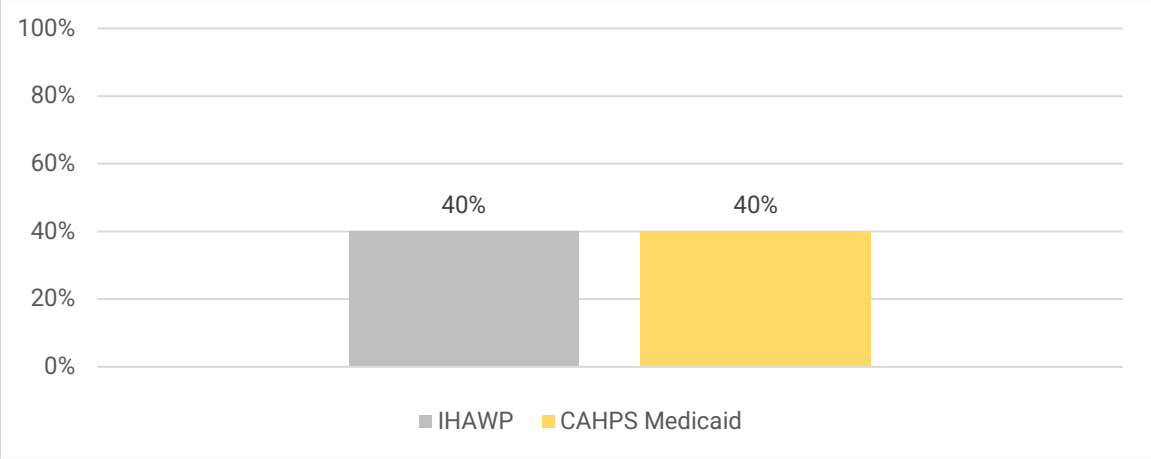
Dataset is curated for the period 2011-2021. Additional data for 2022 and 2023 will be added in July 2024. Analyses will be completed by December 2024.

Research Question 1.2.3: Are adults in the IHAWP more likely to have had a flu shot in the past year than other adults in national estimates from National CAHPS Benchmarking Database?

Respondents in the 2022 Consumer Survey reported if they had received a flu shot since September and those in the 2022 National CAHPS Benchmarking Database reported whether they had received a flu shot since July (approximately the past year). There was

no difference between the two comparison groups with 40% of IHAWP members and 40% of CAHPS adult Medicaid participants reporting receipt of a flu shot (Figure 57).

Figure 57. Receipt of a Flu Vaccine (IHAWP vs. CAHPS Medicaid)



One sample z-test for proportion: not significant

Research Question 1.2.4: Are adults with diabetes in the IHAWP more likely to have had Hemoglobin A1c testing than other adults with diabetes in Medicaid?

Dataset is curated for the period 2011-2021. Additional data for 2022 and 2023 will be added in July 2024. Analyses will be completed by December 2024.

Research Question 1.2.5: Are adults in the IHAWP more likely to report greater access to preventive care than other adults in Medicaid?

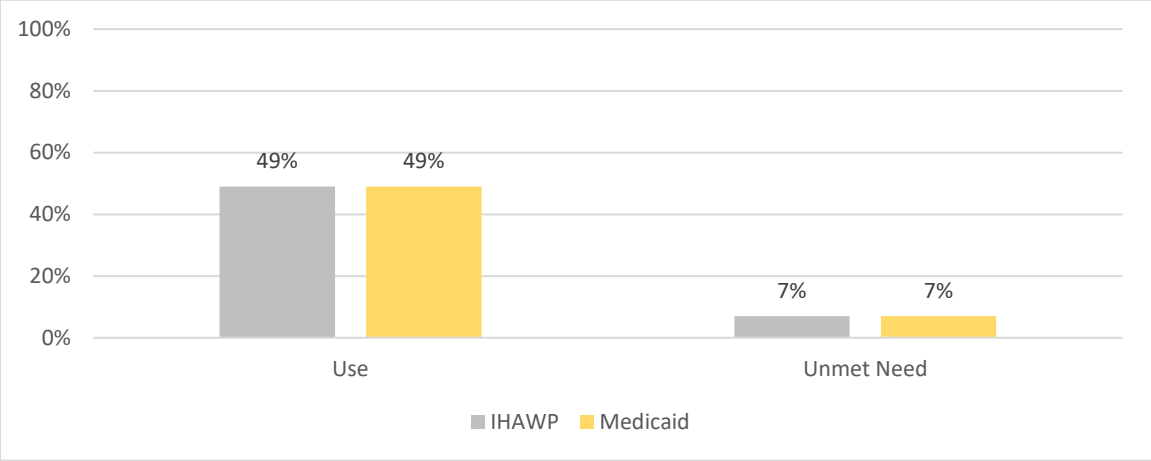
Member experiences with preventive care were assessed by asking respondents if, in the last six months, they:

Got preventive care, such as a check-up, physical exam, mammogram, or Pap smear test (Use)

Had a time when preventive care was needed but they were unable to get it (Unmet Need)

Just under half of both IHAWP and Medicaid members (49%) reported receiving preventive care (Figure 58). Less than one-tenth (7%) of both IHAWP and Medicaid members reported not being able to get preventive care when it was needed (unmet need).

Figure 58. Utilization and Unmet Need for Preventive Care in Past 6 Months (IHAWP vs. Traditional Medicaid)



Chi-square tests: not significant

Hypothesis 1.3: Wellness Plan members will have equal or greater access to mental and behavioral health services.

Research Question 1.3.1: Are adults in IHAWP with major depressive disorder more likely to have higher anti-depressant medication management than other adults with major depressive disorder in Medicaid?

Dataset is curated for the period 2011-2021. Additional data for 2022 and 2023 will be added in July 2024. Analyses will be completed by December 2024.

Research Question 1.3.2: Are adults in the IHAWP more likely to utilize mental health services than other adults in Medicaid?

Dataset is curated for the period 2011-2021. Preliminary model building is currently underway.

Research Question 1.3.3: Are adults in the IHAWP more likely to have greater access to preventive care than other adults in national estimates from National CAHPS Benchmarking Database?

This question is included in Research Question 1.2.5.

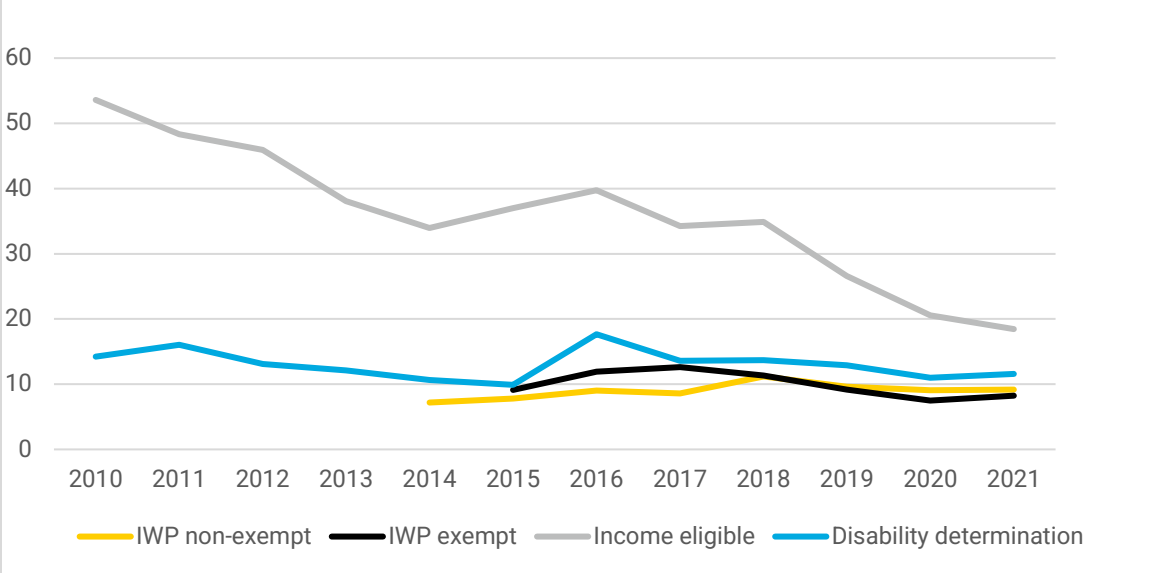
Hypothesis 1.4: Wellness Plan members will have equal or greater access to care, resulting in equal or lower use of emergency department services for non-emergent care.

Research Question 1.4.1: Are adults in the IHAWP more likely to have fewer non-emergent ED visits than other adults in Medicaid?

Preliminary data has been analyzed to determine the pattern of ED visits per 1,000 member months for 4 specific groups. We included IHAWP members who were not exempt from the Healthy Behaviors (HB) requirements (would need a preventive visit to avoid a premium), IHAWP members who are exempt from the HBI requirements (medically exempt or in exempted population such as American Indian or FPL under 50%), adults in households that are income eligible for Medicaid, and adults in households who are eligible for Medicaid due to a disability determination.

Figure 59 shows the pattern of outpatient ED visits/1,000 member months for the period 2011-2021. The members enrolled due to a disability determination (DD) have a unique pattern. Prior to 2014 (year IHAWP was instituted) the trend is stable. There is a spike in outpatient ED visits for this group during 2016, the year Iowa Medicaid moved to an all MCO model of care. The outpatient ED rate for these members never returned to pre-MCO levels. For members enrolled due to income eligibility the outpatient ED rates have continued to fall over the 12 years shown in the trend. Rates for IHAWP non-exempt members and IHAWP exempt members have fallen since IHAWP began in 2014, with the greatest drop in the IHAWP exempt group.

Figure 59. Outpatient ED Rates by Program and Year



IHAWP exempt group rates begin in 2015 as HBI exemption was not determined until 1 year post HBI initiation 2014

Research Question 1.4.2: Are adults in the IHAWP more likely to have fewer follow-up ED visits than other adults in Medicaid?

Dataset is curated for the period 2011-2021. Preliminary model building is currently underway.

Research Question 1.4.3: Are adults in the IHAWP more likely to utilize ambulatory care than other adults in Medicaid?

Dataset is curated for the period 2011-2021. Preliminary model building is currently underway.

Research Question 1.4.4: What other circumstances are associated with overutilization of ED?

Dataset is curated for the period 2011-2021. Preliminary model building is currently underway.

Coverage continuity

Hypothesis 2.1: Wellness Plan members will experience equal or less churning.

Research Question 2.1.1: Are adults in the IHAWP less likely to have gaps in health insurance coverage over the past 12 months than other adults in Medicaid?

This question was not included in the 2022 Member Survey and will be considered for inclusion in the next member survey.

Research Question 2.1.2: Are adults in the IHAWP more likely to have higher rates of consecutive coverage than other adults in Medicaid?

The eligibility database is currently being analyzed to assess this question.

Research Question 2.1.3: Are adults in the IHAWP less likely to change plans or lose eligibility during the year than other adults in Medicaid?

The eligibility database is currently being analyzed to assess this question.

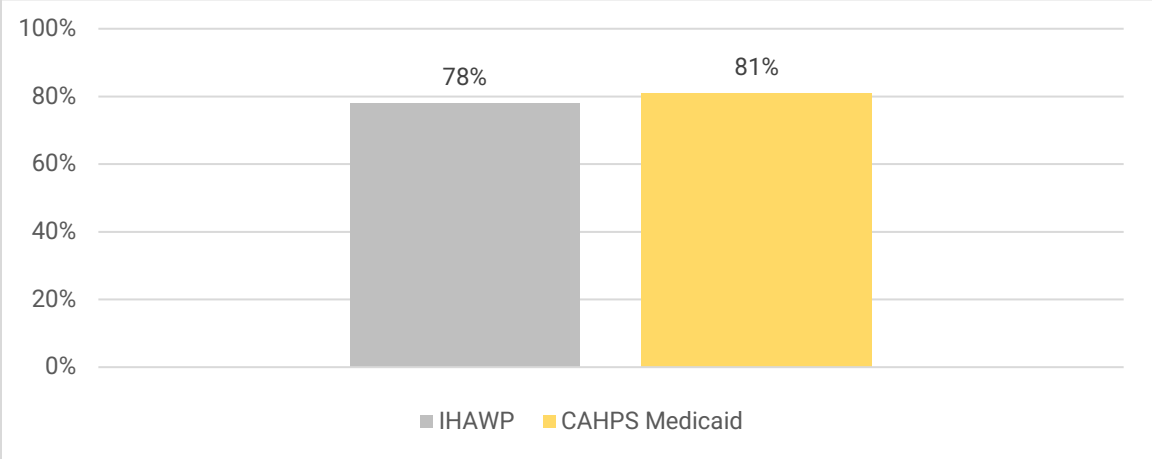
Hypothesis 2.2: Wellness Plan members will maintain continuous access to a regular source of care when their eligibility status changes.

Research Question 2.2.1: Are adults in the IHAWP more likely to have a personal doctor than other adults in national estimates from National CAHPS Benchmarking Database?

Respondents reported if they had a personal doctor based on the following question: A personal doctor is the person you would see if you need a check-up, want advice about a health problem, or get sick or hurt. Do you have a personal doctor?

Figure 60 shows that over three quarters of IHAWP respondents reported having a personal doctor (78%) and this was a slightly lower rate compared with adult Medicaid participants in the 2022 National CAHPS Benchmarking Database (81%).

Figure 60. Has a Personal Doctor (IHAWP vs. CAHPS Medicaid)

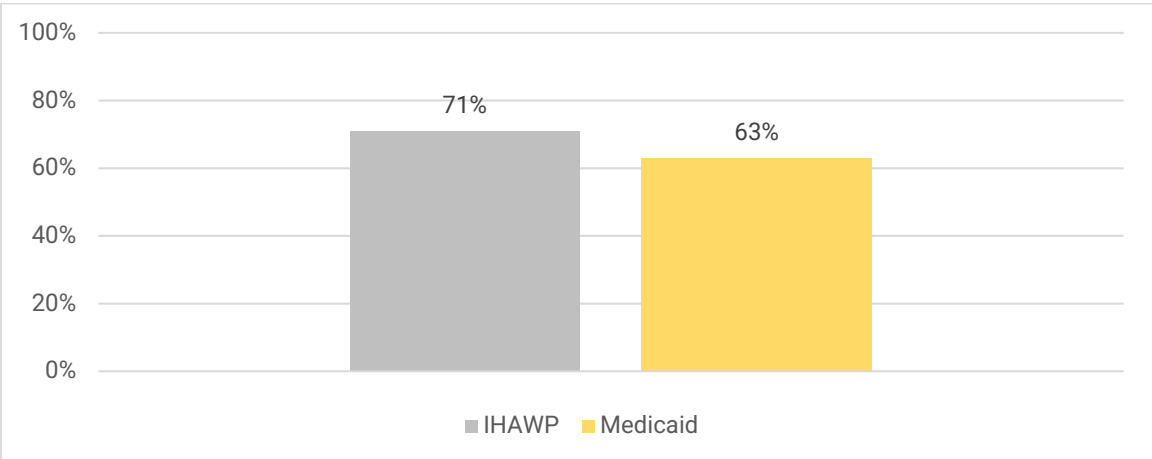


One sample z-test for proportion: p<.05

Research Question 2.2.2: Are adults in the IHAWP more likely to have a positive experience with changing personal doctor/PCP than other adults in Medicaid?

Fewer than one-tenth of IHAWP and Medicaid members reported attempting to change their personal doctor (8% IHAWP and Medicaid). Of those who did attempt to change their personal doctor, Figure 61 shows that a majority of IHAWP and Medicaid members reported that it was "very easy" or "somewhat easy" to find a new personal doctor (71% IHAWP and 63% Medicaid, chi-square not significant).

Figure 61. Somewhat or Very Easy to Change Personal Doctor (IHAWP vs. Traditional Medicaid)



Chi-square: not significant

Quality of care

Hypothesis 3.1: Wellness Plan members will have equal or better quality of care.

Research Question 3.1.1: Are adults in the IHAWP less likely to receive antibiotic treatment for acute bronchitis than other adults in Medicaid?

Dataset is curated for the period 2011-2021. Preliminary model building is currently underway.

Research Question 3.1.2: Are adults aged 40-64 with COPD in IHAWP more likely to have pharmacotherapeutic management of COPD exacerbation than other adults in Medicaid?

Dataset is curated for the period 2011-2021. Preliminary model building is currently underway.

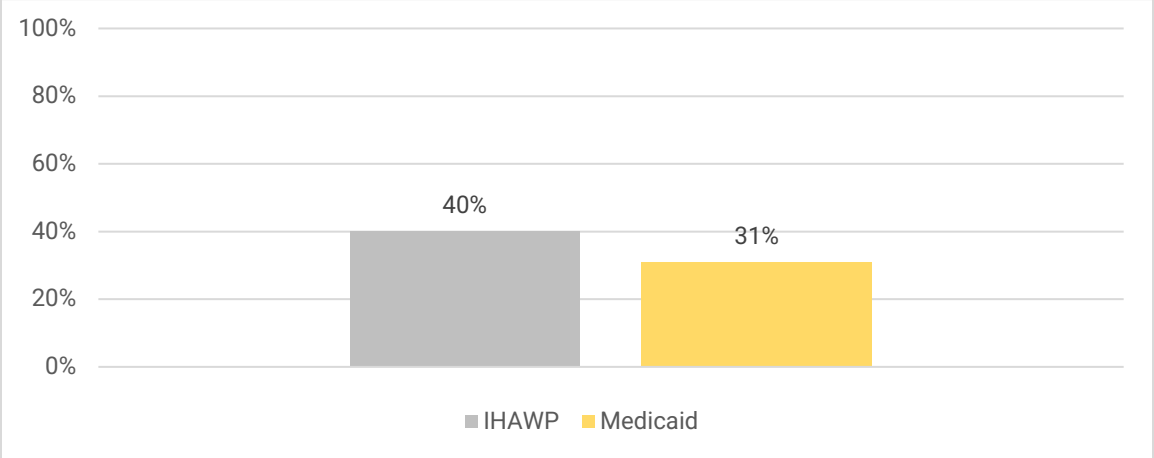
Research Question 3.1.3: Are adults in the IHAWP more likely to self-report receipt of flu shot than other adults in Medicaid?

Receipt of a flu vaccine was assessed using the item below.

Have you had a flu shot since September 1, 2021?

IHAWP members were significantly more likely to indicate receipt of a flu shot (40%) than Medicaid members (31%) (Figure 62).

Figure 62. Receipt of Flu Vaccine (IHAWP vs. Traditional Medicaid)



Chi-square p<.05

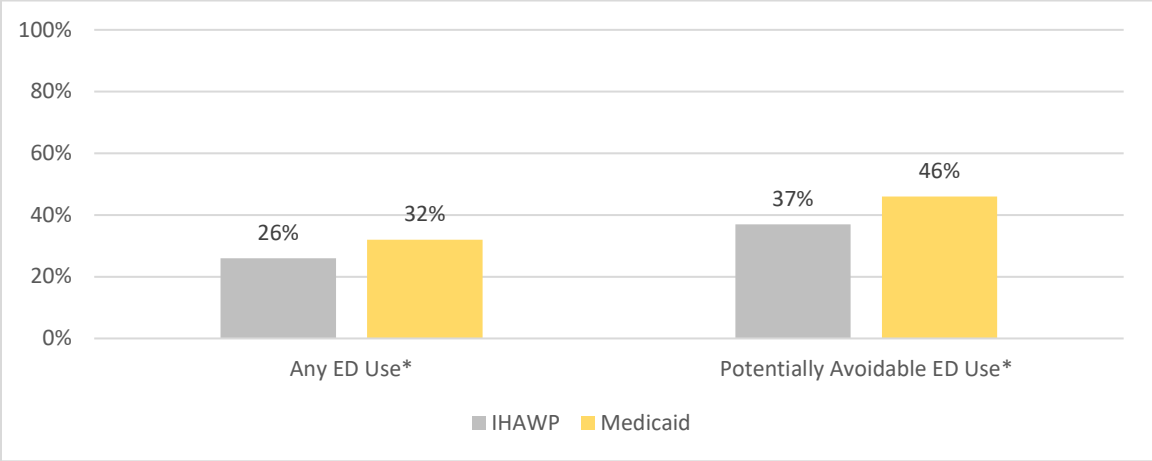
Research Question 3.1.4: Are adults in the IHAWP less likely to report visiting the ED for non-emergent care than other adults in Medicaid?

There were several questions in the survey that attempted to assess "appropriate" emergency department (ED) use. The surveys included a question asking those with at least one ED visit whether the care from their most recent ED visit could have been

provided in a doctor's office if one was available at the time. Affirmative responses to that question defined potentially "avoidable" ED use.

Figure 63 shows the ED experiences of IHAWP and Medicaid members. Around one-quarter (26%) of IHAWP members and around one-third of Medicaid members (32%) used the ED at least once in the six-month period, and that difference was significant. Significantly fewer IHAWP members (37%) compared to Medicaid members (46%) reported that the care at their last visit to the ED could have been provided in a doctor's office.

Figure 63. Emergency Department Use in Past 6 Months (IHAWP vs. Traditional Medicaid)



** Chi-square p<.05*

Hypothesis 3.2: Wellness Plan members will have equal or lower rates of hospital admissions.

Research Question 3.2.1: Are adults in the IHAWP less likely to have hospital admissions for COPD, diabetes short-term complications, CHF, or asthma than other adults in Medicaid?

Dataset is curated for the period 2011-2021. Preliminary model building is currently underway.

Research Question 3.2.2: Are adults in the IHAWP less likely to utilize general hospital/acute care than other adults in Medicaid?

Dataset is curated for the period 2011-2021. Preliminary model building is currently underway.

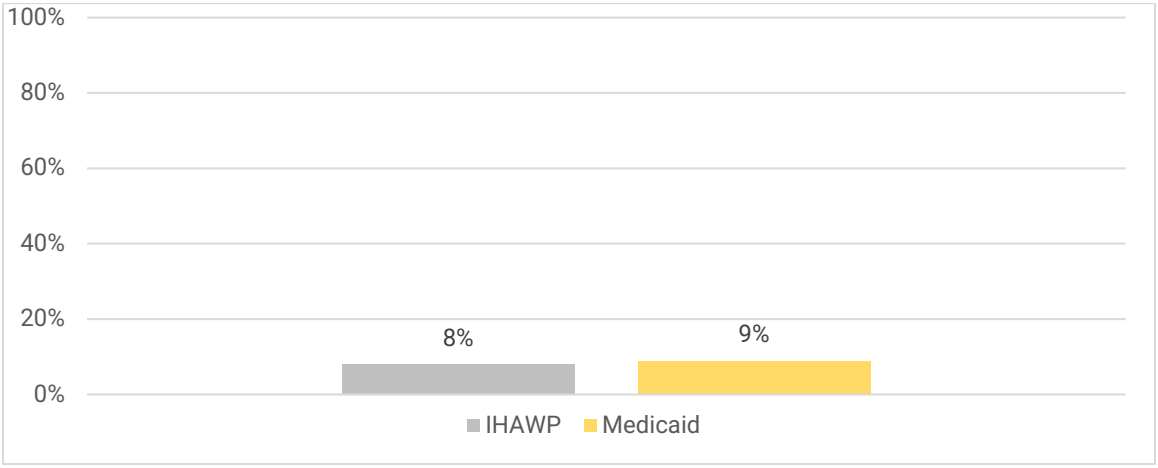
Research Question 3.2.3: Are adults in the IHAWP less likely to have an acute readmission within 30 days of being discharged for acute inpatient stay than other adults in Medicaid?

Dataset is being curated for the period 2011-2021.

Research Question 3.2.4: Are adults in the IHAWP less likely to have a self-reported hospitalization in the previous 6 months than other adults in Medicaid?

Respondents were asked how many nights they spent in the hospital for any reason in the six months prior to the survey. Figure 64 shows there was no significant difference between IHAWP members and Medicaid members with regard to hospital stays in the last six months. About one tenth (8% and 9% respectively) reported any hospital stays in the six-month period.

Figure 64. Any Hospitalization in Past 6 Months (IHAWP vs. Traditional Medicaid)



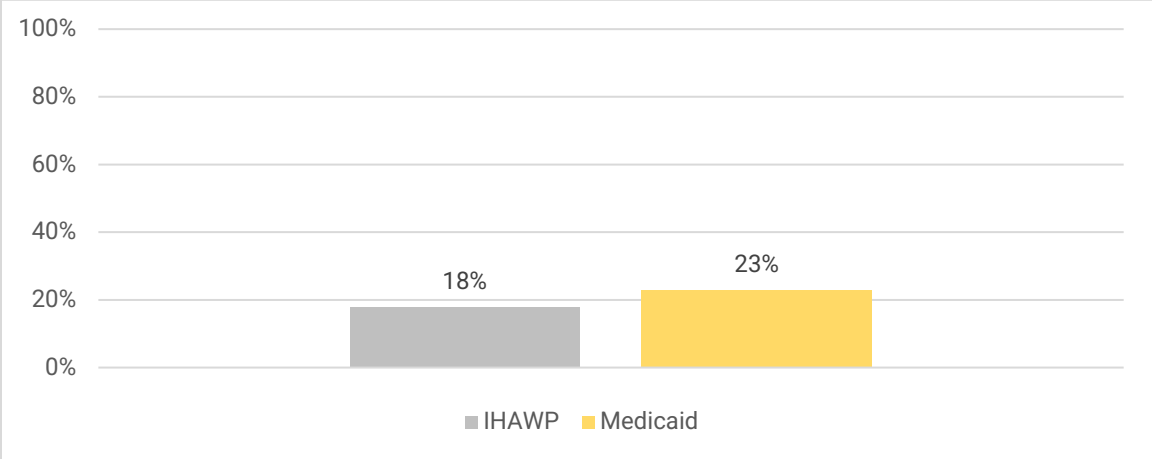
Chi-square: not significant

Research Question 3.2.5: Are adults in the IHAWP less likely to have a self-reported 30-day hospital readmission in the previous 6 months than other adults in Medicaid?

Among those who reported any hospitalization, potentially "avoidable" readmissions to the hospital were assessed by asking respondents if they ever had to go back into the hospital within 30 days of being allowed to go home because they were still sick or had a problem.

Figure 65 shows that 18% of IHAWP respondents reported a 30-day hospital readmission in the past 6 months compared with 23% of Medicaid respondents. This difference was not statistically significant.

Figure 65. 30-day Hospital Readmission Among Those with Any Hospitalization in Past 6 Months (IHAWP vs. Traditional Medicaid)



Chi-square: not significant

Hypothesis 3.3: Wellness Plan members will report equal or greater satisfaction with the care provided.

Research Question 3.3.1: Are adults in the IHAWP more likely to report that their personal doctor communicated well with them during office visits than other adults in national estimates from National CAHPS Benchmarking Database?

Communication between providers and patients was assessed using a CAHPS four-item composite measure comprised of the following questions (asked of those with a personal doctor):

How often did your personal doctor explain things in a way that was easy to understand?

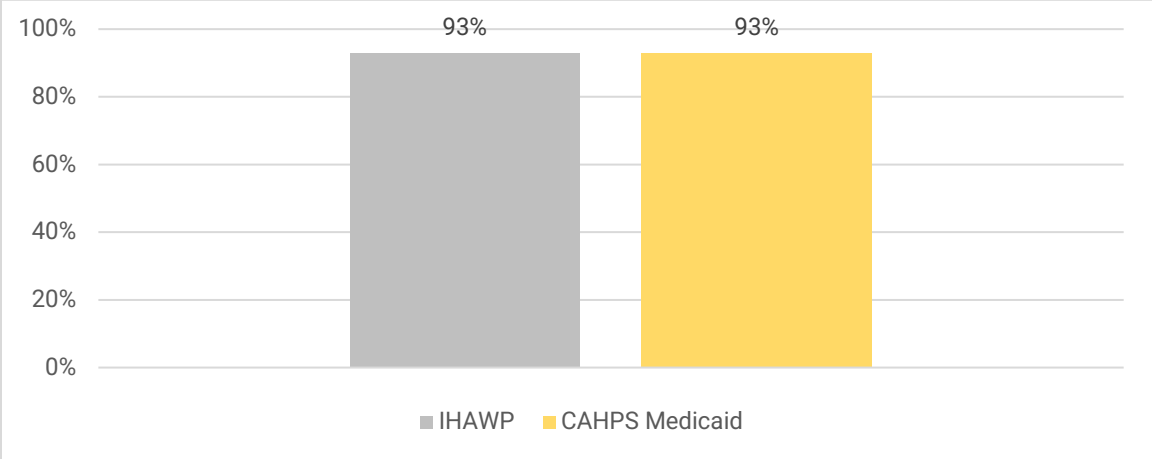
How often did your personal doctor listen carefully to you?

How often did your personal doctor show respect for what you had to say?

How often did your personal doctor spend enough time with you?

Figure 66 shows the proportion of respondents who reported that their personal doctor usually or always communicated well with them for IHAWP members and adult Medicaid recipients in the 2022 CAHPS National Benchmarking Database. Rates were the same between the two comparison groups with the vast majority of respondents in each group (93%) indicating that their personal doctor usually or always communicated well with them.

Figure 66. Personal Doctor Usually or Always Communicated Well (IHAWP vs. CAHPS Medicaid)



One sample z-test for proportion: not significant

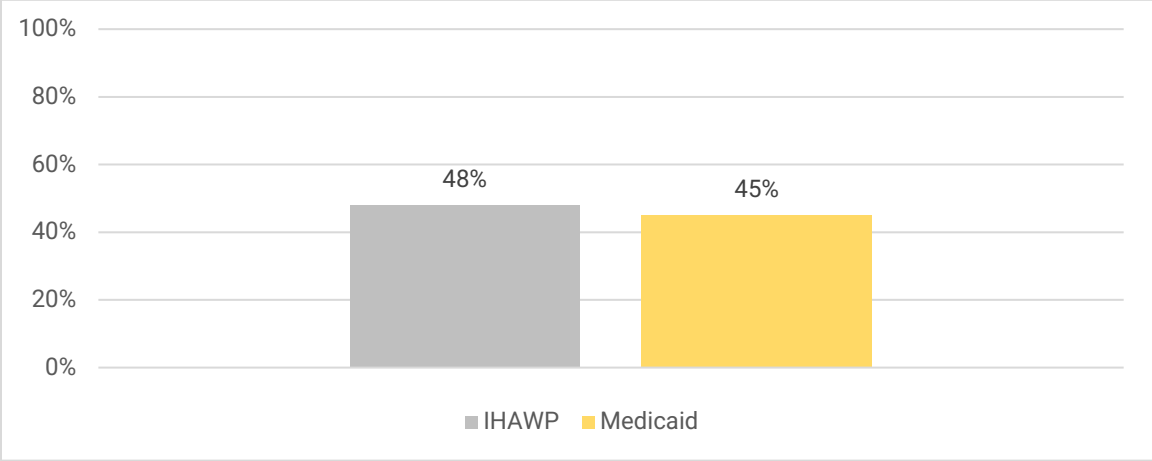
Research Question 3.3.2: Are adults in the IHAWP more likely to report that their provider supported them in taking care of their own health than other adults in Medicaid?

Self-Management Support was assessed using a two-item CAHPS composite measure comprised of the following questions asked of those with a health visit:

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

Figure 67 provides a summary of the findings for IHAWP and Medicaid member receipt of self-management support. Almost half of IHAWP (48%) and Medicaid members (45%) with a health visit reported receiving self-management support from their provider.

Figure 67. Receipt of Self-Management Support Among Those with a Health Visit in Past 6 Months (IHAWP vs. Traditional Medicaid)



Chi-square: not significant

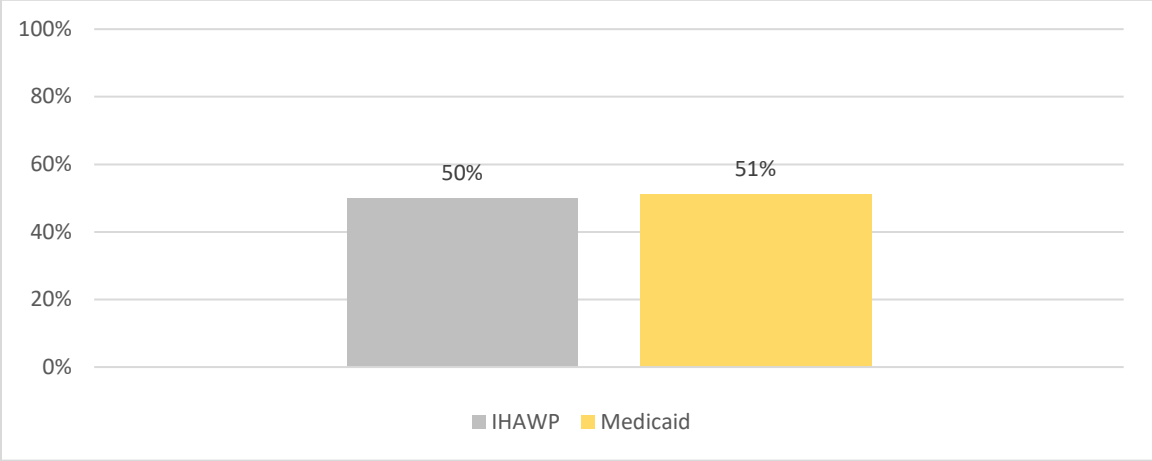
Research Question 3.3.3: Are adults in the IHAWP more likely to report that their provider paid attention to their mental or emotional health than other adults in national estimates from National CAHPS Benchmarking Database?

Respondents who reported a health care visit in the last six months were asked the following question about the attention their provider paid to their mental or emotional health during a doctor's visit:

> *Did you and anyone in a doctor's office talk about things in your life that worry you or cause you stress?*

Figure 68 shows that about one-half of both IHAWP and Medicaid members (50 and 51%, respectively) reported talking with someone from their doctor's office about things in life that worried them or caused them stress.

Figure 68. Provider Paid Attention to Mental or Emotional Health Among Those with a Health Visit in Past 6 Months (IHAWP vs. Traditional Medicaid)



Chi-square: not significant

Research Question 3.3.4: Are adults in the IHAWP more likely to report that their provider talked with them about their prescription medications than other adults in national estimates from National CAHPS Benchmarking Database?

This question is included in the composite for Research Question 3.3.5.

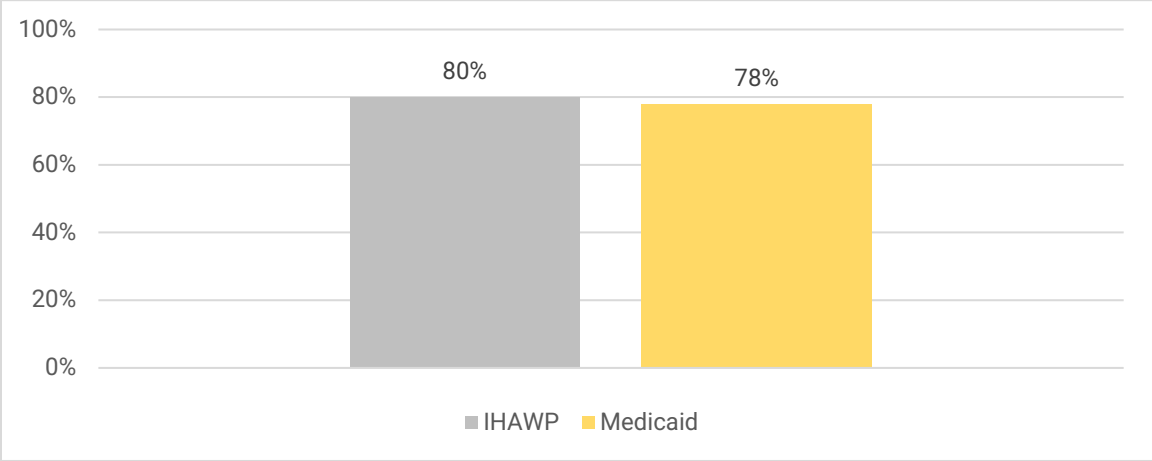
Research Question 3.3.5: Are adults in the IHAWP more likely to report that their provider paid attention to the care they received from other providers than other adults in Medicaid?

Care Coordination was assessed using four items from CAHPS related to different aspects of providing care coordination:

> *When your doctor's office ordered a blood test, x-ray, or other test for you, how often did someone from the doctor's office follow up to give you those results?*
>
> *How often did your personal doctor's office seem informed and up to date about the care you got from specialists?*
>
> *How often did your personal doctor seem to know the important information about your medical history?*
>
> *How often did you talk with someone from your doctor's office about all the prescription medicines you were taking?*

Figure 69 provides a summary of the percentage of respondents who reported "usually" or "always" to the above measures assessing experiences with their doctor's office. IHAWP and Medicaid members' experiences were similar with regard to care coordination (80% IHAWP, 78% Medicaid).

Figure 69. Usually or Always Received Good Care Coordination (IHAWP vs. Traditional Medicaid)

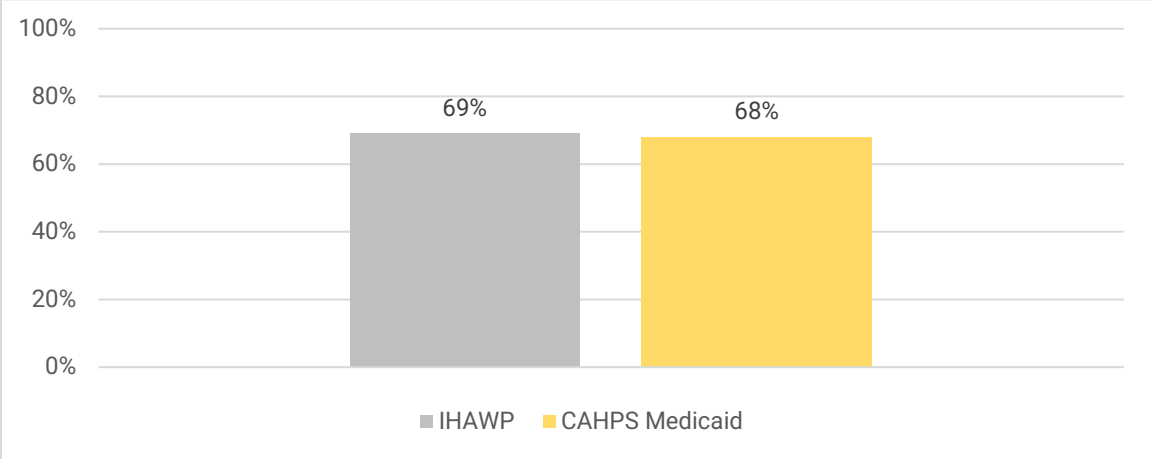


Chi-square: not significant

Research Question 3.3.6: Are adults in the IHAWP more likely to report higher ratings of their personal doctor than other adults in national estimates from National CAHPS Benchmarking Database?

Respondents were asked to rate their personal doctor on a 0 to 10 scale, where 0 was defined as the worst possible and 10 as the best possible. Figure 70 shows the percentage of IHAWP and CAHPS adult Medicaid respondents who rated their personal doctor as 9" or "10". Doctor ratings were similar between the two comparison groups with 69% of IHAWP respondents rating their doctor as 9 or 10 compared with 68% of adult Medicaid recipients in CAHPS.

Figure 70. High Rating of Personal Doctor (IHAWP vs. CAHPS Medicaid)

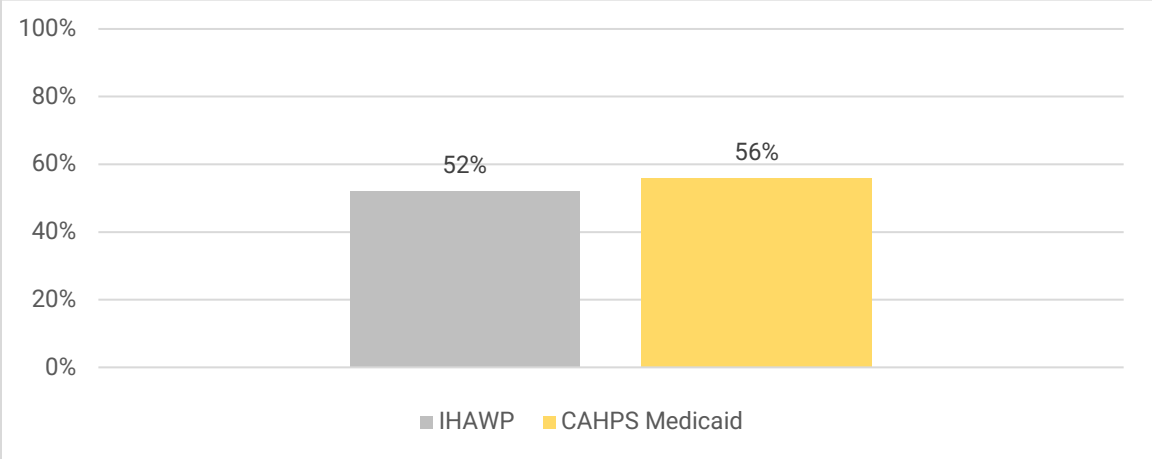


One sample z-test for proportion: not significant

Research Question 3.3.7: Are adults in the IHAWP more likely to report higher ratings of their overall care than other adults in national estimates from National CAHPS Benchmarking Database?

Respondents also rated all the health care they received on a 0 to 10 scale, where 0 was defined as the worst possible and 10 as the best possible. Figure 71 shows that a high rating of overall care was slightly more common among adult Medicaid recipients in CAHPS than among IHAWP members. Specifically, 56% of CAHPS adult Medicaid recipients gave a high rating of their overall care (9 or 10) compared with 52% of IHAWP respondents.

Figure 71. High Rating of Overall Health Care (IHAWP vs. CAHPS Medicaid)



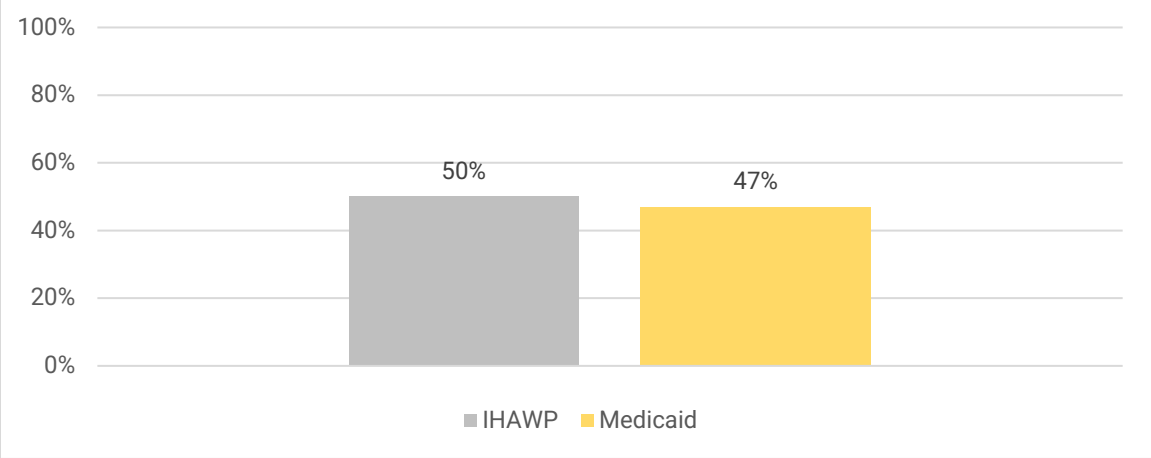
One sample z-test for proportion: p<.05

Research Question 3.3.8: Are adults in the IHAWP more likely to report higher ratings of their health plan than other adults in Medicaid?

Respondents in the 2022 Consumer Survey were asked to rate their Medicaid MCO health plan on a 0 to 10 scale, where 0 was defined as the worst possible and 10 as the best possible.

Figure 72 provides a summary of the percentage of IHAWP and Medicaid respondents who rated their health plan as a "9" or "10" which indicates the highest possible ratings. Half of IHAWP members and nearly half of Medicaid members (47%) rated their health plan as 9 or 10 (chi-square not significant).

Figure 72. High Rating of Health Plan (IHAWP vs. Traditional Medicaid)



Chi-square: not significant

Appendix A: Synthetic Control Method

SCM was completed in Fall, 2023. We selected comparison states from non-expanding and late-expanding states, as shown below. We considered states that have expanded their Medicaid programs prior to 2019 for falsification tests. Though there are many data sources, including TAF, American Community Survey (ACS), BRFSS, and HCUP, which can provide data for Iowa and comparison states over time, we opted to utilize the HCUP Fast Stats data regarding state-level ED visit trends as the outcome and demographic characteristics from the ACS. Though our HCUP-dependent analyses examine outcomes other than general ED visit rates, we selected this as the outcome measure proxy because ED visits particularly non-emergent and repetitive ones represent an area of high cost where policy makers and clinicians operate with the understanding that reasonable changes can lead to creditable savings.

State	Expansion date
Immediate Expansion (1/1/2014)	
Arizona	1/1/2014
Arkansas	1/1/2014
Colorado	1/1/2014
Hawaii	1/1/2014
Illinois	1/1/2014
Iowa	1/1/2014
Kentucky	1/1/2014
Maryland	1/1/2014
Nevada	1/1/2014
New Jersey	1/1/2014
New Mexico	1/1/2014
North Dakota	1/1/2014
Ohio	1/1/2014
Oregon	1/1/2014
Rhode Island	1/1/2014
Washington	1/1/2014
West Virginia	1/1/2014
California	1/1/2014
Minnesota	1/1/2014
District of Columbia	1/1/2014
Connecticut	1/1/2014
Delaware	1/1/2014
Massachusetts	1/1/2014
New York	1/1/2014
Vermont	1/1/2014

State	Expansion date
Early-Mid Expansion (late 2014-2019)	
Michigan	4/1/2014
New Hampshire	8/15/2014
Pennsylvania	1/1/2015
Indiana	2/1/2015
Alaska	9/1/2015
Montana	1/1/2016
Louisiana	7/1/2016
Late Expansion (2019-2023)	
Virginia	1/1/2019
Maine	1/10/2019
Idaho	1/1/2020
Utah	1/1/2020
Nebraska	10/1/2020
Oklahoma	7/1/2021
Missouri	10/1/2021
South Dakota	7/1/2023
Non-Expansion	
Alabama	
Florida	
Georgia	
Kansas	
Mississippi	
South Carolina	
Tennessee	
Texas	
Wisconsin	
Wyoming	

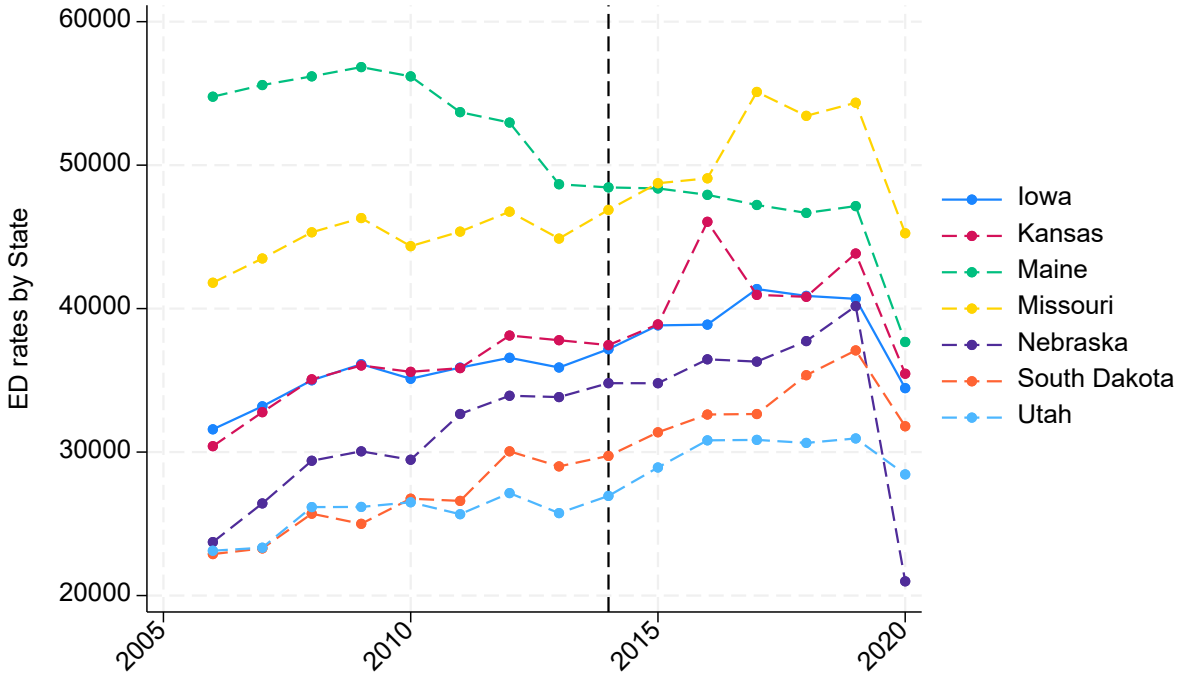
North Carolina	contingent on budget

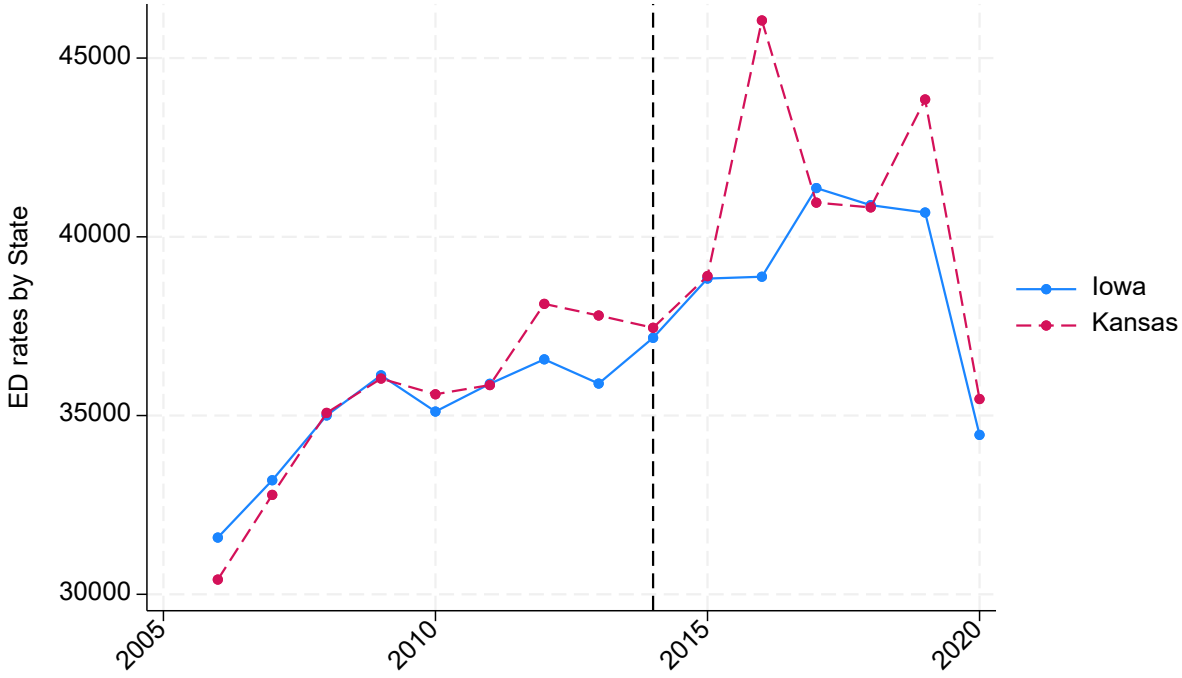
We utilized the state-level ED visits data from HCUP Fast Stats *State Trends in Emergency Department Visits* for states with data available from 2006 through 2021 (https://datatools.ahrq.gov/hcup-fast-stats/?tab=state-trends-in-hospital-utilization-by-payer&dash=36), and then merged with state-level demographics from the ACS. Due to the costs associated with accessing state-level HCUP data, our goal was to identify 3-5 non-expansion states to act as comparisons for the analyses shown below.

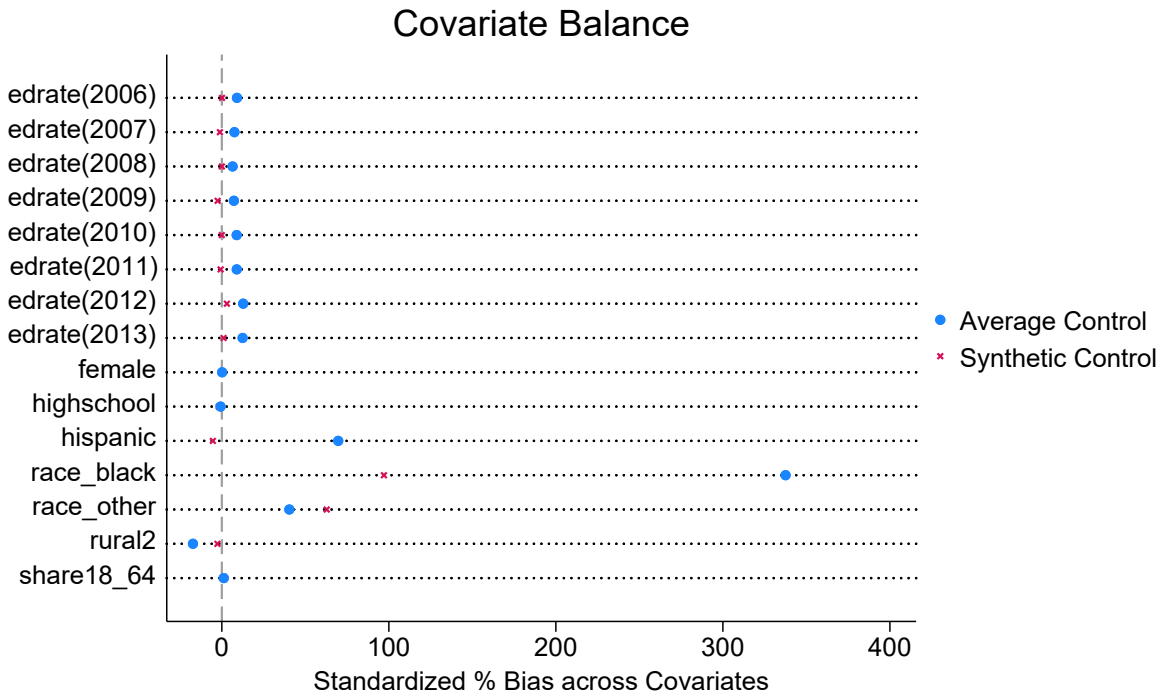
We selected comparison states based on the similarity of the trends and levels of ED visit rates prior to 2014, the similarity of the demographic characteristics of the states prior to 2014, a data-driven procedure (synthetic control methods) that constructs a weighted average from the potential comparison states to match Iowa, and the availability of HCUP data from 2010-2020. We did not rely on a single procedure (such as synthetic control methods) since we were selecting comparison states for this data source prior to having access to the data and for additional outcomes.

The figures below show the trends in ED visit rates in Iowa and selected potential comparison states, the ED visits rates for Iowa and Kansas (the single state most comparable to the trends and levels of ED visit rates in Iowa prior to 2014), the optimal weight for each state based on the synthetic control methods analysis (states not shown have a weight of 0), and the covariate balance between Iowa and the other potential comparison states (the average and the weighted average using the synthetic control weights).

Based on these methods and results, the selected comparison states are Kansas, Maine, Nebraska, and Utah.







Appendix B: Process scripts

2022 report interview script + codebook

Key Informant Interview Script (2022)

Hello, am I speaking with [interviewee name]?

[if Yes, continue]

Is this still a good time to complete an interview?

[if Yes, continue]

My name is [research team member] and I am a member of the research team at the University of Iowa. Thank you again for your time. The goal of this study is to understand the impact of the Iowa Health and Wellness Plan from the perspectives of those involved in implementation. The purpose of this interview is to learn how the program works and what your experience in the program has been like. There are no wrong answers, we are interested in your opinion and experience.

During the interview, you can provide as much or as little information as desired, and any question can be skipped.

To accurately represent your responses, the interview will be recorded and transcribed. We will then delete the recording after the transcription process is complete. If we write a report about this study, your responses will be de-identified.

We anticipate this interview to take about (/maximum) 60 minutes. You can stop the interview at any time. Do you agree to participate?

[If yes continue]

Do you have any questions before we begin?

[If no, continue]

[If yes, answer questions/ take notes and follow-up if not comfortable answering]

Ok, I will start recording now.

General
[For IPCA, IACP, MCO reps] How often does your organization interact with Iowa Medicaid staff? How satisfied is your organization with the amount of interaction with Iowa Medicaid staff?
What kinds of people are involved in the policy and program decisions related to Iowa Medicaid? (Staff, legislators, workgroups, or advisory committees?)
What are the highlights or achievements of Iowa's IHAWP program?
What practices or resources are needed to improve Iowa's IHAWP program?

i. Prompt: *data collection, standardization, reimbursement, communication with providers and members?*

II. Retroactive Eligibility

What is your understanding of the goals of retroactive eligibility provision waiver in Iowa?
How does your organization perceive retroactive eligibility to impact …?
Payers? Providers? (Time spent completing enrollment paperwork?) State of Iowa? Members?
Are you aware of any unintended consequences of retroactive eligibility policy? Does your organization do anything to address or mitigate impacts?
Cost Sharing
Medicaid members covered through Iowa Health and Wellness Plan are expected to pay an $8 copay at the emergency room if they are seen for something that is not considered an emergency.
What is your understanding of the goals of the $8 ED copayment?
How does your organization perceive cost sharing to impact …?
Payers? Providers? State of Iowa? Members?
Healthcare utilization (deter ED use?) and health outcomes of individuals?
Are you aware of any unintended consequences of the copayment? Does your organization do anything to address or mitigate impacts?
Healthy Behaviors
What is your understanding of the goals of Healthy Behaviors Incentive program in Iowa?
How do MCO-specific healthy behavior programs (My Health Pays from ITC and Healthy Rewards program from Amerigroup) interact with the state's Healthy Behavior requirements (wellness exam and completion of HRA)?
How does your organization perceive HBI's impact on…?
Payers? Providers? State of Iowa? Members? (Healthcare utilization?)
What strategies have been used to increase awareness of and participation in healthy behavior programs?
Any strategies to address disparities in completion?
Walk me through the member experience.
How is the IHAWP HBI program communicated?
What options do members have to access the HRA? Any reminders to complete?
What is done with the data collected? Is the data used or shared?
Same questions with MCO-specific program (also ask for copy of HRA)
Do you anticipate any communication efforts for beyond the Public Health Emergency to inform members and providers about any changes to expectations (e.g., re-instating disenrollment)?
Transportation / NEMT
What role do reliable and affordable transportation options have in healthcare?
Prompt: is this a barrier to accessing routine primary (non-emergency) care?

What barriers in addressing this barrier? What data do you collect or track metrics (if any) about burden of transportation?
Any information on missed appointments due to transportation?
Disparities by disability? Or location?
What strategies, if any, has your organization employed to address transportation needs of IHAWP members?
Do Amerigroup and ITC (Centene) provide private insurance in Iowa? What is coverage like? Transportation?

III. Is there anything else that you have been thinking of and haven't had a chance to say?

Key Informant Interview codebook (2022)

Name	Description
Policy Area (Retroactive Eligibility / Cost Sharing / NEMT /HBI)	Comments about Iowa Medicaid's [Retroactive Eligibility / Cost Sharing / NEMT /HBI] program, including the annual wellness exam and health risk assessment, co-pays, communication, and data usage
Goals	Comments about the perceptions or awareness of goals of [Retroactive Eligibility / Cost Sharing / NEMT /HBI] program for participants, providers, insurers, Medicaid population, and the state.
Effectiveness	Respondent perceptions of how effective or ineffective the policy at achieving or progressing towards goals
Spillover effects	Comments about unintended consequences or impacts of the program outside of its intended impact (creating burden in other settings or untargeted populations (e.g., provider administrative burden))
Supplementary efforts	Comments about tangential efforts that support the policy's implementation, awareness, or participation, completed by key informants not directly responsible (via contractual obligations) for outcomes
Member experience	Comments speculating about member experiences interacting with the program, including receiving and understanding information, life circumstances, health needs, ability to comply, preparedness for co-pays
Communication about policy	Comments about communication from the state, MCOs, providers, others about the components of the policy /program, including frequency, methods, reminders, etc.
Disparities	Respondent comments about differences in awareness, (dis)enrollment, compliance rates of across different populations within IHAWP (e.g., rurality, age, race, income, gender)
Procedural	Comments about the details of the general processes, including data collection, compliance, communication, implementation, enforcement, enrollment
Coordination across key informants	Comments about the intersections of MCO and provider efforts similar to state efforts and how they align (or are independent from) the state programs/ policies
Enforcement	Comments about the co-pay / premium billing and collection, disenrollment, member notification, and roles involved

Name	Description
HBI HRAs	Comments about the Health Risk Assessments administered by MCOs which fulfill the state HBI requirements and / or qualify members for MCO-specific incentives
Content	Comments related to the content of HRAs, including topics covered, development and selection, and purpose of inclusion
Data export and sharing	Comments related to how HRA data is shared and distributed, with which key informants, and at what level of specificity (e.g., by subpopulation, individual cases, overall population)
Data use	Comments about how HRA data is used (e.g., to inform patient care, compliance with federal and state programs, present aggregate data at meetings, inform strategic direction and programming) and general findings

2023 report interview script + codebook

Key Informant Interview Script (2023)

My name is [research team member] and I am a member of the research team at the University of Iowa. Thank you again for your time. The goal of this study is to understand the Iowa Wellness Plan implementation. The purpose of this interview is to learn how the program works and what your experience in the program has been like. There are no wrong answers, we are interested in your opinion and experience.

During the interview, you can provide as much or as little information as desired, and any question can be skipped.

To accurately represent your responses, the interview will be recorded and transcribed. We will then delete the recording after the transcription process is complete. In reports about this study, your responses will be de-identified.

We anticipate this interview to take about (/maximum) 30 minutes. You can stop the interview at any time. Do you agree to participate?

[If yes continue]

Do you have any questions before we begin?

[If no, continue]

[If yes, answer questions/ take notes and follow-up if not comfortable answering]

Ok, I will start recording now.

Retroactive Eligibility

[Shared definition: People who are uninsured and eligible for IHAWP and Medicaid are able to apply for coverage within the calendar month of services rendered]

1. What is your understanding of the goals of retroactive eligibility provision waiver in Iowa?

2. What role does your organization have as far as enrolling patients in Medicaid?
3. Generally, what types of care are uninsured people eligible for Medicaid seeking (preventative/routine, specialty, emergency?
4. Which positions (if any) perform this role (enrolling patients in Medicaid)?
    a. *Prompt: Case coordinators? Administrative staff? Income Maintenance Workers*
5. Describe the ways that information about retroactive eligibility is shared with patients. How could this process be improved to enhance patient awareness and engagement?

Cost Sharing

[Shared definition: Emergency department use which is determined non-emergent are subject to an $8 member co-pay]

1. What is your understanding of the goals of cost sharing provision waiver in Iowa?
2. What role does your organization have in enforcing cost sharing? Which positions perform this role? Alternatively, What role does your clinic have in determining whether services are subject to cost sharing based on non-emergency ED use? Prompt: Screen? Refer? Inform patient of co-pay?
3. Does cost sharing have any impact on provider practices? Administrative staff duties? Patients?
4. Are you aware of any unintended consequences of cost sharing? Does your organization do anything to address or mitigate impacts?
5. Prompt: Limit enrollees' access to coverage and care, Increased utilization of more expensive forms of care, Increased likelihood of uncompensated care? Disproportionate negative impact on low-income and high health needs patients? Reduced medication adherence?
6. How do perceptions of the effectiveness of cost sharing as an ER deterrent impact… providers? …quality and consistency of care for patients?
7. Describe how copays impact a patient's access to care. Describe how providers navigate copays with patients.
8. Describe how focusing on patient education about copays and ER visits could impact hospitals. Describe potential next steps for improving the continuity and consistency of this situation.
9. Describe how a better understanding of the current effectiveness of cost sharing could impact providers and patients.
10. Describe how, if at all, workforce capacity influences provider expansion of after-hours care access and preemptive contact options. Are these practices sustainable for providers and reliable for patients?
11. Describe how providers are trained and educated to work to keep patients out of emergency rooms.

12. In the case that emergency room use is determined preventative, how are co-pays billed and collected?
13. Describe how patients are educated about the appropriate use of the emergency room. Who is involved in educating patients?

Healthy Behaviors Incentive (HBI) Program

[Shared definition: IHAWP members are expected to complete an annual Health Risk Assessment and wellness exam to avoid paying premiums]

1. Describe how information related to HRAs and the HBI program is disseminated to providers.
2. Describe how providers and patients are educated about the HBI program and MCO value-added benefits program.
3. Describe how patients are educated about health care expectations (going to the doctor once per year, preventative care, etc).
4. Describe the alignment/ interaction between the state's HBI program and managed care rewards programs.
5. Describe current strategies that are used to educate patients about HBI requirements. Describe strategies to improve patient awareness about HBI requirements.
6. Describe the process of completing a health risk assessment with a patient. ***
7. Describe how patients are informed about their additional care/case management opt-in options.
8. How is completion of HBI components documented and managed?

NEMT and Transportation

1. Describe how patients are educated about their transportation benefits/options. Who is involved in assisting patients with understanding the transportation options and coverage (or lack thereof)?
2. Describe the education and resources available to patients (who are general IHAWP members (non-medically exempt)) about transportation options. Describe how transportation impacts patients' access to care.
3. Describe how caseworkers/providers/staff are educated about transportation benefits/options for patients.

Conclusion

1. Is there anything else you'd like to say that you have been thinking about and haven't had a chance to say?
2. Do you have any questions for me before we end?

Thank you for your time, we appreciate your knowledge and insights (closing statement)

If you have questions or remember additional information you'd like to be included in your interview, please call Tessa Heeren at (319) 335-6772 or follow-up via email tessa-heeren@uiowa.edu

Key Informant Interview codebook (2022)

Name	Description
Policy Area (Retroactive Eligibility / Cost Sharing / NEMT /HBI)	Comments about Iowa Medicaid's [Retroactive Eligibility / Cost Sharing / NEMT /HBI] program, including the annual wellness exam and health risk assessment, co-pays, communication, and data usage
Goals	Comments about the perceptions or awareness of goals of [Retroactive Eligibility / Cost Sharing / NEMT /HBI] program for participants, providers, insurers, Medicaid population, and the state.
Effectiveness	Respondent perceptions of how effective or ineffective the policy at achieving or progressing towards goals
Spillover effects	Comments about unintended consequences or impacts of the program outside of its intended impact (creating burden in other settings or untargeted populations (e.g., provider administrative burden))
Supplementary efforts	Comments about tangential efforts that support the policy's implementation, awareness, or participation, completed by informants not directly responsible (via contractual obligations) for outcomes
Member experience	Comments speculating about member experiences interacting with the program, including receiving and understanding information, life circumstances, health needs, ability to comply, preparedness for co-pays
Communication about policy	Comments about communication from the state, MCOs, providers, others about the components of the policy /program, including frequency, methods, reminders, etc.
Disparities	Respondent comments about differences in awareness, (dis)enrollment, compliance rates of across different populations within IHAWP (e.g., rurality, age, race, income, gender)
Procedural	Comments about the details of the general processes, including data collection, compliance, communication, implementation, enforcement, enrollment
Coordination across informants	Comments about the intersections of MCO and provider efforts similar to state efforts and how they align (or are independent from) the state programs/ policies
Enforcement	Comments about the co-pay / premium billing and collection, disenrollment, member notification, and roles involved

Name	Description
HBI HRAs	Comments about the Health Risk Assessments administered by MCOs which fulfill the state HBI requirements and / or qualify members for MCO-specific incentives
Content	Comments related to the content of HRAs, including topics covered, development and selection, and purpose of inclusion
Data export and sharing	Comments related to how HRA data is shared and distributed, with which informants, and at what level of specificity (e.g., by subpopulation, individual cases, overall population)
Data use	Comments about how HRA data is used (e.g., to inform patient care, compliance with federal and state programs, present aggregate data at meetings, inform strategic direction and programming) and general findings

Appendix C: Approved evaluation proposal