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Federal Evaluation of Indiana's Healthy Indiana Plan — HIP 2.0

Report Date: November 30, 2020

Prepared for:
Centers for Medicare & Medicaid Services
Center for Medicaid and CHIP Services
State Demonstrations Group

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Executive Summary

The Patient Protection and Affordable Care Act (P.L. 111-148; ACA)[1] allows states to expand Medicaid eligibility to adults with incomes up to 138 percent of the federal poverty level (FPL). As of November 2020, 39 states (including the District of Columbia) had adopted the ACA Medicaid expansion.[2] Ten of these states have secured section 1115 demonstrations to implement their expansions, which, among other things, allows the states to test alternative delivery systems and add conditions of eligibility for expansion enrollees. Indiana was among the first states to use a section 1115 demonstration to implement the ACA Medicaid expansion. The demonstration, called the Healthy Indiana Plan (HIP) 2.0, which built on HIP 1.0 (the state's 2008 section 1115 demonstration), was approved in January 2015, and enrollment began in February 2015. In February 2018, Indiana was granted an amended extension of the HIP 2.0 demonstration through December 2020 that contains various amendments that simplify program administration, change HIP 2.0 redetermination policies, and introduce a mandatory community engagement component to the demonstration.[3] As of December 2018, more than 420,000 Hoosiers were enrolled in HIP 2.0, now referred to as simply "HIP."[4]

Similar to the ACA Medicaid expansion demonstrations in other states (e.g., Arkansas and Michigan), HIP 2.0 encourages enrollees to be prudent health care purchasers and take responsibility for their health care through monthly contributions, copayments, and strategies to promote healthy behaviors. HIP 2.0 also includes provisions that allow Indiana to disenroll some newly-eligible individuals with incomes above 100 percent of the FPL who do not pay their monthly contributions on a timely basis. In addition, HIP 2.0 includes a waiver of non-emergency medical transportation (NEMT) for some demonstration enrollees and a waiver of retroactive Medicaid coverage for most HIP 2.0 enrollees.[5]

Federal Evaluation of HIP 2.0

In 2015, Social & Scientific Systems, Inc. (SSS) and its subcontractor, the Urban Institute, were awarded a contract (September 2015 to September 2019; extended to May 2020) to conduct the federal evaluation of HIP 2.0. As described in the evaluation design report,[6] the evaluation has three principal objectives:

- Understand and document the design, implementation, and ongoing operations of HIP 2.0;
- Document enrollee understanding of and experiences with HIP 2.0; and
- Estimate the impacts of HIP 2.0 on health insurance coverage, health care access and affordability, health behaviors, and health status.

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[1] Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 et seq. (2010).

[2] "State Health Facts: Status of State Action on the Medicaid Expansion," Kaiser Family Foundation, no date (accessed January 5, 2021), https://www.kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/.

[3] Demetrios Kouzoukas, letter to Allison Taylor, February 1, 2018 (accessed February 13, 2019), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-cms-amend-appvl-02012018.pdf

[4] "Medicaid Monthly Enrollment Report December 2018," Indiana Family and Social Services Administration, January 22, 2019 (accessed February 13, 2019), https://www.in.gov/fssa/ompp/4881.htm.

[5] Although not part of the HIP 2.0 Special Terms and Conditions (STCs), the demonstration also included a voluntary work referral program, Gateway to Work.

[6] Social & Scientific Systems, Inc., *Evaluation Design Report for Indiana HIP 2.0 Federal Evaluation* (Silver Spring, MD: Centers for Medicare & Medicaid Services, 2017), https://www.medicaid.gov/medicaid/downloads/in-healthy-indiana-plan-support-20-eval-dsgn-rpt-05222017.pdf.

To meet these goals, the federal evaluation includes both qualitative and quantitative analyses:

- Qualitative analyses involved a site visit in 2018 that entailed conducting semi-structured interviews in Indianapolis, Gary, and Logansport with 18 HIP 2.0 stakeholders, including state officials, managed care entity (MCE) executives, health care providers and provider association representatives, and consumer advocates. In addition, six focus groups with HIP 2.0 enrollees were conducted in Indianapolis, Gary, and Logansport, and two focus groups with disenrollees were held in Indianapolis. Finally, document review of published and gray literature on the demonstration and program statistics were used.
- Quantitative analyses used quasi-experimental methods and national survey data from the American Community Survey (ACS) and the Behavioral Risk Factor Surveillance System (BRFSS) to estimate the impacts of HIP 2.0 on health insurance coverage, health care access and affordability, health behaviors, and health status through 2018.[7]

This report is part of the federal evaluation of Indiana's HIP 2.0 demonstration. It summarizes key findings from the 2018 site visit, including information obtained from key informant interviews and focus groups, and impact estimates based on data from the ACS and BRFSS.

Key Findings from the Qualitative Analysis

The goal of the qualitative assessment of HIP 2.0 is to understand and document the design, implementation, and ongoing operations of HIP 2.0 and to document enrollee understanding of and experiences with HIP 2.0. Much of the data collected for the qualitative analysis were gathered in 2018 (3.5 years into the demonstration) during a site visit that relied on key informant interviews and focus groups with HIP 2.0 enrollees and disenrollees. Program administrative data and document review were also used in the analysis. Major findings from the qualitative analysis include the following.

- **Implementation of HIP 2.0.** Universally, state officials and other stakeholders we spoke with viewed HIP 2.0 as a successful program that launched a major Medicaid expansion with just a few glitches. Those glitches were reported by state officials, other interviewees, and focus group participants to have caused some errors or delays in the enrollment process. While many of these problems abated over time, some enrollment challenges persisted (e.g., issues with presumptive eligibility).
- **Operation of HIP 2.0.** Apart from the enrollment glitches, some other components of HIP 2.0 were also described as problematic by interviewees. MCE executives reported that the administration of the Personal Wellness and Responsibility (POWER) Account contributions, a variation of a high-deductible health plan (HDHP) paired with a health savings-like account, and the tracking of enrollee out-of-pocket spending was challenging and administratively burdensome. Further, providers said they did not always collect copayments from HIP 2.0 enrollees, often because of the high administrative costs relative to the payment amount. Apart from operational problems, the qualitative analysis also revealed that even though NEMT services are excluded from the HIP 2.0 demonstration for some newly-eligible enrollees, all four

[7] Because the national survey data used in the impact analysis is released in the fall of the year after the survey is fielded (e.g., data for 2018 is released in fall 2019), the last year of these data available to the evaluation is 2018.

MCEs offer free transportation services for medical, education and redetermination appointments (with some exceptions) to enrollees.

- **Enrollee experiences and understanding of HIP 2.0.** Enrollees in our focus groups generally thought HIP 2.0 was affordable and enhanced their access to health care. However, some enrollee focus group participants and disenrollee focus group participants reported challenges making the monthly POWER Account contributions due to confusion over how much they owed, when they had to pay, or difficulty affording the payment at times. Consumer advocates' views on the affordability of POWER Account contributions mirrored those of focus group participants. Further, interviewees across the board reported that enrollee understanding of some programmatic features of HIP 2.0 was generally low despite education efforts by the state, MCEs, and other stakeholders.
- **Major accomplishments under HIP 2.0.** Across the board, interviewees and focus group participants emphasized increased health insurance coverage and improved access to health care as the major wins of HIP 2.0. While not part of the demonstration, the increase in provider reimbursement rates under HIP 2.0 and Indiana's traditional Medicaid program were also described by state officials and other stakeholders as a major success at expanding provider participation in Medicaid and, thus, helping to ensure access to health care for demonstration enrollees. State officials and other interviewees also reported an increase in preventive care use among HIP 2.0 enrollees and the willingness of most HIP Plus enrollees to make monthly POWER Account contributions as evidence that the demonstration has been successful in promoting consumer engagement.

Impacts of HIP 2.0 through 2018

Quasi-experimental methods and data from multiple years of the ACS and BRFSS were used to estimate the impacts of HIP 2.0 on health insurance coverage, health care access and affordability, health behaviors, and health status between the pre-HIP 2.0 period (defined as 2011-2013) and the post-HIP 2.0 period (defined as 2017-18) for childless adults ages 21 to 64. We would expect the changes introduced under HIP 2.0 to first affect health insurance coverage, with any gains in coverage translating into improvements in health care access and affordability over time, followed later still by improvements in health behaviors and health status as access improves. We would also expect the impacts on the latter outcomes to be smaller than any impacts on health insurance coverage as uninsured individuals generally have access to some health care, including, in some cases, low-cost health care.

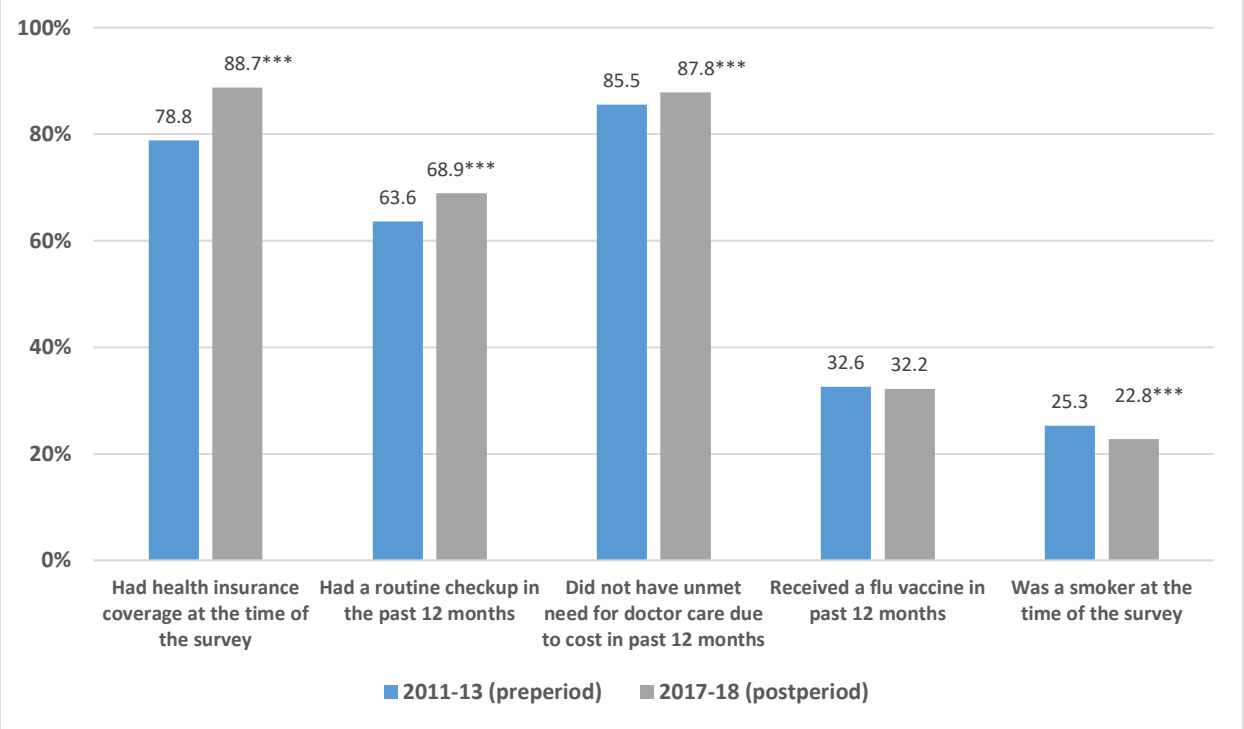
This evaluation report provides estimates of the impacts of HIP 2.0 in 2017-18. We estimate HIP 2.0 impacts using quasi-experimental difference-in-differences (DD) models, where changes over time observed in Indiana were compared to the changes over time for similar comparison states that used three alternate approaches to the Medicaid expansion: 1) no expansion of Medicaid (Alabama, Florida, Kansas, Mississippi, Nebraska, South Carolina, South Dakota, and Texas), 2) the expansion of Medicaid without a demonstration (Colorado, Kentucky, North Dakota, Ohio, and Pennsylvania), and 3) the expansion of Medicaid with a different demonstration (Michigan and New Hampshire).[8] In general, we have more confidence in the estimates for health insurance coverage, which are based on the ACS, than the estimates for health care access and affordability, health behaviors, and health status, which are

[8] Comparison states were selected based on having similar Medicaid eligibility policies and population health insurance coverage, health care access and use, and health status as Indiana in the preperiod.

based on the smaller samples of the BRFSS. Further, because of limitations in the income data available in the BRFSS, we have more confidence in the BRFSS estimates for all childless adults than in the BRFSS estimates for low-income childless adults. Finally, because it is not possible to identify comparison states that match Indiana across all dimensions (e.g., demographic, social, economic, health, and political context), any differences between Indiana and the comparison states may reflect those factors as well as differences in Medicaid expansion strategies.

Figure 1 shows the changes over time in select outcomes in Indiana for adults 21 to 64 between the 2011-13 preperiod and the 2017-18 postperiod. As shown, Indiana experienced significant gains ($p<.01$) in health insurance coverage and in health care access (as measured by having a routine check-up in the past 12 months) and affordability (as measured by not having unmet need for doctor due to cost in the past 12 months) in the 2017-18 postperiod. There evidence on health behaviors is more mixed, with no significant gains in the receipt of a flu vaccine, but significant reductions in the share of adults who were smokers. The impact analysis assesses the scale of those changes under HIP 2.0 relative to the changes that would be expected if Indiana had chosen a different approach to the ACA's Medicaid expansion, as represented by the comparison states. Because there were no similar comparison states for Indiana's expansion to parents under HIP 2.0, the impact analysis focuses on the impacts of HIP 2.0 for childless adults.

Figure 1: Changes Over Time in Health Insurance Coverage, Health Care Access and Affordability, and Health Behaviors for Adults 21 to 64 in Indiana, 2011-13 (preperiod) to 2017-18 (postperiod)



Sources: 2011-13 and 2017-18 American Community Survey (ACS) for health insurance coverage and 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS) for remaining outcomes. ***/**/***** Significantly different from 2011-13 at the .10/.05/.01 level, two-tailed test.

Impacts on health insurance coverage.

- Compared to not expanding Medicaid,[9] the gains in health insurance coverage under HIP 2.0 were significantly larger in 2017-18. Relative to the comparison states, health insurance coverage in Indiana grew 3.6 percentage points more for all childless adults ($p<.01$) and 11.3 percentage points more for low-income childless adults ($p<.01$), who were the target population for the Medicaid expansion.[10]
- Compared to expanding Medicaid without a demonstration,[11] the gains in health insurance coverage for all childless adults and low-income adults under HIP 2.0 were comparable to the gains that would be expected if Indiana had pursued the Medicaid expansion without a demonstration.
- Compared to expanding Medicaid with a different demonstration,[12] the gains in health insurance coverage under HIP 2.0 were the same or somewhat smaller than the gains that would have been expected if Indiana had pursued the Medicaid expansion with a different demonstration.

Impacts on health care access and affordability, health behaviors, and health status.

- There is little evidence of systematic changes in health care access and affordability, health behaviors, or health status in Indiana in 2017-18 relative to the comparison states that did not expand Medicaid, those that expanded Medicaid without a demonstration, or those that expanded Medicaid with a different demonstration.

Summary

The gains in health insurance coverage in Indiana under HIP 2.0 in 2017-18 were significantly larger than would have been expected if Indiana had not expanded Medicaid and generally comparable to what would have been expected if Indiana had expanded Medicaid without a demonstration or with a different demonstration. Despite these gains, there is little evidence of systematic changes in health care access and affordability, health behaviors, or health status in Indiana relative to the comparison states in 2017-18. However, there are several factors to consider in assessing those estimates. First, we would expect the impacts of HIP 2.0 on health care access and affordability, health behaviors, and health status to be smaller than any impacts on health insurance coverage and to lag any changes in health insurance due to HIP 2.0. Second, we know that the smaller sample size of the BRFSS, the data source used to assess HIP 2.0 impacts for these outcomes, makes it harder to detect small changes than is possible with the ACS, the data source used to assess HIP 2.0 impacts on health insurance coverage. Finally, there are many potential differences between Indiana and the comparison states beyond HIP 2.0 that we are not able to control for in the analysis (e.g., demographic, social, economic, health, and

[9] The group of best comparison states that did not expand Medicaid includes Alabama, Florida, Kansas, Mississippi, Nebraska, South Carolina, South Dakota, and Texas.

[10] Impact estimates based on comparing Indiana to each of the comparison states yields comparable findings for all childless adults. The sample sizes for the state-specific comparisons are too small to support analyses of low-income childless adults.

[11] The group of best comparison states that expanded Medicaid without a demonstration includes Colorado, Kentucky, North Dakota, Ohio, and Pennsylvania.

[12] The group of best comparison states that expanded Medicaid with a different demonstration includes Michigan and New Hampshire.

political context), that also could be affecting differences in health care access and affordability, health behaviors, and health status.

Several key themes emerged from data garnered from key informant interviews and focus groups.

- **Coverage alone is not enough to guarantee access.** One lesson from Indiana is the importance of addressing provider supply in conjunction with a major expansion in coverage. Though not part of the demonstration, state officials and other stakeholders underscored that Indiana's substantial increase in provider reimbursement rates for demonstration enrollees is bringing more providers into HIP 2.0 and Medicaid.
- **Stakeholder engagement and collaboration expedites change.** Stakeholder collaboration during design and implementation of HIP 2.0 created a win-win situation for hospitals, the broader health care system, and the uninsured.
- **Incremental reforms leveraging existing programs facilitate rapid implementation.** Building upon HIP 1.0 ensured a rapid and smooth ramp-up in health insurance coverage in the state.
- **Changing behavior is hard and requires a long-term commitment.** Many interviewees noted that changing health care behaviors takes time as enrollees learn how health insurance works and gain experience with the health care system. While state officials, other interviewees, and focus group participants reported continued gaps in enrollee understanding of key components of HIP 2.0, they also noted changes in health care behaviors among HIP 2.0 enrollees.
- **Flexibility in design is important.** A key example concerned the administrative complexity of the original POWER Account contribution design, which created high administrative costs and was reported to be a source of confusion for HIP 2.0 enrollees. Indiana made a change in the structure of POWER Account contributions under the 2018 demonstration renewal to provide a simplified version that aimed to maintain enrollee engagement in their health care while simultaneously reducing MCE administrative costs and enrollee confusion.

The Future of HIP 2.0

By taking advantage of the experimental nature afforded by section 1115 demonstrations, Indiana has been able to test and refine key elements of HIP 2.0, resulting in a program that achieved a key goal of both the ACA and the state—a significant expansion in health insurance coverage. As the program moves forward and evolves under the two pending requests Indiana has submitted to the Centers for Medicare & Medicaid Services (CMS) (i.e., a demonstration renewal request submitted January 2020, and a July 2019 demonstration amendment request), it will be important to continue to track the implementation and management of the demonstration as well as examine the impacts of the demonstration (and any changes to the demonstration beyond 2018) to capture longer-term effects.[13]

[13] The 2020 demonstration amendment would extend the demonstration through December 2030, providing flexibility to modify POWER Account contributions and copayment amounts, as well providing the authority to include a separate demonstration amendment request, the Workforce Bridge Account, in the extended renewal program. Under the Workforce Bridge Account amendment application, submitted in July 2019, the state aims to establish HIP Workforce Bridge Accounts, which would provide qualifying HIP enrollees who lose eligibility up to $1,000 of unused POWER Account funds that could be used to pay for health care expenses during their transition to other coverage. For more information, see "Healthy Indiana Plan Section 1115 Demonstration HIP Workforce Bridge Amendment," Indiana Family and Social Services Administration,

This would include the impacts of enrollment lockouts on HIP 2.0 enrollment and enrollee outcomes, and the impact of financial incentives on healthy behaviors among enrollees. Further, with the changes introduced under the 2018 demonstration renewal, research on how community engagement requirements affect HIP 2.0 enrollment, how imposing a tobacco surcharge affects tobacco use and health outcomes, and how tiered premiums affect enrollment will be important. Moreover, if CMS approves Indiana's pending demonstration amendment, it will be important to evaluate the effects of the HIP Workforce Bridge Account on transitions to new coverage.[14]

As required under the federally-mandated evaluation of the HIP demonstration renewal, Indiana has contracted with the Lewin Group to conduct an independent evaluation. That evaluation includes two reports—an interim evaluation report and a summative evaluation report. The interim evaluation report, which was submitted to CMS in December 2019, focuses on assessments of the first 17 months of the demonstration renewal (February 2018 to June 2019), which includes the phase-in of the new community engagement requirements and baseline analyses of the HIP enrollees' tobacco use.[15] The summative evaluation report, which will cover the full 3-year demonstration period from February 2018 to December 2020, will be submitted in 2022. That report will include additional analyses of federal survey data, as well as analyses of Indiana's Medicaid administrative data and beneficiary surveys. The administrative data and beneficiary surveys will support analyses of critical design features being tested under the demonstration that cannot be addressed with federal survey data and, thus, could not be assessed in this federal evaluation.

amendment application submitted to CMS on July 25, 2019 (accessed January 27, 2020), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/in-healthy-indiana-plan-support-20-pa6.pdf; "Healthy Indiana Plan Section 1115 Demonstration Extension Request", Indiana Family and Social Services Administration, state extension request submitted to CMS on January 31, 2020, (accessed March 13, 2020). https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/in-healthy-indiana-plan-support-20-pa8.pdf

[14] Perhaps the modification under the 2018 demonstration renewal that has received the most attention is the changes made to Indiana's "Gateway to Work" program, which had been a voluntary program available to HIP 2.0 enrollees. The state plans to phase out the original Gateway to Work and to implement a new Gateway to Work program. Key elements of Gateway to Work have been suspended owing to a lawsuit filed in federal court challenging Gateway to Work and other parts of HIP.

[15] The Lewin Group. *Health Indiana Plan Interim Evaluation Report: Final for CMS Review*. December, 18, 2019 (accessed January, 27, 2020), https://www.in.gov/fssa/hip/files/IN_HIP_Interim_Evaluation_Report_Final.pdf.

I. Introduction

The Affordable Care Act (ACA) allows states to expand Medicaid eligibility to adults with incomes up to 138 percent of the federal poverty level (FPL). As of March 2020, 36 states (including the District of Columbia) had opted to implement the ACA Medicaid expansion.[16] Ten of these states have secured section 1115 demonstrations to implement their expansions, which, among other things, allows the states to test alternative delivery systems and add conditions of eligibility for expansion enrollees. Though long a hallmark of Medicaid, section 1115 demonstrations have gained renewed prominence given the Trump Administration's interest in testing new ways to improve the program.[17] Chief among the strategies that CMS is interested in testing through section 1115 demonstrations are strengthening enrollee engagement in their health care, enhancing the alignment between Medicaid and private health insurance policies, and supporting initiatives that promote upward mobility, greater independence, and improved quality of life for Medicaid enrollees.[18]

Indiana was among the first states to implement the ACA Medicaid expansion in conjunction with a section 1115 demonstration. In January 2015, Indiana received approval from CMS to implement the Heathy Indiana Plan (HIP) 2.0, a new section 1115 demonstration that built on HIP 1.0, the state's 2008 section 1115 demonstration. Enrollment in HIP 2.0 began on February 1, 2015. On February 1, 2018, CMS granted a renewal of the HIP 2.0 demonstration that extends the demonstration to December 2020.[19] As of December 2018, more than 420,000 Hoosiers were enrolled in HIP 2.0, now referred to simply as "HIP."[20]

Federal Evaluation of HIP 2.0

In 2015, Social & Scientific Systems, Inc. (SSS) and its subcontractor, the Urban Institute, were awarded a contract (September 2015 to September 2019; extended to May 2020) to conduct the federal evaluation of HIP 2.0. This report was done as part of that evaluation.

As described in the evaluation design report, [21] the federal evaluation of HIP 2.0 had three principal objectives:

- Understand and document the design, implementation, and ongoing operations of HIP 2.0
- Document enrollee understanding of and experiences with HIP 2.0

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[16] "State Health Facts: Status of State Action on the Medicaid Expansion," Kaiser Family Foundation, no date (accessed March 13, 2020), https://www.kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/.

[17] "Verma Outlines Vision for Medicaid, Announces Historic Steps Taken to Improve the Program," Press Release, Centers for Medicare & Medicaid Services, November 7, 2017 (accessed August 11, 2018). https://www.cms.gov/newsroom/press-releases/verma-outlines-vision-medicaid-announces-historic-steps-taken-improve-program.

[18] "About Section 1115 Demonstrations," Medicaid.gov, no date (accessed March 8, 2019), https://www.medicaid.gov/medicaid/section-1115-demo/about-1115/index.html.

[19] Demetrios Kouzoukas, letter to Allison Taylor, February 1, 2018, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-cms-amend-appvl-02012018.pdf

[20] "Medicaid Monthly Enrollment Report December 2018," Indiana Family and Social Services Administration, multiple dates (accessed January 22, 2019), https://www.in.gov/fssa/ompp/4881.htm.

[21] Social & Scientific Systems, Inc., *Evaluation Design Report for Indiana HIP 2.0 Federal Evaluation* (Silver Spring, MD: Centers for Medicare & Medicaid Services, 2017), https://www.medicaid.gov/medicaid/downloads/in-healthy-indiana-plan-support-20-eval-dsgn-rpt-05222017.pdf .

- Estimate the effects of HIP 2.0 on health insurance coverage, health care access and affordability, and health behaviors and health status

To meet these goals, the federal evaluation was initially designed to include three components relying on qualitative and quantitative analyses:

- Qualitative analyses entailing document review and two rounds of site visits, including conducting informational interviews with key HIP 2.0 stakeholders and four focus groups of HIP 2.0 enrollees in each round
- HIP 2.0 beneficiary surveys and descriptive analyses based on Medicaid administrative data
- Impact analyses using quasi-experimental methods and both Medicaid administrative data (through 2018) and national survey data from the American Community Survey (ACS) and the Behavioral Risk Factor Surveillance System (BRFSS)

The goals of the qualitative analyses were to provide careful documentation of HIP 2.0 implementation and operations, as well as successes and challenges Indiana faced in managing the demonstration. Through the enrollee focus groups and the beneficiary surveys, the qualitative analyses were expected to provide an in-depth assessment of HIP 2.0 experiences from the consumer perspective. In addition, the qualitative analyses were to inform the descriptive analyses based on administrative data and the impact analyses using administrative data and national survey data under the evaluation's quantitative components, helping to guide the focus for those components of the evaluation and providing valuable context for interpreting results. The goals of the impact analyses were to assess the extent to which HIP 2.0 led to changes in health insurance coverage, as well as changes in health care access and affordability, health care quality, health behaviors, and health status.

Initially, the plan was to conduct two rounds of site visits in 2016 and 2018 and to administer the beneficiary surveys in 2016 and 2018 as well. The design of the federal evaluation was subsequently modified, however, as the Data Use Agreement (DUA) with Indiana was not finalized until 2018, which affected the evaluation team's access to state HIP 2.0 staff and Medicaid administrative data. Specifically, we could not conduct the planned 2016 site visit and focus groups, the beneficiary surveys, and the analyses of administrative data within the remaining timeframe of the existing contract. Consequently, the 2016 site visit and focus groups, the beneficiary surveys, and the analyses of administrative data were removed from the federal evaluation's scope of work.

Although the redesigned federal evaluation continues to address the three goals outlined above, it provides a more limited understanding of HIP 2.0 and of enrollee perceptions and experiences with HIP 2.0 than had been originally contemplated. We have information on HIP 2.0 stakeholder perspectives as of 2018 but not from earlier years of the demonstration. By reducing the number of site visits to a single round conducted in 2018, the evaluation has collected less reliable information on the design and implementation of HIP 2.0 and on early beneficiary experiences with POWER Accounts, enrollment, and disenrollment. Further, because the beneficiary surveys could no longer be administered, the evaluation collects less information on the broader enrollee experiences with HIP 2.0 than initially planned. Under the redesign, information on enrollee experience is limited to information collected from HIP 2.0 enrollee focus groups, which, by design, obtain information from a small sample of enrollees who are selected to provide a range of perspectives. To broaden the scope of information available on enrollees, the evaluation redesign includes an increase in the number of focus groups with HIP 2.0 enrollees from four to six and adds two disenrollee focus groups (for a total of eight focus groups). Finally, by forgoing

the policy-specific impact analyses that would have relied on Medicaid administrative data, the evaluation is unable to address the impacts of different components of the HIP 2.0 demonstration and the overall impacts of the HIP 2.0 demonstration on health care quality.[22]

Organization of the Evaluation Report

This report is part of the federal evaluation of Indiana's HIP 2.0 demonstration. It summarizes key findings from the 2018 site visit, with updates through the end of 2018, and provides impact estimates through 2018 based on data from the ACS and BRFSS. The report is organized as follows: The remainder of this chapter provides an overview of key elements of the design for HIP 2.0, with more detailed information on Indiana and HIP 2.0 in Appendix A. Chapter II provides a summary of the qualitative assessment of HIP 2.0 through December 2018, with more detailed findings provided in Appendix B. Chapter III reports on the quantitative assessment of the impacts of HIP 2.0 through 2018 in Chapter III, with more detailed information on the data and methods provided in Appendix C and supplemental tables that support the impact estimates provided in Appendix D. The final chapter discusses lessons learned from the HIP 2.0 demonstration.

Overview of HIP 2.0

HIP 2.0 was built on Indiana's existing Medicaid managed care program and its 2008 section 1115 demonstration, HIP 1.0. HIP 1.0 provided health insurance coverage to low-income uninsured parents (and other caretakers) of dependent children and childless adults (i.e., adults who are not custodial parents or caretakers for dependent children). Childless adults were subject to an enrollment cap of 34,000, though enrollment in HIP 1.0 for this group often fell below this level.[23,24] Following the HIP 1.0 model, HIP 2.0 is designed to promote personal health responsibility among enrollees through use of health savings-like accounts, cost-sharing, financial incentives to promote healthy behaviors, and a reliance on the private insurance market through managed care plans, referred to as managed care entities (MCEs) in Indiana. According to Indiana's HIP 2.0 demonstration application, HIP 2.0 has six overarching goals:[25]

- Reduce the number of uninsured low-income adults and increase access to health care services
- Promote value-based decision-making and personal health responsibility
- Promote disease prevention and health promotion to achieve better outcomes
- Promote private insurance coverage and family coverage options
- Facilitate access to job training and stable employment to reduce dependence on public assistance
- Assure state fiscal responsibility and efficient management of the program

[22] The 2017 revision of the evaluation design report reflects these changes.

[23] "Healthy Indiana Plan 1115 Waiver Extension Application," Indiana Family and Social Services Administration, April 12, 2013 (accessed August 11, 2018), https://www.in.gov/fssa/hip/files/April122013HIPWaiverExtensionApp.pdf.

[24] Kaiser Family Foundation, "Healthy Indiana Plan and the Affordable Care Act" (Menlo Park, CA: Kaiser Family Foundation, 2013), https://www.kff.org/wp-content/uploads/2013/12/8529-healthy-indiana-plan-and-the-affordable-care-act1.pdf

[25] Indiana Family and Social Services Administration, *HIP 2.0 1115 Waiver Application* (Indianapolis, IN: Indiana Family and Social Services Administration, 2014), https://www.in.gov/fssa/hip/files/HIP_2_0_Waiver_Final.pdf.

To help achieve these objectives, the 2015 HIP 2.0 design contained:

- A variation of a high-deductible health plan (HDHP) paired with a health savings-like account—the Personal Wellness and Responsibility (POWER) Account.
- Two plan designs with different types of benefit levels and cost-sharing—HIP Basic (available to HIP 2.0 enrollees with incomes at or below 100 percent of the FPL) and HIP Plus (available to all HIP 2.0 enrollees), where HIP Plus offers expanded benefits (including dental and vision) and more limited copayments in exchange for monthly contributions to the enrollee's POWER Account.
- Financial incentives for enrollees who receive recommended preventive services.
- Disenrollment from HIP 2.0 and a 6-month "lockout" period from coverage for some HIP Plus enrollees with incomes above 100 percent of the FPL who do not make their monthly POWER Account contributions within a 60-day grace period.[26] HIP Plus enrollees with incomes at or below 100 percent of the FPL are moved to HIP Basic if they do not make their monthly POWER Account contributions within a 60-day grace period.
- A waiver of non-emergency medical transportation (NEMT) for most HIP 2.0 enrollees.
- A waiver of retroactive Medicaid coverage for most HIP 2.0 enrollees.
- A Fast Track prepayment option for POWER Account contributions. Under this option, HIP 2.0 applicants or a third-party entity can make a one-time POWER Account prepayment to expedite enrollment in HIP Plus for an individual who is determined to be eligible for coverage.[27]
- Graduated copayments for emergency department (ED) visits for non-emergent care.[28]

Though not part of HIP 2.0 Special Terms and Conditions (STCs), the 2015 demonstration also included a voluntary work referral program, Gateway to Work.

A more detailed description of the elements of HIP 2.0 and a description of the Medicaid program in place in Indiana prior to HIP 2.0 is provided in Appendix A.

[26] Individuals with income above 100 percent of the FPL who fail to make their first monthly POWER Account contribution within the grace period are not enrolled in HIP 2.0 but are eligible to reapply at any time.

[27] Fast Track is an optional payment program in which prospective HIP 2.0 enrollees (or a third-party entity acting on their behalf) can make a $10 prepayment of the POWER Account contribution anytime between program application and eligibility determination. If determined eligible, the individual's coverage is retroactive to the first of the month in which the FAST Track payment was made. If found ineligible for HIP 2.0, the state will refund the $10.

[28] The graduated copayment for non-emergency ED use was provided for under a 2-year section 1916(f) waiver. The first non-emergency ED visit was to have a co-payment of $8 and any subsequent non-emergency visits was to have a co-payment of $25.

II. Qualitative Assessment of HIP 2.0 through 2018

The goal of the qualitative assessment of HIP 2.0 is to understand and document the design, implementation, and ongoing operations of HIP 2.0 and to document enrollee understanding of and experiences with HIP 2.0. The qualitative assessment relies on document reviews and a site visit to Indiana in 2018, which included 18 key informant interviews and eight focus groups—six with HIP 2.0 enrollees and two with HIP 2.0 disenrollees.[29] The key informant interviews included state officials and representative of stakeholder groups, including MCE executives, health care providers and provider association representatives, and consumer advocates. The six focus groups with enrollees were conducted in Indianapolis (2), Gary (2), and Logansport (2). The two disenrollee focus groups were held in Indianapolis.

The qualitative component of the evaluation is meant to tell the story of HIP 2.0 from the perspective of demonstration stakeholders in Indiana. While this information provides important context for understanding and interpreting the impact findings of HIP 2.0 presented in Chapter III, qualitative findings should not be interpreted as providing estimates of the impacts of the demonstration. The information obtained from stakeholder interviews and focus groups is self-reported and thus limited by the memory, perspectives, and experience of the individuals with whom we spoke. Finally, while interviewees are designated as representatives of their particular stakeholder type (e.g., state officials can speak on behalf of state government, and provider association representatives can speak on behalf of the providers they represent), focus group participants are not meant to be representative of all demonstration enrollees or disenrollees, but rather to provide examples from a range of HIP 2.0 enrollee and disenrollee perspectives.

This chapter presents a summary of the key findings, including findings on the development of and goals for HIP 2.0, implementation, and early experiences of HIP 2.0 across major program areas such as outreach, enrollment, enrollee education and cost-sharing. This is followed by a discussion of changes provided for under the HIP 2.0 2018 demonstration renewal. Appendix B provides information on the data and methods used in the qualitative component of the HIP 2.0 evaluation, along with an in-depth presentation of findings.

Overview of Findings from the Qualitative Analysis

Three and a half years into the HIP 2.0 demonstration, state officials and other stakeholders with whom we spoke (i.e., MCE executives, health care providers and provider association representatives, and consumer advocates) universally viewed HIP 2.0 as a successful program that launched a major Medicaid expansion with just a few glitches. Key findings from the qualitative analysis include:

Development of HIP 2.0. Interviewees emphasized the importance of having HIP 1.0, an established and well-liked safety net program developed under Indiana's 2008 section 1115 demonstration, as the

[29] The state makes a distinction between individuals disenrolled from HIP Plus and those never fully enrolled in HIP Plus because they failed to make their first POWER Account contribution or to complete the required follow-up for presumptive eligibility. However, Indiana officials agreed that both types of people belonged on the recruitment list for the disenrollee focus groups and no distinction between the two groups were made on the list. In conducting the focus groups, we found that all disenrollee focus group participants viewed themselves as having been disenrolled from HIP 2.0 although it became apparent to the researchers during the focus group conversations that some would have been considered by Indiana officials as having never fully enrolled in the demonstration.

foundation for HIP 2.0. Also critical was strong stakeholder support across the state, particularly that of the Indiana Hospital Association, which offered a sustainable funding source for the majority of the state's share of the Medicaid expansion through a provider tax.

Implementation of HIP 2.0. Beyond the expansion in Medicaid eligibility adopted by the state, the HIP 2.0 program has been largely implemented through the private sector via MCEs and health care organizations. Health care organizations and embedded navigators conduct the bulk of the outreach and enrollment for HIP 2.0, the state determines eligibility for HIP 2.0, and MCEs are responsible for administering the program once individuals are enrolled, including providing enrollee education on HIP 2.0 and collecting monthly POWER Account contributions, among other things. Providers are responsible for collecting copayments. State officials, other interviewees, and focus group participants reported that early in the HIP 2.0 implementation, difficulties with coordination among these entities caused some errors or delays in the enrollment process. While many of these problems lessened over time, some enrollment challenges (e.g., presumptive eligibility and Fast Track payment) persist, according to interviewees and focus group participants.

Some other components of HIP 2.0 were also described as difficult to implement. MCE executives reported that collecting monthly enrollee POWER Account contributions and keeping track of enrollee out-of-pocket spending was labor intensive and administratively burdensome while providers said they did not always collect copayments from HIP 2.0 enrollees, often because of high administrative costs relative to the expected payment amount.

Perhaps most fundamentally, though, interviewees across the board reported that enrollee understanding of certain elements of HIP 2.0, particularly the POWER Account, is generally low despite education efforts by the state, MCEs, and other stakeholders. Focus group discussions also revealed that POWER Accounts, POWER Account contributions, and other features of HIP were not well understood by many focus group participants. For example, one focus group enrollee said, "They send you a notice in the mail, but I don't pay too much attention to it; I don't understand it [POWER account statement]," and another said, "It says you've used so much towards your POWER account. I don't know what it means." As noted below, this is a major focus of state education efforts going forward.

Enrollee experiences and understanding of HIP 2.0. Enrollees in our focus groups generally thought HIP 2.0 was affordable and enhanced their access to health care. Most felt their monthly POWER Account contributions, which ranged from $1 to $100, were worthwhile to obtain the expanded benefits and minimal copayments under HIP Plus. Many also felt the opportunity to contribute toward their coverage reduced the stigma or personal guilt associated with "relying on government" for traditional Medicaid coverage. However, some enrollee focus group participants reported challenges making the monthly POWER Account contributions due to confusion over how much they owed, when they had to pay or difficulty affording the payment at times. Consumer advocates' views on the affordability of POWER Account contributions mirrored those of focus group participants, that is, POWER Account contributions are affordable for most enrollees, although they can be challenging to understand and difficult for some to afford.

At the same time, consumer advocates noted that a $1 per month (which is the amount that nearly half of HIP Plus enrollees pay in POWER Account contributions) could be a challenge for some individuals. As one consumer advocate shared, "We had one client tell us…it just seems like Indiana wants my last $12." Another consumer advocate commented, "We have had people that say they don't get the insurance at the appointment [with the navigator] because it is not affordable." The consensus among

interviewees and participants in focus groups was that HIP 2.0 cost-sharing, at least to date, has not yet affected enrollee behavior. Most enrollees in the focus groups, for example, did not report making decisions on whether to use health care services based on their POWER Account balance or potential rollover amounts, or on potential copayments. In addition, interviewees generally felt that the POWER Account rollover benefit for preventive care was not well understood or salient enough among HIP 2.0 enrollees to motivate behavior. For example, one MCE executive said, "The intent of the [POWER Account] rollover is to reward people for healthy behaviors. But it doesn't happen until so long after those healthy behaviors that it doesn't have the impact that I think was really intended." On the other hand, state officials and some MCE executives highlighted that most HIP 2.0 enrollees with incomes at or below 100 percent of FPL are opting to make a POWER Account contribution and enroll in HIP Plus, where they receive enhanced benefits and largely avoid having to make copayments. From these interviewees' perspective, this indicates that enrollees see value in HIP Plus over HIP Basic and are acting accordingly. One state official said, "It suggests to me that they are making the conscious decision that if I invest a little on the front end, engage in my healthcare, do the preventative stuff [I am better off]. They are taking that step to the next level [of health insurance use], which is good."

Disenrollee experiences and understanding of HIP 2.0. In the disenrollee focus groups, which included both individuals never enrolled in HIP 2.0 because they did not make their initial POWER Account contribution and individuals who were disenrolled from HIP 2.0 because they did not make a subsequent POWER Account contribution, participants often reported confusion about POWER Account contributions. As with some enrollee focus group participants, some disenrollee focus group participants reported confusion over their POWER contributions, whether they needed to pay them, and difficulty affording the payments. Disenrollee focus group participants, who were often surprised to learn they had been disenrolled, were eager to get back on HIP 2.0, but were locked out or could not figure out how to reenroll. Most disenrollees in the focus groups were uninsured at the time of our focus groups and did not have alternate forms of coverage available to them. Many reported forgoing needed medical and dental care in the meantime because they could not afford the out-of-pocket cost. Consumer advocates, health care providers, and provider association representatives were concerned about health care access for those who were locked out of HIP 2.0 coverage and questioned the effectiveness of lockouts in supporting the program's goal of consumer engagement. One provider association representative said, "Is a lockout scary enough to make somebody [make] a POWER Account payment?" I would say yes, but…is a lockout enforcing the idea that you should change your behavior for better health outcomes? The answer is no."

Major accomplishments under HIP 2.0. State officials and other interviewees viewed the implementation of a major Medicaid expansion tailored to Indiana as a huge accomplishment. Across the board, interviewees, and focus group participants emphasized increased health insurance coverage and improved access to health care as the major wins of HIP 2.0. The increase in provider reimbursement rates under HIP 2.0 was also described by state officials and other stakeholders as a major success as it expanded provider participation in Medicaid. Consumer advocates and focus group participants reported good access to care under HIP 2.0. Hospital representatives also reported reductions in uncompensated care and increased Medicaid revenue due to the greater number of people covered by Medicaid and higher Medicaid reimbursement provided under HIP 2.0 and Indiana's traditional Medicaid program. Further, state officials and other interviewees reported an increase in preventive care use among HIP 2.0 enrollees and the willingness of most HIP Plus enrollees to make monthly POWER Account contributions as evidence that the demonstration has been successful in promoting consumer engagement.

Summary. In summary, the qualitative findings suggest that Indiana has made headway on some of the key goals of HIP 2.0. Most prominently, the demonstration increased coverage to more low-income individuals and increased access to health care services, including preventive care. At the same time, it is unclear from the qualitative assessment whether Indiana has achieved some of its other goals for HIP 2.0, including promoting value-based decision-making and personal health responsibility and expanding private insurance coverage. In part, this can be explained by the fact that these and other HIP 2.0 goals (e.g., facilitating access to job training, stable employment to reduce dependence on public assistance, and achieving better health outcomes) are longer term objectives that may take more time to achieve than the 3-year observation period available under the federal evaluation. That said, these longer-term goals are becoming a more central focus of HIP 2.0 as the demonstration goes forward.

HIP 2.0 Going Forward

In 2018, HIP 2.0 was viewed by state officials, other interviewees, and enrollee focus group participants as a highly successful program that has yielded significant gains in health insurance coverage and health care access in Indiana. Focus group enrollees and disenrollees universally praised HIP 2.0 and said it had made a significant difference in their lives by providing needed health care, protecting them from the high costs of health care, and ensuring peace of mind for their health care needs in the future. For example, one enrollee in our focus groups shared, "Initially when I got HIP, I was having problems with my lungs and the tests cost $6,000 alone. I didn't think I was going to live. It was life-saving." Another focus group participant noted, "It makes you more conscious about your health. It makes you want to go back to the doctor to find out what is going on because you don't have to worry about those high prices." Indiana's 2018 demonstration renewal is intended to build on the success of HIP 2.0 by both addressing program elements that were viewed as less successful and to add new elements to the demonstration to continue testing alternate strategies under the demonstration. Although the 2018 demonstration renewal will make a number of changes in the demonstration, interviewees expect the fundamental character of HIP 2.0 to remain intact.

Several of the 2018 demonstration amendments are aimed at improving administrative processes in HIP 2.0. For example, HIP 2.0 MCEs and Indiana found it difficult to administrate POWER Account contributions based on a flat 2 percent of income because many enrollees have fluctuating incomes that lead to frequent changes in the required contribution and a great deal of confusion among enrollees. To address this, under the demonstration renewal, HIP 2.0 enrollees as of January 2018 make POWER Account contributions based on a tiered structure that uses five income groups.[30] As one consumer advocate interviewee said of the shift to a tiered structure: the POWER Account contribution is now "a known amount and the same amount every month [for most enrollees]….I think we will see more compliance because it is a predictable amount…make one payment for coverage for the year and be done with it." The state said that they expect that enrollee's POWER Account contributions will either remain the same or decrease under the tiered POWER Account contributions. Early findings from the state's evaluation indicate that changes made to POWER Account contributions as part of the HIP 2.0 2018 demonstration renewal have been positive. While HIP enrollees' understanding of POWER Account policies was reported to remain an issue, state officials and MCEs reported that the shift to a tiered POWER Account contribution structure has "sustained" program enrollment and reduced MCE

[30] Specifically, monthly POWER Account contributions are (1) income less than 22 percent of FPL: $1.00, (2) income 23 to 50 percent of FPL: $5.00, (3) income 51 to 75 percent of FPL: $10.00, (4) income 76 to 100 percent of FPL: $15.00, and (5) income 101 to 138 percent of FPL: $20.00. Data from Indiana Family and Social Services Administration, Letter from the State on Power Account Tiers, November 29, 2017.

administrative burden. Further, the state evaluation highlights that administrative data show that between 2017 and 2018 HIP Plus enrollment increased and the rate of disenrollment for non-payment declined, though other factors were acknowledged as also possibly influencing these data trends and that additional work is needed to draw firm conclusions.[31]

Another administrative change made under the 2018 demonstration renewal was HIP 2.0 eligibility for pregnant women. Under the amended demonstration, women who become pregnant while enrolled in HIP 2.0 no longer need to move to different Medicaid coverage.[32] Instead, they will stay with their same MCE and simply shift to HIP Maternity, which provides additional benefits (e.g., NEMT) and eliminates any cost-sharing provisions. As one state official said, moving women who became pregnant to a different plan, "was confusing messaging – telling a pregnant woman your insurance changed and issuing a new card…" As of December 2018, 18,494 members were enrolled in HIP Maternity, accounting for 4.4 percent of HIP enrollment that month.[33]

The 2018 demonstration renewal also shifted to a using calendar-year benefit structure in HIP 2.0. With this change, enrollees have one POWER Account and one MCE for the year regardless of whether they have a gap in coverage during the year. This modification was viewed by many interviewees, particularly MCE executives, as a major administrative improvement. Previously, people who left HIP 2.0 but returned to the program later in the same year could switch MCEs, resulting in the need to establish a new POWER Account. The new MCE would need to reconcile with the state and the previous MCE (or MCEs) to ensure all cost-sharing (e.g., POWER Account contributions, 5 percent cost-sharing limit per quarter) was correctly tracked. This change was described by one MCE executive as "a big win." A state official thought it would make HIP 2.0 "more predictable and easier to understand for consumers and easier on the program" to administer.

In addition to a focus on improving the administration of HIP 2.0, the 2018 demonstration renewal also added several new components, including making the former, voluntary Gateway to Work a mandatory work requirements program, a POWER Account contributions surcharge for tobacco users, expanded access to substance use disorder (SUD) services, and new HIP 2.0 redetermination policies. These are discussed below.

Mandatory work requirements. Perhaps the modification under the 2018 demonstration renewal that has received the most attention[34] is the changes made to Indiana's "Gateway to Work" program, which had been a voluntary program available to HIP 2.0 enrollees. The original Gateway to Work program is to be phased out and plans to implement a new Gateway to Work program were being developed when we were on-site in June 2018. While we discuss those plans in this section, we would note that key

[31] "Healthy Indiana Plan Interim Evaluation Report," The Lewin Group, Inc., prepared for the Indiana Family and Social Services Administration, December 18, 2019, https://www.in.gov/fssa/hip/files/IN_HIP_Interim_Evaluation_Report_Final.pdf.

[32] FSSA updated its website to provide step-by-step instructions for pregnant women to enroll in HIP Maternity and also noting that HIP 2.0 contributions and any cost-sharing requirements are suspended during pregnancy and post-partum period of 60 days. "HIP Maternity," Indiana Family and Social Services Administration, no date (accessed September 9, 2019), https://www.in.gov/fssa/hip/2463.htm.

[33] "FSSA Monthly Enrollment Report December 2018," Indiana Family and Social Services Administration, January 22, 2019.

[34] "HHS Approves New Healthy Indiana Medicaid Demonstration," Press Release, US Department of Health and Human Services, February 2, 2018 (accessed August 17, 2018), https://www.hhs.gov/about/news/2018/02/02/hhs-approves-new-healthy-indiana-medicaid-demonstration.html. See also "Indiana to Impose Work Requirement for Some on Medicaid, Get up to $240M for Addiction," *IndyStar*, February 2, 2018 (accessed August 17, 2018), https://www.indystar.com/story/news/2018/02/02/indiana-impose-work-requirement-some-medicaid-get-up-80-m-addiction/1088068001/.

elements of Gateway to Work have been suspended owing to a lawsuit filed in federal court challenging Gateway to Work and other parts of HIP.[35]

In planning for the new Gateway to Work program, one state official explained that Indiana is aiming to "build our own [work program] to ensure we are in charge of it, to have our own flavor." According to the Indiana Family and Social Services Administration, Gateway to Work will include a broad range of work and other qualifying activities that are intended to help members "improve their health and also improve their socioeconomic status."[36] HIP 2.0's new work requirement is estimated to affect 70,000 HIP 2.0 enrollees,[37] and scheduled to begin implementation January 2019 with full implementation expected by July 2020.[38,39] State officials said Indiana is taking its time designing the program; "working on a long runway" for implementation, as one official commented.

As with the overall HIP 2.0 design, several interviewees, including MCE executives, health care providers and provider association representatives, and consumer advocates, were pleased that Indiana was soliciting and using input from stakeholders as it worked out the programmatic and operational details of the new Gateway to Work program. Consumer advocate interviewees noted that the state was adopting a flexible approach with regards to which HIP 2.0 enrollees will be subject to work requirements, referred to as "community engagement activities" in Indiana, and what those requirements will be. Based on stakeholder input, there would be a wide range of qualifying activities; the state issued additional guidelines in November 2018 on activities based on the following three categories: work (e.g., employed or self-employed, homeschooling, job search, education related to employment); learn (e.g., college education, English as a second language, general education, high school equivalency, job skill training, vocational education and training); and serve (e.g., caregiving services, community service and public service, volunteer work, and other qualifying activities as necessary based on individual review).[40]

At the same time, several groups of enrollees will be exempt from the work requirements, including older adults, pregnant women, and people with serious health issues (e.g., people who are medically frail or in SUD treatment), caretakers for dependent children or disabled family members, homeless

[35] "Gateway to Work Suspension Announcement," Indiana Family and Social Services Administration, October 31, 2019, https://www.in.gov/fssa/files/Gateway_to_Work_suspension_announcement.pdf

[36] "FSSA Update," Indiana Family and Social Services Administration, May 2018 (accessed August 17, 2018), https://www.in.gov/fssa/thehub/files/FSSA_Update_May%202018.pdf.

[37] Sheridan, J. "HIP 2.0 Begins Work Requirement Program," *WYFI*, January 31, 2019, https://www.wfyi.org/news/articles/hip-20-begins-work-requirement-program.

[38] In January 2019, FSSA released a reporting schedule for the new community engagement provision requiring some enrollees to participate in Gateway to Work. Hours needed to satisfy the community engagement requirements will increase incrementally: 20 hours per month will be required effective July 2019 and then the full 80-hour per month requirement will be implemented July 2020. "Learn About Gateway to Work," Indiana Family and Social Services Administration, no date (accessed September 9, 2019), https://www.in.gov/fssa/ompp/files/2018-5-24_GTW_Overview_MAC.pdf .

[39] FSSA released a new Benefits Portal for enrollees to log hours spent on qualifying activities for the community engagement requirements. "Welcome to the FSSA Benefits Portal," Indiana Family and Social Services Administration, no date (accessed September 9, 2019), https://fssabenefits.in.gov/#/.

[40] Healthy Indiana Plan (HIP) Special Terms and Conditions, February 1, 2018 through December 31, 2020 (accessed April 18, 2019), https://www.in.gov/fssa/ompp/files/2018-5-24_GTW_Overview_MAC.pdf .

adults, students, Temporary Assistance for Needy Families (TANF) or Supplemental Nutrition Assistance Program (SNAP) recipients, and adults who were recently incarcerated.[41]

Perhaps the biggest concern raised about the Gateway to Work Initiative by some interviewees, including a consumer advocate and an MCE executive, is that MCEs will be charged with administrating the program. Some interviewees were concerned that MCEs "have no experience in" running such programs. However, based on information provided in the interviews with state officials and MCE executives, two of the four HIP 2.0 MCEs have existing programs that seek to connect individuals with job opportunities while simultaneously addressing the social determinants of health. To date, these existing programs are relatively small efforts that target a few hundred participants, whereas Gateway to Work will be at a wholly different scale.

While some interviewees expressed concern for the role of MCEs in Gateway to Work, state officials and other MCE executives were not concerned about that expanded role. According to one state official, "What the MCEs will be doing for us is really educating members about Gateway to Work and then helping facilitate some movement." And, as one MCE representative stated, "The plan will be responsible for educating and tracking, similar to the POWER Account." Another state official interviewee noted that giving administrative responsibility of Gateway to Work to MCEs is consistent with the rest of HIP 2.0, which tasks plans with much of HIP 2.0's day-to-day operations. Further, another consumer advocate commented that MCEs have a strong financial incentive to make Gateway to Work successful because they want to keep people enrolled in HIP 2.0.

State officials view the Gateway to Work program as an effort that runs parallel with the Next Level Jobs Program, an initiative Governor Holcomb announced in 2017 that aims to retrain Hoosiers for today's available jobs and the more than 1 million open positions Indiana expects to have by 2025.[42] State officials expect that the Gateway to Work program will eventually converge with the Next Level Jobs Program to create a comprehensive job preparation framework in the state.

Indiana began implementation of Gateway to Work in January 2019 using a phased in approach to allow for operational readiness and to raise enrollee awareness about reporting requirements. Mandatory reporting of community engagement activities for non-exempt enrollees began July 2019. Analysis of administrative data as of June 2019 (still in the voluntary reporting phase of Gateway to Work) provided in the state's evaluation of HIP showed that nearly three-quarters of HIP enrollees (74.6 percent) met one of the exemptions and did not need to report community engagement activities, another 7.4 percent would have already met the work requirements stipulated by Gateway to Work, and 18 percent would have been required to report. In June 2019, a month before required reporting began, less than 1 percent of those who would be required to report community engagement activities did so.

[41] Healthy Indiana Plan (HIP) Special Terms and Conditions, February 1, 2018 through December 31, 2020 (accessed April 18, 2019), https://www.in.gov/fssa/hip/files/IN-HIP-1115-Approval-Package_2-1-2018.pdf; "Gateway to Work FAQs," Indiana Family and Social Services, November 2018, https://www.in.gov/fssa/ompp/files/2018-5-24_GTW_Overview_MAC.pdf .

[42] "About: Next Level Jobs [Indiana]," State of Indiana, no date (accessed August 17, 2018), https://www.nextleveljobs.org/About.

Even so, the state's evaluation reported that HIP stakeholders and HIP enrollees felt that as of mid-2019 demonstration enrollees "have some understanding of their community engagement requirements, including reporting status and consequences of non-compliance."[43]

While Gateway to Work shifted to mandatory reporting in July 2019 as planned, Indiana announced that it was temporarily suspending reporting requirements for Gateway to Work owing to a lawsuit filed in federal court challenging Gateway to Work and other parts of HIP.[44] Until the matter is resolved, Indiana will not consider benefits suspension for failing to comply with Gateway to Work reporting requirements. Given these developments, it will be critical to monitor how Gateway to Work starts again and how consumers are educated about any program changes.

Tobacco user surcharge. In what state officials identified as an effort to mirror private insurance surcharges on smokers, under the 2018 demonstration renewal HIP 2.0 enrollees who use tobacco have 12 months of coverage in the program to stop using or face a 50 percent increase in their POWER Account contributions in the next plan year. In 2017, with 21.1 percent of Indiana adults reporting being smokers, the state has one of the highest smoking rates in the country, ranking 41st across the states.[45] As one state official commented, anything that "we can do to improve our smoking rate would be a good thing." At the same time, this same official said the state was not "excited about the stick" as a mechanism to reduce tobacco use but thought it was worth trying.

Initially, Indiana is relying on HIP 2.0 enrollees to self-report use of tobacco products, but the state eventually may consider using claims data to identify users. The state launched a postcard campaign in fall 2017 to encourage HIP 2.0 enrollees to call in to their MCE or to the state enrollment broker and attest to using tobacco in the hopes they will get connected to tobacco cessation programs during this baseline period. According to state officials, several hundred enrollees called in. Further, Indiana added questions on tobacco use on the HIP 2.0 application as another way to identify smokers. In 2018, the state reported that 36 percent of HIP 2.0 enrollees used tobacco.[46] In a related effort, MCEs have recently included a notice of a future tobacco surcharge on applicable enrollees' monthly invoices. State officials explained that the goal of the surcharge is to "encourage people to stop smoking and see if individuals take advantage of tobacco cessation programs," which MCEs have been offering HIP 2.0 enrollees prior to the surcharge taking effect.

The tobacco user surcharge was implemented January 2019. While Indiana intends to do further work on analyzing the surcharge, the state's interim evaluation report found that MCEs applied the surcharge to 2,662 HIP enrollees in 2019, which accounts for less than 1 percent of HIP enrollees in 2018.[47] According to the report, MCEs face considerable challenges in collecting quality information on enrollee tobacco use over time, largely due to underreporting, to base their surcharge decision. At the same

[43] "Healthy Indiana Plan Interim Evaluation Report," The Lewin Group, Inc., prepared for the Indiana Family and Social Services Administration, December 18, 2019, https://www.in.gov/fssa/hip/files/IN_HIP_Interim_Evaluation_Report_Final.pdf.

[44] "Gateway to Work Suspension Announcement," Indiana Family and Social Services Administration, October 31, 2019, https://www.in.gov/fssa/files/Gateway_to_Work_suspension_announcement.pdf

[45] "Smoking in the United States in 2017," *America's Health Rankings*, December 2017 (accessed August 17, 2018), https://www.americashealthrankings.org/explore/annual/measure/Smoking.

[46] "Healthy Indiana Plan: Hoosiers Enrolled," Indiana Family and Social Services Administration, February 2018 (accessed September 9, 2019), https://www.in.gov/fssa/hip/files/HIP-InfoGraphic-02-01.PDF.

[47] The Lewin Group. *Health Indiana Plan Interim Evaluation Report: Final for CMS Review*. December, 18, 2019 (accessed January 27, 2020), https://www.in.gov/fssa/hip/files/IN_HIP_Interim_Evaluation_Report_Final.pdf.

time, the state's evaluation report indicates that HIP enrollees are aware of the tobacco surcharge and available cessation services.

Expanded substance use disorder (SUD) services. Like many states, Indiana (which ranks 15th among states in overdose fatalities)[48] is dealing with an opioid crisis. To address the issue, Indiana sought to expand SUD services in HIP 2.0 and in the state's overall Medicaid program, including detoxification services and addiction recovery management services, and to waive the payment exclusion for Institutions for Mental Disease (IMD) for short-term SUD treatment.[49] Given the existing challenges Indiana faces with SUD, interviewees universally viewed these new services as significant and thought they "would not have been possible without the [demonstration] waiver," as one interviewee noted. According to the state, the expansion of SUD services went live on March 1, 2018. As part of that launch, Indiana established a statewide referral network, "Open Beds," to map out available inpatient beds and to connect patients to substance-use treatment facilities in real time. As one state official observed, given that under HIP 2.0 Medicaid has become a "good payer, beds that were traditionally reserved for private pay [patients] suddenly become available for Medicaid patients … we now have not only capacity but connectivity."

Change in redetermination policies. The demonstration renewal also called for a change in HIP 2.0 redetermination policies under which enrollees who failed to comply or complete their annual redetermination of coverage in a timely manner run the risk of being "locked out" of coverage for up to 3 months.[50] Further, unlike lockouts for failure to pay POWER Account contributions, which only apply to enrollees with incomes above 100 percent of FPL, lockouts for failing to comply with or complete redetermination was to apply to all HIP 2.0 enrollees, including those with incomes under 100 percent of FPL. Previously, enrollees who failed to complete redetermination could regain HIP 2.0 coverage once they complied.

One consumer advocate described the change in HIP 2.0 redetermination policy as the "sleeping giant" in the demonstration renewal because of how it might affect HIP 2.0 enrollment. Though the state said it had not estimated how many enrollees would be affected, one state official guessed that less than 10 percent overall would experience a lockout, which is consistent with HIP 2.0 statistics in the third year of the demonstration, which spanned February 2017 to January 2018. In that year, 50,515 enrollees left HIP 2.0 because they failed to comply with or complete redetermination, accounting for 9.1 percent of the 556,325 people ever enrolled in the program during the third year of the demonstration.[51]

While the demonstration renewal allowed for the change in redetermination policy to take effect February 2018, Indiana paused implementation of the policy change in October 2018 to enable the state

[48] "Drug Overdose Mortality by State: 2016," US Centers for Disease Control and Prevention, January 10, 2018 (accessed August 17, 2018), https://www.cdc.gov/nchs/pressroom/sosmap/drug_poisoning_mortality/drug_poisoning.htm.

[49] As contained in the recently approved HIP 2.0 waiver renewal, the Institution for Mental Diseases exclusion expanded the scope of treatment options for SUD for Medicaid program beneficiaries in Indiana. See Demetrios Kouzoukas, letter to Allison Taylor, February 1, 2018, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-cms-amend-appvl-02012018.pdf.

[50] If an enrollee fails to comply, he or she is disenrolled but has a "grace period" of 3 months to submit documentation and reenroll without a new application. Failure to comply after the grace period results in a hard lockout of 3 months. Therefore, someone who does not comply would experience a 6-month disenrollment period before they can reapply.

[51] State of Indiana, *Healthy Indiana Plan Demonstration Section 1115 Annual Report: Demonstration Year 3* (Indianapolis, IN: State of Indiana, 2018), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-annl-rpt-feb-jan-2018-043018.pdf. Indiana has not reported redetermination statistics since the third year of the demonstration.

to continue its efforts to enhance its eligibility processes and systems.[52] As of December 2018, the policy had not been implemented.

Expanded enrollee education. As discussed earlier, many interviewees commented that enrollees had only the most basic understanding of how HIP 2.0 worked, including how POWER Accounts work, and that communication about the details of the program from the state and from MCEs was limited and needed to be improved.[53] Enrollees in focus groups echoed this sentiment with their confusion about many of the elements of HIP 2.0. Indeed, state officials said that their own research reveals the need to improve enrollee education. As one state official said, people "know what the Healthy Indiana Plan is … how to access it, [how] it gets you health care, etc. What they don't know and what the next step is [after enrollment]—they don't understand." To address the issue, at the time of our site visit Indiana was to launch a new media campaign for HIP 2.0 later in 2018 that shifts the message from one of program awareness to member education. As one official said, the campaign is to help familiarize enrollees with "certain terms" in HIP 2.0 and "some of those things that are tricky." Although the state is taking steps to further educate HIP 2.0 enrollees, nearly all the contact with enrollees and education about HIP 2.0 is done by the MCEs. "They [the MCEs] are the boots on the ground," as a consumer advocate put it. Thus, how well state efforts will improve enrollees' understanding of how HIP 2.0 works is not yet clear, but all interviewees agreed that doing so is important. Since our June 2018 site visit, the state released several videos on topics ranging from HIP POWER Accounts to health plan selection to tobacco cessation program.

[52] State of Indiana, *Healthy Indiana Plan Demonstration Section 1115 Annual Report: Demonstration Year 4* (Indianapolis, IN: State of Indiana, 2019), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-annl-rpt-dy4-20190411.pdf.

[53] The state's interim evaluation report on the 2018 demonstration renewal echoes the continued need to support enrollee understanding about HIP 2.0, particularly as demonstration policies change. See "Healthy Indiana Plan Interim Evaluation Report," The Lewin Group, Inc., prepared for the Indiana Family and Social Services Administration, December 18, 2019, https://www.in.gov/fssa/hip/files/IN_HIP_Interim_Evaluation_Report_Final.pdf.

III. Assessment of the Impacts of HIP 2.0 through 2018

The qualitative analysis established that Indiana was successful at implementing the core components of HIP 2.0, including launching a major Medicaid coverage expansion. The goal of the impact analysis is to assess the extent to which HIP 2.0 has caused the changes in enrollee outcomes that were intended under the demonstration. Specifically, the impact analysis assesses whether HIP 2.0 led to gains in health insurance coverage, health care access and affordability, health behaviors, and health status relative to what would have been expected under the other policy choices available to Indiana—not expanding Medicaid, expanding Medicaid without a demonstration, and expanding Medicaid with a different demonstration. We would expect the changes introduced under HIP 2.0 to first affect health insurance coverage, with any gains in coverage translating into improvements in health care access and affordability over time, followed later still by improvements in health behaviors and health status as access improves. We would also expect the impacts on the latter outcomes to be smaller than any impacts on health insurance coverage as uninsured individuals generally have some access to health care, including, in some cases, low-cost health care. Finally, we would expect the impacts of HIP 2.0 relative to the states that did not expand Medicaid to be larger than the impacts relative to states that expanded Medicaid (without a demonstration or with a different demonstration).

In assessing HIP 2.0, the impact analysis relied on a quasi-experimental difference-in-differences (DD) evaluation design and data over time from the ACS and the BRFSS that compares changes over time for childless adults in Indiana to changes for similar childless adults in similar comparison states. This report provides estimates of the impacts of HIP 2.0 on changes in health care access or affordability, health behaviors, or health status through 2018, which is the third full year of operation for HIP 2.0 and the first year under the 2018 demonstration renewal.

To preview our findings of the impacts of HIP 2.0 through 2018, HIP 2.0 led to a significant increase in health insurance coverage in Indiana. Between 2011-13 and 2017-18, health insurance coverage for childless adults increased significantly more in Indiana than what would have been expected if Indiana had not expanded Medicaid. Further, under HIP 2.0 Indiana achieved comparable gains in coverage in 2017-18 as would have been expected if Indiana had expanded Medicaid without a demonstration or with a different demonstration. There is limited evidence of any impacts of HIP 2.0 on health care access and affordability, health behaviors, or health status. The significant differences that we do find are consistent with somewhat greater access to routine check-ups in Indiana relative to states that did not expand Medicaid and somewhat more unmet need for doctor care due to costs in Indiana relative to states that expanded Medicaid with a different demonstration.

While these findings point to successes under HIP 2.0, the impact analysis has several limitations. Most importantly, we rely on quasi-experimental methods, which compare changes over time between Indiana and similar states that provide the counterfactual for what would have happened in Indiana in the absence of HIP 2.0. Because it is not possible to identify states that match Indiana across all dimensions (e.g., demographic, social, economic, health, and political context), any differences identified in the comparisons between Indiana and the comparison states may reflect those factors as well as differences in Medicaid expansion strategies. Further, because we could not identify any other states that were similar to Indiana on baseline Medicaid policies with respect to parents, the impact analysis focuses on childless adults. In addition, the impact analysis is limited to national survey data from the ACS (for health insurance coverage) and the BRFSS (for the remaining outcomes), which means the impact analysis focuses on the overall impacts of HIP 2.0 for the outcomes available in those surveys. We do not have the data needed to disentangle the impacts of different components of HIP 2.0

nor do we have the data to look at outcomes beyond those available in the ACS and BRFSS, including additional measures of health care access (e.g., additional measures of preventive care use and ED visits). In general, we have more confidence in the estimates for health insurance coverage, which are based on the ACS, than the estimates for health care access and affordability, health behaviors, and health status, which are based on the smaller samples of the BRFSS. Further, because of limitations in the income data available in the BRFSS, we have more confidence in the BRFSS estimates for all childless adults than in the BRFSS estimates for low-income childless adults.

In the remainder of this chapter, we present the research questions that motivate the impact analysis, followed by a brief discussion of our data and methods, including limitations. We then present the results from the assessment of the impacts of HIP 2.0. More detailed information about the data and methods are available in Appendix C.

Research Questions

The impact analysis is organized around three research questions:

1. What are the impacts of Indiana's Medicaid expansion demonstration compared with not expanding Medicaid?
2. What are the impacts of Indiana's Medicaid expansion demonstration compared with expanding Medicaid without a demonstration?
3. What are the impacts of Indiana's Medicaid expansion demonstration compared with expanding Medicaid with a different demonstration?

We hypothesize that Indiana's alternative Medicaid expansion demonstration will lead to gains in health insurance coverage and other outcomes relative to not expanding Medicaid. In particular, given Indiana's strong focus on encouraging preventive care, we would expect the state to see gains in preventive care use over time relative to non-expansion states. We have more limited expectations regarding the impacts of Indiana's expansion demonstration relative to other strategies for expanding Medicaid. Given Indiana's emphasis on building a pathway to private health insurance coverage, we would expect a greater reliance on private coverage relative to Medicaid over time in Indiana than in the comparison states that expanded Medicaid without a similar focus on private coverage. Similarly, to the extent that people do not enroll in HIP 2.0 because of the required POWER Account contributions or are disenrolled and locked out of HIP coverage because of a failure to make those required contributions, we would expect smaller overall gains in coverage in Indiana relative to other states that expanded coverage without similar provisions.

As noted above, we expect the changes introduced under the HIP 2.0 demonstration to first affect health insurance coverage, with any gains in coverage translating into improvements in health care access and affordability over time, followed later still by improvements in health behaviors and health status as access improves. We would also expect the impacts on the latter outcomes to be smaller than any impacts on health insurance coverage as uninsured individuals generally have access to some health care.

Overview of Data, Methods, and Limitations

We provide a brief overview of data, methods, and limitations here. More detailed information is available in Appendix C.

Data

We used data from the ACS and BRFSS from 2011 to 2018. We define the pre-HIP 2.0 period as 2011 to 2013.[54] This provides a 3-year baseline period before implementation of ACA's Medicaid expansion and the rollout of the Marketplace began in 2014. In this report, we exclude 2014 and 2015 from the study period as transition years associated with the Marketplace rollout and Medicaid expansions in many states (2014) and the rollout of HIP 2.0 in Indiana (2015). We focus on 2017-18 as the post-HIP 2.0 period in this report. We focus on the 2017-18 period rather than 2018 alone to maximize the available sample size for the most recent postperiod. We provide estimates based on the 2017 and 2018 postperiods in Appendix D. In general, the impact estimates for the 2017 and 2018 postperiods are similar to the estimates for the 2017-18 postperiod, although, as would be expected with the smaller sample sizes for 2017 and 2018 alone, there are some differences in statistical significance.

We also provide estimates in Appendix D that define the postperiod based on the timing of the implementation of the Medicaid expansion in Indiana and the comparison states rather than calendar years. Specifically, we compare the third and fourth years after the implementation of Indiana's demonstration, which is 2017-18 for Indiana and 2016-17 for the comparison states. In general, the impact estimates based on the third and fourth years after implementation as the postperiod are similar to the estimates based on the 2017-18 postperiod.

We focus on the impacts of HIP 2.0 for childless adults ages 21 to 64. Childless adults (i.e., noncustodial parents and adults without dependent children) is the group for whom the policy changes under HIP 2.0 were greatest and where we can identify similar comparison states to serve as the counterfactual for what would have happened in Indiana under alternative policy decisions. We focus on childless adults ages 21 to 64 since some 18 to 20-year-olds are subject to different Medicaid and HIP 2.0 policies. We also provide estimates for the low-income population targeted by the Medicaid expansion: childless adults with family income at or below 138 percent of FPL. However, identifying those income groups in the BRFSS involves some degree of measurement error and sample sizes for the low-income population in the BRFSS are often small, rendering those impact estimates less precise than estimates based on the ACS. Issues with the BRFSS income measures are discussed in Appendix C.

We focused on measures of health insurance coverage from the ACS and measures of health care access and affordability, health behaviors, and health status from the BRFSS. The outcome measures include:

[54] We explored two alternate pre–HIP 2.0 periods. First, given the potential for spillover effects on Medicaid enrollment from the first Marketplace open enrollment period in 2013, we also considered a pre–HIP 2.0 period of 2011–12. Second, because 2011 was the first year of a major redesign of the BRFSS, a key data source for the evaluation, we considered a pre-HIP period of 2012–13. As the choice of preperiod had little effect on the findings, we used the preperiod that provided the largest sample size: 2011-2013.

- Health insurance coverage at the time of the survey, including type of health insurance coverage (Medicaid or other public coverage, employer-sponsored insurance, or direct purchase or other coverage)[55]
- Health care access and affordability
    - Had a personal doctor at the time of the survey
    - Had a routine check-up in the past 12 months
    - Had a flu vaccine in the past 12 months
    - No unmet need for doctor care due to costs in the past 12 months[56]
- Health behaviors and health status
    - Smoker at the time of the survey
    - Smoker who did not try to quit in the past 12 months
    - Health status was fair or poor at the time of the survey
    - Physical health was not good in the past 30 days (defined as not good for at least one day)
    - Mental health was not good in the past 30 days (defined as not good for at least one day)
    - Had an activity limitation due to health issues at the time of the survey

Although we report on type of health insurance coverage, evidence suggests that some respondents misreport their coverage type in surveys, particularly between Medicaid or other public coverage and direct purchase.[57,58,59] In the case of Indiana's Medicaid expansion demonstration, it would not be surprising if some respondents reported coverage obtained under the demonstration as direct purchase rather than Medicaid given HIP 2.0's reliance on coverage through MCEs and POWER Account contributions.

Because the ACS and BRFSS are both fielded continuously over the year (with roughly one-twelfth of the sample interviewed in each month), the estimates for outcomes measured at the time of the survey (e.g., a respondent's health insurance coverage, whether he or she has a personal doctor, and his or her health status) are averages for the calendar year. By contrast, the estimates for outcomes that have a 12-month look-back period (e.g., whether the respondent had a routine check-up in the past 12 months and whether the respondent received a flu vaccine in the past 12 months) will include periods from the previous calendar year. For adults interviewed in July 2018, for example, the past 12 months would include August through December 2017 and January through July 2018. Consequently, the look-back period in the BRFSS for those measures exacerbates the lag between the likely impacts of Indiana's demonstration (including the changes introduced under the 2018 demonstration renewal) on health care access and affordability, health behaviors, and health status (which are expected to be on a slower

[55] Because some respondents report multiple types of health insurance coverage, we imposed a hierarchy on coverage type in presenting the results based on Medicaid or other public coverage first, employer-sponsored insurance second, and direct purchase or other coverage third.

[56] We frame this as a "positive" outcome so that higher values indicated better access and affordability across all the measures examined.

[57] Call, KT, ME Davern, JA Klerman, and Victoria Lynch. "Comparing Errors in Medicaid Reporting across Surveys: Evidence to Date." *Health Services Research* 48, no. 2pt1 (2013): 652-664.

[58] Boudreaux, MH, KT Call, J Turner, B Fried, and B O'Hara. "Measurement error in public health insurance reporting in the American Community Survey: evidence from record linkage." *Health Services Research* 50, no. 6 (2015): 1973-1995.

[59] Noon, JM, LE Fernandez, and SR Porter. "Response error and the Medicaid undercount in the current population survey." *Health Services Research* 54, no. 1 (2016): 34-43.

path than any impacts on health insurance coverage) and the ability to detect those lagged impacts with the available data, which are limited to 2018 in this report.

Finally, while the BRFSS design calls for continuous fielding of the survey over the year, in conducting the analysis of the 2017-18 data we discovered that a number of comparison states have gaps in the months in which the survey was fielded, with the gaps more frequent in 2017-18 than in earlier years.[60] While the gaps in fielding are not expected to have a significant effect on most measures, they can have an impact on seasonal measures, including receipt of a flu vaccine. We would expect states with gaps in data collection in winter months to underestimate receipt of flu vaccines (by surveying more of their sample in the summer when they are less likely to remember having had a flu vaccine in the prior year), while states with gaps in data collection in summer months would tend to overestimate receipt of flu vaccine (by surveying more of their sample in the winter when they are more likely to have had a recent flu vaccine). Because of this data limitation, the analysis of the receipt of flu vaccine was limited to the states that had no gaps or only a single month gap in fielding over any of the study years.

Methods

The impacts of Indiana's Medicaid expansion demonstration are estimated using a quasi-experimental difference-in-differences (DD) framework, meaning changes over time in Indiana are compared with changes over time in comparison groups. The comparison groups provide an estimate of the counterfactual for what would have happened in Indiana absent HIP 2.0. The empirical model for the DD analysis can be written as

$$Y_{ist} = \beta_1 \text{INDIANA}_s + \beta_2 \text{POST}_t + \beta_3 (\text{INDIANA}_s * \text{POST}_t) + \boldsymbol{X}_i \beta_4 + \varepsilon_{ist}$$

Where Y is the outcome of interest for individual i in state s and time t; INDIANA takes the value one for individuals from Indiana and zero for individuals in the comparison group; POST is a dummy for the post-HIP 2.0 period relative to the pre-HIP 2.0 period; and X is a vector of individual and family characteristics. β_3, the coefficient on the interaction term between INDIANA and POST, provides the DD estimates of the impact of Indiana's Medicaid expansion on the outcome in the post-HIP 2.0 period.

Defining the comparison groups. As noted, we consider three counterfactuals for Indiana's Medicaid expansion demonstration: (1) not expanding Medicaid, (2) expanding Medicaid without a demonstration, and (3) expanding Medicaid with a different demonstration. We describe in detail the process to select the states to be included in each comparison group in Appendix C. We were not able to identify appropriate comparison states for parents in Indiana and so focus on impact estimates for childless adults. Table III.1 identifies the group of best comparison states for childless adults and the single-best comparison state from among each group of best comparison states. We focus on impact estimates using the group of best comparison states, but also report on impact estimates based on the single-best comparison state, as well as each of the comparison states within the group of best comparison states, since there is not a definitive approach for identifying an appropriate counterfactual to estimate the impacts of HIP 2.0. Given our inability to control for all the potential differences between Indiana and the comparison states that could confound the impact estimates, we have more

[60] For example, four of the comparison states in Table III.1 had gaps in fielding in 2011-2013, two had gaps in 2016, and eight had gaps in 2017-18. Altogether, 11 of the comparison states had gaps of a month or more over the study period. For information on the gaps in 2018, see, Centers for Disease Control and Prevention. "The Behavioral Risk Factor Surveillance System: Comparability of Data BRFSS 2018." (2019).

confidence in estimates that are consistent across multiple comparison states and groups of comparison states.

Table III.1: Comparison States for Childless Adults Ages 21 to 64 in Indiana

	Group of Best Comparison States	Single-best Comparison State
Similar states that did not expand Medicaid	Alabama (AL) Florida (FL) Kansas (KS) Mississippi (MS) Nebraska (NE) South Carolina (SC) South Dakota (SD) Texas (TX)	SC
Similar states that expanded Medicaid without a demonstration	Colorado (CO) Kentucky (KY) North Dakota (ND) Ohio (OH) Pennsylvania (PA)	OH
Similar states that expanded Medicaid with a different demonstration	Michigan (MI) New Hampshire (NH)	MI

As shown in Table III.1, the group of best comparison states includes eight states that did not expand Medicaid, five states that expanded Medicaid without a demonstration, and two states that expanded Medicaid with a different demonstration. The two states in that last group are New Hampshire, which focused on expanding private coverage through the Marketplace using premium assistance, and Michigan, which implemented a program similar to Indiana's (with premium contributions through a version of a health savings account and a wellness program) but without disenrollment for failing to make the required contributions.

We created the comparison groups for childless adults in the group of best comparison states, the single-best comparison state, and for each of the remaining states in the group of best comparison states using propensity score weighting, as discussed in Appendix C. Propensity score models identify the childless adults in each comparison state (or group of comparison states) who are most similar to the childless adults in Indiana. By using the propensity scores to create inverse probability weights, adults in the comparison states who were more similar to adults in Indiana received larger weights while those who were less similar to Indiana adults received lower weights.

Estimation approach. All the outcomes examined here are binary outcomes—which means their value can be either one or zero. For simplicity in comparing across the outcomes, we estimated the DD models using linear probability models,[61] controlling for the individual and family characteristics from the propensity score models as an additional adjustment for differences between childless adults in

[61] Linear probability models generally provide reliable estimates over average effects. See JD Angrist and JS Pischke, *Mostly Harmless Econometrics: An Empiricist's Companion* (Princeton, NJ: Princeton University Press, 2008).

Indiana and the comparison states. For the BRFSS, where we have additional data on elements of survey design, we also controlled for survey month and whether the respondent was a member of the cell phone sample in the BRFSS.[62] The analyses using the ACS and BRFSS were conducted using Stata version 15.1.[63] All estimates using the BRFSS and ACS were weighted and used Stata's "svy" command to control for the complex designs of the surveys. We assessed the robustness of our findings to an alternate weighting (using ebalance rather than propensity score weighting) and alternative estimation strategies (using logit and probit regression rather than linear probability models). Since the alternate approach to propensity score reweighting and the alternate estimation methods had little effect on the DD estimates, we focus on the results based on the linear probability models using propensity score reweighting in this report.

The estimates from the DD models are based on two-tailed hypothesis tests in which we reject the null hypothesis of no difference between Indiana and the comparison groups if the likelihood of the observed data under the null hypotheses is low. We report on statistical significance at the 10, 5 and 1 percent levels. When multiple hypotheses are tested (as is the case here), the likelihood of incorrectly rejecting a null hypothesis of no difference between Indiana and the comparison group (i.e., making a Type I error) increases. To address this issue, we are cautious about interpreting isolated findings of significance (e.g., a single significant estimate on access to care among multiple access outcomes) as evidence of an impact, particularly when the statistical significance level is relatively low. We have more confidence when our findings are consistent (e.g., all positive or all negative and statistically significant across several related measures and/or comparison groups).

Limitations

The impact analysis has several limitations. These include an inability to estimate impacts for the full HIP 2.0 target population and an inability to disentangle the impacts of different components of HIP 2.0. In addition, because we rely on quasi-experimental methods, our impact estimates likely incorporate some omitted variable bias because, absent random assignment, the potential for unmeasured differences between Indiana and the comparison groups persists. To reduce the potential for omitted variable bias, we include a rich array of measures in both the propensity score reweighting and in the DD models. We also test the sensitivity of our estimates of HIP 2.0 impacts using multiple comparison groups.

Further, the federal surveys, like all surveys, are subject to measurement error, including reporting error by respondents. This is particularly true for the household income measure in the BRFSS relative to the income measures in the ACS. Thus, we have more confidence in the measures of family income relative to FPL in the ACS than in the BRFSS. We also have more confidence in the estimates from the ACS because it provides much larger sample sizes than the BRFSS. Because of the ACS's larger samples, we are better able to detect small changes in Indiana relative to the comparison groups for measures of health insurance coverage than for the remaining outcomes examined.

As noted above, gaps in the fielding of the BRFSS in some states introduced measurement error in the measure for receipt of a flu vaccine, which is a seasonal measure. Thus, we have more confidence in

[62] As noted above, the BRFSS conducts interviews with individuals drawn from landline and cell phone samples. Because there are differences across the two samples in how the respondent is selected (the landline sample selects a random adult from among all adults in the household while the cell phone sample respondent is the individual who answers the cell phone) and in some of the questions asked of the respondents, we controlled for the survey sample in the analysis.

[63] StataCorp, *Stata Statistical Software: Release 15* (College Station, TX: StataCorp LLC, 2017).

estimates based on states that do not have gaps in the fielding of the BRFSS in any of the study years. The states without gaps include Indiana, four of the eight comparison states that did not expand Medicaid (Alabama, Mississippi, Nebraska, and South Dakota), and one of the two comparison states that expanded Medicaid with a different demonstration (Michigan). All five of the states that expanded Medicaid without a demonstration had gaps in the fielding of the BRFSS over the study period; however, Ohio and Kentucky were limited to gaps of only 1 month in any given year (March 2013 and November 2017 for Ohio, and November 2017 for Kentucky). We focus on these comparison states in estimating the impacts of HIP 2.0 on the receipt of flu vaccines over the past 12 months.

Finally, as noted, the impact estimates are based on data through 2018 and so will not capture the full effects of the changes introduced under HIP 2.0 in 2018 as part of the demonstration renewal. This is particularly true for effects on health care access and affordability, health behaviors, and health status, which will likely take longer to be influenced by HIP 2.0 than changes in health insurance coverage. The delay in impacts on those outcomes is further complicated because many of them rely on variables with a 12-month look-back period in the BRFSS.

Results

Simple Differences Over Time

Table III.2 provides simple differences in the study outcomes for childless adults ages 21 to 64 in Indiana between 2011-13 (preperiod) and 2017-18 (postperiod). As shown, we see significant gains in health insurance coverage for childless adults in 2017-18 relative to the preperiod (up 9.9 percentage points, p<.01), as well as significant gains in health care access and affordability. The latter includes significant increases in the shares of childless adults with a routine check-up in the past 12 months (up 5.2 percentage points, p<.01) and the share reporting they had no unmet need for doctor care due to costs in the past 12 months (up 2.3 percentage points, p<.01).

Findings for the measures of health behaviors and health status were somewhat mixed. We find a significant reduction in the share of Indiana childless adults who were smoking at the time of the survey and the share who had not tried to quit smoking in the past 12 months, but significant increases in the shares reporting fair or poor health, mental health issues, and an activity limitation due to health at the time of the survey. These findings suggest an improvement in health behaviors but a worsening of health outcomes over time in Indiana.

In the remainder of this section, we present DD models to assess the changes over time for childless adults under Indiana's HIP 2.0 *relative* to states that did not expand Medicaid, expanded Medicaid without a demonstration, and expanded Medicaid with a different demonstration, respectively. Unlike the simple differences in study outcomes over time, the DD models provide estimates of changes in the study outcomes that were likely caused by the HIP 2.0 demonstration.

Table III.2: Changes in Health Insurance Coverage, Health Care Access and Affordability, and Health Behaviors and Health Status for Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017-18 (postperiod)

	2011-13	2017-18	Difference
Health insurance coverage (%)			
Had health insurance coverage at the time of the survey	78.8	88.7	9.9***
Type of coverage			
Medicaid or other public coverage	10.9	15.7	4.8***
Employer-sponsored insurance	62.1	65.4	3.3***
Direct purchase or other coverage	5.8	7.6	1.8***
Sample size	68,922	46,403	
Health care access and affordability (%)			
Had a personal doctor at the time of the survey	80.3	79.7	-0.7
Had a routine checkup in past 12 months	63.6	68.9	5.2***
Received flu vaccine in past 12 months	32.6	32.2	-0.4
No unmet need for doctor care due to costs in past 12 months	85.5	87.8	2.3***
Sample size	11,017	7,812	
Health behaviors and health status (%)			
Smoker at the time of the survey	25.3	22.8	-2.5***
Smoker who did not try to quit in past 12 months	11.9	10.1	-1.8***
Health status was fair or poor at the time of the survey	16.4	18.1	1.7**
Physical health was not good in past 30 days	35.1	35.6	0.4
Mental health was not good in past 30 days	36.7	39.4	2.7***
Had an activity limitation due to health at the time of the survey	21.5	25.0	3.5***
Sample size	11,017	7,812	

Sources: Health insurance coverage: 2011-13 and 2017-18 American Community Survey (ACS); Health care access and affordability, health behaviors, and health: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS).
/**/** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Childless Adults

Childless adults in Indiana experienced significant gains in health insurance coverage between 2011-13 and 2017-18 relative to the changes for childless adults in similar comparison states that did not expand Medicaid (Table III.3). Under HIP 2.0, health insurance coverage for childless adults increased 3.6 percentage points ($p<.01$) relative to similar adults in the group of best comparison states that did not expand Medicaid.

Table III.3: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017-18 (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Compared to Not Expanding Medicaid				
Had health insurance coverage at the time of the survey	3.6***	2.9, 4.4	11.3***	9.7, 13.0
Type of coverage				
Medicaid or other public coverage	4.1***	3.5, 4.7	11.0***	9.4, 12.5
Employer-sponsored insurance	-0.1	-1.0, 0.7	1.3	-0.3, 2.8
Direct purchase or other coverage	-0.3	-0.9, 0.2	-0.9	-2.0, 0.2
Sample size	1,205,419		338,774	
Compared to Expanding Medicaid without a Demonstration				
Had health insurance coverage at the time of the survey	-0.1	-0.9, 0.7	0.4	-1.4, 2.1
Type of coverage				
Medicaid or other public coverage	-2.6***	-3.2, -2.0	-6.0***	-7.7, -4.3
Employer-sponsored insurance	1.4***	0.5, 2.3	3.3***	1.7, 5.0
Direct purchase or other coverage	1.2***	0.6, 1.8	3.0***	1.9, 4.1
Sample size	743,165		188,029	
Compared to Expanding Medicaid with a Different Demonstration				
Had health insurance coverage at the time of the survey	-1.3***	-2.3, -0.4	-1.1	-3.1, 1.0
Type of coverage				
Medicaid or other public coverage	-2.3***	-3.1, -1.5	-4.9***	-6.9, -2.8
Employer-sponsored insurance	1.1**	0.1, 2.2	2.4**	0.5, 4.4
Direct purchase or other coverage	-0.2	-0.8, 0.5	1.4**	0.2, 2.6
Sample size	319,090		84,794	

Source: 2011-13 and 2017-18 American Community Survey (ACS). **Notes:** Low-income is defined as family income at or below 138 percent of the FPL. Best comparison states for not expanding Medicaid are AL, FL, KS, MS, NE, SC, SD, and TX. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

As would be expected given the focus of HIP 2.0 on low-income adults, the relative gains in coverage under HIP 2.0 were larger for low-income childless adults (defined as adults with family income at or below 138 percent of FPL), at 11.3 percentage points (p<.01). Similar patterns are observed if we focus on 2017 alone (Table D.1) and 2018 alone (Table D.2) as the postperiod for the impact estimates, with the relative gains in coverage in Indiana at 3.3 percentage points for all adults and 11.2 percentage points for low-income childless adults (both p<.01) in 2017 and 3.9 percentage points for all adults and 11.5 percentage points for low-income childless adults (both p<.01) in 2018.

By contrast, when compared with childless adults in similar states that expanded Medicaid without a demonstration, there are no significant differences between the gain in health insurance coverage for childless adults in Indiana and the gains for childless adults in the group of best comparison states that expanded Medicaid without a demonstration between 2011-13 and 2017-18 (Table III.3). There are also no significant differences between Indiana and the comparison states if we focus on 2017 alone (Table D.1) or 2018 alone (Table D.2) as the postperiod or if we define the postperiod as the third and fourth years after implementation of Indiana's demonstration rather than calendar years (Table D.3). Thus, the gains in health insurance coverage under HIP 2.0 are similar to the gains that would have been expected had Indiana pursued the Medicaid expansion without a demonstration.

The findings relative to the comparison states that expanded Medicaid with a different demonstration are more mixed, with the gains in health insurance coverage in Indiana lower than the comparison states for all childless adults (1.3 percentage points lower, p<.01) but not significantly different than the comparison states for low-income childless adults between 2011-13 and 2017-18 (Table III.3). A similar pattern is observed if we define the postperiod as 2017 alone (Table D.1) or based on the third and fourth years after implementation (Table D.3). However, there are no significant differences for all childless adults or low-income childless adults if the postperiod is defined as 2018 alone (Table D.2). Thus, it appears that the gains in health insurance coverage under HIP 2.0 are the same or somewhat smaller than the gains that would have been expected had Indiana pursued the Medicaid expansion with a different demonstration.

When we focus on changes in type of health insurance coverage, we find significant differences in the changes in the type of health insurance coverage in Indiana compared to states that expanded Medicaid with a demonstration and compared to those that expanded Medicaid without a demonstration (Table III.3). In general, Indiana saw significantly smaller gains in Medicaid or other public coverage and significantly larger gains in private coverage for all childless adults and for low-income childless adults relative to the comparison states that expanded Medicaid (without a demonstration or with a different demonstration). These same general patterns are also observed for alternate definitions of the postperiod based on 2017 alone (Table D.1), based on 2018 alone (Table D.2) or based on the third and fourth years after implementation (Table D.3). This shift toward private coverage is consistent with Indiana's focus on replicating elements of private market coverage under its Medicaid expansion demonstration to facilitate transitions to private coverage as well as consistent with the enrollee perspective that HIP 2.0 is not Medicaid, which may have led some HIP 2.0 survey respondents to report HIP 2.0 as direct purchase coverage rather than Medicaid.[64]

[64] Adults in Indiana with coverage under HIP 2.0 may be more likely than adults in states that expanded Medicaid without a demonstration to report their coverage as private coverage. Focus group participants in Indiana made a clear distinction between Medicaid, which was described as welfare, and HIP 2.0, which was described as coverage they paid for through their monthly POWER contribution.

State-specific impact estimates. As a check on the impact estimates for health insurance coverage using the groups of best comparison states for 2017-18, we also estimated the impacts of HIP 2.0 relative to the single-best comparison state and to each of the remaining states in the groups of best comparison states. Table III.4 summarizes the results from that analysis, with the more detailed results underlying the summary provided in Table D.4. As shown in Table III.4, there were significantly larger coverage gains in Indiana in 2017-2018 relative to the single-best comparison state (South Carolina) and relative to each of the seven remaining comparison states that did not expand Medicaid. Thus, all of the evidence points to significant gains in coverage under HIP 2.0 relative to not expanding Medicaid.

In contrast, the results are mixed when we compare Indiana with the single-best comparison state and each of the remaining states in the group of best comparison states that expanded Medicaid without a demonstration. Compared to the states that expanded Medicaid without a demonstration, there was no difference in the change in health insurance coverage in Indiana relative to the single-best comparison state (Ohio) but smaller relative gains than in two other comparison states (Colorado and Kentucky) and larger relative gains than in the two remaining comparison states (North Dakota and Pennsylvania). A mixed pattern of positive and negative relative impacts is also observed if we define the postperiod based on the third and fourth years after implementation of Indiana's demonstration rather than calendar years (Table D.5).

Finally, compared to each of the states that expanded Medicaid with a different demonstration, Indiana had a smaller gain in coverage than the single-best comparison state (Michigan) and the same gain in coverage as the remaining comparison state (New Hampshire) in 2017-2018 (Table III.4). That pattern is also observed if we defined the postperiod as the third and fourth years after implementation (Table D.5). Thus, the relative impact of Indiana's demonstration on health insurance coverage is within the range of impacts observed for similar states that expanded Medicaid without a demonstration or with a different demonstration.

Table III.4: Summary of Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017-18 (postperiod) for Each of the Best Comparison States

	Group of Best Comparison States that Did Not Expand Medicaid								Group of Best Comparison States that Expanded Medicaid Without a Demonstration					Group of Best Comparison States that Expanded Medicaid with a Different Demonstration	
	SC^	AL	FL	KS	MS	NE	SD	TX	OH^	CO	KY	ND	PA	MI^	NH
Had health insurance coverage at the time of the survey	+***	+***	+***	+***	+***	+***	+***	+***	-	-***	-***	+**	+***	-***	-
Type of coverage															
Medicaid or other public coverage	+***	+***	+***	+***	+***	+***	+***	+***	-***	-***	-***	+	-***	-***	-*
Employer-sponsored insurance	+	+	+*	-	+	-	-	-	+***	+	+***	+	+***	+***	+
Direct purchase or other coverage	-***	+**	-***	+	-	+	+	-**	+**	+***	+***	+*	+	+	-

Source: 2011-13 and 2017-18 American Community Survey (ACS). **Notes:** ^ indicates single-best comparison state within group of best comparison states; + indicates positive impact estimate relative to comparison state; - indicates negative impact estimate relative to comparison state. The detailed findings that underlie this table are provided in Table D.4. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Difference-in-Differences Estimates of Changes in Health Care Access and Affordability for Childless Adults

As discussed, we would expect any impacts of HIP 2.0 on health care access and affordability to be smaller than any impacts on health insurance coverage and to lag behind changes in health insurance coverage both because of the pathway from coverage to health care access and because of the 12-month look-back period for many of the health care access and affordability measures in the BRFSS. In addition, the smaller sample size of the BRFSS relative to the ACS will make it harder to detect small changes in health care access and affordability measures. Given those data limitations, we would not necessarily expect to see significant changes in health care access and affordability in Indiana between 2011-13 and 2017-18 relative to the comparison states for all childless adults or, given the smaller sample sizes, for low-income childless adults.

The findings in Table III.5 are generally consistent with that expectation, with few statistically significant differences in Indiana relative to not expanding Medicaid, to expanding Medicaid without a demonstration, or to expanding Medicaid with a different demonstration between 2011-13 and 2017-18. The few statistically significant differences that we do see suggest improvements in access to care relative to not expanding Medicaid and reductions in unmet need for doctor care due to costs relative to expanding Medicaid with a different demonstration. While the patterns of impact estimates do differ somewhat when we define the postperiod as 2017 alone (Table D.6), 2018 alone (Table D.7), or the third and fourth years after implementation of Indiana's demonstration (Table D.8), the patterns of significant findings there are also suggestive of some improved access to care relative to not expanding Medicaid and some improved affordability of care relative to expanding Medicaid with a different demonstration.

Table III.5: Difference-in-Differences Estimates for Changes in Health Care Access and Affordability for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017-18 (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Compared to Not Expanding Medicaid				
Had a personal doctor at the time of the survey	1.4	-0.3, 3.2	4.1 *	-0.0, 8.2
Had a routine checkup in past 12 months	1.4	-0.6, 3.5	5.7 **	1.1, 10.2
Received flu vaccine in past 12 months [a]	1.8	-0.5, 4.0	1.9	-2.9, 6.6
No unmet need for doctor care due to costs in past 12 months	0.5	-0.9, 1.9	1.6	-2.5, 5.6
Sample size	207,227		58,747	
Compared to Expanding Medicaid without a Demonstration				
Had a personal doctor at the time of the survey	1.1	-0.6, 2.9	1.1	-2.9, 5.2
Had a routine checkup in past 12 months	1.8	-0.3, 3.9	3.2	-2.2, 8.6
Received flu vaccine in past 12 months [a]	1.5	-0.9, 3.8	-1.7	-7.6, 4.2
No unmet need for doctor care due to costs in past 12 months	-0.2	-1.6, 1.3	-2.6	-6.4, 1.2
Sample size	123,978		32,836	
Compared to Expanding Medicaid with a Different Demonstration				
Had a personal doctor at the time of the survey	-1.2	-3.2, 0.8	-1.0	-5.7, 3.7
Had a routine checkup in past 12 months	-1.7	-4.1, 0.8	0.9	-4.2, 6.1
Received flu vaccine in past 12 months [a]	-0.7	-3.2, 1.9	-2.2	-8.6, 4.1
No unmet need for doctor care due to costs in past 12 months	-1.8 **	-3.5, -0.1	-2.8	-7.2, 1.5
Sample size	54,112		14,284	

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Low-income is defined as family income at or below 138 percent of the FPL. Low-income is imputed in the BRFSS. Best comparison states for not expanding Medicaid are AL, FL, KS, MS, NE, SC, SD, and TX. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. [a] Because of measurement error due to gaps in survey fielding in some states, the comparison groups for the analysis of the receipt of a flu vaccine are limited to AL, MS, NE and SD for the comparison to not expanding Medicaid, limited to OH and KY for the comparison to expanding Medicaid without a demonstration, and limited to MI for the comparison to expanding Medicaid with a different demonstration. For sample sizes pertaining to flu shot estimates, see Table D.16. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

State-specific impact estimates. We also estimated the impacts of HIP 2.0 relative to the single-best comparison state and to each of the remaining states in the groups of best comparison states as a check on the impact estimates for measures of health care access and affordability for 2017-18. Table III.6 summarizes those results, with the detailed findings reported in Table D.9. As would be expected given the few statistically significant differences between Indiana and the comparison states as a group, there are mixed findings across the individual comparison states. While the gains in Indiana are sometimes significantly larger or significantly smaller than the gains in individual comparisons states, for most measures across most comparison states the gains in Indiana are not significantly different from the gains in the comparison state. This pattern also holds if we define the postperiod as the third and fourth years after implementation (Table D.10).

Table III.6: Summary of Difference-in-Differences Estimates of Changes in Health Care Access and Affordability for Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017-18 (postperiod) for Each of the Best Comparison States

	Group of Best Comparison States that Did Not Expand Medicaid								Group of Best Comparison States that Expanded Medicaid without a Demonstration					Group of Best Comparison States that Expanded Medicaid with a Different Demonstration	
	SC^	AL	FL	KS	MS	NE	SD	TX	OH^	CO	KY	ND	PA	MI^	NH
Had a personal doctor at the time of the survey	+	+	+**	+**	+	+	+	+	+**	+	-	+**	+	-*	+
Had a routine checkup in past 12 months	-	+***	+	+***	+	-**	+	+*	+*	+	+	+	+	-**	-
Received flu vaccine in past 12 months [a]	NA	+	NA	NA	+	-*	+**	NA	+	NA	+*	NA	NA	-	NA
No unmet need for doctor care due to costs in past 12 months	+	+	+	+	-	+**	+	+	-*	+	-	+***	+	-**	-

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** ^ indicates single-best comparison state within group of best comparison states; + indicates positive impact estimate relative to comparison state; - indicates negative impact estimate relative to comparison state. The detailed findings that underlie this table are provided in Table D.12. For sample sizes, see Table D.16. NA is estimate not available. [a] Because of measurement error due to gaps in survey fielding in some states, the comparison groups for the analysis of the receipt of a flu vaccine are limited to AL, MS, NE and SD for the comparison to not expanding Medicaid, limited to OH and KY for the comparison to expanding Medicaid without a demonstration, and limited to MI for the comparison to expanding Medicaid with a different demonstration. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Difference-in-Differences Estimates of Changes in Health Behaviors and Health Status for Childless Adults

Given the impacts of Indiana's Medicaid expansion demonstration on health care access and affordability, we would not expect to see strong changes in health behaviors and health status in Indiana relative to the comparison states between 2011-13 and 2017-18. Consistent with that expectation, we find few significant differences in health behaviors or health status in Indiana relative to the comparison states that did not expand Medicaid, and no significant differences between Indiana and the comparison states that expanded Medicaid without a demonstration or with a different demonstration (Table III.7). The statistically significant differences in Indiana relative to the states that did not expand Medicaid all suggest poorer health outcomes in Indiana. Those patterns are similar when we define the postperiod as 2017 alone (Table D.11) or 2018 alone (Table D.12), albeit with fewer statistically significant differences for 2018 alone. By contrast, the estimates based on the third and fourth years after implementation of Indiana's demonstration rather than calendar year (Table D.13) suggest some poorer health outcomes in Indiana relative to both comparison states that expanded Medicaid without a demonstration and those that expanded Medicaid with a different demonstration. Overall, our findings suggest that the changes in health behaviors and health status in Indiana were the same or somewhat worse in Indiana than the comparison states.

State-specific impact estimates. We also estimated the impacts of HIP 2.0 relative to the single-best comparison state and to each of the remaining states in the groups of best comparison states as a check on our estimates based on the groups of best comparison states for measures of health behaviors and health status. Table III.8 summarizes those results, with the detailed findings underlying that summary provided in Table D.14. As shown in Table III.8, there were few significant differences between Indiana and the single-best comparison states that did not expand Medicaid (South Carolina), expanded Medicaid without a demonstration (Ohio), or expanded Medicaid with a different demonstration (Michigan). By contrast, the findings for Indiana relative to the remaining comparison states are more mixed, although there are few significant differences between Indiana and most of the comparison states. The two exceptions are Alabama and Florida, where Indiana had significantly worse changes in both health behaviors and health outcomes. As with the findings for the groups of best comparison states, when we compare the findings for 2017-18 (Table III.8) to the findings based on the third and fourth years after implementation of Indiana's demonstration rather than calendar years (Table D.15), we find more evidence of significant differences in Indiana relative to the comparison states that expanded Medicaid without a demonstration and those that expanded Medicaid with a different demonstration. Overall, the findings suggest that the changes in health behaviors were the same in Indiana relative to each of the comparison states while the changes in health status were the same or somewhat worse in Indiana relative to each of the comparison states.

Table III.7: Difference-in-Differences Estimates for Changes in Health Behaviors and Health Status for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017-18 (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% confidence Interval	Estimate	95% confidence Interval
Compared to Not Expanding Medicaid				
Smoker at the time of the survey	1.7 *	-0.1, 3.5	2.4	-1.6, 6.5
Smoker who did not try to quit in past 12 months	0.4	-1.0, 1.7	0.6	-2.9, 4.0
Health status was fair or poor at the time of the survey	1.9 ***	0.5, 3.4	3.8 **	0.2, 7.4
Physical health was not good in past 30 days	0.7	-1.3, 2.8	-0.1	-4.6, 4.5
Mental health was not good in past 30 days	1.0	-1.0, 3.1	-0.2	-4.9, 4.6
Had an activity limitation due to health at the time of the survey	2.9 ***	1.2, 4.7	2.9	-1.2, 6.9
Sample size	207,227		58,747	
Compared to Expanding Medicaid without a Demonstration				
Smoker at the time of the survey	1.3	-0.6, 3.1	1.3	-3.0, 5.7
Smoker who did not try to quit in past 12 months	0.2	-1.1, 1.6	-0.6	-4.1, 3.0
Health status was fair or poor at the time of the survey	1.2	-0.3, 2.7	2.5	-2.2, 7.2
Physical health was not good in past 30 days	0.4	-1.7, 2.5	1.2	-3.8, 6.1
Mental health was not good in past 30 days	0.1	-2.0, 2.2	0.3	-4.6, 5.2
Had an activity limitation due to health at the time of the survey	1.2	-0.6, 3.0	1.6	-2.5, 5.7
Sample size	123,978		32,836	
Compared to Expanding Medicaid with a Different Demonstration				
Smoker at the time of the survey	0.9	-1.2, 3.1	2.5	-3.0, 8.0
Smoker who did not try to quit in past 12 months	-0.1	-1.6, 1.5	-0.6	-4.7, 3.4
Health status was fair or poor at the time of the survey	1.2	-0.6, 2.9	1.2	-5.0, 7.5
Physical health was not good in past 30 days	-1.4	-3.8, 1.1	-2.3	-7.9, 3.3
Mental health was not good in past 30 days	0.7	-1.8, 3.2	-1.3	-7.4, 4.9
Had an activity limitation due to health at the time of the survey	0.5	-1.7, 2.6	-0.2	-5.6, 5.2
Sample size	54,112		14,284	

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Low-income is defined as family income at or below 138 percent of the FPL. Low-income is imputed in the BRFSS. Best comparison states for not expanding Medicaid are AL, FL, KS, MS, NE, SC, SD, and TX. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table III.8: Summary of Difference-in-Differences Estimates of Changes in Health Behaviors and Health Status for Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017-18 (postperiod) for Each of the Best Comparison States

	Group of Best Comparison States that Did Not Expand Medicaid								Group of Best Comparison States that Expanded Medicaid without a Demonstration					Group of Best Comparison States that Expanded Medicaid with a Different Demonstration	
	SC^	AL	FL	KS	MS	NE	SD	TX	OH^	CO	KY	ND	PA	MI^	NH
Smoker at the time of the survey	+	+*	+**	+	+	+*	+	+	+	+**	+	+	+	+	-
Smoker who did not try to quit in past 12 months	+	+	+	-	-	+	+	-	-	+	+	-	-	-	-
Health status was fair or poor at the time of the survey	+*	+**	+*	+	+**	+**	+	+	+*	+	+	+**	+	+	+
Physical health was not good in past 30 days	+	+**	+***	-	-	+	-	-	+	-	+	+	-	-**	-
Mental health was not good in past 30 days	-	+	+***	-	-	-	+	-	-	+	+**	+	-	-	+
Had an activity limitation due to health at the time of the survey	+*	+***	+***	+	+	+	+	+	+	+	+*	+**	-	+	+

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** ^ indicates single-best comparison state within group of best comparison states; + indicates positive impact estimate relative to comparison state; - indicates negative impact estimate relative to comparison state. The detailed findings that underlie this table are provided in Table D.14. For sample sizes, see Table D.16. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

IV. Lessons Learned from HIP 2.0

In 2014, Indiana sought a section 1115 demonstration in order to design and implement a version of the ACA's Medicaid expansion that met the political and cultural landscape of Indiana by emphasizing program aspects that mirrored private insurance coverage and incorporated personal responsibility. Indiana's demonstration, called HIP 2.0, was approved on January 27, 2015, and implemented on February 1, 2015.[65] Between 2011-13 (the period just before the ACA's Medicaid expansion and the launch of the Marketplace) and 2017-18 (the third and fourth years after the implementation of Indiana's demonstration), health insurance coverage in Indiana was significantly higher than what would have been expected if Indiana had not expanded Medicaid. Specifically, the change in health insurance coverage in Indiana was 3.6 percentage points ($p<.01$) higher for all childless adults and 11.3 percentage points ($p<.01$) higher for low-income childless adults relative to the group of eight best comparison states that did not expand Medicaid.

A related question is how the impact of HIP 2.0 on health insurance coverage compared to the impacts of alternate strategies for Medicaid expansions, that is, expanding without a demonstration or expanding with a different demonstration. We find that the gains in health insurance coverage for childless adults under HIP 2.0 are comparable to those achieved by similar states that expanded Medicaid without a demonstration and similar states that expanded Medicaid with a different demonstration. Thus, the first and most important lesson learned from Indiana's section 1115 demonstration is that Indiana's decision to use a section 1115 demonstration to implement a Medicaid expansion that met the political and cultural landscape of the state resulted in a program that achieved a key goal of both the ACA and the state—a significant expansion in health insurance coverage.

While there is some evidence of gains in preventive care under HIP 2.0, on the whole, we found few other significant differences in the changes in health care access and affordability measures or in health behaviors and health status in Indiana in 2017-18 relative to states that did not expand Medicaid and those that expanded Medicaid with or without a demonstration. However, data limitations and smaller sample sizes make the estimates of those outcomes less robust than the estimates of the impacts on health insurance coverage.

Beyond the findings from the impact analysis, the qualitative assessment of HIP 2.0 provides numerous lessons for other states considering designing and implementing section 1115 Medicaid demonstrations:

- **Health insurance coverage alone is not enough to guarantee access to health care.** As one state official said, "[A] card that says you have Medicaid doesn't mean much if you can't find a physician." Thus, a second key lesson from Indiana is the importance of addressing provider supply in conjunction with a major expansion in coverage. State officials and other stakeholders highlighted the importance of Indiana's substantial increase in provider reimbursement rates (100 percent of Medicare for HIP enrollees and an increase from 60 percent to 75 percent of

[65] "Timeline of Federal HIP 2.0 Interaction in Indiana," Indiana Family and Social Services Administration, no date (accessed March 11, 2019), https://www.in.gov/fssa/hip/files/HIP_timeline.pdf.

Medicare for most other Medicaid enrollees),[66] as bringing more providers into HIP 2.0 and Medicaid.

- **Strong stakeholder engagement and collaboration expedites system change.** According to state officials and stakeholders, the broad collaboration between the state and stakeholders in designing and implementing HIP 2.0 created a win-win situation for hospitals, the broader health care system, and the uninsured in Indiana.
- **Incremental reforms that leverage existing programs facilitate rapid implementation.** By building on the infrastructure and broad support for the 2008 HIP 1.0 section 1115 demonstration, Indiana was able to design and implement HIP 2.0 quickly, ensuring a rapid and, for the most part, smooth ramp-up in health insurance coverage in the state under HIP 2.0.
- **Changing health care behaviors is hard and requires a long-term commitment.** One of HIP 2.0's goals is to promote value-based decision-making and personal health responsibility. State officials and other interviewees noted that changing health care behaviors takes time as enrollees, especially enrollees who may never have had health insurance, learn how health insurance works and gain experience with the health care system. While state officials, other interviewees, and focus group participants reported continued gaps in enrollee understanding of HIP 2.0, they also noted evidence of changes in health care behaviors in response to the program as more enrollees were reported to be obtaining preventive care over time, a finding that our impact estimates appear to support.
- **Flexibility in program design is important.** State officials and other interviewees highlighted the importance of periodically revisiting the HIP 2.0 demonstration design based on actual program experience. For example, the administrative complexity of the original design of the POWER Account contributions created high administrative costs for MCEs and was a source of confusion for enrollees. As a result, Indiana made a change in the structure of POWER Account contributions under the 2018 demonstration renewal to provide a simplified version of contributions that retains enrollee responsibility while reducing enrollee confusion and lowering administrative costs for MCEs.

While this federal evaluation will not continue to track HIP 2.0 as it moves forward and evolves under the 2018 demonstration renewal, there is more than can be learned from Indiana's section 1115 demonstration. It will be important to continue to track the implementation and management of the demonstration, as well as to examine the impacts of the demonstration beyond 2018. Further, with the changes introduced under the 2018 demonstration renewal, research on how community engagement requirements affect HIP 2.0 enrollment, how imposing a tobacco surcharge affects tobacco use and health outcomes, and how tiered premiums affect participation will be important. Moreover, if CMS approves Indiana's pending demonstration amendment in which the state proposes implementing the HIP Workforce Bridge Account that aims to support continuity of insurance coverage between HIP and commercial coverage,[67] it will be important to evaluate the effects of the account on such transitions.

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[66] *Healthy Indiana Plan: Provider Payment Report.* Baltimore, MD: Centers for Medicare & Medicaid Services; 2017. https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-provider-pymt-rpt-09252017.pdf.

[67] "Healthy Indiana Plan Section 1115 Demonstration HIP Workforce Bridge Amendment," Indiana Family and Social Services Administration, amendment application submitted to CMS on July 25, 2019 (accessed January 27, 2020), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/in-healthy-indiana-plan-support-20-pa6.pdf.

As required under the federally-mandated evaluation of the HIP demonstration renewal, Indiana has contracted with the Lewin Group to conduct an independent evaluation. That evaluation includes two reports—an interim evaluation report and a summative evaluation report. The interim evaluation report, which was submitted to CMS in December 2019, focuses on assessments of the first 17 months of the demonstration renewal (February 2018 to June 2019), which includes the phase-in of the new community engagement requirements and baseline analyses of the HIP enrollees' tobacco use.[68] The summative evaluation report, which will cover the full 3-year demonstration period from February 2018 to December 2020, will be submitted in 2022. That report will include additional analyses of federal survey data, as well as analyses of Indiana's Medicaid administrative data and beneficiary surveys. The administrative data and beneficiary surveys will support analyses of critical design features being tested under the demonstration that cannot be addressed with federal survey data and, thus, could not be assessed in the federal evaluation.

[68] The Lewin Group. *Health Indiana Plan Interim Evaluation Report: Final for CMS Review*. December, 18, 2019 (accessed January 27, 2020), https://www.in.gov/fssa/hip/files/IN_HIP_Interim_Evaluation_Report_Final.pdf

Appendix A. Indiana's Medicaid Program and the Design of HIP 2.0

This appendix provides background on Indiana's Medicaid program prior to HIP 2.0 and an overview of the design of HIP 2.0.

Indiana's Medicaid Program Before HIP 2.0

Indiana's Medicaid program had an enrollment of more than 1.1 million people as of January 2015, just before HIP 2.0 launched.[69] The largest program was Hoosier Healthwise (HHW), which accounted for more than 60 percent of Indiana's overall Medicaid enrollment.[70] HHW covered low-income parents (and other caregivers), pregnant women, and children under 19 years old. Eligibility levels for pregnant women and children in Indiana were above the median level across the remaining states. For example, in January 2013, Indiana covered pregnant women with incomes up to 200 percent of the FPL and children in families with income up to 250 percent of FPL; comparable median values for the remaining states at that time were, respectively, 185 percent of FPL and 235 percent of FPL.[71] However, except for parents in HIP 1.0 (discussed below), the state's Medicaid eligibility level for parents in 2013 (24 percent of FPL) was far below the national median for the remaining states (64 percent of FPL).[72] HHW relied on managed care entities (MCEs) to deliver services. Prior to HIP 2.0, Indiana's Medicaid benefit package was roughly comparable to that of most other states.[73]

As mentioned in Chapter I, before HIP 2.0, Indiana had HIP 1.0, which was a 2008 section 1115 demonstration that provided health insurance to working-age parents (and other caregivers) and childless adults who were not otherwise eligible for Medicaid, had no access to employer-sponsored insurance, and had been uninsured for at least 6 months.[74] Eligibility under HIP 1.0 was initially extended up to 200 percent of FPL, with an enrollment cap for noncustodial parents and childless adults; however, in 2014 eligibility was lowered to 100 percent of FPL with the enrollment cap still in effect. In December 2013, just before the major coverage provisions of the ACA were implemented, HIP 1.0 enrollment was at 34,823 members (24,690 parents and caretakers for dependent children and 10,133 childless adults).[75] In January 2015, just before HIP 2.0 was implemented, HIP 1.0 enrollment was at nearly 60,000 people (24,503 parents and caretakers for dependent children and 34,736 childless adults),[76] accounting for about 5 percent of Indiana's overall Medicaid enrollment and about 15 percent

[69] "Enrollment Count by Age Group and Health Plan," Indiana Family and Social Services Administration, February 9, 2015 (accessed March 8, 2019), https://www.in.gov/fssa/ompp/files/DMA11272__Monthly__Enrollment_January_2015.pdf.

[70] For an overview of Indiana's Medicaid program in 2014, see "Medicaid Basics and Indiana Health Coverage Programs (IHCPs)," Indiana.gov, no date (accessed August 17, 2018), https://www.in.gov/idoi/files/Module_2_medicaid_basics.pdf.

[71] "State Health Facts: Trends in Medicaid Income Eligibility Limits," Kaiser Family Foundation, no date (accessed August 17, 2018), https://www.kff.org/statedata/collection/trends-in-medicaid-income-eligibility-limits/.

[72] "State Health Facts: Trends in Medicaid Income Eligibility Limits," Kaiser Family Foundation, no date (accessed March 11, 2019), https://www.kff.org/statedata/collection/trends-in-medicaid-income-eligibility-limits/.

[73] "State Health Facts: Medicaid Benefits Data Collection," Kaiser Family Foundation, no date (accessed August 17), 2018, https://www.kff.org/state-category/medicaid-chip/medicaid-benefits/.

[74] A Gates, R Rudowitz, and S Artiga, "Healthy Indiana Plan and the Affordable Care Act" (Menlo Park, CA: Kaiser Family Foundation, 2013), https://www.kff.org/medicaid/fact-sheet/healthy-indiana-plan-and-the-affordable-care-act/

[75] "Enrollment Count by Age Group and Health Plan: December 2013," Indiana Family and Social Services Administration, December 2013 (accessed August 31, 2018), https://www.in.gov/fssa/ompp/files/Medicaid_Monthly_Enrollment_Dec2013.pdf.

[76] "Enrollment Count by Age Group and Health Plan: January 2015," Indiana Family and Social Services Administration, February 9, 2015 (accessed August 31, 2018), https://www.in.gov/fssa/ompp/files/DMA11272__Monthly__Enrollment_January_2015.pdf.

of Medicaid enrollment among nonelderly adults.[77,78] Like HHW, MCEs provided health care services to HIP 1.0 enrollees.

Apart from HHW and HIP 1.0, the balance of Indiana Medicaid enrollment in January 2015 was accounted for by fee-for-service enrollees (31.8 percent), which included those who qualified as aged, blind, and disabled individuals and enrollees in Care Select (3.6 percent), a disease management program for enrollees with special health care needs or chronic conditions.[79]

Key Design Features of HIP 2.0

Like alternate Medicaid expansion demonstrations in other states (e.g., Arkansas, Michigan, and Montana), HIP 2.0 is designed to promote personal responsibility among enrollees through monthly premium-like contributions, copayments, and strategies to promote consumer engagement and healthy behaviors. Consistent with HIP 2.0's goal of promoting private insurance coverage, four MCEs statewide provide health care services to HIP 2.0 enrollees. In this section, we describe key components of HIP 2.0.

HIP Plus and HIP Basic. Although HIP 1.0 had just one plan design, HIP 2.0 provides enrollees with income at or below 100 percent of FPL with two plan options: HIP Plus and HIP Basic (Table A.1).[80,81] Enrollees with income above 100 percent of FPL are only eligible for HIP Plus. HIP Plus, which requires a monthly premium-like contribution to the enrollee's POWER Account, offers an enhanced benefit package that includes dental and vision services (among other added benefits) and only has copayments for non-emergent use of the ED.[82] In contrast, HIP Basic, which does not require a monthly contribution, has a more limited benefit package and requires copayments for most services. Copayments imposed on HIP Basic enrollees are consistent with what is allowed under federal Medicaid law and thus not a provision of the demonstration. HIP Plus is noted in state documents as being the "best value" option because of the enhanced benefits and limited copayments.[83] As of January 31, 2018, nearly two-thirds (65.8 percent) of the 403,075 HIP 2.0 enrollees were in HIP Plus while the rest were in HIP Basic, a split

[77] For an overview of Indiana's Medicaid program in 2014, see "Medicaid Basics and Indiana Health Coverage Programs (IHCPs)," Indiana.gov, no date (accessed August 17, 2018), https://www.in.gov/idoi/files/Module_2_medicaid_basics.pdf.

[78] "Enrollment Count by Age Group and Health Plan: January 2015," Indiana Family and Social Services Administration, February 9, 2015 (accessed August 31, 2018), https://www.in.gov/fssa/ompp/files/DMA11272__Monthly__Enrollment_January_2015.pdf.

[79] "Enrollment Count by Age Group and Health Plan: January 2015," Indiana Family and Social Services Administration, February 9, 2015 (accessed August 31, 2018), https://www.in.gov/fssa/ompp/files/DMA11272__Monthly__Enrollment_January_2015.pdf.

[80] For some HIP enrollees there are other benefit and cost-sharing options under the State Plan. Populations including low-income (less than 19 percent FPL) parents or caretaker adults, low-income (less than 19 percent FPL) 19-and 20-year olds and the medically frail receive State Plan benefits and have either HIP Basic or HIP Plus cost sharing. Pregnant women receive either HIP Basic or HIP Plus benefits but do not have any cost sharing and receive additional benefits. Native Americans receive HIP Plus benefits and have no cost sharing, but they can also opt out of HIP and receive fee-for-service Medicaid. Transitional medical assistance individuals also receive State Plan benefits and are subject to HIP Basic or HIP Plus cost sharing, though they may receive HIP Basic if income is over 100 percent FPL. Further, non-emergency medical transportation (NEMT) is provided to HIP Plus State Plan and HIP Plus State Plan Basic enrollees, a service not covered under the HIP Plus or HIP Basic packages for some newly-eligible enrollees.

[81] Indiana had offered a third option, HIP Employer Link, but because of low employer participation, the state terminated the program in December 2017.

[82] The ED copayments were not included in the 2018 demonstration renewal.

[83] For example, see "Healthy Indiana Plan 2.0: Introduction, Plan Options, Cost Sharing and Benefits," Indiana Family and Social Services Administration, no date (accessed August 17, 2018), https://www.in.gov/idoi/files/HIP_2_0_Training.pdf.

that has been consistent over the first 3 years of the demonstration.[84] Among the HIP Plus enrollees, 82.8 percent had income at or below 100 percent of FPL, compared to 15.6 percent with income above 100 percent FPL (1.6 percent had unknown incomes).[85]

Table A.1: HIP Plus and HIP Basic Benefit Packages and Cost-Sharing Policies, January 2018

HIP Plus	HIP Basic
• Essential health benefits, plus dental and vision services (among other services) • Monthly POWER Account contributions of 2 percent of income (range of $1 to $100/month)[a] • No copayments except for non-emergent ED visits[b]	• Essential health benefits only • No POWER Account contributions • Copayments for drugs and many health care services as allowed under federal Medicaid law, including non-emergent ED visits[b]

Notes: Other benefits and cost-sharing packages are available to some HIP 2.0 enrollees (see footnote 40). Under both HIP Plus and HIP Basic, enrollee cost-sharing (which includes both POWER Account contributions and copayments) is subject to a 5 percent income limit per quarter.
[a] Under Indiana's 2018 demonstration renewal, monthly POWER Account contributions shifted from a flat 2 percent of family income to a five-level tiered structure.
[b] The ED copayments were not included under Indiana's 2018 demonstration renewal.

Power Accounts. A cornerstone of HIP 2.0 is the use of a variation of an HDHP combined with a POWER Account that acts like a health savings account. Each HIP 2.0 enrollee has a POWER Account containing $2,500, which is used to pay for the first $2,500 of covered health care services minus any required copayments. Once enrollees exhaust funds in their POWER Accounts, their MCE becomes financially responsible for any subsequent health care use except for any required copayments.

Although all HIP 2.0 enrollees have a POWER Account, how the account is funded varies and depends upon which HIP 2.0 option (HIP Basic or HIP Plus) the enrollee is in. For HIP Basic, Indiana fully funds enrollees' POWER Accounts. For HIP Plus, however, enrollees' POWER Accounts are jointly funded by state and enrollee contributions. Importantly, enrollee POWER Account contributions are not premium payments; rather, enrollees "own" their contributions. For example, when HIP Plus enrollees who have made contributions to their POWER Accounts leave HIP 2.0, they are refunded the unused share (prorated based on their health care use) of their POWER Account contributions. In addition, HIP Plus enrollees who do not fully exhaust their POWER Accounts in a plan year can roll over unused contributions to help pay their POWER Account contributions in the next plan year.

All HIP 2.0 enrollees are initially placed in HIP Plus, with benefits starting the first of the month in which a person makes his or her initial POWER Account contributions or makes a $10 Fast Track payment

[84] State of Indiana, *Healthy Indiana Plan Demonstration Section 1115 Annual Report: Demonstration Year 3* (Indianapolis, IN: State of Indiana, 2018), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-annl-rpt-feb-jan-2018-043018.pdf.

[85] State of Indiana, *Healthy Indiana Plan Demonstration Section 1115 Annual Report: Demonstration Year 3* (Indianapolis, IN: State of Indiana, 2018), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-annl-rpt-feb-jan-2018-043018.pdf.

toward his or her POWER Account. To remain in HIP Plus, enrollees must continue to make monthly POWER Account contributions. Before the 2018 demonstration renewal, monthly contributions were set at a flat rate of 2 percent of an enrollee's family income, designed to be comparable to the premium level found for private insurance coverage on the ACA Marketplace.[86] Minimum POWER Account contributions were $1 per month; maximum contributions were $100 per month. The 2018 demonstration renewal shifted POWER Account contributions from the flat rate of 2 percent of family income to a five-level tiered structure.

For HIP Plus enrollees, the failure to make a POWER Account contribution within a 60-day grace period leads to the loss of the HIP Plus option. HIP Plus enrollees with income at or below 100 percent of FPL who fail to make a timely POWER Account contribution transition from HIP Plus to HIP Basic, the fallback plan option (Table A.2). As noted, HIP Basic covers essential health benefits but not the expanded services available under HIP Plus. Further, at levels that are consistent with what is allowed under federal law, HIP Basic requires copayments for most services except preventive care (e.g., $4 for outpatient services, $4 for preferred prescription drugs, and $75 for inpatient services). As of January 2018, 63.1 percent of enrollees who were eligible for HIP Basic (e.g., with incomes at or below 100 percent of FPL) chose to make a POWER Account contribution in order to enroll in HIP Plus.[87]

HIP Plus enrollees with income above 100 percent of FPL who fail to make a timely POWER Account contribution lose their HIP Plus coverage, although the ramifications differ depending on whether they fail to make the initial POWER Account contribution or a subsequent contribution. Those who apply to HIP 2.0 and are determined eligible but fail to make their first POWER Account contribution within the grace period are defined as not having enrolled in HIP 2.0. They are considered "Never Members" by the state. These Never Members can reapply for HIP 2.0 at any time. According to the state's evaluation of HIP 2.0, 46,176 people, or about 7.8 percent of the more than 590,000 people determined eligible for HIP 2.0 during the first 22 months of the demonstration, failed to make their first POWER Account contribution and were categorized as Never Members.[88] As of November 2016, 24,424 people or 53 percent of "Never Members" had reenrolled in HIP 2.0 or another Medicaid program.

With some exceptions, enrollees with incomes above 100 percent of FPL who make a first POWER Account contribution but subsequently fail to make a later POWER Account contribution within the grace period are disenrolled and prevented from reenrolling in HIP 2.0 for up to 6 months. This disenrollment feature was included in HIP 2.0 to be consistent with the ACA Marketplace's penalty for not paying premiums.[89] During the third year of the demonstration, internal state data show that 6,122 HIP Plus enrollees were disenrolled and locked out of HIP 2.0 for failing to make timely POWER Account contributions. These disenrolled people account for 7.8 percent of ever-enrolled HIP Plus members

[86] S Verma and B Neale, "Healthy Indiana 2.0 Is Challenging Medicaid Norms," *Health Affairs Blog,* August 31, 2016, https://www.realclearhealth.com/2016/08/31/healthy_indiana_20_is_challenging_medicaid_norms_272729.html.

[87] State of Indiana, *Healthy Indiana Plan Demonstration Section 1115 Annual Report: Demonstration Year 3* (Indianapolis, IN: State of Indiana, 2018), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-annl-rpt-feb-jan-2018-043018.pdf.

[88] The Lewin Group, Inc., *Healthy Indiana Plan 2.0: POWER Account Contribution Assessment.* Falls (Church, VA: The Lewin Group, Inc.; March 31, 2017), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.

[89] S Verma and B Neale, "Healthy Indiana 2.0 Is Challenging Medicaid Norms," *Health Affairs Blog,* August 31, 2016, https://www.realclearhealth.com/2016/08/31/healthy_indiana_20_is_challenging_medicaid_norms_272729.html.

subject to disenrollment, which was slightly lower than the previous year, where disenrollees accounted for 8.5 percent of ever-enrolled HIP Plus members subject to disenrollment in the second year of the demonstration. [90]

Table A.2: Enrollee POWER Account Contributions and HIP 2.0 Enrollment Policies

Enrollee POWER Account Contributions	Family Income Level	
	At or below 100% of Federal Poverty Level (FPL)	Above 100% of FPL
Fails to make first monthly POWER Account contribution within the 60-day grace period	Moved to HIP Basic	Not enrolled in HIP 2.0 but eligible to reapply at any time
Makes first monthly POWER Account contribution but fails to make a subsequent contribution within the 60-day grace period	Moved to HIP Basic	Disenrolled from HIP 2.0 and locked out of the program for up to 6 months [a]

[a] There are exceptions to disenrollment penalties for nonpayment for some subgroups of people with incomes above 100 percent of FPL, including people who qualify as medically frail, Native Americans, people living in a domestic violence shelter, or people living in a state-declared disaster area.

Retroactive coverage. To align HIP 2.0 more closely with private insurance coverage, HIP 2.0 waives retroactive Medicaid coverage, which covers medical bills incurred up to 3 months prior to the Medicaid application date for individuals who would have been eligible for Medicaid coverage at the time the medical bills were incurred. Instead, HIP Plus coverage begins on the first day of the month in which an enrollee makes his or her first POWER Account contribution or Fast Track payment. For prospective enrollees with incomes below 100 percent of FPL who fail to make a POWER Account contribution within the 60-day grace period after they are determined eligible, HIP Basic coverage begins on the first day of the month in which the 60-day grace period expires.

Fast Track payments for POWER Account contributions. To help facilitate timely coverage, the HIP 2.0 demonstration included provisions for Indiana to establish the Fast Track program, an optional payment program in which prospective HIP 2.0 enrollees can make a $10 payment that goes toward their first POWER Account contribution, with any remaining balance allocated toward contributions for future months.[91] Other parties (e.g., health care providers) can also make a Fast Track payment on behalf of a

[90] Data provided by staff at Family and Social Services Administration (FSSA) via email, June 7, 2019. These estimates of disenrollment do not capture those individuals who were never enrolled or conditionally enrolled in HIP 2.0. These disenrollment statistics are corrections for the disenrollment data the state presented in its Annual Report for Demonstration Year 3. The Annual Report for Demonstration Year 3 stated that 11,793 HIP Plus enrollees were disenrolled and locked out of HIP 2.0 for failing to make timely POWER Account contributions. These disenrolled people accounted for 2.1 percent of all ever-enrolled HIP Plus enrollees and 18.0 percent of ever-enrolled HIP Plus enrollees with incomes above 100 percent FPL in the third year of the demonstration. The latter was lower than the 20.4 percent reported in the second year of the demonstration. State of Indiana, *Healthy Indiana Plan Demonstration Section 1115 Annual Report: Demonstration Year 3* (Indianapolis, IN: State of Indiana, 2018), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-annl-rpt-feb-jan-2018-043018.pdf.

[91] If found ineligible for HIP 2.0, the state will refund the $10 Fast Track payment.

HIP 2.0 applicant. Fast Track payments can be made at the time of application or at any time while an application is being processed. For those determined eligible for HIP 2.0 who have made the Fast Track payment, HIP Plus coverage begins on the first day of the month in which the Fast Track payment was made.

Expanded presumptive eligibility. In another effort to reduce delays in the start of HIP 2.0 coverage, Indiana's demonstration allowed for an expanded presumptive eligibility program. Specifically, the state expanded the sites authorized to determine presumptive eligibility beyond hospitals to include Federally Qualified Health Centers, Rural Health Centers, Community Mental Centers, and Health Departments. Individuals who are presumptively enrolled in HIP 2.0 can begin receiving Medicaid-covered services for at least 60 days while a final eligibility determination is pending. During this time, these enrollees are expected to make monthly POWER Account contributions. Presumptively enrolled people with incomes at or below 100 percent of FPL who are determined eligible for HIP 2.0 but do not make a POWER Account contribution within the grace period are transferred to HIP Basic at the end of the presumptive eligible period. Presumptively enrolled people with incomes above 100 percent of FPL who do not make a POWER Account contribution within the grace period lose their coverage, but they are not locked out and can reapply for coverage.

In the third year of the demonstration, the program received more than 103,000 applications through the expanded presumptive eligibility program.[92] Although most (81.9 percent) were approved for presumptive eligibility, only 30.5 percent of approved presumptively eligible individuals were ultimately approved for full Medicaid coverage. The most common reasons that the application was denied included failure to cooperate in income verification, an applicant's income exceeding program standards, and failure to verify being a resident of Indiana.

Incentives to obtain preventive care. As an incentive to encourage enrollees to be prudent users of health care and to get preventive care, HIP 2.0 includes a POWER Account rollover feature that allows some enrollees to reduce future POWER Account contributions by obtaining recommended preventive care services (Table A.3). Rollovers work differently under HIP Plus and HIP Basic. Under HIP Plus, at the end of the plan year, unused enrollee POWER Account contributions can be rolled over to the next plan year and used to offset some (or possibly all) of the next plan year's required contributions. The state will double the rollover amount (up to 100 percent of the next year's contribution amount) if the enrollee has received recommended preventive care services. Nearly 130,000 HIP Plus enrollees rolled over their unspent 2017 POWER Account contributions to 2018. The average rollover was $74.41.[93]

Under HIP Basic, the POWER Account rollover is designed to encourage enrollees to get preventive care services and to enroll in HIP Plus. At the end of the plan year, HIP Basic enrollees who have received the recommended preventive care services and enroll in HIP Plus can offset their HIP Plus POWER Account contributions by up to 50 percent in the next plan year.

[92] State of Indiana, *Healthy Indiana Plan Demonstration Section 1115 Annual Report: Demonstration Year 3* (Indianapolis, IN: State of Indiana, 2018), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-annl-rpt-feb-jan-2018-043018.pdf.

[93] Data provided by staff at Indiana Family Social Services Administration (FSSA) via email, July 20, 2018.

Table A.3: HIP Plus and HIP Basic POWER Account Rollover Policies

HIP Plus	HIP Basic
A HIP Plus enrollee's share of unused POWER Account funds can roll over to reduce the enrollee's required contributions in the next plan year. The state will double the rollover amount if the enrollee received recommended preventive care services.	If at the end of a plan year a HIP Basic enrollee moves to HIP Plus, a percentage of the enrollee's unused POWER Account funds can roll over and be applied to next plan year's HIP Plus required POWER Account contributions. Specifically, enrollee POWER Account contributions can be reduced up to 50 percent if the enrollee received recommended preventive care services.

In addition to offering the POWER Account rollover benefit, MCEs offer other incentives and rewards (such as gift cards) to enrollees for obtaining preventive care. Initially, MCEs could offer up to $50 in member health incentives but in the 2018 demonstration renewal application, Indiana requested an increase in the capped limit for healthy behavior incentives to $300 per member per year.[94] The primary goal of the increased incentives is to advance wellness activities related to preventive care, tobacco cessation, substance abuse, and chronic disease management.

Graduated copayments for non-emergent Emergency Department (ED) visits. In 2015, Indiana received a 2-year section 1916(f) demonstration waiver to impose a graduated copayment on HIP 2.0 enrollees for non-emergent use of the ED as part of its 2015 demonstration. Specifically, HIP Plus and HIP Basic enrollees were required to pay an $8 copayment for the first non-emergent ED visit, a copayment allowable under federal law and not a part of the demonstration and $25 for any subsequent non-emergent ED visit, a payment for which Indiana obtained a waiver. Copayments were waived if enrollees called their MCE's 24-hour nurse advice hotline before going to the ED. Nonetheless, hospitals generally did not collect the copayments, and the ED copayments were not included in the 2018 demonstration renewal.

Reduced access to non-emergency medical transportation (NEMT). To be consistent with private insurance coverage,[95] HIP 2.0 includes a waiver of NEMT services to non-medically frail newly eligible adults, while preserving these services for other enrollees, including pregnant women and medically frail enrollees. Nonetheless, as reported by stakeholders during the site visit (discussed below), all four MCEs provide NEMT services to the population for which the waiver applies as they viewed NEMT as cost-effective. Consequently, the HIP 2.0 demonstration provides evidence of the impacts of a waiver of NEMT on health plans but not on enrollees.

[94] "Healthy Indiana Plan (HIP) Section 1115 Waiver Extension Application," Indiana Family and Social Services Administration, July 20, 2017 (accessed August 31, 2018), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-demo-app-07202017.pdf.

[95] S Verma and B Neale, "Healthy Indiana 2.0 Is Challenging Medicaid Norms," *Health Affairs Blog,* August 31, 2016, https://www.realclearhealth.com/2016/08/31/healthy_indiana_20_is_challenging_medicaid_norms_272729.html.

Appendix B. Supplemental Materials for Chapter II

This appendix addresses two topics: (1) the data and methods used in the qualitative assessment of HIP 2.0 and (2) additional details on the findings from the qualitative assessment.

Data and Methods

Data

A primary data source to support the qualitative analysis was information obtained through document review and a site visit to Indiana during the weeks of June 4, 2018, and June 25, 2018. During the site visit, Urban Institute researchers conducted semi-structured interviews in Indianapolis, Gary, and Logansport with 18 HIP 2.0 stakeholders, including state officials (5), MCE executives (4), health care providers and provider association representatives (5), and consumer advocates (4).[96] Names of potential interviewees were obtained through a variety of sources, including Indiana officials, state health care observers and experts, and our review of HIP 2.0 documents and the grey literature. From this list of prospective interviewees, we selected 18 interview respondents, a sufficiently large number of people to provide us with a range of perspectives on HIP 2.0. Senior Urban Institute researchers conducted the stakeholder interviews with a second Urban Institute researcher taking verbatim notes. With the approval of interviewees, interviews were also audio recorded to provide back-up for the note taker. Recordings were destroyed after note taking was completed.

We also held eight focus groups as part of the site visit: six focus groups with HIP 2.0 enrollees and two with people who had been disenrolled from HIP 2.0.[97] The six focus groups with enrollees were conducted in Indianapolis (2), Gary (2), and Logansport (2). The two disenrollee focus groups were held in Indianapolis. Using a randomized list of enrollees and disenrollees provided by the Indiana Family and Social Services Administration, an Indiana-based partner organization oversaw the recruitment of HIP 2.0 enrollees and disenrollees for the focus groups. Focus group participants had to meet several criteria as a prerequisite to their participation, and these included the following:

- Age between 18 and 64
- Speak English as their primary language
- Have a home address with a ZIP Code within one of the focus group locations
- For the enrollee groups, be enrolled in HIP 2.0 for at least 4 months or, for the disenrollee groups, be disenrolled from HIP 2.0 in the last 4 months

The focus groups were included in the evaluation design to provide information directly from HIP 2.0 enrollees on their experiences with HIP 2.0. In the original design, the focus groups were intended to

[96] Owing to schedule conflicts for some interviewees, three of 18 interviews were conducted by telephone before or after the site visit weeks.

[97] The state makes a distinction between people who were disenrolled from HIP Plus and those who were never fully enrolled in HIP Plus because they failed to make their first POWER Account contribution or to complete the required follow-up for presumptive eligibility. However, Indiana officials agreed that both types of people belonged on the recruitment list for the disenrollee focus groups and no distinction between the two groups were made on the list. In conducting the focus groups, we found that all disenrollee focus group participants viewed themselves as having been disenrolled from HIP 2.0 although it became apparent to the researchers during the focus group conversations that some would have been considered by Indiana officials as having never fully enrolled in the demonstration.

supplement beneficiary surveys. However, the design for the federal evaluation changed because the Data Use Agreement (DUA) with Indiana was not finalized until 2018. As a result, the beneficiary surveys were excluded from the redesigned federal evaluation. Under the redesigned federal evaluation, the focus groups during the 2018 site visit became the only source of direct information on HIP 2.0 from enrollees. Because of that, the number of focus groups with enrollees was expanded from four to six, with the addition of two focus groups with disenrollees.

Finally, in addition to the site visit interviews and the focus groups, we relied on information gathered from various documents about HIP 2.0, including publicly available materials, program administrative data provided by Indiana officials, and materials provided by CMS, Indiana officials, and other stakeholder interviewees.

Design of the focus groups. In the original design of the federal evaluation of HIP 2.0, the qualitative component included document review and site visits to Indiana in 2016 and 2018. Each site visit was to include four focus groups with HIP 2.0 enrollees to collect information from enrollees on their perceptions of the demonstration, as a supplement to the planned beneficiary surveys with enrollees and disenrollees in 2016 and 2018. The focus groups were included in the design to gather more in-depth information on enrollee perspectives than could be obtained from the beneficiary surveys. Unlike the beneficiary surveys, focus groups are not representative of the entire HIP 2.0 population, as they draw from a select sample of individuals. However, focus groups can collect more detailed information on a range of enrollee experiences with HIP 2.0 that no other source can provide. Given the program's emphasis on consumer engagement, enrollee experiences are of interest to consumer advocates, researchers, and policy makers. Therefore, including the voices of enrollees sharing their perspectives in their own words as part of the evaluation is particularly important.

While the expanded number of focus groups do provide a richer perspective from HIP 2.0 enrollees and disenrollees than the original plan for four focus groups would have provided, the information from the focus groups should not be viewed as a replacement for the information that would have been collected from the beneficiary surveys in 2016 and 2018. The focus groups are not representative of the experiences of all HIP 2.0 enrollees or disenrollees and do not provide information on enrollee and disenrollee experiences in the early years of the demonstration, since the focus group sessions focused on enrollee experiences in 2018.

The focus groups were conducted in three areas of the state to provide a range of geographic settings: Indianapolis (urban and suburban), Gary (urban), and Logansport (rural). The three areas were selected based on having a relatively large number of HIP enrollees and having a strong navigator presence. The latter was important to support an alternate recruitment strategy for the focus groups in the event we were unable to obtain administrative data from the state. In the absence of those data, the plan was to partner with navigators to recruit HIP 2.0 enrollees and disenrollees.

Eight focus groups were conducted—six with HIP 2.0 enrollees and two with disenrollees. The enrollee focus groups targeted individuals who had been enrolled in HIP 2.0 for at least 4 months. The disenrollee focus groups targeted individuals who had completed the HIP 2.0 enrollment process but, within the last 4 months, had either (1) failed to make their initial POWER Account contribution and so were never officially enrolled in HIP 2.0, or (2) had made their initial POWER Account contribution to enroll in HIP 2.0 but had failed to make a subsequent POWER Account contribution and were disenrolled. Administratively, the state of Indiana makes a distinction between these two groups of individuals as "never enrolled" and "disenrolled," but agreed it was appropriate to include both groups

of individuals in the disenrollee focus groups due to their similarities (i.e., failing to make a required POWER Account contribution) and to ensure adequate sample sizes for the disenrollee focus groups. In addition to those criteria, both enrollees and disenrollees selected for the focus groups were between the ages of 18 and 64, spoke English as their primary language, and had a home address with a ZIP Code that was located within one of the three focus group areas.

The focus group sessions were designed to last between 60 and 90 minutes. Refreshments were provided to focus group participants. Following the completion of the session, focus group participants received a $60 gift card to Walmart or Speedway.

The focus groups were guided by a moderator's guide that provided a core set of semi-structured discussion questions to be asked at all groups. While many of the questions were similar for the enrollee and disenrollee focus groups, questions were reframed for the disenrollee focus groups when necessary. The topics covered in the moderator's guide included:

- Coverage history
- Marketing and outreach
- Eligibility determination, enrollment, and redetermination
- Monthly POWER Account contributions and cost-sharing
- Access to care and benefits
- Self-reported effects on daily life and health
- Satisfaction with HIP 2.0
- Advice for improving HIP 2.0

Six focus groups were held with HIP 2.0 enrollees (in Indianapolis, Logansport, and Gary) and two focus groups were held with HIP 2.0 disenrollees (in Indianapolis). The focus groups were conducted by an Urban Institute facilitator with a second Urban Institute researcher taking written notes. All focus groups were also digitally recorded. The audio recording was used to confirm the notes for accuracy and to clarify any areas where the written notes were unclear. The recordings were deleted upon completion of the note-taking process.

Focus group participants were selected from randomized lists of eligible HIP 2.0 enrollees and disenrollees provided by the Indiana Family and Social Services Administration based on the criteria outlined above. For each eligible individual, the state provided the following information: name, mailing address, phone number, age, gender, race/ethnicity, family income level as a percent of the FPL, and HIP 2.0 enrollment status (enrollee or disenrollee).

Recruitment of focus group participants from the lists provided by the state was conducted by our Indiana-based collaborator—Briljent, LLC. Briljent recruiters made phone calls to eligible participants based on the contact information provided by the state. The recruitment phone calls followed a standardized telephone script that outlined the purpose of the evaluation and solicited respondents' participation in a focus group. For those respondents willing to participate, Briljent followed up to request their preferred method of receiving confirmation information about the focus groups (i.e., by phone, email, or text). Briljent recruiters proceeded with calling efforts until 12 to 15 individuals had agreed to participate in each focus group, with the expectation that a group of eight to 10 individuals would show up for the focus groups. It is standard practice to recruit a larger group of individuals for focus groups to account for no-shows on the day of the focus group. Reminder notifications were made using the participant's preferred method of communication for each participant the day before the

focus group session. Briljent recruiters reviewed session logistics including the start time, location, and length of the session in the reminder communication.

Over the course of the eight focus groups, researchers met with a total of 51 participants, which included 40 HIP 2.0 enrollees in six focus groups and 11 HIP 2.0 disenrollees in two focus groups (Table B.1). The enrollee focus groups in Gary and Logansport had similar numbers of participants (between 4 and 11), while the Indianapolis focus groups were somewhat smaller (between 3 and 7). Most (37 out of 40) participants in the enrollee focus groups were enrolled in HIP Plus and most (37 out of 40) had family income at or below 100 percent of FPL. This is consistent with most HIP 2.0 enrollees being enrolled in HIP Plus and most having family income at or below 100 percent of FPL. It also means that while most enrollee focus group participants could be downgraded from HIP Plus to HIP Basic for non-payment of their POWER Account contribution, most could not be disenrolled from the program due to their income level.

Table B.1: Focus Group Composition

Focus Group Type	Number of Focus Groups	Number of Focus Group Participants
Enrollees	6	40
Disenrollees	2	11

The disenrollee focus groups, which were held in Indianapolis, were more challenging. The first disenrollee focus group drew a single participant. Given the high-level of no-shows to the focus group, Briljent recruiters reached out by phone to the disenrollees who had committed to the session to determine why individuals were unable to attend. Most of the disenrollees who did not show up for the focus group reported that the focus group venue was too difficult to access and expressed interest in attending a make-up session at a more convenient location. Therefore, the first focus group was rescheduled at a more centralized location to accommodate those disenrollees who had already committed to participating. The rescheduled focus group included five participants. All of the disenrollee focus group participants had family incomes at or above 100 percent of FPL; after all, for failing to make a POWER Account contribution, adults with family income below that level would get coverage under HIP Basic instead of staying never enrolled or becoming disenrolled.

Across both the enrollee and disenrollee focus groups, roughly half of the participants were racial minorities. However, the composition of the groups varied widely across the state given the differences in the population in different areas of the state. The Logansport focus groups were comprised of all White participants, whereas the Gary focus groups were mostly Black, and the Indianapolis focus groups included a more even mix of White and Black participants. Most (34 of 51) participants were female.

Before starting the focus group discussions, enrollees were provided with two copies of an informed consent form. The form was developed in accordance with the Urban Institute's Institutional Review Board guidelines, and acknowledged that participation was voluntary, information shared would be protected, and that the sessions would be recorded for note-taking purposes with the recording destroyed after note-taking was completed. After reviewing the consent form, participants were asked

to sign and submit one copy for the evaluators' records, and to keep the second copy for their own, should they have any concerns after the focus group was completed.

The focus group discussion was led by an Urban Institute facilitator based on the focus group moderator's guide. The facilitator led the guided discussion by walking through the protocol questions, using probes to follow-up on or clarify responses, generate discussion and to seek input from all participants.

Methods

Notes from both the stakeholder interviews and focus groups were reviewed and confirmed using the audio recordings. The files containing the complete set of notes were then uploaded and coded with NVivo qualitative analysis software for thematic analysis using well-established techniques to facilitate reliability and validity.[98,99] We used an iterative approach for data analysis that combined both inductive and deductive coding. We began this process by drafting a preliminary coding sheet, which provided researchers with consistent guidelines on classifying notes into the major topics addressed in the stakeholder interviews and focus groups with HIP 2.0 enrollees and disenrollees. Initially, the coding sheet contained high-level topic areas and major themes identified by the research team after the site visit. During the coding process, the coding sheet was updated as additional themes emerged.

The notes were coded by three Urban Institute researchers who participated in the site visit and focus groups. The researchers carefully reviewed the notes from each interview and focus group and coded participant responses to the appropriate component according to the coding sheet. Major themes and subthemes were identified through a process of cutting and sorting the coded notes to compare themes by stakeholder type (state officials, MCE executives, health care providers and provider association representatives, and consumer advocates) and focus group type (enrollee or disenrollee), and for comparison between the interviewees and focus groups. Divergent opinions and common experiences were summarized. Lastly, supporting quotes were selected based on relevance or frequency of a common sentiment to a major theme.

Careful review of documents obtained to support the qualitative analysis provided context and understanding of the HIP 2.0 demonstration to inform development of interview and focus group protocols, the initial drafting of the coding sheet used for qualitative analysis of interview and focus group notes, and interpretation of findings from the interviews and focus groups as themes emerged.

Detailed Findings

We organize our findings around three topics: (1) the development of HIP 2.0, (2) the goals for HIP 2.0, and (3) the implementation of and enrollee experiences with HIP 2.0, including outreach, enrollment and eligibility redetermination, enrollee education, cost-sharing, disenrollment and lockout, and access to health care. Findings in the first two topic areas, the development of HIP 2.0 and the goals for HIP 2.0, are based on information reported by interviewees, including state officials, MCE executives, health care providers and provider association representatives, and consumer advocates. Focus group findings were

[98] KJ Devers. "How will we know "good" qualitative research when we see it? Beginning the dialogue in health services research." *Health Services Research* 34, no. 5pt2 (1999):1153-1188.

[99] EH Bradley, LA Curry, and KJ Devers. "Qualitative data analysis for health services research: developing taxonomy, themes, and theory." *Health Services Research* 42, no. 4 (2007):1758-1772.

not used since these topics were not discussed in the focus groups given that HIP 2.0 enrollees and disenrollees were likely unaware of how the demonstration was developed or its high-level goals. Findings from both the interviews and the focus groups were used to inform the final topic area on the implementation of and enrollee experience with HIP 2.0.

Development of HIP 2.0

Interviewees across the board reported that while many things shaped the development and design of HIP 2.0, by far the most important was already having an established safety net program that enjoyed widespread support (i.e., HIP 1.0). The other critical piece to the development of HIP 2.0 that was cited across all types of interviewees was strong stakeholder advocacy, particularly by the Indiana Hospital Association, which provides much of the state's share of financing for HIP 2.0.

Broad support for HIP 1.0. Interviewees universally noted the importance of HIP 1.0 in Indiana moving forward with the HIP 2.0 demonstration. Having an existing safety net program like HIP 1.0 provided the foundation on which to model Medicaid expansion for Indiana. As one consumer advocate interviewee noted, because of HIP 1.0, Indiana had "already made the philosophical shift" to help low-income Hoosiers in a way consistent with Indiana's values. Moreover, HIP 1.0 enjoyed widespread support across Indiana, and the "legislature and the governor had a comfort level" with it. The existence of HIP 1.0 also enabled the political discussion around the HIP 2.0 demonstration to involve "just pulling federal funds into an existing program," which was "a much easier conversation to have" than talking about expanding Medicaid under the ACA, one consumer advocate interviewee observed.

Stakeholder engagement and advocacy. Advocacy for Medicaid expansion by a broad array of non-state stakeholders was described as important, but most influential was the push made by the Indiana Hospital Association, including its support of a hospital provider tax, an essential piece to the development of HIP 2.0. Interviewees also consistently acknowledged the importance of other stakeholder groups support in the development of HIP 2.0, including MCEs, provider associations, and consumer advocates. Provider association representatives and consumer advocate interviewees described "hard negotiations at times" where "both sides were conceding points," but they also said that Indiana officials solicited and were receptive to input throughout the development of HIP 2.0. Advocacy by the Indiana Hospital Association, however, was viewed by state officials and other interviewees as being vital to moving HIP 2.0 forward, largely because the association offered a sustainable funding source for much of Indiana's share of the Medicaid expansion through a hospital provider tax. The hospital provider tax was described in an Indiana Hospital Association document as a "mutually beneficial agreement" with the state to help fund HIP 2.0.[100]

Important to hospital support for the demonstration was an agreement with the state that the HIP 1.0 provisions for provider reimbursements be continued under HIP 2.0, with providers reimbursed at Medicare rates under HIP 2.0, which are substantially above the prior Medicaid payments of 60 percent of Medicare rates. State legislation authorizing HIP 2.0 requires that participating providers be reimbursed at Medicare rates and, as part of the HIP 2.0 financing agreement between the Indiana hospital association and the state, provider reimbursement for non-HIP 2.0 Medicaid enrollees be

[100] "HIP 2.0 Financing Overview," Indiana Hospital Association, no date (accessed August 17, 2018), https://www.in.gov/fssa/hip/files/HIP_2.0_Financing_Overview.pdf

increased to 75 percent of Medicare rates.[101] According to one provider association representative interviewee, the rationale to support paying Medicare rates for HIP 2.0 enrollees was that "Medicaid rates are too low, they don't increase access, they don't maintain access, … a card that says you have Medicaid doesn't mean much if you can't find a physician."

Goals for HIP 2.0

In agreement with Indiana's HIP 2.0 demonstration application, each of the interviewees articulated many goals for HIP 2.0, with expanding coverage at the top of the list followed by trying to educate consumers about health care, health insurance, and improving health outcomes. Further, state official interviewees commented that because HIP 2.0 is a demonstration, it allows Indiana to test different ways to provide health insurance coverage and deliver health care to determine what works best for Indiana.

Stakeholder support of HIP 2.0 goals. Interviewees across the board echoed support for the stated goals of the program, with that of expanding health insurance coverage to a greater number of low-income uninsured adults in Indiana – not surprisingly – garnering widespread endorsement among Indiana's health care stakeholders, including MCE executives, health care providers and provider associations, and consumer advocates.

State officials acknowledged Indiana's poor record of population health status, with one interviewee noting, "we have abysmal [health] outcomes not to be proud of." Consistent with that, several interviewees, including an MCE executive, a provider association representative, and a consumer advocate, also mentioned improving health outcomes for Indiana residents as a key goal for HIP 2.0 and as the motivation for the financial incentives for preventive care under HIP 2.0. According to the 2017 America's Health Rankings, Indiana ranked 38th among states in health determinants (a composite measure of community, environmental, policy, behavioral, and clinical health measures), 41st in smoking, and 40th in obesity.[102]

Further, teaching enrollees about how health insurance works was commonly mentioned as a demonstration goal by state officials, MCE executives, and consumer advocates. Several interviewees commented that the demonstration was an important step in the transition toward private insurance coverage and a way to encourage HIP 2.0 enrollees to be responsible for their health care by bearing some of the financial responsibility (i.e., by having "skin in the game"). As one interviewee representing an MCE put it, "[through HIP 2.0,] we are helping [enrollees] navigate health care … to help people get to commercial insurance … [HIP 2.0] is a steppingstone to it."

Testing different approaches. State officials view HIP 2.0 as a dynamic, evolving program that allows Indiana to test different approaches to providing health care coverage and services to meet the goals of the demonstration. "It is a [section] 1115 [demonstration] waiver, so let's demonstrate for real what is working. And for those items where it is not [working], let's sunset those. And let's enhance those that are working …" said one state official. In that spirit, the 2018 demonstration renewal included several

[101] Healthy Indiana Plan*, Provider Payment Report.* (Baltimore, MD: Centers for Medicare & Medicaid Service, 2017); https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-provider-pymt-rpt-09252017.pdf.

[102] United Health Foundation, *America's Health Rankings: Annual Report 2017* (Minnetonka, MN: United Health Foundation, 2017), https://assets.americashealthrankings.org/app/uploads/ahrannual17_complete-121817.pdf.

program changes based on experiences to date under HIP 2.0. For example, Indiana did not include the graduated copayment for non-emergent use of the ED in its demonstration renewal request. State officials said that the data indicated that the added copayment "wasn't making a difference," so they phased it out. As part of the evolution of HIP 2.0, state officials also noted that Indiana wants "to ensure that we [Indiana] are in charge of it [HIP 2.0] … to have our flavor" of Medicaid expansion. Several non-state interviewees noted approvingly that Governor Holcomb's administration is "open on communications and transparent" about HIP 2.0, and one interviewee representing a consumer advocate described the administration as having a "pragmatic" and "very data-driven" approach to running the demonstration to best meet Indiana's needs.

Implementation of and Enrollee Experiences with HIP 2.0

In this section, we discuss the implementation of and enrollee experiences with HIP 2.0. Results presented in this section are based on the 18 stakeholder interviews, six enrollee focus groups, and two disenrollee focus groups. We look at six major program areas: (i) outreach, (ii) enrollment and eligibility redetermination, (iii) enrollee education, (iv) cost-sharing, (v) disenrollment and lockout, and (vi) access to health care. Although interviewees noted some problems and glitches with the initial implementation of HIP 2.0, more than 3 years into the demonstration, HIP 2.0 is universally appreciated by enrollee focus group participants and interviewees across the board, including state officials, MCE executives, health care providers and provider association representatives, and consumer advocates. Further, all the non-state interviewees gave credit to Indiana's Family and Social Services Administration (FSSA), the state agency responsible for administrating HIP 2.0, for operationalizing, implementing, and refining HIP 2.0 as needed to create a strong program for Indiana.

1) Outreach.

Indiana's strategy behind marketing HIP 2.0 ensured that the demonstration was well-recognized among stakeholders across the state as well as among prospective enrollees. Initial state-sponsored outreach efforts aimed to communicate programmatic features of HIP 2.0 and to solicit input on HIP 2.0 design and implementation, with the expectation that Indiana health care stakeholders would be the first to identify and educate potential enrollees. Interviewees representing MCEs, provider associations, and consumer advocates all expressed how collaborative Indiana officials were in their initial outreach for HIP 2.0, and moreover, these interviewees felt their feedback on HIP 2.0 was taken into consideration as the state developed the demonstration. Although deliberately targeting HIP 2.0 stakeholders was Indiana's primary outreach approach, the state also employed mass communications and advertisement campaigns to publicize the program directly to prospective enrollees. Enrollees in focus groups and interviewees representing state government, provider groups, and consumer advocates also reported how helpful navigators and application assistors were in providing program outreach and education, mainly because they can provide frequent one-on-one interactions with current enrollees and prospective enrollees to help explain HIP 2.0.

Program outreach. Successful HIP 2.0 program outreach involved overlaying communications with stakeholder engagement in an effort to reach prospective enrollees. According to state officials, in 2014 Indiana adopted a hybrid approach to educate health care stakeholders and potential enrollees about the HIP 2.0 demonstration proposal. A state official described forming an advisory stakeholder group consisting of navigators, the Indiana State Medical Association, and the Indiana Hospital Association early in 2014 to educate group members on the proposal and provide an overview of its design features, which they could then share with prospective enrollees. Coupled with creating an advisory committee,

the state also launched a series of "roadshows," visiting cities such as Bloomington, Lafayette, South Bend, and Fort Wayne. The purpose of the roadshows was to engage local health care stakeholders (including local health care providers and consumer advocates), define key components of HIP 2.0 demonstration, and communicate program changes under the demonstration. MCE executives, health care providers and provider association representatives, and consumer advocate interviewees all commended the state for its collaborative efforts to engage Indiana health care stakeholders on the design of HIP 2.0 through a range of activities.

In addition to stakeholder outreach, in the summer of 2015 the state sponsored advertisements through TV commercials, billboards, posters, and brochures to spread the word about HIP 2.0 to prospective enrollees. This hybrid approach was apparently effective in reaching prospective enrollees: most participants in our focus groups cited first hearing about HIP 2.0 from stakeholders such as hospitals, navigators, the Medicaid office, and the food pantry; from billboards and posters; or on TV. State officials said that since the launch of HIP 2.0, Indiana has continued to invite stakeholder input on program implementation to shape changes to the future program design. Non-state interviewees, including MCE representatives and consumer advocates concurred.

HIP 2.0 branding. Enrollees in our focus groups, state officials, MCE executives, and other interviewees we spoke with all regarded HIP 2.0 as a well-known program that is distinct from Hoosier Healthwise, Indiana's traditional Medicaid program. The immediate brand recognition of HIP 2.0 was attributed to the tailored messaging campaign sponsored by the state. As one state official described, "One thing that I remember about the messaging was characterizing HIP 2.0 as Indiana's signature health plan. We take ownership in this; we take pride in this. This is our program and we have branded it so that people know it by name." Accordingly, over the course of the first 3 years of the demonstration, Indiana has rolled out multiple advertisement efforts focusing on different themes. The first phase consisted of the "with it, without it" campaign, which emphasized the importance of health insurance coverage for staying healthy. The second phase underscored the affordability of HIP 2.0 and the third phase focused on untangling the intricacies of specific program elements of HIP 2.0, such as POWER Accounts, which state officials, MCE executives, and consumer advocate interviewees identified as a confusing program aspect for existing and prospective enrollees. One state official described the ongoing refinement of the HIP 2.0 communication strategy as going hand-in-hand with program refinement: "communication is evolving as the program evolves."

Critical role of navigators. Navigators played a key role in HIP 2.0 outreach efforts. During the rollout of HIP 2.0, navigators targeted newly eligible individuals, including those who had been waitlisted in HIP 1.0, to ramp up enrollment efforts. As of the time of our site visit in June 2018, navigator organizations have been funded through federal and state grants. Navigators were said to be a critical resource for HIP 2.0, described by one interviewee representing providers as "the subject matter experts in HIP" and as having strong connections with enrollees because "they really know their people." As well as assisting individuals with the application process, navigators help enrollees with ongoing program issues. For example, interviewees reported that navigators educate members on the benefits of the HIP Plus benefit package, the required POWER Account contributions, and upcoming program changes.

2) Enrollment and Redetermination.

Interviewees representing state government, MCEs, health care providers and provider associations, and consumer advocates all said HIP 2.0's biggest achievement so far has been the significant expansion of health insurance coverage through enrollment in the demonstration. Moreover, enrollment and

eligibility redetermination in HIP 2.0 were described as easy processes by most enrollees in our focus groups. Disenrollee focus group participants, however, did report some difficulty with the HIP 2.0 enrollment process and consumer advocate interviewees mentioned challenges with presumptive eligibility. In addition, focus group participants, state officials, and other interviewees reported that other components of the enrollment process (such as MCE selection and the Fast Track payment) were confusing.

Rapid enrollment ramp-up. Enrollment in HIP 2.0 was quick to ramp up after implementation. By January 31, 2016, just 1 year after the launch of HIP 2.0, more than 342,000 people were enrolled in HIP 2.0.[103] Indiana officials credited the rapid enrollment under HIP 2.0 to the robust outreach efforts by the state and its community partners that provided navigator services, and to the state's efforts to expand presumptive eligibility in HIP 2.0, which was designed to ameliorate potential negative consequences from the waiver of retroactive coverage. Program enrollment had grown to 403,075 people by January 31, 2018,[104] which was roughly three quarters of the 552,390 people that Indiana had projected that HIP 2.0 enrollment would reach in 2018.[105] State officials acknowledge enrollment targets have not been reached but attribute the shortfall to Indiana's economy rebounding "so nicely" after the 2008 recession, highlighting the state's low unemployment rate, which was 3.3 percent in June 2018.[106] As one official said, "we probably underestimated how far back the economy would come." A consumer advocate interviewee acknowledged the economy as a possible explanation for the shortfall but was not completely convinced, saying, "Our employment rate is very good. It's hard to say [why HIP 2.0 enrollment is lower than was estimated], we don't know … When people fall off the program, it is hard to capture their rationale."

Initial application and redetermination. Coverage sign-up and redetermination were generally perceived by HIP 2.0 enrollees in the focus groups as simple and straightforward. Focus group participants said they enrolled in coverage in many different settings, including online, in person at the Medicaid office or the food pantry, over the phone, and at the ED. Some said they used enrollment assisters to help them apply. For example, one enrollee focus group participant reported, "I used the navigator. You tell them what your needs are, what your resources are, and what all your health needs are, [including] pre-existing conditions. They hook you up with the best program [HIP Plus or Basic] that is good for you." The enrollment process for HIP 2.0 coverage was regarded positively among HIP 2.0 enrollees in our focus groups and described as "simple," "easy" and "self-explanatory." Enrollees in our focus groups who had experience renewing HIP 2.0 coverage said this process was also easy. As described by a state official, the state notifies enrollees when it is time to renew coverage and that some action (such as updating contact or income information) may be required. This process was confirmed by HIP 2.0 enrollees in our focus groups.

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[103] State of Indiana, *Healthy Indiana Plan Demonstration Annual Report: Demonstration Year 1* (Indianapolis, IN: State of Indiana), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-annl-rpt-feb-jan-2016-04292016.pdf.

[104] State of Indiana, *Healthy Indiana Plan Demonstration Section 1115 Annual Report: Demonstration Year 3* (Indianapolis, IN: State of Indiana, 2018), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-annl-rpt-feb-jan-2018-043018.pdf.

[105] "Basic Public Healthy Indiana Plan 2.0 Presentation," Indiana Family and Social Services Administration, August 5, 2015 (Accessed August 31, 2018), https://indianacouncil.org/sites/default/files/resources/2-13-15_HIP%20Approved%20presentation_Wernert.pdf.

[106] "Economy at a Glance," Bureau of Labor Statistics, data extracted on August 29, 2018, https://www.bls.gov/eag/eag.in.htm.

While disenrollees in focus groups also generally described the initial HIP 2.0 enrollment process as quick and easy, some were surprised to later find out they had not been fully enrolled in HIP 2.0, and many said they had difficulty trying to re-enroll. For example, one disenrollee focus group participant shared, "Once disenrolled, they told me to call my insurance [MCE] but when I called my insurance [MCE] they didn't know why I was calling since they no longer had information on me. It's to the point I just want to go [back] to the hospital to get signed up."

Since we do not have information from people who applied for HIP 2.0 coverage but did not enroll or tried to renew and failed, we do not know what barriers to enrollment and redetermination may exist for these groups. However, focus group and interview findings suggest some individuals may have experienced a lack of follow-up to complete the presumptive eligibility process, as further described below.

MCE choice. In 2018, HIP 2.0 enrollees could select one of four MCEs available statewide during their application process or could call an enrollment broker to select one afterwards. If no selection was made, enrollees were assigned to an MCE. Enrollees in the focus groups, however, were not always aware they had a choice in MCEs. When asked about selecting an MCE, enrollees in the focus groups cited choosing a plan based on in-network providers, previous insurance coverage, or family recommendations. Although some enrollees in the focus groups felt like they had a decision in selecting their MCE, this was not the case for all, as one enrollee said, "I don't remember having a choice."

Presumptive eligibility. Presumptive eligibility is designed to help expedite the enrollment process, but the subsequent steps needed to obtain full HIP 2.0 coverage were confusing to some focus group participants. While the HIP 2.0 demonstration allows for an expanded presumptive eligibility program by broadening the scope of organizations able to determine presumptive eligibility, other HIP 2.0 presumptive eligibility policies adhere to what is set out in Indianan's general Medicaid program. Thus, the uncertainty expressed by focus group participants about how to achieve full enrollment status after being determined presumptively eligible reflects confusion about general Medicaid program provisions as well as HIP 2.0. Health care providers and MCE executive interviewees both touted that HIP 2.0 affords consumers presumptive eligibility, meaning applicants can sign up for short-term coverage for health care services at acute care hospitals, as well as at Federally Qualified Health Centers, Rural Health Centers, Community Mental Centers, and Health Departments across Indiana.

Although presumptive eligibility provides a quick way to temporarily turn on HIP 2.0 coverage, state officials and several other interviewees stressed the importance of ensuring full HIP 2.0 enrollment for people who use it. One consumer advocate described an ongoing issue where there "is not always follow-through to get the full application taken care of." Another consumer advocate described a similar situation, saying, "The account didn't get switched on, something happened, they [the enrollee] were okay with presumptive eligibility in the hospital but then they tried to go to the follow-up and they [the provider] said your coverage [was] inactive."

Presumptive eligible enrollees in the focus groups were not always aware that further action on their part was needed to become fully enrolled in HIP 2.0. One disenrollee focus group participant said, "I went to the emergency room and then they signed me up. When I got it, I thought it was for the year but then when I called to make an appointment, I was [told I was] cut off." Individuals who fail to complete the presumptive eligibility process are not locked out from HIP 2.0 and can reapply for coverage.

Fast Track payments. Fast Track payments toward an enrollee's POWER Account contribution are another mechanism to help speed up the HIP 2.0 enrollment process.[107] HIP 2.0 applicants or someone paying on their behalf can make a one-time prepayment of $10 to an MCE to activate HIP Plus coverage retroactive to the first of the month in which the payment was made once eligibility is determined. But several interviewees noted a few challenges with the Fast Track process. One consumer advocate stated that "[Fast Track] is the quickest way to lose 10 dollars because you probably won't end up with [the MCE that you chose and paid the 10 dollars too], for instance, because there are no more in-network providers accepting new patients." Other interviewees noted that enrollees are not always aware that future POWER Account contributions may be owed in addition to the one-time $10 prepayment. As one disenrollee focus group participant experienced: "[The Fast Track payment] was the confusing part. I was told it was a one-time payment. And I was like wow that's great...but then I was told I no longer had coverage because I hadn't made any more payments. And I was like wait a minute no one told me." At the same time, consumer advocates and provider association representative interviewees said that hospitals commonly make the Fast Track payments on behalf of applicants. One provider association representative interviewee said, "It's [Fast Track] not a long process and it's great to give them [enrollees] peace of mind." Providers were reported to use the Fast Track payment option frequently, and as one provider association representative interviewee noted, "We do it as often as we can, and it is fairly common for us to pay the 10 dollars." The state's evaluation reported that 20 percent of people enrolled in HIP 2.0 in the first 22 months of the demonstration had made a Fast Track payment, which includes payments made directly by enrollees and by providers.[108]

3) Enrollee Education.

Although Indiana has focused on providing general education about the availability of HIP 2.0, navigator organizations provide education to individuals throughout the enrollment process, and MCEs educate people once they are enrolled (primarily on the details of the program such as POWER Accounts and the advantages of HIP Plus over HIP Basic). Although the state, MCEs, and consumer advocates (particularly navigator organizations) all provided education on HIP 2.0 through multiple mediums, interviewees from all perspectives reported difficulty reaching enrollees and, as a result, enrollee understanding of key elements of HIP 2.0 was described to be limited. Our focus groups with HIP enrollees and disenrollees confirmed these gaps in understanding how HIP 2.0 works.

Education efforts by MCEs. MCEs are responsible for educating their HIP 2.0 enrollees about program design and operations, which MCE executive interviewees report has been a challenge. Once the enrollment process is completed, MCEs follow up with HIP 2.0 enrollees in several ways, including welcome kits and new member packets, information on plan websites, phone calls, texts, emails, social media, letters and post cards, and community events. These communications include educational information about how the HIP 2.0 program works (such as the difference between HIP Plus and HIP Basic and information on POWER Accounts, monthly contributions, copayments, incentives for preventive care, and when to use the ED), along with monthly communications about POWER Account

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[107] "Healthy Indiana Plan: Fast Track Payments," Indiana.gov, no date (accessed August 17, 2018), https://www.in.gov/fssa/hip/2501.htm.

[108] The Lewin Group, Inc., *Healthy Indiana Plan 2.0: POWER Account Contribution Assessment* (Indianapolis, IN: Indiana Family and Social Services Administration, 2017), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-POWER-acct-cont-assesmnt-03312017.pdf.

balances and contributions owed. Many focus group participants reported they were aware of several ways to get information about HIP 2.0 from their MCE.

However, some enrollees in the focus groups felt they received too much mail from their MCE and that it was difficult to determine what was new information and to keep up with all the information. One enrollee focus group participant said, "They [the MCE] send so much material in the mail that half of the time you just throw it away." Another enrollee shared, "I just want to know if I have coverage and if I owe money. It's good that they [the MCE] keep you updated but I don't need all that [other mail]."

Interviewees across the board reported several barriers faced by MCEs in their efforts to reach HIP 2.0 enrollees for education, including incorrect addresses and phone numbers. Several interviewees noted that HIP 2.0 enrollees often move, which can lead to problems with lost or delayed mail. In addition, one MCE executive shared, "A lot of people have prepaid phones, and they change their phone numbers [frequently], so you can't get a hold of people."

Education on the value of HIP options. State officials, MCE executives, and consumer advocates all emphasize in their HIP 2.0 outreach and education efforts that HIP Plus is the "best value" option under HIP 2.0 for those who have a choice between HIP Plus and HIP Basic.[109] Interviewees and focus group participants, without exception, agreed that enrollees understand the better value afforded by HIP Plus. Nonetheless, some HIP 2.0 enrollees are in HIP Basic option rather than HIP Plus. State officials report that they do not know whether HIP Basic enrollees are intentionally selecting HIP Basic or if they are unaware of the option to make POWER Account contributions to receive HIP Plus. Enrollee focus group participants reported experiences with not making POWER Account contributions either because they could not afford them or due to logistical challenges (described in other sections) that are also potential explanations as to why some HIP 2.0 enrollees are in HIP Basic.

Opportunities for additional education. Interviewees across the board reported that enrollee understanding of certain elements of HIP 2.0, particularly the POWER Account, is generally low despite education efforts. One MCE executive reported, "Many have no understanding of what the POWER Account is." Another MCE executive said, "I don't think there is a broad understanding of what [the enrollee] is paying into [when they make a contribution] and the rollover benefits." Consumer advocates also said that enrollees had limited understanding of POWER Accounts, as one advocate said, "People understand that there is a program that says that in order for you to get this service you have to pay for this … they don't understand that there is even a POWER Account."

Focus group discussions also revealed that POWER Accounts, POWER Account contributions, and rollover benefits are not well understood by many of enrollee focus group participants. When asked about how their POWER Accounts work, enrollee focus group participants gave a range of answers, with most answers reflecting limited understanding. Some reported they had not heard of POWER Accounts or said they did not understand them. For example, regarding the monthly POWER Account statements, one focus group enrollee said, "They send you a notice in the mail, but I don't pay too much attention to it, I don't understand it," and another said, "It says you've used so much towards your POWER Account. I don't know what it means." Other enrollees in the focus groups made inaccurate statements regarding how POWER Accounts work. For example, there was confusion over how the rollover benefit works, as

[109] "Healthy Indiana Plan 2.0: Introduction, Plan Options, Cost Sharing and Benefits," Indiana Family and Social Services Administration, no date (accessed August 17, 2018), https://www.in.gov/idoi/files/HIP_2_0_Training.pdf

one enrollee said, "If you don't use it every year you lose that. It does not roll over," while another said, "It automatically rolls over. You don't lose it or anything like that."

State officials acknowledge that enrollees have a limited understanding of HIP 2.0's processes and policies and are working to change this as part of a new outreach effort. One state official shared, "The next step [in enrollee education] is demystifying this stuff: How do POWER Accounts work? Do people know what these really are? When we got our [state] evaluation back … when people were asked about POWER Account contributions, the next level of detail was that folks didn't know what that is. Some of the language didn't work in round one [of enrollee education]."

4) Cost-Sharing.

As mentioned, HIP 2.0 includes three elements of cost-sharing POWER Account contributions for those in HIP Plus, copayments for selected services (with only copayments for non-emergent ED use for those in HIP Plus and more copayments for those in HIP Basic as allowed under federal Medicaid law), and a "deductible" paid out of the POWER Account. Focus group participants and interviewees across the board, including state officials, MCE executives, health care providers, and consumer advocates, generally view the cost-sharing requirements of HIP 2.0 as affordable, although there were some examples where people struggled to afford the POWER Account contributions, particularly in the disenrollee focus groups. In addition, state officials and MCE executives reported that the POWER Account contributions were a successful strategy to engage enrollees in their health care use. However, the administrative processes required to collect the contributions were said to be complicated for MCEs, and copayments, including copayments for ED use, were said to be inconsistently collected by providers (except pharmacies). Focus group participants also reported challenges keeping track of their POWER Account contributions, especially when the amounts they needed to pay could change each month.

Amount of POWER Account contributions. POWER Account contributions, which averaged about $12 per month in 2017 according to state-reported data,[110] were viewed as being affordable by most but not all enrollees and disenrollees in our focus groups. Importantly, since we did not conduct focus groups with eligible people who did apply, we do not know to what extent affordability was a barrier for that group.

With state data showing that nearly half of HIP Plus enrollees (45.1 percent) were paying $1 per month in POWER Account contributions,[111] many enrollees in the focus groups were quick to point to affordability as one of their favorite aspects of the program, particularly compared with other options such as purchasing insurance through their employer. For example, one focus group enrollee said, "I am glad they have this opportunity for people who cannot afford regular insurance." Another participant shared, "You can afford it. [My cost is] $35/month max. My insurance through my job would be 15 percent of my pay." Focus group participants also felt it was fair to contribute and liked that HIP 2.0 does not have the stigma associated with traditional Medicaid. As one enrollee participant said, "If it was completely free, I think people would judge you. People have negative views about those on Medicaid." Another focus group participant shared, "Now I don't feel like I have public insurance. I feel like I actually contribute to my insurance and I am paying towards it."

[110] Data provided by staff at the Indiana Family and Social Services Administration (FSSA) via email, July 20, 2018.
[111] Data provided by staff at the Indiana Family and Social Services Administration (FSSA) via email, July 20, 2018.

While on balance participants of the focus groups said that POWER Account contributions were affordable, it was not a universal sentiment. Some, particularly in the disenrollee focus groups, mentioned times they had to prioritize other necessities over making their POWER Account contributions. For example, one participant shared, "We were using all of that [pay]check just to pay for food and bus passes and we couldn't afford the payment." Some disenrollees in the focus groups said they could not afford their POWER Account contributions because they had lost their job or had seasonal employment, as one focus group participant reported, "Indiana Public Schools is not in operations in the summer, so I had no income coming in for 2 months and was unable to pay my POWER Account payment … They didn't even take into consideration that I don't work 12 months a year."

Consumer advocates' views on the affordability of POWER Account mirrored those of our focus group participants for most HIP 2.0 enrollees, contributions are affordable but for some they can be challenging. One consumer advocate shared, "frankly, with HIP, the fact that the POWER Account contribution requirement was so low, I am thinking 'hallelujah!'" At the same time, consumer advocates noted that $1 per month could be a challenge for some individuals. As one consumer advocate shared, "We had one client tell us … it just seems like Indiana wants my last $12." Another consumer advocate commented said, "We have had people that say they don't get the insurance at the appointment [with the navigator] because it is not affordable." One MCE executive observed that POWER Account contributions could sometimes be difficult for higher income enrollees, if "you're above 100 percent FPL, then the payments become more challenging."

Enrollee engagement through POWER Account contributions. The need for HIP Plus enrollees to make monthly POWER Account contributions was seen as an effective mechanism by some MCE executives interviewed to increase enrollee engagement. As one MCE executive said, "If you are a new enrollee you have to take action before you have access to your benefits unless you are at a certain income level. And so, it [POWER Account contributions] was a great way to get people engaged, to make sure they were assigned to the [primary care physician] they wanted, to help answer their questions about their benefits, because a lot of these folks had not had access to benefits for a long time. And so, it [monthly interactions with the MCE to make POWER Account contributions] was a whole different level of engagement than a traditional Medicaid program." MCE executives recounted stories of interactions with low-income enrollees who paid for a whole year of monthly POWER Account contributions at one time, suggesting some enrollees were deciding to prioritize maintaining coverage. One state official said, "as we talked to folks, and I suspect you'll hear this when you do your focus groups, people are really proud about making a POWER payment." Several enrollees in the focus groups echoed this sentiment of feeling good about making the payment because it reduced the stigma or guilt associated with "depending on the government."

Administrative complexity of collecting POWER Account contributions. Making monthly POWER Account contributions can be logistically challenging for some enrollees and collecting them was described as complex and labor intensive for MCEs. Most enrollee focus group participants reported making their POWER Account contributions over the phone or by mail when they received an invoice in the mail from their MCE. MCE executives stated that most enrollees call them each month to make their contributions, which has required them to build significant staffing capacity to handle these calls. One MCE interviewee shared that initially, for every person it had working on traditional Medicaid, the MCE needed to hire seven people to work on HIP 2.0. At the same time, the ratio has since fallen to 5:1, and has continued fall over time as HIP 2.0 has matured. This interviewee explained, "It was five times the calls, the volume of questions and making payments is a big one and they make payments every month.

They [enrollees] have a lot of questions." Although this is viewed as positive from a consumer engagement perspective, it is a high-touch and high-cost element of HIP 2.0.

Though state officials and other interviewees reported that making a POWER Account contribution was straightforward, several enrollees in focus groups mentioned some difficulties with the payment process, particularly as the amount owed changed from month to month. Several enrollee focus group participants shared that their lack of clarity on how much to pay in a given month resulted in a loss of benefits. For example, one participant said, "I didn't know it changed monthly so I paid for the year and then it changed. They called me and told me I was moved from Plus to Basic for missing a payment, but I had paid for the year … I had to file an appeal and go before the judge to go back to Plus and show that I had paid for the year." Another participant shared, "[The POWER Account contribution] keeps fluctuating … I have it automatically coming out. And now there hasn't been any payment for the last 2 or 3 months … I was told we are 45 days late for $3.50. I was told we were going to lose coverage."

MCEs receive information on their enrollees' income from the state each month, which they use to generate enrollee POWER Account contribution invoices, if applicable. As one MCE executive shared, "You cannot even imagine the amount of administrative difficulty caused by the 2 percent POWER Account contributions requirement."

Participants in the disenrollee focus groups reported logistical challenges in making their monthly payments as well as ultimately losing their coverage because of a failure to make a monthly payment. Some disenrollees in our focus groups also reported they did not know they were supposed to pay or were confused about how much they owed, as one focus group participant shared, "I didn't know I had to pay it … nobody wants to lose insurance and that's the cheapest insurance to have. I would've found a way to make the payment just to have something." Several other disenrollee focus group participants said they had never received a bill or had received their bill too late. For example, one disenrollee focus group participant said, "The letters arrive late and then when it's due – I'll have like one day to make payment. And depending on where you live and the mail, it really affects if you can make a timely payment."

Consumer advocate interviewees shared examples where particularly vulnerable people faced administrative or logistical barriers in making their POWER Account contributions. For example, one advocate shared, "A lot of people say they didn't get a bill and sometimes folks do move around and so that could be an issue to some people." State officials, MCE executives, and consumer advocates all reported that the state records contain incorrect addresses for HIP 2.0 enrollees. As one consumer advocate interviewee shared, "Through anecdotes we know the return mail is ridiculous. We just got some data from the state [to use in] trying to map those eligible for the community engagement requirement. Out of 900 people, we had 819 bad zip codes."

Administrative complexity of tracking out-of-pocket spending. MCE executives described tracking enrollee out-of-pocket spending as complex and labor intensive. It is the MCEs' responsibility to track the percentage of income enrollees have incurred in out-of-pocket costs (including copayments and POWER Account contributions) per calendar quarter to ensure that combined these out-of-pocket payments remain below the 5 percent threshold. According to state-reported data, 17 percent of HIP 2.0

enrollees in December 2017 had out-of-pocket costs at or above the 5 percent income threshold for that quarter.[112]

MCE executives reported some administrative difficulty tracking when cost sharing (including POWER Account contributions and copayments) reaches 5 percent of an enrollee's income in a given quarter. After reaching this threshold, enrollees are not supposed to incur additional out-of-pocket costs for the rest of the quarter. One MCE representative shared that when this happens, "We have to turn off their cost share percentage. And then the beginning of the next quarter, we have to turn it back on. So, someone has to constantly watch those numbers [to determine] who are getting their cost-share turned on and off every quarter."

Many providers are not collecting copayments. Providers are reported to be inconsistent in collecting copayments from HIP 2.0 enrollees, primarily affecting enrollees in HIP Basic. The consensus among interviewees and enrollee focus group participants was that providers, other than pharmacies, were often not collecting copayments in part because these copayments were regarded as an inconsequential sum. As one consumer advocate shared, "If they [the providers] don't collect the copay, then that person has made the decision it is not worth it to them, but they are still getting the [higher] Medicare reimbursement."

Some enrollees in our focus groups reported that pharmacies always charged required copayments, while doctors' offices sometimes charged copayments and EDs never charged copayments. Enrollees in the focus groups generally thought the copayments were affordable, if unpredictable. As one enrollee focus group participant reported, "They messed mine up. It was supposed to be free. It was only $3 to $5 copayment, so I was paying it. Sometimes I had to pay, other times no charges." Some enrollee focus group participants reported that at times they could not be seen by a provider without paying their copayment up front, as one participant said, "When I had HIP Basic, then I had to start making copayments before I switched to [HIP Plus]. You had to pay otherwise you won't see the doctor. You had to pay right then before you went to the appointment." Some enrollee focus group participants also reported inconsistencies in when and how much copays were being collected. For instance, one participant who had HIP Plus but was charged copays shared, "Even though I made all of my monthly [POWER Account] payments, I had to make copayments on top of that." Another enrollee participant reported, "The copays are really small. Not everybody does [collect them]. Mine is like $5."

Though not universal, several interviewees, including state officials, MCE executives, providers, and consumer advocates reported that ED copayments were not being collected. Part of the issue is that hospitals must first bill the MCE for an ED event. The MCE then determines whether a copay is owed—that is if it is non-emergent. If the MCE determines that it was a non-emergent visit, then the hospital can bill the enrollee. Under HIP 2.0, enrollees pay $8 for their first non-emergent visit to the ED (a charge allowable under federal Medicaid law and for which no waiver is required) and $25 for each subsequent non-emergent visit unless they called their MCE nurse advice hotline before going to the ED. One health care provider interviewee shared, "We don't collect copays in the [emergency department] … We stay away from financial conversations with [HIP 2.0] members in the [emergency department]. Not just for HIP but all payers." For primary care services, one provider association representative shared, "for the ones [enrollees] in [HIP] Basic, we do a lot of write-offs. That $4, they don't pay it … If we don't get paid in 180 days we don't take them to collections, we just write it off. Again, before [HIP

[112] Data provided by staff at the Indiana Family and Social Services Administration (FSSA) via email, July 20, 2018,

2.0] we were making $20 [on HIP 2.0 enrollees], now we are making $220. We ask them for it [the copayment] like we are supposed to, but we don't push it, we just do a write-off."

Effect of cost-sharing on enrollee behavior. Most enrollees in the focus groups did not report making decisions on whether to use health care services based on their POWER Account balance or potential rollover amounts or on potential copayments. For example, one enrollee focus group participant shared, "I don't [consider cost]. I guess because I am never at that point where I am running out [of POWER Account dollars] or going beyond what I need." However, some focus group enrollee participants did pay attention to their POWER Account balance before seeking care, such as one participant who said, "I only go if like I am really sick. Just make sure that I keep it [the POWER Account] so if anything comes up I don't have to worry."

Interviewees generally felt that the POWER Account rollover benefit for preventive care was not well understood or salient enough among HIP 2.0 enrollees to motivate behavior. For example, one MCE executive said, "The intent of the [POWER Account] rollover is to reward people for healthy behaviors. But it doesn't happen until so long after those healthy behaviors that it doesn't have the impact that I think was really intended." Another MCE executive, "There is an association that [HIP] Plus members are doing more preventive care [than HIP Basic members]. Whether it is caused by the POWER Account rollovers, it's hard to say. We get individual comments from members asking about the POWER Accounts, some of them are pursuing their refunds aggressively. The exact percentage is hard to say—it's probably not the majority of members."

Apart from HIP 2.0's POWER Account rollover benefit for preventive care, each MCE has its own rewards program that offers additional incentives to enrollees who demonstrate healthy behaviors. For instance, MCEs reward enrollees who complete a health needs assessment or who receive regular check-ups and exams with a gift card that can be applied to medical or wellness products or toward monthly POWER Account contributions. A few enrollee focus group participants were highly motivated by the opportunity to earn the gift cards that MCEs provided as rewards for receipt of preventive care services, such as one enrollee participant who reported, "I used to not go to the doctor, but since they put me on the rewards program I am all about going for my physical. If they are going to pay you for it and you don't have to spend out of pocket to see your doctor, that's money in your pocket."

State officials and some MCE executives highlighted that most HIP 2.0 enrollees with incomes at or below 100 percent of FPL are opting to make a POWER Account contribution and enroll in HIP Plus, where they receive enhanced benefits and largely avoid having to make copayments. From these interviewees' perspective, this indicates that enrollees see value in HIP Plus over HIP Basic and are acting accordingly. One state official said, "It suggests to me that they are making the conscious decision that if I invest a little on the front end, engage in my healthcare, do the preventative stuff [I am better off]. They are taking that step to the next level [of health insurance use], which is good."

Views differed among interviewees on whether copayments for non-emergent ED visits were affecting enrollee utilization. One MCE executive said, "I do think there is an effect because we have heard it from members before, 'oh well there could be a copay if I go [to the emergency department].'" A provider association representative interviewee observed, "There wasn't really a change in terms of non-emergent [emergency department] use … But was it that the copays don't matter or was it that they never were implemented on the ground level and that is the question we have."

5) Disenrollment and Lockout.

Awareness of how disenrollment and the lockout work under HIP 2.0 varied among focus group participants. Some HIP Plus enrollees in the focus groups were aware they could be disenrolled and locked out for failing to make their POWER Account contribution within the grace period, while others were not. Several HIP Plus disenrollees in our focus groups reported confusion over why they were disenrolled and were eager to return to HIP 2.0, but were locked out or could not figure out how to reenroll.[113] Disenrollee focus group participants also reported going without needed health care, including prescription drugs, while waiting to re-enroll in HIP Plus.

State officials and other interviewees reported that disenrollment due to administrative glitches around the POWER Account contributions occurred relatively frequently when the demonstration was first implemented, but that such disenrollments have declined significantly over time. Although some interviewees, including MCE executives and state officials, did not view disenrollments as a big problem, others, including consumer advocates, health care providers, and provider association representatives, had major concerns, particularly about health care access for those who were locked out of HIP 2.0 coverage.

Disenrollment due to administrative issues. Administrative issues led to higher-than-expected disenrollments when HIP 2.0 was launched. Disenrollment occurs through a joint process between the MCEs and the state. Although the MCEs send invoices and collect POWER Account contributions, Indiana determines eligibility and thus oversees disenrollment for failing to make the monthly POWER Account contribution within the grace period. The state also tracks the lockout period for POWER Account nonpayment. Because of this process, files that track enrollee status must be shared back and forth between the state and each of the MCEs. Interviewees reported some disenrollments had occurred because of tracking or coordination errors, particularly as HIP 2.0 was getting started. One consumer advocate shared, "The ones I knew about, it was the state's fault. They [HIP 2.0 enrollees] wanted to pay but there was a miscommunication and I think the state learned that they had to show a little flexibility there until this thing got smoothed out." Interviewees, including MCE executives and consumer advocates, noted that administrative issues pertaining to disenrollment have improved over time. One MCE executive reported, "Our first file with this process had a … couple thousand [prospective disenrollees] … now it's down to 100." Currently, the state sends a list of prospective disenrollees to the MCEs. They contact enrollees, encouraging them to make their outstanding POWER Account contributions to avoid disenrollment. Of course, the ability to contact enrollees is dependent on the accuracy of contact information for the enrollees, as discussed. Disenrollees can also appeal their coverage loss and lockout.

Although some focus group participants who were disenrolled reported learning of their disenrollment through a letter from the state, many did not know they had been disenrolled until they tried to use HIP 2.0 in a health care setting. For example, one focus group disenrollee reported, "I found out I didn't make a payment. I was only in the program for 1 month. I tried to make a doctor's appointment, but they told me I no longer had coverage." Another said, "I was going to fill a prescription and they told me I didn't have coverage." Others found out they had been disenrolled when they called to make their POWER Account contribution, such as one disenrollee focus group participant who said, "[I called and] asked about my balance and they told me I was discontinued." Consumer advocates described similar

[113] These included those who were fully enrolled before disenrollment and those who were considered never fully enrolled because they had not made their first POWER Account contribution but still considered themselves disenrolled.

disenrollee lockout experiences—where members were not aware of the termination of their coverage prior to seeking care.

Reasons for nonpayment and incomplete redetermination. HIP 2.0 enrollees fail to make their monthly POWER Account contribution or to complete redetermination for several reasons, according to interviewees. MCE executives and consumer advocates shared examples of people going back and forth between private insurance and HIP 2.0, like someone who "might get a little overtime and so that bumps them up to the Marketplace." One MCE executive observed, "Generally, the people who are dropping off are less engaged [with HIP 2.0], because they are a healthier and busier population." As described in previous sections, consumer advocate interviewees and disenrollee focus group participants reported some disenrollees had not paid for a number of reasons, including lack of awareness that additional steps were needed to complete enrollment after presumptive eligibility, confusion over the Fast Track payment, not knowing they needed to pay due to late mail or confusion over the mail they received, or the need to prioritize paying for other necessities.

Some enrollee focus group participants also lacked awareness of how disenrollment and lockout work under HIP 2.0. For example, one enrollee shared, "If you forget to make a payment you can get kicked off and dropped down to below [HIP] Plus. Then if you don't make the copayments then they will kick you off. Then you have to wait for like 2 years to re-apply." Enrollees in our focus groups also varied in their experiences of the consequences for nonpayment of POWER Account contributions. While some had experienced being switched from HIP Plus to HIP Basic, others benefited from the grace period for making POWER Account contribution. As one enrollee in our focus group reported, "I talked to somebody in billing … and said that money is tight, my wife lost a check and we are going off [a] very strict income so we can't really make payments all the time. They went ahead and said they would cover me like 2-3 months in between and after the 3rd or 4th month they would shut me down. They gave me a few months' leeway."

Disenrollees' perception of lockout. Although it is unclear from Medicaid administrative data how many people who are locked out of HIP Plus obtain alternate forms of coverage, a state official reported that the number of people who were locked out and try to reapply is "a very small number; it's in the hundreds." Although this may suggest many people disenrolled from HIP 2.0 obtain coverage elsewhere or have left the state, disenrollee focus group participants reported they initially did not know they had been disenrolled. Some also said they could not figure out how to reapply, suggesting that at least some disenrollees who have been locked out may want to reenroll than are captured in HIP 2.0 program data.

Interviewees across all stakeholder categories expressed concern about the lockout and questioned its effectiveness in supporting the program's goal of consumer engagement. One provider association representative said, "Is a lockout scary enough to make somebody [make] a POWER Account payment? I would say yes, but … is a lockout enforcing the idea that you should change your behavior for better health outcomes? The answer is no."

Most disenrollees in our focus groups were uninsured at the time of our focus groups and did not have alternate forms of coverage available to them. They felt responsibility and regret for losing their HIP 2.0 coverage, as one disenrollee participant said, "I was mad at myself. I should've made those little simple payments each month." At the same time, disenrollees in our focus groups felt the lockout was unfair and wished they could reenroll as soon as they could pay their outstanding POWER Account balance. For example, one focus group disenrollee suggested, "If you are behind on your payment, they [the state] should tell you that you have to catch that up before you can go to the doctor … Why lock you out for 6

months, and then it takes like 3 more months to get it started back up again." Another disenrollee focus group participant shared, "This is the worst time this could happen to us. My husband just had a heart attack and has to wait for the 6 months to reapply."

Many disenrollees in the focus groups reported forgoing needed medical and dental care in the meantime because they could not afford the out-of-pocket cost. One disenrollee participant reported, "I was in tears when I couldn't see a dentist. Once you apply you have to wait for a period of time … even though I have reenrolled … I had to self-medicate and tolerate the pain." In addition, disenrollees reported difficulties accessing prescription medications needed to treat chronic conditions, such as high blood pressure and depression, which led to them spacing out medications, forgoing medications, or self-medicating with medication obtained over the counter or from friends. For example, one disenrollee focus group participant shared, "For my [normal] medications, I try to spread it out so that I have it when I really need it."

6) Access to Health Care.

Interviewees and focus group participants considered improved access to health care a major success of HIP 2.0. According to a state official, "The accomplishment has always been access. Access has been the key to HIP 2.0. [HIP 2.0] got the consumers and providers to really rally around the concept." Improved access afforded under HIP 2.0 was largely attributed to expanded health insurance coverage and to the Medicare rates paid to providers for HIP 2.0 enrollees.[114] By expanding the share of the population with coverage and increasing provider reimbursement, HIP 2.0 was viewed by many interviewees as having (1) increased provider participation in Medicaid so that HIP 2.0 enrollees had access to care consistent with that of other insured groups and (2) decreased hospital uncompensated care costs to significantly improve their financial circumstances. Although interviewees and enrollee focus group participants generally characterized access under HIP 2.0 positively, some pockets of Indiana continue to experience provider access issues (particularly for general and specialty dental services (e.g., implants and oral surgery) as well as behavioral health services, described by several interviewees as a statewide provider deficiency rather than specific to HIP 2.0.

General access to health care. Access to health care under HIP 2.0 was reported to be generally good. Interviewees representing all stakeholder categories and enrollee focus group participants reported that HIP 2.0 provides good access to health care and that finding a primary care doctor was generally not a problem. Enrollees in focus groups said that they are now able to seek care without experiencing real delays and could receive services that they previously could not afford, including dental and vision care. For example, one enrollee focus group participant shared, "You're so excited to get blood work. You can actually go get your teeth clean. God, I can go get some glasses now." Another enrollee focus group participant said, "I have a dentist appointment tomorrow, before HIP it would cost me $300 but now I'll go because I can afford it." One MCE executive said that, "Provider networks are very robust. HIP 2.0 reimburses at a higher rate, so we haven't seen a network or provider access shortage like other states may have experienced."

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[114] Historically, non-HIP Medicaid providers were reimbursed at approximately 60 percent of Medicare, but with the launch of HIP 2.0, provider rates for non-HIP enrollees increased to 75 percent. See Healthy Indiana Plan*, Provider Payment Report.* (Baltimore, MD: Centers for Medicare & Medicaid Services, 2015), https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/in/Healthy-Indiana-Plan-2/in-healthy-indiana-plan-support-20-provdr-payment-rpt-12292015.pdf.

Although enrollees in the focus groups noted that primary care was widely accessible, some said they found it difficult to find specialty providers, such as one enrollee focus group participant who said, "Most regular physicians take HIP but not specialists. ENTs for example might not accept it. I had to go to Indy to find one." Another participant shared, "I need to get my wisdom teeth pulled but I don't have an oral surgeon in network. I don't think they take the insurance. I would only go if it was covered." In some cases, enrollee focus group participants reported difficulty accessing specialty care because of the need for an appropriate referral from their primary care physician.

Emergency department (ED) utilization. Emergency department utilization is reported to be down among HIP 2.0 enrollees, but the factors behind the decline in usage are not well understood. The possibility of a graduated copayment for using the ED for non-emergent care may have contributed to a decline in use, although it appears consumers were rarely billed for those copayments by the hospital. Nonetheless, some enrollee focus group participants reported that they tried to avoid non-emergent use of the ED (such as by calling the doctor or nurse hotline first or using urgent care instead) because of the possibility of a copay. However, other enrollee focus group participants did not appear to understand the difference between emergent and non-emergent ED use and so were less likely to change their behavior, as some enrollees said they would still use the ED when they felt they needed care right away.

Interviewees representing all stakeholder categories reported that there has been a shift away from ED use among HIP 2.0 enrollees. According to state administrative data, the number of ED claims (emergent and non-emergent) per 1,000 members decreased among both HIP Plus and HIP Basic members between 2015 and 2017, with a drop from 65 to 57 claims per 1,000 enrollees for HIP Plus and from 128 to 84 claims per 1,000 enrollees for HIP Basic.[115] Some interviewees hypothesized that the decline is tied to increased access to primary care and dental care. Interviewees reported that enrollees would formerly show up to the ED for primary care and dental care, or as one provider association representative noted, "To a lot of folks, the emergency department was their [primary care physician]." A consumer advocate noted that "Once people got reliable coverage and started using preventive services, they weren't using the [emergency department] as much." However, it is also possible that a decline in ED use per 1,000 members was the result of a healthier population joining HIP 2.0 under the Medicaid expansion relative to the Medicaid population before HIP 2.0.

Preventive care utilization. State officials and other interviewees said preventive care use has increased under HIP 2.0, which stakeholders viewed as being a major win for HIP 2.0. HIP 2.0 underscores the importance of personal responsibility, including the use of preventive care through both enrollee outreach and incentives for preventive care through POWER Account rollovers and MCE incentives. Some focus group enrollees attested to being more inclined to use preventive care services because they are now covered under HIP 2.0. State officials highlighted gains in several prevention measures for HIP 2.0 enrollees based on administrative data, such as increases in the share of enrollees receiving routine check-ups, mammograms, and colorectal screenings. For example, among HIP 2.0 enrollees age 20 and older, 42.9 percent with HIP Plus and 61.2 percent with HIP Basic received a preventive care or ambulatory care visit in 2015, whereas, that share had increased to 69.7 percent for HIP Plus and 69.0 percent for HIP Basic in 2017.[116]

[115] Data provided by staff at the Indiana Family and Social Services Administration (FSSA) via email, July 20, 2018.
[116] Data provided by staff at FSSA via email, July 20, 2018.

However, interviewees were generally uncertain what aspects of HIP 2.0 were driving an increased use of preventive care. Findings from our focus groups suggest it is likely some combination of having coverage for these services, the possibility of rolling over POWER Account balances at the end of the plan year, and the other incentives and reward programs offered by MCEs for obtaining preventive care that led more HIP 2.0 enrollees to use preventive care services.

Non-emergency medical transportation (NEMT). Even though NEMT services are excluded from the HIP 2.0 demonstration for some newly-eligible enrollees, all four MCEs offer free transportation services for medical, education, and redetermination appointments (with some exceptions) to some HIP 2.0 enrollees as the MCEs viewed NEMT as cost-effective. One MCE executive said, "We provide non-emergency transportation as a value-add. While we are not required to, we still provide it." Another MCE executive reported that because NEMT is covered by the HIP 2.0 State Plan, which covers the medically frail, if someone with HIP Plus or HIP Basic needs transportation services, "We play the game to get them into the [medically frail] category so that it is a covered service. If we go through the [medically frail assessment] and if the member has a serious medical need we generally can get them to qualify." Thus, neither interviewees nor enrollee focus group participants reported access to transportation as an issue, even in rural areas of the state. Enrollee focus group participants reported that transportation was available through their MCEs. For example, one enrollee focus group participant said, "Through health plans, if you give them 24 hours' notice you can get picked up. They have a radius. These are Medicaid cabs. You can't use them for emergency use." Therefore, because MCEs are finding ways to provide the service as part of their care delivery, the elimination of transportation for non-emergent services under the demonstration does not present itself as a barrier to care. Given that the MCEs are providing NEMT, the HIP 2.0 demonstration provides evidence of the impact of the waiver of NEMT on health plans but not enrollees.

Importantly, the work presented in this chapter is descriptive and thus does not provide definitive evidence on the impacts of the demonstration, but the qualitative findings suggest that Indiana has made headway on some of the key goals of HIP 2.0. Most prominently, providing coverage to more low-income individuals and increasing access to health care services, including preventive care. As the same time, it is unclear from the qualitative assessment whether Indiana has achieved some of its other goals for HIP 2.0, including promoting value-based decision-making and personal health responsibility or promoting expanded private insurance coverage. In part, these and other HIP 2.0 goals (e.g., facilitating access to job training and stable employment to reduce dependence on public assistance, and achieving better health outcomes) are longer term goals that are assuming a more central focus as the demonstration goes forward.

Appendix C. Supplemental Materials on Data and Methods for Chapter III

This appendix provides overviews of: (1) the data preparation work for the impact analyses using the American Community Survey (ACS) and Behavioral Risk Factor Surveillance System (BRFSS) and (2) the construction of the comparison groups for the impact analyses. It also provides supplemental tables to support the impact estimates. All tables in this appendix appear at the end.

Data Preparation

American Community Survey

The ACS is used to analyze the impacts of HIP 2.0 on having health insurance coverage at the time of the survey and on type of health insurance coverage. The ACS required minimal data preparation work. We downloaded the 2011-2018 raw ACS data files from the Integrated Public Use Microdata Series (IPUMS) USA website: https://usa.ipums.org/usa/, which provides Census data with harmonized variables over time and enhanced documentation. We identified our analytic sample as all civilian, noninstitutionalized adults ages 21 to 64 who were living in Indiana or one of Indiana's comparison states. We constructed the analytic variables needed for the analysis. Those variables included outcome measures and control variables used in the regression analyses. The outcome variables in the ACS were health insurance coverage at the time of the survey and type of health insurance coverage: (1) Medicaid or other public coverage, (2) employer-sponsored insurance, or (3) direct purchase or other coverage). The control variables for the ACS analyses included gender, age, race/ethnicity, educational attainment, marital status, employment status, presence of another worker within the family, family income, whether the family has investment income, multiple family household status, and homeownership. For the family measures, we defined the family based on the "health insurance unit" (HIU) typically used for insurance coverage, comprising the adult, his or her spouse (if present in the household), and any related children under age 19 present in the household. Childless adults, who are the focus of this report, are defined as adults without any dependent children under age 19 in their HIU. For the family income measure, we calculated family income relative to FPL based on the modified adjusted gross income (MAGI) definition[117] that is used to determine Medicaid eligibility under the ACA.[118]

Behavioral Risk Factor Surveillance System

The BRFSS is used to analyze the impacts of HIP 2.0 on health care access and affordability, health behaviors, and health status. The data preparation work for the BRFSS was more involved than that required for the ACS. We downloaded the 2011-18 BRFSS Data files from the Centers for Disease Control and Prevention (CDC) website: https://www.cdc.gov/brfss/annual_data/annual_data.htm. We identified our analytic sample as all civilian, noninstitutionalized adults ages 21 to 64 who were living in Indiana or one of Indiana's comparison states. However, before we could construct the analytic variables for the analysis, we needed to impute values for missing data in the BRFSS.[119] Once we had addressed missing

[117] A person's MAGI income is the sum of their wage, business, investment, retirement, and Social Security incomes. The family's MAGI income is the sum of individual MAGI incomes for all filers in the family, including all individuals age 18 and older and individuals below age 18 with wage, business, investment, and retirement income above the dependent filing threshold.

[118] In constructing family income relative to FPL, we use the guidelines outlined in State Health Access Data Assistance Center, "Defining 'Family' for Studies of Health Insurance Coverage," issue brief 27 (Minneapolis: University of Minnesota, 2012); http://shadac.org/sites/default/files/publications/SHADAC_Brief27.pdf.

[119] Unlike BRFSS public use files, the ACS public use files include imputations for item nonresponse.

data, we constructed the analytic variables needed for the analysis. Those variables included outcome measures and control variables used in the regression analyses. The outcome variables in the BRFSS included:

- Health care access and affordability
  - Had a personal doctor at the time of the survey
  - Had a routine check-up in the past 12 months
  - Had a flu vaccine in the past 12 months[120]
  - No unmet need for doctor care due to costs in the past 12 months[121]

- Health behaviors and health status
  - Smoker at the time of the survey
  - Smoker who did not try to quit in the past 12 months
  - Health status was fair or poor at the time of the survey
  - Physical health was not good in the past 30 days (defined as not good for at least 1 day)
  - Mental health was not good in the past 30 days (defined as not good for at least 1 day)
  - Had an activity limitation due to health issues at the time of the survey

The control variables for the BRFSS analyses included gender, age, race/ethnicity, educational attainment, marital status, employment status, multiple family household status, cell phone sample status, household income, homeownership and file month for a given observation.

Another data preparation task for the BRFSS was the need to construct consistent weights for the BRFSS samples to support comparisons across states (e.g., between Indiana and its comparison states) and over time (e.g., between 2011-13 and 2017-18). Unlike the ACS, which provides a weight constructed consistently across all the states, each state in the BRFSS constructs its own weight in each survey year. We discuss our approach of imputing for missing data and developing consistent weights for the BRFSS across states and over time below.

1) Imputing for Missing Data.

Because the BRFSS does not provide imputed values for item nonresponse in the public use files, we imputed values for item nonresponse for key demographic and socioeconomic variables in the BRFSS. We also assigned values for missing data for family income relative to FPL, which the BRFSS does not ask about at all, and the number of adults in the household, which the BRFSS asks about in the landline samples but did not ask about in the cell phone samples in 2011-13. That is, we addressed a problem with missing data that arose because of missing questions in the survey. This type of imputation, which relies on an external data source to predict values for a missing variable, is most common in microsimulation models, which often need to supplement existing data sources with additional measures to support policy analyses.[122] For example, the Congressional Budget Office uses a similar regression-based imputation strategy that relies on the Survey of Income and Program Participation, the

[120] As discussed in the report, gaps in fielding of the BRFSS is comparison states introduced measurement error for seasonal variables, such as the receipt of a flu vaccine.

[121] We frame this as a "positive" outcome so that higher values indicated better access and affordability across all the measures examined.

[122] For simplicity, we refer to all our efforts to address missing data as imputation, although the assignment of family income in the BRFSS based on the data in the ACS can also be considered an out-of-sample prediction model.

Health and Retirement Study, and the Current Population Survey to impute missing variables in the primary database used in its microsimulation model.[123] Because these two variables, which are predicted with error, are critical to identifying adults who are predicted to be low-income families in the BRFSS, we have more confidence in the estimates based on the overall population in the BRFSS than those based on the predicted income groups.

Imputing for item nonresponse and missing data on number of adults. We imputed for missing values because of item nonresponse for key demographic and socioeconomic variables and because the question on number of adults in the household was not asked of adults in the cell phone sample in 2011-13. The variables we imputed values for included gender, age categories, race/ethnicity, educational attainment, marital status, number of adults in the household, number of children in the household, employment status, household income categories, and homeownership. All the variables to be imputed were either binary variables or categorical variables. Item nonresponse was low for most variables (2 percent or less) but was more of an issue for household income (between 14.0 and 17.3 percent). Missing data for the number of adults in the household was less than 0.1 percent for the landline sample across 2017-18 and was less than 1 percent for the cell phone sample in 2018. However, missing data for the number of adults in the household was 21 percent for the cell phone sample in 2017. Similarly, it was missing for every cell phone survey for 2011-13 because those respondents were not asked about the other adults in their household in those years.

The categories used in imputing values for the variables were as follows:

- Age: 18–20, 21–25, 26–44, 45–64, and 65 and older;
- Race/ethnicity: non-Hispanic white and another race/ethnicity;
- Educational attainment: less than high school graduate, high school degree, some college, and four-year college degree or more;
- Marital status: married, widowed/separated/divorced, and never married;
- Number of adults in the household: 1, 2, and 3 or more;
- Number of children in the household: 0, 1, 2, and 3 or more;
- Employed: employed and not employed;
- Household income: less than $10,000, $10,000-$14,999, $15,000-$19,999, $20,000-$24,999, $25,000-$34,999, $35,000-$49,999, $50,000-$74,999, and $75000 or more; and
- Homeownership: someone in household owns or is buying the residence and no one in household owns or is buying the residence.

We imputed for missing values in the BRFSS in three stages using Stata's "mi chained" command, which executes multiple imputation using a sequential process in which missing data for multiple variables are imputed in a specified order (from variables with lower levels of missing to variables with higher levels of missing within the chain of variables), with imputed values included in each successive stage of the imputation process as the imputation moves through the chain of variables. We first imputed for demographic characteristics across the full sample for each individual year (Stage 1), followed by imputation for the number of adults in the household for the cell phone samples in the combined years of 2011-13 (Stage 2), and then imputation for employment, homeownership, and household income

[123] JA Schwabish and JH Topoleski, "Modeling Individual Earnings in CBO's Long-Term Microsimulation Model," Working paper 2013-04 (Washington, DC: Congressional Budget Office, 2013).

categories for the full sample for each individual year (Stage 3). More information on each stage is provided below.

- **Stage 1.** The first stage of the imputation process imputed for missing values for the following chain: gender, age, marital status, educational attainment, race/ethnicity, and number of children in the household. The model was estimated separately for each year and included indicators for state of residence and being in the cell phone sample of the survey.[124] Age, educational attainment, and number of children in the household were imputed using ordered logit regressions given that they are ordered categorical variables. Marital status, which is an unordered categorical variable, was imputed using multinomial logit regression. Gender and race/ethnicity, which are binary variables, were imputed using logit regression.
- **Stage 2.** The second stage of the imputation process imputed for missing values for the number of adults in the household that arises because the question was not asked of the cell phone sample in 2011-13.[125] Since the question was asked in other years of the BRFSS, we used data from the cell phone sample for those years to impute for the missing data in 2011-13.[126] For this imputation, we appended BRFSS data from the years 2011 through 2018 into a single file and imputed the number of adults in the household, an ordered categorical variable, using ordered logit regression.[127] The model included gender, age, race/ethnicity, educational attainment, marital status, number of children in the household, and state of residence.
- **Stage 3.** The third stage of the imputation process imputed for missing values for employment status, homeownership and household income. For this imputation, we created separate files for each year and imputed employment status and homeownership, which are both binary variables, using logit regression and household income, which is an ordered categorical variable, using ordered logit regression.[128] The model included gender, age, race/ethnicity, educational attainment, marital status, number of children in the household, number of adults in the household, multiple family household status,[129] state of residence, and being in the cell phone sample for the survey.

Table C.1 provides a summary of demographic and socioeconomic characteristics of adults in Indiana before and after imputation for item nonresponse and for missing data on number of adults in the household for cell phone respondents in 2011-13.

[124] As noted above, the BRFSS conducts interviews with individuals drawn from landline and cell phone samples. Because there are differences across the two samples in how the respondent is selected (the landline sample selects a random adult from among all adults in the household while the cell phone sample respondent is the individual who answers the cell phone) and in some of the questions asked of the respondents, we controlled for the survey sample in the analysis.

[125] The landline sample also has a few observations where the number of adults in the household is missing. Given how few observations are missing, we dropped these observations rather than impute for them.

[126] We rely on later years of the BRFSS rather than the ACS for imputing number of adults in the household in order to impute within a cell phone sample that is similar to cell phone sample of the 2011-13 BRFSS. We cannot identify a similar sample in the ACS.

[127] Estimating the model using multinomial logit regression instead of ordered logit regression yielded comparable findings.

[128] Estimating the model using multinomial logit regression instead of ordered logit regression yielded comparable findings.

[129] A multiple family household is defined in the BRFSS as a household with more than two adults or a household with two adults in which the individual surveyed is not married. Because the ACS collects information on every individual in a household rather than the single household member surveyed in the BRFSS, multiple family households in the ACS are defined as households with more than two adults or households with two adults in which at least one member of the household is not married.

Imputing for missing family income. Because the population targeted by the Medicaid expansion under the HIP 2.0 demonstration is defined based on family income relative to FPL, we needed to be able to identify that population in the BRFSS. Unfortunately, the BRFSS only provides broad categories of household income and has no information on family size or family income. To address this gap, we imputed family income relative to FPL in the BRFSS using the relationship between family income and household income in the ACS. Specifically, we estimated a regression model for family income as a function of the BRFSS household income categories and other variables and used the coefficient estimates from that model to predict family income in the BRFSS. The remainder of this section discusses that process.

We constructed four measures of family income relative to FPL in the ACS: at or below 50 percent of FPL, at or below 100 percent of FPL, at or below 138 percent of FPL, and at or above 500 percent of FPL in order to be able to examine the estimated impacts of HIP 2.0 for different income groups as a sensitivity test of the imputed income data. Because the impact estimates generated across the income groups were consistent with the expectation of larger impacts for lower-income groups, we focus on the estimated impacts for the population at or below 138 percent FPL in this report.

Table C.2 shows the crosswalk between the BRFSS "household income" measures and the "family income relative to FPL" measures that we calculated in the ACS. As shown, the BRFSS household income measure does not provide a strong approximation of family income relative to FPL, highlighting the need to impute for family income relative to FPL to better approximate the target population for Indiana's Medicaid expansion.

The imputation model for family income relative to FPL relied on demographic and socioeconomic variables that were defined consistently in the BRFSS and ACS. Because BRFSS collects little information on other household members, we were not able to control for some variables that are likely to be strong predictors of family income relative to FPL (e.g., a spouse's age, education, work status, and family size). To allow for differences in the relationship between family income and household income for different types of households, we conducted the imputation separately for adults in three different living situations: living alone, living in single-family households, and living in multiple family households, each with its own set of variables used for the imputation.

Adults living alone were adults living in a household with one adult and no children, and for these individuals our imputation model included gender, age, race, educational attainment, household income categories,[130] and state of residence. Adults living in single-family households were adults living in a household with either two married adults (with or without children) or one adult with one or more children. For these individuals, we ran two different imputation models, one for imputing income categories below 150 percent FPL and one for imputing income categories 400 percent FPL or higher. The low-income imputations included gender, age, race, educational attainment, number of adults in the household, number of children in the household, household income categories, and state of residence. The high-income imputations included gender, age, race, educational attainment, number of children in the household, household income categories, and state of residence.

[130] Although many of the variables are based on very similar questions in the two surveys, that is not true for the household income measure. The ACS household income measure is constructed by aggregating across reported income from several income sources for each member of the household; the BRFSS measure is based on the respondent's reported total household income.

Finally, adults living in multiple family households were adults in households with more than two adults or with two adults at least one of whom was not married. If one adult was married and the other was not, both adults were considered to be in a multiple family household. For these individuals, our imputation model included gender, age, race, educational attainment, number of adults in the household, number of children in the household, household income categories, and state of residence.

The first step in the imputation process was based on the assignment of family income relative to FPL for adults in BRFSS household income categories that mapped strongly to one "family income relative to FPL" cell. A "strong" map is defined as one for which 95 percent of the adults in the household income category were in the same "family income relative to FPL" category in each year of the base period (2011-13); hereafter, we refer to this as the 95 percent rule. For example, at least 95 percent of adults living alone with household income less than $10,000 had family income at or below 100 percent of FPL for each year in the base period. Thus, all adults living alone with income less than $10,000 in the BRFSS are assigned as having family income at or below 100 percent of FPL.[131] Table C.3 summarizes the circumstances where family income relative to FPL was assigned based on the 95 percent rule for household income. Family income based on the 95 percent rule was used to assign family income relative to FPL to about 60 percent of the Indiana adults ages 21 to 64 in the 2011-13 BRFSS sample and 52 percent in the 2017-18 sample. The comparable figures were about 60 percent for the 2011-13 BRFSS sample and 54 percent for the 2017-18 sample for Indiana's comparison states. The selection of comparison states is discussed below, with the list of comparison states provided in Table C.10.

For the remaining adults who could not be assigned a "family income relative to FPL" category using the 95 percent rule, we used Stata's multiple imputation command "mi" to impute income based on regression models. We estimated logit regression models for each of the income categories (i.e., family income at or below 50, 100, and 138 percent of FPL and family income above 500 percent of FPL, respectively). Separate models were run for each "family income relative to FPL" category and for each household type. Table C.4 provides a crosswalk of predicted and reported family income relative to FPL for adults ages 21 to 64 in Indiana based on the ACS.[132] As shown, roughly 70 percent of the adults who were predicted to have family income at or below 138 percent of FPL reported their income in that category (73.9 percent in 2011-13, 69.9 percent in 2017-18). However, that of course means that roughly 30 percent of the adults who were predicted to have family income at or below 138 percent of FPL reported income above that level. There is also error in the prediction of income above 138 percent of FPL, with almost 11 percent of the adults predicted to have income above that level reporting income at or below 138 percent of FPL. The patterns of prediction error in the imputation process were similar in Indiana's comparison states, as shown in Table C.5. Thus, the impact estimates for low-income adults ages 21 to 64 using the BRFSS data should be viewed as rough approximations of the actual impacts of HIP 2.0.

The parameter estimates from the regression models using the ACS were used to predict family income relative to FPL for the adults in the BRFSS in each year of the preperiod (2011-13) and for the postperiod. Table C.6 summarizes the predicted family income for adults ages 21 to 64 in Indiana in the

[131] In a few instances in the ACS data for AK and HI, everyone or nearly everyone in the sample of adults living alone was in the same "family income relative to FPL" cell. For similar respondents in AK and HI in the BRFSS, we assigned that same family income relative to FPL from the ACS data.

[132] The imputation process was based on 80 percent of the ACS sample. These estimates are based on the 20 percent of the ACS sample reserved for testing the imputation process.

BRFSS sample in 2011-13 and 2017-18 by reported household income. Table C.7 provides comparable information for adults 21 to 64 in Indiana's comparison states.

2) Revising the BRFSS Weights.

Because the BRFSS is conducted by each state, the survey fielding, data preparation, and sample weighting vary across states and over time. To address these differences, we reweighted each year of the BRFSS to a common set of population characteristics across states and over time based on the ACS. Those variables include gender, age, race/ethnicity, educational attainment, marital status, number of children in the household, number of adults in the household, employment status, and household income. We limited the BRFSS sample for reweighting to adults ages 21 to 64, the age group targeted by the HIP 2.0 demonstration, and reweighted to ACS population characteristics for adults ages 21 to 64.

For the reweighting, we used the user-written "ipfweight" command in Stata[133] to implement a raking process to adjust the existing BRFSS weights. Raking is an iterative adjustment of survey sampling weights to make the composition of the sample match the known composition of the population for a predetermined set of characteristics. It differs from poststratification in that weights are adjusted to make the sample total for a given characteristic (e.g., marital status) equal to the population total. The adjustment proceeds one characteristic at a time, iterating until the sample composition matches that of the population for the whole set of characteristics.

Given the challenge of obtaining convergence across multiple measures in the raking process, the targets for the population characteristics were constrained to just two or three categories. They were also constrained so that the categories can be consistently defined between the ACS and BRFSS. The final categories used for each of the variables included in the reweighting process were as follow:

- Gender: Male and female
- Age: 21-25, 26-44, and 45-64
- Race/ethnicity: Non-Hispanic white and another race/ethnicity
- Educational attainment: Four-year college degree or more and less than four-year college degree
- Marital status: Married, widowed/separated/divorced, and never married
- Number of adults in the household: 1, 2, and 3 or more
- Number of children in the household: 0, 1, and 2 or more
- Employed: Employed and not employed
- Household income: Less than $35,000, $35,000-$74,999, and $75,000 or more
- Homeownership: Someone in household owns or is buying the residence and no one in household owns or is buying the residence

[133] M Bergmann, "IPFWEIGHT: Stata Module to Create Adjustment Weights for Surveys," statistical software components S457353 (Boston: Boston College Department of Economics, 2011).

Tables C.8 and C.9 show the distribution of the samples for Indiana and Indiana's comparison states, respectively, for the original BRFSS weights and for the revised BRFSS weights for selected measures.[134]

Constructing the Comparison Groups

The impact analysis estimates the effects of Indiana's HIP 2.0 demonstration using difference-in-differences (DD) methods based on data for 2011-2018 for the ACS and BRFSS. DD models compare changes over time in a treatment group (in this case, Indiana) to changes over time in a comparison group that provides the counterfactual for what would have happened in the treatment group in the absence of the intervention (in this case, the HIP 2.0 demonstration). This section describes the process for selecting the comparison groups to be used in the DD models to estimate the effects of the HIP 2.0 demonstration.

Constructing the comparison groups for Indiana's demonstration involved two steps: (1) identifying the groups of states that would serve as the counterfactuals for Indiana's demonstration, and (2) identifying the people in those groups of comparisons states who were most similar to people in Indiana on a range of individual and family characteristics using propensity scores. By using propensity scores to reweight the residents of the comparison states, we obtained a comparison group that more closely matches the characteristics of the Indiana sample, reducing the potential for omitted variable bias in the impact estimates caused by unmeasured differences between residents of Indiana and the comparison states.

Identifying the Potential Comparison States

To identify the comparison states for each counterfactual for each research question, we began by sorting all states by their expansion status—that is, by whether they had not expanded Medicaid, expanded Medicaid without a demonstration, and expanded Medicaid with a demonstration, as summarized in Table C.10 (column 3). We then excluded states that had made changes in Medicaid eligibility over the baseline period (2011-13) or were not good matches for other reasons (outlined later in this section). This created the set of potential comparison states (column 4).

From the potential comparison states, we then sought to identify the subset of states that provided the best comparison based on similar Medicaid and section 1115 demonstration eligibility standards in 2011 (within 10 percentage points for all categories) and relative stability in eligibility standards over the baseline period of 2011-13 (changes of less than 10 percentage points for all categories). To determine income eligibility for Medicaid and section 1115 demonstration coverage expansions, we relied heavily upon annual reports from the Kaiser Family Foundation that detail income eligibility standards for

[134] The reweighting program converged relatively quickly for all states except Wisconsin, where the reweighting program failed to converge for some years because there was not a set of weights that satisfied all the reweighting targets. We determined that this was caused by a highly irregular distribution of the number of adults in a household in the BRFSS relative to the ACS for Wisconsin. A conversation with the BRFSS coordinator for Wisconsin confirmed that there was a mistake in the coding of the number of adults for some years. Because Wisconsin is not included as a comparison state for Indiana (described later in this section), this data problem does not affect the analyses for Indiana.

Medicaid and section 1115 demonstration coverage by state for January of a given year.[135,136,137,138] When the coverage provided under the section 1115 demonstrations was equivalent to the coverage under Medicaid, we listed whichever income standard was higher as the threshold for full Medicaid benefits. When reports are unclear about the extent of the section 1115 demonstration coverage, we attempted to verify the extent of coverage using additional tables by the Kaiser Family Foundation that list the income eligibility limits for coverage providing full Medicaid benefits.[139,140] When still in doubt about the scope of benefits, we turned to outside sources for Delaware,[141] Louisiana,[142] Missouri,[143] and Vermont.[144,145] Information on the states included in the group of potential comparison states (Table C.10, column 4) is discussed below.

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[135] M Heberlein, T Brooks, J Alker, S Artiga, and J Stephens, "Getting into Gear for 2014: Findings from a 50-State Survey of Eligibility, Enrollment, Renewal, and Cost-Sharing Policies in Medicaid and CHIP, 2012–2013" (Menlo Park, CA: Kaiser Family Foundation, 2013); https://www.kff.org/wp-content/uploads/2013/05/8401.pdf.

[136] M Heberlein, T Brooks, J Guyer, S Artiga, and J Stephens, "Holding Steady, Looking Ahead: Annual Findings of a 50-State Survey of Eligibility Rules, Enrollment and Renewal Procedures, and Cost Sharing Practices in Medicaid and Chip, 2010-2011" (Menlo Park, CA: Kaiser Family Foundation, 2011); https://www.kff.org/wp-content/uploads/2013/01/8130.pdf.

[137] M Heberlein, T Brooks, J Guyer, S Artiga, and J Stephens, "Performing under Pressure: Annual Findings of A 50-State Survey of Eligibility, Enrollment, Renewal, and Cost-Sharing Policies in Medicaid and Chip, 2011-2012" (Menlo Park, CA: Kaiser Family Foundation, 2012). https://www.kff.org/wp-content/uploads/2013/01/8272.pdf.

[138] Programs that were closed were given an eligibility standard of zero because they were not accepting new enrollees. Oklahoma's section 1115 demonstration coverage was limited to a subset of adults who had incomes below the eligibility threshold and worked for a small employer, were self-employed, were unemployed and seeking work, were working while disabled, were a full-time college student, or were the spouse of a qualified worker. Although those requirements were consistent across the period examined, in 2011 and 2012 the Kaiser Family Foundation considered this coverage as available to both working and nonworking adults, though in 2013 the organization interpreted this coverage as only available to working adults. Although the emphasis is on work, coverage is not strictly limited to working adults, so we consider this coverage as available to both working and nonworking adults for all years. As noted in the Kaiser Family Foundation reports, Louisiana and Missouri had section 1115 demonstration coverage for the greater New Orleans and greater Saint Louis areas, respectively. Because these areas constituted a significant share of the overall state population in their respective states, we included the income eligibility for these programs as the section 1115 demonstration coverage threshold for the state.

[139] "Medicaid Income Eligibility Limits for Other Non-Disabled Adults, 2011-2016," Kaiser Family Foundation, no date (accessed October 19, 2016), http://kff.org/medicaid/state-indicator/medicaid-income-eligibility-limits-for-other-non-disabled-adults/ .

[140] "Medicaid Income Eligibility Limits for Parents, 2002-2016," Kaiser Family Foundation, no date (accessed October 19, 2016), https://www.kff.org/medicaid/state-indicator/medicaid-income-eligibility-limits-for-parents/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D.

[141] "Delaware Diamond State Health Plan Special Terms and Conditions," Centers for Medicare & Medicaid Services, amended as of April 1, 2012, https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/de/Diamond-State-Health-Plan/de-dshp-stc-01312011-12312013-amended-042012.pdf.

[142] Centers for Medicare & Medicaid Services, "National Summary of State Medicaid Managed Care Programs as of July 1, 2011" (Baltimore, MD: Centers for Medicare & Medicaid Services, 2011). https://www.kff.org/wp-content/uploads/sites/2/2013/12/2011-medicaid-mc-enrollment-report.pdf.

[143] Missouri Department of Social Services, *Gateway to Better Health Demonstration Amendment Request* (Jefferson City, MO: Missouri Department of Social Services, 2015). https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mo/Gateway-to-Better-Health/mo-gateway-to-better-health-amend-cvrg-brand-drug-02192015.pdf.

[144] Pacific Health Policy Group on behalf of the State of Vermont Agency of Human Services, *Global Commitment to Health 2013 Interim Program Evaluation* (Highland Park, IL: Pacific Health Policy Group, 2013). https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/vt/Global-Commitment-to-Health/vt-global-commitment-to-health-interim-program-eval-042013.pdf.

[145] State of Vermont Agency of Human Services, "Global Commitment to Health Extension Request" (Montpelier, VT: State of Vermont Agency of Human Services, 2015. https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/vt/Global-Commitment-to-Health/vt-global-commitment-to-health-vt-ext-app-12212015.pdf.

In addition to selecting comparison states based on Medicaid and section 1115 demonstration eligibility standards, we also selected states that were similar to Indiana based on measures of uninsurance, health status and health care outcomes over the baseline period. These measures, which were based on the BRFSS, included the share of nonelderly adults who reported affirmatively to the following: being uninsured, being of fair or poor health, having ever been diagnosed with a chronic condition, having a health limitation, having a personal doctor or health care provider, and having had a routine check-up in the past year.[146]

The subset of states that provided the best comparison for adults based on similar Medicaid and section 1115 demonstration eligibility standards in 2011 (within 10 percentage points of Indiana for all categories), relative stability in eligibility standards over the baseline period of 2011-13 (changes of less than 10 percentage points for all categories), and similar baseline health and health outcomes (within 10 percentage points of Indiana across almost all measures) are listed in Table C.10 (column 5 for all adults and column 6 for childless adults). To select the single-best comparison states for adults in Indiana, we identified the state most similar to Indiana across both the Medicaid and section 1115 demonstration eligibility standards, uninsurance rate, and health and health outcomes. We relied on two sets of comparison states for the DD analyses: the group of best comparison states (column 6 for childless adults) and the single-best comparison state from among the group of best comparison states (column 7 for childless adults). As discussed below, there were no "best" comparison states for all adults.

States differ in many ways beyond the Medicaid expansion strategies being examined here, including the demographic, social, economic, health and political context, and it is not possible to identify states that match Indiana across all those dimensions. Thus, any differences identified in the comparisons between Indiana and the various comparison groups will reflect those factors, as well as differences in Medicaid expansion strategies. The group of best comparison states and the single-best comparison state that did not expand Medicaid, expanded Medicaid without a demonstration, and expanded Medicaid with a different demonstration are described below. Given that we are not able to control for all the potential differences between Indiana and the comparison states, we have more confidence in findings that are robust across the different comparison states in the group of best comparison states.

1) Comparison States that Did Not Expand Medicaid.

The states that had not expanded Medicaid as of January 1, 2017, are listed in the first row in Table C.10 (column 3). In selecting the set of potential comparison states (column 4), we excluded Missouri, Maine, Utah, and Wisconsin. Although Missouri has not implemented the Medicaid expansion, the Gateway to Better Health section 1115 demonstration was implemented in St. Louis, which represents a substantial share of the state's population, making Missouri an inappropriate non-expansion comparison. Utah also had not expanded Medicaid eligibility, but in 2012 the state increased eligibility for their employer-sponsored insurance (ESI) premium assistance program. Maine and Wisconsin are excluded because both states were already covering parents under their Medicaid programs in 2011 at roughly the level to which the ACA expanded coverage.

[146] The measures of the uninsurance rate and health and health care outcomes for the states' populations were regression-adjusted for differences in the age and sex distribution across the states. We did this by regressing each outcome measure on indicators for age, sex, and state and deriving the mean of the predicted value of the outcome measure for each state using the national sample, assuming the entire sample lives within that state. This allowed us to separate state-specific effects from the effects of differences in age and sex distribution of the state population.

From the set of potential comparison states, we sought to identify the subset of states that provided the best comparisons to Indiana based on similar Medicaid and section 1115 demonstration eligibility standards in 2011 (within 10 percentage points of Indiana for all categories) and relative stability in eligibility standards over the baseline period of 2011-13 (changes of less than 10 percentage points for all categories) as summarized in Table C.11. As shown in the table, no states satisfied that criteria for all adults. When we focus on childless adults, however, we find that Alabama, Florida, Kansas, Mississippi, Nebraska, South Carolina, South Dakota, and Texas are similar to Indiana on baseline Medicaid and section 1115 demonstration eligibility standards and uninsurance (Table C.12) and on baseline health and health outcomes (Table C.13). South Carolina provides the single-best comparison state for childless adults because it is most similar to Indiana across the baseline Medicaid and section 1115 demonstration eligibility criteria, uninsurance, and the health and health care outcomes.[147]

2) Comparison States that Expanded Medicaid Without a Demonstration.

The states that expanded Medicaid without a demonstration are shown the second row of Table C.10 (column 3). In selecting the potential set of comparison states (column 4), we excluded states that expanded Medicaid before 2014 (California, Connecticut, District of Columbia, Minnesota, New Jersey, and Washington), states with eligibility levels that met ACA standards before 2011 (Massachusetts, New York, Rhode Island, and Vermont), states that made other changes to Medicaid eligibility during the baseline period (Arizona, Hawaii, Illinois, Nevada, and Oregon), and states that expanded Medicaid after the date of Indiana's expansion (Alaska and Louisiana). From the potential set of comparison states, we sought to identify the subset of states that provided the best comparison to Indiana based on similar Medicaid and section 1115 demonstration eligibility standards in 2011 (within 10 percentage points of Indiana for all categories) and relative stability in eligibility standards over the baseline period of 2011-13 (changes of less than 10 percentage points for all categories), as summarized in Table C.14. As shown in the table, no states satisfied that criteria for all adults. When we focus on childless adults, however, we find that Colorado, Kentucky, North Dakota, Ohio, and Pennsylvania are similar to Indiana on baseline Medicaid and section 1115 demonstration eligibility standards and uninsurance (Table C.15) and on baseline health and health care outcomes (Table C.16). Ohio provides the single-best comparison state for childless adults because it is most similar to Indiana across the baseline Medicaid and section 1115 demonstration eligibility criteria, uninsurance, and the health and health care outcomes.

3) Comparison States that Expanded Medicaid With a Different Demonstration.

The states that expanded Medicaid with a different demonstration are listed in the third row in Table C.10 (column 3). We excluded Montana from the potential set of comparison states (column 4) because Montana expanded Medicaid after the date of Indiana's expansion. From those remaining states, we sought to identify the subset of states that provided the best comparison based on similar Medicaid and section 1115 demonstration eligibility standards in 2011 (within 10 percentage points for all categories) and relative stability in eligibility standards over the baseline period of 2011-13 (changes of less than 10 percentage points for all categories), as summarized in Table C.17. As shown, no states satisfied that criteria for all adults. When we focus on childless adults, however, we find that Michigan and New Hampshire are similar to Indiana on baseline Medicaid and section 1115 demonstration eligibility standards and uninsurance (Table C.18) and on baseline health and health care outcomes (Table C.19). Michigan provides the single-best comparison state for childless adults because it is most similar to

[147] We define "most similar" as having the smallest total differences from Indiana for the baseline Medicaid and section 1115 demonstration eligibility standards, uninsurance, and the health and health care outcomes.

Indiana across the baseline Medicaid and section 1115 demonstration eligibility criteria, uninsurance and the baseline health and health care outcomes.

Identifying Residents in the Comparison States Who Are Similar to Indiana Residents

The next step was to estimate propensity score models to identify the residents of each group of best comparison states and the residents of each single-best comparison state who were similar to residents of Indiana on a range of individual and family characteristics.[148] The list of the explanatory variables included in the propensity score models for the ACS and BRFSS are summarized in Table C.20. The models varied for the ACS and BRFSS because the two surveys include somewhat different variables and the sample size for the ACS is large enough to support the use of additional measures. Before estimating the models for the groups of best comparison states, we first adjusted the ACS and revised BRFSS weights to balance for state population differences. These state population-balanced-weights (PBW) ensure equal contribution from each state within the group of best comparison states. This limits the introduction of any biases caused by unobserved idiosyncrasies from any individual state within the group of best comparison states. In this process, the weights for the Indiana sample were left unchanged.

Given the binary nature of the outcome (a person either lives in Indiana or another state), we estimated logit regression models to derive propensity scores for each of the groups of best comparison states and each of the individual comparison states. The parameter estimates from the regression models were used to estimate the propensity score (PS) for everyone in each group of best comparison states and each single-best comparison state, providing the predicted probability that the individual is from Indiana. We then used these propensity scores to create inverse probability weights. For the single-best comparison states, the inverse probability weights are defined as PS/(1-PS) times the weight from the ACS (for the ACS sample) or the revised weight from the BRFSS (for the BRFSS sample). For the group of best comparison states, the inverse probability weights are defined as PS/(1-PS) times the state population-balanced weight constructed for the ACS (for the ACS sample) or BRFSS (for the BRFSS sample). By doing this, residents of the group of best comparison states and single-best comparison states who were more similar to Indiana residents received larger weights; those who were less similar to Indiana residents received lower weights. This reweighting pulled the distribution of the characteristics of the weighted comparison groups closer to that of Indiana residents, increasing the comparability between Indiana and its comparison groups.

We assessed the resulting comparison groups by comparing the distribution of the propensity scores and of the covariates between Indiana and the comparison groups to ensure that the resulting distributions are similar (i.e., “balanced”). Observations from the group of best comparison states that had propensity scores that are smaller than the smallest propensity score in the Indiana sample were excluded from the analysis.

As a check on the weights generated using propensity scores, we conducted similar analyses using entropy balancing, a reweighting method that aligns the characteristics of the residents of comparison groups to the characteristics of Indiana residents. We used Stata’s “ebalance” command to implement

[148] We had proposed including county characteristics in the analyses based on the ACS; however, the relatively small number of counties in Indiana and some of the comparison states made matching on county characteristics problematic.

entropy balancing. We used the same variables as in the propensity score models for the application of entropy balancing.

Both the propensity score reweighting and entropy balancing approach aligned the characteristics of the childless adults in the group of best comparison states with the characteristics of childless adults in Indiana, as shown in Tables C.21-C26. As impact estimates based on the entropy weights were consistent with the impact estimates using the propensity score reweighting, we focus on the estimates based on the propensity score reweighting in the text.

Table C.1: Selected Characteristics of Adults Ages 18 and Older in Indiana Before and After Imputation for Item Nonresponse in the Behavioral Risk Factor Surveillance System, 2011-13 (preperiod) and 2017-18 (postperiod)

	2011-13		2017-18	
	Before Imputation	After Imputation	Before Imputation	After Imputation
Gender (%)				
Female	48.6	48.6	48.6	48.7
Male	51.4	51.4	51.2	51.3
Missing	0.0		0.2	
Age (%)				
18-25	6.1	6.1	5.7	5.7
26-44	40.5	40.6	40.0	40.0
45-64	34.6	34.8	33.6	33.6
65+	18.3	18.4	20.7	20.7
Missing	0.5			
Race/ethnicity (%)				
Non-Hispanic white	82.2	82.2	80.4	80.4
Non-Hispanic another race	11.2	11.2	12.2	12.2
Hispanic	5.2	5.2	5.7	5.7
Missing	1.4	1.4	1.7	1.7
Educational attainment (%)				
Less than high school graduate/GED	14.4	14.4	12.6	12.6
High school graduate/GED	35.0	35.1	33.8	33.9
Some college	29.7	29.8	30.6	30.7
College graduate or more	20.6	20.7	22.7	22.8
Missing	0.2		0.4	
Marital status (%)				
Married	53.0	53.2	51.7	52.1
Widowed/separated/divorced	20.9	21.0	21.3	21.4
Never married	25.7	25.8	26.3	26.5
Missing	0.4		0.7	

(continued)

Table C.1 (continued)

	2011-13		2017-18	
	Before Imputation	**After Imputation**	**Before Imputation**	**After Imputation**
Number of adults in household (%)				
1	11.6	20.0	22.7	22.9
2	36.0	54.1	51.4	51.7
3 or more	16.4	25.8	25.2	25.4
Missing	36.0		0.7	
Number of children in household (%)				
No children	62.4	62.5	62.6	62.9
1	14.6	14.7	14.4	14.5
2	13.2	13.3	12.4	12.6
3 or more	9.5	9.5	10.1	10.1
Missing	0.2		0.6	
Employment status (%)				
Not employed	44.1	44.5	42.1	42.7
Employed	55.3	55.5	56.8	57.3
Missing	0.6		1.1	
Household income (%)				
Less than $25,000	26.8	33.4	22.3	27.4
$25,000-$49,999	23.7	27.6	22.7	27.1
$50,000-$74,999	14.0	16.0	14.6	16.6
$75,000 or more	20.6	22.9	25.2	29.0
Missing	14.9		15.2	
Household owns home (%)				
Does not own home	26.2	26.6	27.7	28.0
Owns home	72.7	73.4	71.5	72.0
Missing	1.1		0.7	
Sample size	27,420	27,420	21,389	21,389

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Estimates are weighted by the original BRFSS weights.

Table C.2: Crosswalk of Household Income Categories from Behavioral Risk Factor Surveillance System and Reported Family Income Relative to FPL for Adults Ages 21 to 64 in the American Community Survey, 2011-13 (preperiod) and 2017-18 (postperiod)

	Behavioral Risk Factor Surveillance System Household Income Categories							
	Less than $10,000	**$10,000 to 14,999**	**$15,000 to $19,999**	**$20,000 to $24,999**	**$25,000 to $34,999**	**$35,000 to $49,999**	**$50,000 to $74,999**	**At or above $75,000**
Years 2011-13								
Reported family income (%)								
At or below 50% FPL	83.6	35.8	24.3	19.0	13.7	10.0	6.3	4.1
At or below 100% FPL	99.9	78.2	54.2	38.9	24.2	15.6	9.6	6.6
At or below 138% FPL	99.9	99.9	79.1	61.4	40.8	22.9	12.9	8.6
Above 138% FPL	0.1	0.1	20.9	38.6	59.2	77.1	87.1	91.4
Above 500% FPL	0.0	0.0	0.0	0.0	0.0	0.0	6.2	54.7
Sample size	292,513	170,518	179,699	204,664	422,090	642,666	982,936	2,200,718
Year 2017-18								
Reported family income (%)								
At or below 50% FPL	88.0	40.7	27.4	17.8	14.5	10.7	6.5	4.3
At or below 100% FPL	100.0	86.7	59.3	44.7	27.8	17.0	10.4	6.5
At or below 138% FPL	100.0	100.0	82.6	63.2	45.3	25.3	13.9	8.3
Above 138% FPL	0.0	0.0	17.4	36.8	54.7	74.7	86.1	91.7
Above 500% FPL	0.0	0.0	0.0	0.0	0.0	0.0	4.5	49.5
Sample size	142,856	80,082	85,547	103,524	221,464	361,045	601,672	1,842,352

Source: 2011-13 and 2017-18 American Community Survey (ACS). **Notes:** FPL = Federal poverty level. Cells show column percentages. Since the rows are not mutually exclusive the columns will sum to more than 100 percent.

Table C.3: Strategy for Assigning Family Income Relative to FPL Based on the 95-Percent Rule for Adults in the Behavioral Risk Factor Surveillance System

	Behavioral Risk Factor Surveillance System Household Income Categories							
	Less than $10,000	**$10,000-$14,999**	**$15,000-$19,999**	**$20,000-$24,999**	**$25,000-$34,999**	**$35,000-$49,999**	**$50,000-$74,999**	**$75,000 or more**
Adults who live alone								
At or below 50% FPL			B	B	B	B	B	B
At or below 100% FPL	A			B	B	B	B	B
At or below 138% FPL	A	A		B	B	B	B	B
Above 138% FPL	B	B		A	A	A	A	A
Above 500% FPL	B	B	B	B	B	B		
Adults who live in a single-family household								
At or below 50% FPL				B	B	B	B	B
At or below 100% FPL	A	A				B	B	B
At or below 138% FPL	A	A	A				B	B
Above 138% FPL	B	B	B				A	A
Above 500% FPL	B	B	B	B	B	B	B	
Adults who live in a multiple-family household								
At or below 50% FPL								
At or below 100% FPL	A							
At or below 138% FPL	A	A						
Above 138% FPL	B	B						
Above 500% FPL	B	B	B	B	B	B	B	

Notes: FPL = Federal poverty level. The 95-percent rule is explained in the text. A = assigned to have family income in category; B = assigned to not have family income in category; Blank = not affected by 95-percent rule.

Table C.4: Crosswalk of Reported and Imputed Family Income Relative to FPL for Adults Ages 21 to 64 in Indiana in the American Community Survey, 2011-13 (preperiod) and 2017-18 (postperiod)

	Imputed Family Income Relative to FPL				
	At or below 50%	**At or below 100%**	**At or below 138%**	**Above 138%**	**Above 500%**
Years 2011-13					
Reported family income (%)					
At or below 50% FPL	48.8	44.8	38.4	4.4	1.3
At or below 100% FPL	64.5	65.9	58.3	7.1	1.9
At or below 138% FPL	73.3	76.1	73.9	10.7	2.4
Above 138% FPL	26.7	23.9	26.1	89.3	97.6
Above 500% FPL	3.1	2.7	2.4	28.6	73.2
Sample size	2,802	4,498	5,819	15,696	4,567
Year 2017-18					
Reported family income (%)					
At or below 50% FPL	47.1	41.5	35.7	4.5	1.2
At or below 100% FPL	64.6	62.9	56.6	6.9	1.7
At or below 138% FPL	72.6	73.0	69.9	10.1	2.5
Above 138% FPL	27.4	27.0	30.1	89.9	97.5
Above 500% FPL	3.8	3.6	3.4	30.7	66.8
Sample size	1,666	2,574	3,319	10,968	3,681

Source: 2011-13 and 2017-18 American Community Survey (ACS). **Notes:** FPL = Federal poverty level. Cells show column percentages. Since the rows are not mutually exclusive the columns will sum to more than 100 percent. The imputation of family income relative to FPL is described in Appendix C. The imputation process was based on a random sample of 80 percent of the ACS sample. These estimates are based on the 20 percent of the ACS sample reserved for testing the imputation process.

Table C.5: Crosswalk of Reported and Imputed Family Income Relative to FPL for Adults Ages 21 to 64 in Indiana's Comparison States in the American Community Survey, 2011-13 (preperiod) and 2017-18 (postperiod)

	Imputed Family Income Relative to FPL				
	At or below 50%	**At or below 100%**	**At or below 138%**	**Above 138%**	**Above 500%**
Years 2011-13					
Reported family income (%)					
At or below 50% FPL	47.4	42.9	37.5	5.5	1.9
At or below 100% FPL	64.3	64.1	57.7	8.5	2.8
At or below 138% FPL	72.8	74.2	71.9	12.0	3.6
Above 138% FPL	27.2	25.8	28.1	88.0	96.4
Above 500% FPL	4.1	3.7	3.6	34.8	74.0
Sample size	134,701	210,819	274,035	724,536	272,754
Year 2017-18					
Reported family income (%)					
At or below 50% FPL	45.0	39.7	34.9	5.4	2.0
At or below 100% FPL	60.9	59.9	54.3	8.5	3.0
At or below 138% FPL	68.3	69.4	66.9	11.8	3.8
Above 138% FPL	31.7	30.6	33.1	88.2	96.2
Above 500% FPL	5.3	4.8	4.6	36.4	69.2
Sample size	78,457	123,615	158,476	515,735	208,228

Source: 2011-13 and 2017-18 American Community Survey (ACS). **Notes:** FPL = Federal poverty level. Cells show column percentages. Since the rows are not mutually exclusive the columns will sum to more than 100 percent. The selection of comparison states is described in Appendix C. These tabulations include all comparison states in Table C.10, column 6. The imputation of family income relative to FPL is described in Appendix C.

Table C.6: Crosswalk of Reported Household Income and Imputed Family Income Relative to FPL for Adults Ages 21 to 64 in Indiana in the Behavioral Risk Factor Surveillance System, 2011-13 (preperiod) and 2017-18 (postperiod)

	Imputed Family Income Relative to FPL				
	At or below 50%	**At or below 100%**	**At or below 138%**	**Above 138%**	**Above 500%**
Years 2011-13					
Reported household income (%)					
Less than $15,000	31.1	33.5	30.5	0.0	0.0
$15,000-$19,999	13.4	14.0	14.6	2.0	0.0
$20,000-$24,999	13.9	13.3	13.6	3.1	0.0
$25,000-$34,999	14.1	12.0	12.5	4.7	0.0
$35,000-$49,999	12.5	12.7	13.5	19.3	0.0
$50,000-$74,999	7.2	7.3	7.5	22.9	5.1
$75,000 or more	7.8	7.2	7.8	48.0	94.9
Sample size	2,513	4,220	5,694	12,226	3,561
Year 2017-18					
Reported household income (%)					
Less than $15,000	27.5	27.6	23.5	0.0	0.0
$15,000-$19,999	12.0	13.1	13.5	1.2	0.0
$20,000-$24,999	12.0	13.1	13.2	2.1	0.0
$25,000-$34,999	13.4	12.9	13.0	3.6	0.0
$35,000-$49,999	13.6	13.1	16.2	14.7	0.0
$50,000-$74,999	8.8	8.3	8.8	19.7	3.1
$75,000 or more	12.6	11.7	11.7	58.7	96.9
Sample size	1,792	2,932	3,894	8,697	2,962

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** FPL = Federal poverty level. Cells show column percentages. Estimates are weighted by the revised BRFSS weights (see Table C.9).

Table C.7: Crosswalk of Reported Household Income and Imputed Family Income Relative to FPL for Adults Ages 21 to 64 in Indiana's Comparison States in the Behavioral Risk Factor Surveillance System, 2011-13 (preperiod) and 2017-18 (postperiod)

	Imputed Family Income Relative to FPL				
	At or below 50%	At or below 100%	At or below 138%	Above 138%	Above 500%
Years 2011-13					
Reported household income (%)					
Less than $15,000	29.8	31.6	28.8	0.0	0.0
$15,000-$19,999	13.1	13.5	13.8	1.7	0.0
$20,000-$24,999	13.3	13.0	13.4	2.7	0.0
$25,000-$34,999	13.6	12.1	12.5	4.0	0.0
$35,000-$49,999	12.3	12.4	14.2	16.5	0.0
$50,000-$74,999	7.5	7.4	7.6	20.1	4.2
$75,000 or more	10.4	9.9	9.7	54.9	95.8
Sample size	117,749	199,394	270,740	660,482	232,832
Years 2017-18					
Reported household income (%)					
Less than $15,000	24.7	25.1	22.3	0.0	0.0
$15,000-$19,999	11.9	12.6	12.8	1.0	0.0
$20,000-$24,999	13.0	13.2	13.2	1.8	0.0
$25,000-$34,999	13.1	11.7	12.0	2.8	0.0
$35,000-$49,999	13.7	14.3	16.5	12.6	0.0
$50,000-$74,999	8.8	9.0	9.2	17.2	2.3
$75,000 or more	14.8	14.1	13.9	64.6	97.7
Sample size	73,262	122,686	160,759	372,968	140,891

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** FPL = Federal poverty level. Cells show column percentages. Estimates are weighted by the revised BRFSS weights (see Table C.9). The selection of comparison states is described in Appendix C. These tabulations include all comparison states Table C.10, column 6.

Table C.8: Selected Characteristics of Adults Ages 21 to 64 in Indiana Before and After Reweighting to Create More Consistent Weights Across States and Over Time in the Behavioral Risk Factor Surveillance System, 2011-13 (preperiod) and 2017-18 (postperiod)

	Original BRFSS Weights	Revised BRFSS Weights
Female (%)	48.7	49.1
Age (%)		
21-25	8.7	11.8
26-44	31.7	42.0
45-64	34.3	46.2
Race/ethnicity (%)		
Non-Hispanic white	82.7	81.6
Non-Hispanic another race	11.8	12.7
Hispanic	5.5	5.7
Educational attainment (%)		
High school graduate/GED or less	34.6	30.9
Some college	30.2	33.8
College graduate or more	21.6	25.8
Marital status (%)		
Married	52.7	55.6
Widowed/separated/divorced	21.2	18.1
Never married	26.1	26.3
Household size (%)		
1	16.6	11.5
2	33.9	33.1
3 or more	49.6	55.4
Multiple family household (%)	58.4	54.4
Employed (%)	43.7	25.9
Household income (%)		
Less than $25,000	31.0	18.6
$25,000-$49,999	27.4	23.2
$50,000-$74,999	16.3	17.8
$75,000 or more	25.4	40.5
Household owns home (%)	27.1	25.1
Sample size	48,809	48,809

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS).

Table C.9: Selected Characteristics of Adults Ages 21 to 64 in Indiana's Comparison States Before and After Reweighting to Create More Consistent Weights Across States and Over Time in the Behavioral Risk Factor Surveillance System, 2011-13 (preperiod) and 2017-18 (postperiod)

	Original BRFSS Weights	Revised BRFSS Weights
Female (%)	48.6	49.2
Age (%)		
21-25	8.6	11.5
26-44	32.6	42.6
45-64	34.0	45.8
Race/ethnicity (%)		
Non-Hispanic white	64.5	69.8
Non-Hispanic another race	19.8	19.2
Hispanic	15.7	11.0
Educational attainment (%)		
High school graduate/GED or less	28.3	25.8
Some college	30.6	34.4
College graduate or more	26.7	31.4
Marital status (%)		
Married	50.8	54.6
Widowed/separated/divorced	20.1	16.5
Never married	29.1	28.9
Household size (%)		
1	16.4	11.0
2	32.8	32.6
3 or more	50.8	56.5
Multiple family household (%)	54.9	51.3
Employed (%)	*43.3*	*25.4*
Household income (%)		
Less than $25,000	30.7	17.2
$25,000-$49,999	24.8	20.9
$50,000-$74,999	14.8	16.1
$75,000 or more	29.6	45.7
Household owns home (%)	32.8	29.6
Sample size	2,270,678	2,270,678

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** The selection of comparison states is described in Appendix C. These tabulations include all comparison states in Table C.10, column 6.

Table C.10: Selecting the Comparison States for Estimating the Impacts of Indiana's Section 1115 Demonstration Using Difference-in-Differences Models

Research Question (1)	Comparison Group (2)	States Sorted Based on Medicaid Expansion Status (3)	Potential Comparison States (4)	Group of Best Comparison States - All Adults (5)	Group of Best Comparison States - Childless Adults (6)	Single-best Comparison State - Childless Adults (7)
What are the impacts of Indiana's Medicaid demonstration as compared to not expanding Medicaid?	Similar persons in comparison states that have not expanded Medicaid	AL, FL, GA, ID, KS, ME, MS, MO, NE, NC, OK, SC, SD, TN, TX, UT, VA, WI, WY	AL, FL, GA, ID, KS, MS, NE, NC, OK, SC, SD, TN, TX, VA, WY	None	AL, FL, KS, MS, NE, SC, SD, TX	SC
What are the impacts of Indiana's Medicaid demonstration as compared expanding Medicaid without a demonstration?	Similar persons in comparison states that expanded Medicaid without a demonstration	AZ, AK, CA, CO, CT, DE, DC, HI, IL, KY, LA, MD, MA, MN, NV, NJ, NM, NY, ND, OH, OR, PA, RI, VT, WA, WV, WI	CO, DE, KY, MD, NM, ND, OH, PA, WV	None	CO, KY, ND, OH, PA	OH
What are the impacts of Indiana's Medicaid demonstration as compared to expanding Medicaid with a different demonstration?	Similar persons in comparison states that expanded Medicaid with a different demonstration	AR, IA, MI, MT, NH	AR, IA, MI, NH	None	MI, NH	MI

Notes: See text for explanation of different comparison group categories.

Table C.11: Comparison of Medicaid and Section 1115 Eligibility Standards for Adults Ages 21 to 64 for Indiana and Comparison States that Did Not Expand Medicaid, Level in 2011 and Change Between 2011 and 2013

		Difference from Value for Indiana							
	Indiana	AL	FL	GA	ID	KS	MS	NE	NC
Level in 2011									
Income eligibility for full benefits									
Nonworking parents	19%	-8	1	9	2	7	5	28	17
Working parents	36%	-12	23	14	3	-4	8	22	13
Nonworking childless adults	0%	0	0	0	0	0	0	0	0
Working childless adults	0%	0	0	0	0	0	0	0	0
Income eligibility for limited benefits									
Nonworking parents	200%	-200	-200	-200	-200	-200	-200	-200	-200
Working parents	200%	-200	-200	-200	-15	-200	-200	-200	-200
Nonworking childless adults	0% [a]	0	0	0	0	0	0	0	0
Working childless adults	0% [a]	0	0	0	185	0	0	0	0
Change between 2011 and 2013									
Income eligibility for full benefits									
Nonworking parents	-1	0	0	0	0	0	0	1	-1
Working parents	-12	11	9	10	10	11	-3	12	10
Nonworking childless adults	0	0	0	0	0	0	0	0	0
Working childless adults	0	0	0	0	0	0	0	0	0
Income eligibility for limited benefits									
Nonworking parents	0	0	0	0	0	0	0	0	0
Working parents	6	-6	-6	-6	-6	-6	-6	-6	-6
Nonworking childless adults	0	0	0	0	0	0	0	0	0
Working childless adults	0	0	0	0	0	0	0	0	0

Sources: Medicaid/Section 1115 eligibility: Kaiser Family Foundation; uninsurance rate: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:**
[a] While childless adults were eligible for coverage, there was a cap on enrollment.

Table C.12: Comparison of Medicaid and Section 1115 Eligibility Standards and Uninsurance Rate for Childless Adults Ages 21 to 64 for Indiana and Comparison States that Did Not Expand Medicaid, Level in 2011 and Change Between 2011 and 2013

		Difference from Value for Indiana							
	Indiana	AL	FL	GA	ID	KS	MS	NE	NC
Level in 2011									
Income eligibility for full benefits									
Nonworking childless adults	0%	0	0	0	0	0	0	0	0
Working childless adults	0%	0	0	0	0	0	0	0	0
Income eligibility for limited benefits									
Nonworking childless adults	0% [a]	0	0	0	0	0	0	0	0
Working childless adults	0% [a]	0	0	0	185	0	0	0	0
Uninsurance rate for nonelderly childless adults	18.6%	0.0	5.2	3.3	0.6	-3.2	5.9	-3.2	1.5
Change between 2011 and 2013									
Income eligibility for full benefits									
Nonworking childless adults	0	0	0	0	0	0	0	0	0
Working childless adults	0	0	0	0	0	0	0	0	0
Income eligibility for limited benefits									
Nonworking childless adults	0	0	0	0	0	0	0	0	0
Working childless adults	0	0	0	0	0	0	0	0	0
Uninsurance rate for nonelderly childless adults	-1.7	-0.9	0.6	0.6	0.5	1.5	1.1	-0.5	-0.7

(continued)

Table C.12 (continued)

	Indiana	Difference from Value for Indiana						
		OK	SC	SD	TN	TX	VA	WY
Level in 2011								
Income eligibility for full benefits								
Nonworking childless adults	0%	0	0	0	0	0	0	0
Working childless adults	0%	0	0	0	0	0	0	0
Income eligibility for limited benefits								
Nonworking childless adults	0% [a]	200	0	0	0	0	0	0
Working childless adults	0% [a]	200	0	0	0	0	0	0
Uninsurance rate for nonelderly childless adults	18.6%	3.3	3.0	-4.8	-0.1	3.7	-4.0	2.5
Change between 2011 and 2013								
Income eligibility for full benefits								
Nonworking childless adults	0	0	0	0	0	0	0	0
Working childless adults	0	0	0	0	0	0	0	0
Income eligibility for limited benefits								
Nonworking childless adults	0	0	0	0	0	0	0	0
Working childless adults	0	0	0	0	0	0	0	0
Uninsurance rate for nonelderly childless adults	-2	-2.8	-0.9	0.7	0.9	2.1	-0.6	-0.4

Sources: Medicaid/Section 1115 eligibility: Kaiser Family Foundation; uninsurance rate: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS).
Notes: Shading indicates states included in the group of best comparison states. [a] While childless adults were eligible for coverage, there was a cap on enrollment.

Table C.13: Comparison of Health and Health Care Outcomes for Childless Adults Ages 21 to 64 for Indiana and Comparison States that Did Not Expand Medicaid, Level in 2011 and Change Between 2011 and 2013

		Difference from Value for Indiana							
	Indiana	AL	FL	GA	ID	KS	MS	NE	NC
Level in 2011									
Share reporting fair/poor health	15.4%	4.6	1.0	0.2	-1.5	-3.9	6.0	-4.3	-0.2
Share ever diagnosed with a chronic condition	58.9%	4.9	-2.7	-3.4	-1.5	-3.3	1.2	-2.8	-1.4
Share with a health limitation	21.8%	7.4	2.0	-0.9	1.3	-1.5	3.5	-2.5	-0.7
Share with a personal doctor	79.5%	-0.3	-6.9	-5.8	-7.6	-0.5	-8.2	-0.3	-3.4
Share with a routine checkup in the past 12 months	60.7%	9.1	5.3	10.2	-3.8	4.6	2.4	-4.5	10.8
Change between 2011 and 2013									
Share reporting fair/poor health	-1.1	-0.1	-0.4	0.3	-0.7	2.0	0.2	0.5	0.9
Share ever diagnosed with a chronic condition	-0.1	-1.7	0.7	5.5	-0.1	1.2	0.8	-1.1	0.7
Share with a health limitation	-1.7	-1.3	-3.2	-1.6	-1.8	0.0	0.3	-1.6	1.1
Share with a personal doctor	-0.7	-4.3	-1.2	-1.4	-4.0	-0.4	3.7	-1.1	-3.5
Share with a routine checkup in the past 12 months	2.0	-2.2	-1.3	-2.5	-1.9	0.4	2.5	1.1	-2.5

(continued)

Table C.13 (continued)

	Indiana	Difference from Value for Indiana						
		OK	SC	SD	TN	TX	VA	WY
Level in 2011								
Share reporting fair/poor health	15.4%	2.5	1.6	-3.1	0.4	0.5	-1.0	-3.7
Share ever diagnosed with a chronic condition	58.9%	1.9	0.9	-2.9	-0.8	-1.8	-2.5	-0.8
Share with a health limitation	21.8%	4.4	2.5	0.0	1.5	-1.4	-1.4	-1.0
Share with a personal doctor	79.5%	-3.5	-1.9	-5.6	-0.6	-7.2	-2.1	-12.6
Share with a routine checkup in the past 12 months	60.7%	-4.1	1.7	2.1	14.0	2.3	11.3	-6.9
Change between 2011 and 2013								
Share reporting fair/poor health	-1.1	-0.6	0.3	-1.2	3.9	-0.2	-1.1	1.2
Share ever diagnosed with a chronic condition	-0.1	-0.2	0.8	1.3	-2.9	-2.7	-0.3	-2.5
Share with a health limitation	-1.7	-1.6	-1.3	-2.3	0.7	-3.8	-2.6	-2.4
Share with a personal doctor	-0.7	-3.3	-3.1	-0.2	-3.9	-3.3	-1.4	0.4
Share with a routine checkup in the past 12 months	2.0	0.5	-0.8	-0.8	-4.1	2.4	-2.9	1.9

Source: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Shading indicates states included in the group of best comparison states.
[a] While childless adults were eligible for coverage, there was a cap on enrollment.

Table C.14: Comparison of Medicaid and Section 1115 Eligibility Standards and Uninsurance Rate for Adults Ages 21 to 64 for Indiana and Comparison States that Expanded Medicaid without a Demonstration, Level in 2011 and Change Between 2011 and 2013

Variable	Indiana	Difference from Value for Indiana								
		CO	DE	KY	MD	NM	ND	OH	PA	WV
Level in 2011										
Income eligibility for full benefits										
Nonworking parents	19%	81	81	17	97	10	15	71	7	-2
Working parents	36%	70	84	26	80	31	23	54	10	-3
Nonworking childless adults	0%	0	100	0	0	0	0	0	0	0
Working childless adults	0%	0	110	0	0	0	0	0	0	0
Income eligibility for limited benefits										
Nonworking parents	200%	-200	-200	-200	-200	-200	-200	-200	-200	-200
Working parents	200%	-200	-200	-200	-200	-200	-200	-200	-200	-200
Nonworking childless adults	0% [a]	0	0	0	116	0	0	0	0	0
Working childless adults	0% [a]	0	0	0	128	0	0	0	0	0
Change between 2011 and 2013										
Income eligibility for full benefits										
Nonworking parents	-1	1	1	-2	1	0	0	1	0	0
Working parents	-12	12	12	7	18	30	10	18	24	10
Nonworking childless adults	0	0	0	0	0	0	0	0	0	0
Working childless adults	0	0	0	0	0	0	0	0	0	0
Income eligibility for limited benefits										
Nonworking parents	0	0	0	0	0	0	0	0	0	0
Working parents	6	-6	-6	-6	-6	-6	-6	-6	-6	-6
Nonworking childless adults	0	0	0	0	0	0	0	0	0	0
Working childless adults	0	0	0	0	0	0	0	0	0	0

Sources: Medicaid/Section 1115 eligibility: Kaiser Family Foundation; uninsurance rate: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:**
[a] While childless adults were eligible for coverage, there was a cap on enrollment.

Table C.15: Comparison of Medicaid and Section 1115 Eligibility Standards and Uninsurance Rate for Childless Adults Ages 21 to 64 for Indiana and Comparison States that Expanded Medicaid Without a Demonstration, Level in 2011 and Change Between 2011 and 2013

Variable	Indiana	Difference from Value for Indiana								
		CO	DE	KY	MD	NM	ND	OH	PA	WV
Level in 2011										
Income eligibility for full benefits										
Nonworking childless adults	0%	0	100	0	0	0	0	0	0	0
Working childless adults	0%	0	110	0	0	0	0	0	0	0
Income eligibility for limited benefits										
Nonworking childless adults	0% [a]	0	0	0	116	0	0	0	0	0
Working childless adults	0% [a]	0	0	0	128	0	0	0	0	0
Uninsurance rate for nonelderly childless adults	18.6%	-2	-7	0	-8	2	-6	-2	-6	2
Change between 2011 and 2013										
Income eligibility for full benefits										
Nonworking childless adults	0	0	0	0	0	0	0	0	0	0
Working childless adults	0	0	0	0	0	0	0	0	0	0
Income eligibility for limited benefits										
Nonworking childless adults	0	0	0	0	0	0	0	0	0	0
Working childless adults	0	0	0	0	0	0	0	0	0	0
Uninsurance rate for nonelderly childless adults	-1.7	-0.3	2.8	1.7	1.6	1.4	-0.6	0.5	1.5	0.9

Sources: Medicaid/Section 1115 eligibility: Kaiser Family Foundation; uninsurance rate: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Shading indicates states included in the group of best comparison states. [a] While childless adults were eligible for coverage, there is a cap on enrollment.

Table C.16: Comparison of Health and Health Care Outcomes for Childless Adults Ages 21 to 64 for Indiana and Comparison States that Expanded Medicaid without a Demonstration, Level in 2011 and Change Between 2011 and 2013

Variable	Indiana	Difference from Value for Indiana								
		CO	DE	KY	MD	NM	ND	OH	PA	WV
Level in 2011										
Share reporting fair/poor health	15.4%	-4.0	-4.1	4.0	-3.9	1.3	-4.1	-0.3	-2.4	7.1
Share ever diagnosed with a chronic condition	58.9%	-5.2	3.0	4.6	-2.2	-0.9	-2.7	0.4	-1.3	3.1
Share with a health limitation	21.8%	0.5	0.2	6.4	-1.7	3.0	-2.0	0.8	-0.2	9.7
Share with a personal doctor	79.5%	-4.1	7.3	-0.6	2.7	-10.2	-7.5	0.6	6.5	-4.6
Share with a routine checkup in the past 12 months	60.7%	-4.0	17.1	2.4	13.5	-6.1	-1.5	6.8	5.6	12.4
Change between 2011 and 2013										
Share reporting fair/poor health	-1.1	-0.4	3.1	2.6	1.1	1.3	1.4	1.3	1.3	0.9
Share ever diagnosed with a chronic condition	-0.1	1.2	-2.4	-0.7	-0.3	0.0	-1.0	0.1	0.8	2.6
Share with a health limitation	-1.7	-2.8	-2.2	-1.0	-3.3	-0.4	-3.3	-2.2	-1.5	-2.1
Share with a personal doctor	-0.7	-0.7	-1.6	-1.8	-3.1	0.1	-1.6	-1.2	-1.9	0.4
Share with a routine checkup in the past 12 months	2.0	0.2	-4.0	1.4	-3.4	3.5	-2.4	-2.2	0.3	-4.0

Source: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Shading indicates states included in the group of best comparison states.

Table C.17: Comparison of Medicaid and Section 1115 Eligibility Standards and Uninsurance Rate for Adults 21 to 64 for Indiana and Comparison States that Expanded Medicaid with a Different Demonstration, Level in 2011 and Change Between 2011 and 2013

		Difference from Value for Indiana			
	Indiana	AR	IA	MI	NH
Level in 2011					
Income eligibility for full benefits					
Nonworking parents	19%	-6	9	18	20
Working parents	36%	-19	47	28	13
Nonworking childless adults	0%	0	0	0	0
Working childless adults	0%	0	0	0	0
Income eligibility for limited benefits					
Nonworking parents	200%	-200	0	-200	-200
Working parents	200%	0	50	-200	-200
Nonworking childless adults	0% [a]	0	200	0	0
Working childless adults	0% [a]	200	250	0	0
Change between 2011 and 2013					
Income eligibility for full benefits					
Nonworking parents	-1	1	0	1	0
Working parents	-12	11	9	12	10
Nonworking childless adults	0	0	0	0	0
Working childless adults	0	0	0	0	0
Income eligibility for limited benefits					
Nonworking parents	0	0	0	0	0
Working parents	6	-6	-6	-6	-6
Nonworking childless adults	0	0	0	0	0
Working childless adults	0	0	0	0	0

Sources: Medicaid/Section 1115 eligibility: Kaiser Family Foundation; uninsurance rate: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** [a] While childless adults were eligible for coverage, there was a cap on enrollment.

Table C.18: Comparison of Medicaid and Section 1115 Eligibility Standards and Uninsurance Rate for Childless Adults Ages 21 to 64 for Indiana and Comparison States that Expanded Medicaid with a Different Demonstration, Level in 2011 and Change Between 2011 and 2013

		Difference from Value for Indiana			
	Indiana	AR	IA	MI	NH
Level in 2011					
Income eligibility for full benefits					
Nonworking childless adults	0%	0	0	0	0
Working childless adults	0%	0	0	0	0
Income eligibility for limited benefits					
Nonworking childless adults	0% [a]	0	200	0	0
Working childless adults	0% [a]	200	250	0	0
Uninsurance rate for nonelderly childless adults	18.6%	2.2	-6.4	-1.8	-6.4
Change between 2011 and 2013					
Income eligibility for full benefits					
Nonworking childless adults	0	0	0	0	0
Working childless adults	0	0	0	0	0
Income eligibility for limited benefits					
Nonworking childless adults	0	0	0	0	0
Working childless adults	0	0	0	0	0
Uninsurance rate for nonelderly childless adults	-1.7	1.0	0.0	-0.2	1.6

Sources: Medicaid/Section 1115 eligibility: Kaiser Family Foundation; uninsurance: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Shading indicates states included in the group of best comparison states. [a] While childless adults were eligible for coverage, there was a cap on enrollment.

Table C.19: Comparison of Health and Health Care Outcomes for Childless Adults Ages 21 to 64 for Indiana and Comparison States that Expanded Medicaid with a Different Demonstration, Level in 2011 and Change Between 2011 and 2013

		Difference from Value for Indiana			
	Indiana	AR	IA	MI	NH
Level in 2011					
Share reporting fair/poor health	15.4%	5.2	-5.0	0.1	-4.2
Share ever diagnosed with a chronic condition	58.9%	1.4	-5.7	4.4	0.3
Share with a health limitation	21.8%	4.6	-4.2	3.9	0.1
Share with a personal doctor	79.5%	-2.2	-1.6	1.8	6.5
Share with a routine checkup in the past 12 months	60.7%	-0.9	5.8	3.3	8.9
Change between 2011 and 2013					
Share reporting fair/poor health	-1.1	0.6	0.8	0.9	-0.7
Share ever diagnosed with a chronic condition	-0.1	3.5	1.9	0.2	-1.3
Share with a health limitation	-1.7	0.4	2.1	-1.8	-2.7
Share with a personal doctor	-0.7	-1.1	0.3	-1.2	-1.4
Share with a routine checkup in the past 12 months	2.0	2.5	-2.5	-0.3	-3.2

Source: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Shading indicates states included in the group of best comparison states.

Table C.20: Explanatory Variables Included in the Propensity Score Models Based on the American Community Survey and Behavioral Risk Factor Surveillance System

	American Community Survey	Behavioral Risk Factor Surveillance System
Gender	X	X
Age	X	X
Gender*Age interactions	X	X
Race/ethnicity	X	X
Educational attainment	X	X
Marital status	X	X
Household size		X
Family size	X	
Multiple family household	X	X
Employment status	X	X
Household income		X
Family income relative to Federal Poverty Level	X	
Family has investment income	X	
Household owns home	X	X

Table C.21: Selected Characteristics of Childless Adults Ages 21 to 64 in Indiana and Group of Best Comparison States that Did Not Expand Medicaid, After Reweighting Using the American Community Survey, 2011-13 (preperiod) and 2017-18 (postperiod)

		Group of Best Comparison States		
	Indiana	Using ACS Weight	Using Propensity Score Weight	Using ebalance Weight
Female (%)	48.6	48.7	48.6	48.6
Age (%)				
21-25	15.2	15.3	15.3	15.2
26-44	28.0	31.2	28.0	28.0
45-64	56.8	53.5	56.7	56.8
Non-Hispanic white (%)	82.4	56.6	82.4	82.4
Educational attainment (%)				
High school graduate/GED or less	44.9	40.9	44.8	44.9
Some college	31.5	33.0	31.6	31.5
College graduate or more	23.5	26.1	23.6	23.5
Marital status (%)				
Married	43.8	40.8	43.8	43.8
Widowed/separated/divorced	21.2	21.1	21.2	21.2
Never married	35.0	38.1	35.0	35.0
Multiple family household (%)	50.1	56.5	50.0	50.1
Employment status (%)				
Adult is employed	71.6	70.0	71.6	71.6
Other family member is employed	30.2	25.8	30.2	30.2
Family income relative to FPL (%)				
At or below 138%	28.9	31.8	28.8	28.8
Above 138% to less than 200%	9.1	10.1	9.1	9.1
200% to less than 500%	37.6	34.3	37.6	37.6
500% or more	24.5	23.7	24.5	24.5
Family has investment income (%)	12.3	11.2	12.4	12.3
Household owns home (%)	68.9	64.4	68.8	68.9
Sample size	115,325	1,090,244	1,090,094	1,090,244

Source: 2011-13 and 2017-18 American Community Survey (ACS). **Notes:** FPL = Federal poverty level. Best comparison states are AL, FL, KS, MS, NE, SC, SD, and TX.

Table C.22: Selected Characteristics of Childless Adults Ages 21 to 64 in Indiana and Group of Best Comparison States that Expanded Medicaid without a Demonstration, After Reweighting Using the American Community Survey, 2011-13 (preperiod) and 2017-18 (postperiod)

	Indiana	Group of Best Comparison States		
		Using ACS Weight	Using Propensity Score Weight	Using ebalance Weight
Female (%)	48.6	48.8	48.6	48.6
Age (%)				
21-25	15.2	14.7	15.2	15.2
26-44	28.0	29.4	28.0	28.0
45-64	56.8	55.9	56.8	56.8
Non-Hispanic white (%)	82.4	80.5	82.3	82.4
Educational attainment (%)				
High school graduate/GED or less	44.9	41.2	45.0	44.9
Some college	31.5	30.5	31.5	31.5
College graduate or more	23.5	28.3	23.5	23.5
Marital status (%)				
Married	43.8	42.4	43.8	43.8
Widowed/separated/divorced	21.2	19.4	21.2	21.2
Never married	35.0	38.2	35.0	35.0
Multiple family household (%)	50.1	51.5	50.0	50.1
Employment status (%)				
Adult is employed	71.6	71.6	71.6	71.6
Other family member is employed	30.2	28.8	30.2	30.2
Family income relative to FPL (%)				
At or below 138%	28.9	28.0	28.9	28.8
Above 138% to less than 200%	9.1	8.7	9.1	9.1
200% to less than 500%	37.6	36.1	37.5	37.6
500% or more	24.5	27.2	24.5	24.5
Family has investment income (%)	12.3	14.8	12.3	12.3
Household owns home (%)	68.9	67.3	69.0	68.9
Sample size	115,325	627,862	627,840	627,862

Source: 2011-13 and 2017-18 American Community Survey (ACS). **Notes:** FPL = Federal poverty level. Best comparison states are CO, KY, ND, OH, and PA.

Table C.23: Selected Characteristics of Childless Adults Ages 21 to 64 in Indiana and Group of Best Comparison States that Expanded Medicaid with a Different Demonstration, After Reweighting Using the American Community Survey, 2011-13 (preperiod) and 2017-18 (postperiod)

		Group of Best Comparison States		
	Indiana	Using ACS Weight	Using Propensity Score Weight	Using ebalance Weight
Female (%)	48.6	48.9	48.6	48.6
Age (%)				
21-25	15.2	15.3	15.2	15.2
26-44	28.0	27.5	28.0	28.0
45-64	56.8	57.2	56.8	56.8
Non-Hispanic white (%)	82.4	79.3	82.4	82.4
Educational attainment (%)				
High school graduate/GED or less	44.9	37.9	45.0	44.9
Some college	31.5	35.6	31.5	31.5
College graduate or more	23.5	26.5	23.5	23.5
Marital status (%)				
Married	43.8	42.2	43.7	43.8
Widowed/separated/divorced	21.2	19.0	21.2	21.2
Never married	35.0	38.8	35.1	35.0
Multiple family household (%)	50.1	52.8	50.0	50.1
Employment status (%)				
Adult is employed	71.6	68.4	71.6	71.6
Other family member is employed	30.2	27.5	30.2	30.2
Family income relative to FPL (%)				
At or below 138%	28.9	30.2	28.8	28.7
Above 138% to less than 200%	9.1	8.9	9.2	9.2
200% to less than 500%	37.6	34.6	37.5	37.6
500% or more	24.5	26.3	24.5	24.5
Family has investment income (%)	12.3	13.8	12.4	12.3
Household owns home (%)	68.9	71.5	68.9	68.9
Sample size	115,325	203,778	203,765	203,778

Source: 2011-13 and 2017-18 American Community Survey (ACS). **Notes:** FPL = Federal poverty level. Best comparison states are MI and NH.

Table C.24: Selected Characteristics of Childless Adults Ages 21 to 64 in Indiana and Group of Best Comparison States that Did Not Expand Medicaid, After Reweighting Using the Behavioral Risk Factor Surveillance System, 2011-13 (preperiod) and 2017-18 (postperiod)

		Group of Best Comparison States		
	Indiana	Using Revised BRFSS Weight	Using Propensity Score Weight	Using ebalance Weight
Female (%)	48.0	48.0	48.0	48.0
Age (%)				
21-25	13.2	13.6	13.3	13.2
26-44	24.9	26.1	24.9	24.9
45-64	61.8	60.3	61.8	61.8
Non-Hispanic white (%)	83.5	71.4	83.5	83.5
Educational attainment (%)				
High school graduate/GED or less	41.4	35.4	41.3	41.4
Some college	33.9	36.7	33.9	33.9
College graduate or more	24.8	27.9	24.8	24.8
Marital status (%)				
Married	48.7	48.0	48.7	48.7
Widowed/separated/divorced	20.6	19.5	20.6	20.6
Never married	30.7	32.5	30.7	30.7
Multiple family household (%)	46.9	48.2	46.8	46.9
Employed (%)	72.3	72.7	72.3	72.3
Household income (%)				
Less than $25,000	19.3	19.9	19.3	19.3
$25,000-$49,999	24.7	24.8	24.7	24.7
$50,000-$74,999	17.8	17.4	17.8	17.8
$75,000 or more	38.2	37.9	38.2	38.2
Household owns home (%)	74.4	70.0	74.4	74.4
Sample size	18,829	188,463	188,398	188,463

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Best comparison states are AL, FL, KS, MS, NE, SC, SD, and TX.

Table C.25: Selected Characteristics of Childless Adults Ages 21 to 64 in Indiana and Group of Best Comparison States that Expanded Medicaid without a Demonstration, After Reweighting Using the Behavioral Risk Factor Surveillance System, 2011-13 (preperiod) and 2017-18 (postperiod)

		Group of Best Comparison States		
	Indiana	Using Revised BRFSS Weight	Using Propensity Score Weight	Using ebalance Weight
Female (%)	48.0	47.7	48.0	48.0
Age (%)				
21-25	13.2	13.5	13.3	13.2
26-44	24.9	26.9	24.9	24.9
45-64	61.8	59.6	61.8	61.8
Non-Hispanic white (%)	83.5	82.5	83.5	83.5
Educational attainment (%)				
High school graduate/GED or less	41.4	36.6	41.4	41.4
Some college	33.9	33.4	33.9	33.9
College graduate or more	24.8	30.0	24.7	24.8
Marital status (%)				
Married	48.7	47.6	48.7	48.7
Widowed/separated/divorced	20.6	18.6	20.6	20.6
Never married	30.7	33.8	30.7	30.7
Multiple family household (%)	46.9	48.3	46.9	46.9
Employed (%)	72.3	72.6	72.3	72.3
Household income (%)				
Less than $25,000	19.3	18.8	19.4	19.3
$25,000-$49,999	24.7	22.8	24.7	24.7
$50,000-$74,999	17.8	17.3	17.8	17.8
$75,000 or more	38.2	41.0	38.1	38.2
Household owns home (%)	74.4	70.2	74.4	74.4
Sample size	18,829	105,168	105,149	105,168

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Best comparison states are CO, KY, ND, OH, and PA.

Table C.26: Selected Characteristics of Childless Adults Ages 21 to 64 in Indiana and Group of Best Comparison States that Expanded Medicaid with a Different Demonstration, After Reweighting Using the Behavioral Risk Factor Surveillance System, 2011-13 (preperiod) and 2017-18 (postperiod)

		Group of Best Comparison States		
	Indiana	Using Revised BRFSS Weight	Using Propensity Score Weight	Using ebalance Weight
Female (%)	48.0	48.3	48.0	48.0
Age (%)				
21-25	13.2	12.7	13.3	13.2
26-44	24.9	24.8	24.9	24.9
45-64	61.8	62.5	61.8	61.8
Non-Hispanic white (%)	83.5	83.6	83.5	83.5
Educational attainment (%)				
High school graduate/GED or less	41.4	34.0	41.4	41.4
Some college	33.9	36.0	33.9	33.9
College graduate or more	24.8	30.0	24.7	24.8
Marital status (%)				
Married	48.7	47.6	48.7	48.7
Widowed/separated/divorced	20.6	18.1	20.5	20.6
Never married	30.7	34.3	30.8	30.7
Multiple family household (%)	46.9	51.6	46.9	46.9
Employed (%)	72.3	70.9	72.2	72.3
Household income (%)				
Less than $25,000	19.3	17.4	19.4	19.3
$25,000-$49,999	24.7	22.2	24.7	24.7
$50,000-$74,999	17.8	16.7	17.8	17.8
$75,000 or more	38.2	43.7	38.1	38.2
Household owns home (%)	74.4	74.3	74.4	74.4
Sample size	18,829	35,300	35,283	35,300

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Best comparison states are MI and NH.

Appendix D. Supplemental Tables for Chapter III

This appendix provides supplemental tables to support the impact estimates in Chapter III.

Table D.1: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017 (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% confidence Interval	Estimate	95% confidence Interval
Compared to Not Expanding Medicaid				
Had health insurance coverage at the time of the survey	3.3***	2.4, 4.3	11.2***	9.1,13.3
Type of coverage				
Medicaid or other public coverage	4.0***	3.3, 4.7	10.5***	8.5,12.5
Employer-sponsored insurance	-0.6	-1.6, 0.5	0.8	-1.2, 2.8
Direct purchase or other coverage	-0.1	-0.8, 0.6	-0.1	-1.6, 1.4
Sample size	956,769		274,493	
Compared to Expanding Medicaid Without a Demonstration				
Had health insurance coverage at the time of the survey	-0.7	-1.7, 0.3	-0.2	-2.3, 1.9
Type of coverage				
Medicaid or other public coverage	-3.2***	-4.0,-2.4	-7.0***	-9.1,-4.8
Employer-sponsored insurance	1.1*	-0.1, 2.2	2.8***	0.7, 4.8
Direct purchase or other coverage	1.4***	0.6, 2.2	4.0***	2.5, 5.5
Sample size	593,237		153,261	
Compared to Expanding Medicaid with a Different Demonstration				
Had health insurance coverage at the time of the survey	-1.8***	-2.9,-0.7	-1.4	-3.9, 1.1
Type of coverage				
Medicaid or other public coverage	-2.3***	-3.3,-1.3	-5.0***	-7.6,-2.4
Employer-sponsored insurance	0.6	-0.7, 2.0	1.4	-1.1, 3.9
Direct purchase or other coverage	-0.2	-1.0, 0.7	2.2***	0.6, 3.9
Sample size	255,038		69,387	

Source: 2011-13 and 2017 American Community Survey (ACS). **Notes:** Low-income is defined as family income at or below 138 percent of the FPL. Best comparison states for not expanding Medicaid are AL, FL, KS, MS, NE, SC, SD, and TX. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.2: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2018 (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% confidence Interval	Estimate	95% confidence Interval
Compared to Not Expanding Medicaid				
Had health insurance coverage at the time of the survey	3.9***	3.0, 4.9	11.5***	9.4, 13.6
Type of coverage				
Medicaid or other public coverage	4.2***	3.4, 4.9	11.5***	9.5, 13.6
Employer-sponsored insurance	0.3	-0.7, 1.4	1.8*	-0.3, 3.8
Direct purchase or other coverage	-0.5	-1.2, 0.1	-1.8***	-3.1, -0.4
Sample size	958,943		273,378	
Compared to Expanding Medicaid Without a Demonstration				
Had health insurance coverage at the time of the survey	0.5	-0.4, 1.5	1.0	-1.2, 3.1
Type of coverage				
Medicaid or other public coverage	-2.1***	-2.9, -1.3	-4.9***	-7.1, -2.7
Employer-sponsored insurance	1.7***	0.6, 2.8	3.9***	1.8, 6.0
Direct purchase or other coverage	0.9**	0.2, 1.6	2.0***	0.6, 3.3
Sample size	593,665		151,784	
Compared to Expanding Medicaid with a Different Demonstration				
Had health insurance coverage at the time of the survey	-0.9	-2.0, 0.3	-0.7	-3.1, 1.7
Type of coverage				
Medicaid or other public coverage	-2.3***	-3.4, -1.3	-4.7***	-7.4, -2.0
Employer-sponsored insurance	1.6**	0.3, 3.0	3.5***	1.0, 6.0
Direct purchase or other coverage	-0.2	-0.9, 0.6	0.5	-1.0, 2.0
Sample size	255,081		69,001	

Source: 2011-13 and 2018 American Community Survey (ACS). **Notes:** Low-income is defined as family income at or below 138 percent of the FPL. Best comparison states for not expanding Medicaid are AL, FL, KS, MS, NE, SC, SD, and TX. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.3: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and the Third and Fourth Years Following Implementation of the Medicaid Expansion (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% confidence Interval	Estimate	95% confidence Interval
Compared to Expanding Medicaid Without a Demonstration				
Had health insurance coverage at the time of the survey	-0.4	-1.2, 0.4	0.3	-1.4, 2.0
Type of coverage				
Medicaid or other public coverage	-2.4***	-3.0, -1.8	-5.4***	-7.1, -3.8
Employer-sponsored insurance	1.4***	0.5, 2.3	3.1***	1.4, 4.7
Direct purchase or other coverage	0.6**	0.1, 1.3	2.7***	1.5, 3.9
Sample size	742,323		189,856	
Compared to Expanding Medicaid with a Different Demonstration				
Had health insurance coverage at the time of the survey	-1.2**	-2.1, -0.3	0.4	-1.7, 2.5
Type of coverage				
Medicaid or other public coverage	-1.5***	-2.3, -0.8	-2.8***	-4.8, -0.7
Employer-sponsored insurance	1.3**	0.2, 2.3	2.6***	0.6, 4.5
Direct purchase or other coverage	-0.9***	-1.6,-0.3	0.6	-0.6, 1.8
Sample size	319,399		85,635	

Source: 2011-13 and 2016-18 American Community Survey (ACS). **Notes:** The postperiod is 2017-18 for Indiana and 2016-17 for the comparison states. Low-income is defined as family income at or below 138 percent of the FPL. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.4: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017-18 (postperiod) for Each of the Best Comparison States

	Group of Best Comparison States that Did Not Expand Medicaid								Group of Best Comparison States that Expanded Medicaid without a Demonstration					Group of Best Comparison States that Expanded Medicaid with a Different Demonstration	
	SC^	AL	FL	KS	MS	NE	SD	TX	OH^	CO	KY	ND	PA	MI^	NH
Had health insurance coverage at the time of the survey	2.5***	5.1***	1.2***	3.6***	4.3***	4.8***	3.9***	3.6***	-0.5	-1.6***	-2.1***	2.8**	2.1***	-1.1***	-1.5
Type of coverage															
Medicaid or other public coverage	3.4***	3.9***	3.3***	3.9***	4.4***	4.5***	4.8***	4.9***	-3.4***	-3.5***	-5.1***	0.6	-1.1***	-2.9***	-1.3*
Employer-sponsored insurance	0.8	0.3	0.8*	-0.6	0.1	-0.2	-1.1	-0.7	2.3***	0.4	1.7***	0.3	2.7***	1.6***	0.6
Direct purchase or other coverage	-1.7***	0.9**	-2.9***	0.3	-0.3	0.6	0.1	-0.6**	0.7**	1.4***	1.2***	1.8*	0.4	0.2	-0.8

Source: 2011-13 and 2017-18 American Community Survey (ACS). **Notes**: ^ indicates single-best comparison state within group of best comparison states. For sample sizes, see Table D.16. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.5: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Childless Adults Ages 21 to 64 in Indiana between 2011-13 (preperiod) and Third and Fourth Years Following Implementation of the Medicaid Expansion (postperiod) for Each of the Best Comparison States

	Group of Best Comparison States that Expanded Medicaid without a Demonstration					Group of Best Comparison States that Expanded Medicaid with a Different Demonstration	
	OH^	CO	KY	ND	PA	MI^	NH
Had health insurance coverage at the time of the survey	-0.8**	-1.6***	-2.6***	2.5*	2.0***	-1.3***	-1.0
Type of coverage							
Medicaid or other public coverage	-3.3***	-3.2***	-5.0***	0.3	-0.4	-2.3***	-0.3
Employer-sponsored insurance	1.9***	0.6	1.8***	0.5	2.6***	1.1**	1.5
Direct purchase or other coverage	0.6**	1.0***	0.6*	1.8*	-0.3	-0.2	-2.2***

Source: 2011-13 and 2016-18 American Community Survey (ACS). **Notes**: The postperiod is 2017-18 for Indiana and 2016-17 for the comparison states. ^ indicates single-best comparison state within group of best comparison states. For sample sizes, see Table D.16**. */**/*** ** Significantly different from zero at the .10/.05/.01 level, using two-tailed test.

Table D.6: Difference-in-Differences Estimates for Changes in Health Care Access and Affordability for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017 (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% confidence Interval	Estimate	95% confidence Interval
Compared to Not Expanding Medicaid				
Had a personal doctor at the time of the survey	1.5	-0.5, 3.5	4.3 *	-0.2, 8.7
Had a routine checkup in past 12 months	0.2	-2.2, 2.6	5.5 *	-1.1,12.1
Received flu vaccine in past 12 months [a]	3.0 **	0.2, 5.7	3.3	-2.7, 9.3
No unmet need for doctor care due to costs in past 12 months	1.0	-0.6, 2.6	2.9	-1.4, 7.2
Sample size	174,879		26,208	
Compared to Expanding Medicaid Without a Demonstration				
Had a personal doctor at the time of the survey	1.7	-0.4, 3.8	1.6	-3.0, 6.3
Had a routine checkup in past 12 months	0.4	-2.1, 2.9	2.7	-3.9, 9.2
Received flu vaccine in past 12 months [a]	3.5 **	0.6, 6.4	-0.1	-8.1, 7.8
No unmet need for doctor care due to costs in past 12 months	0.5	-1.2, 2.1	-0.8	-5.3, 3.7
Sample size	104,746		14,330	
Compared to Expanding Medicaid with a Different Demonstration				
Had a personal doctor at the time of the survey	-0.6	-3.0, 1.8	0.6	-4.9, 6.2
Had a routine checkup in past 12 months	-3.6 **	-6.5,-0.7	0.7	-5.9, 7.3
Received flu vaccine in past 12 months [a]	2.2	-0.9, 5.3	-0.1	-8.4, 8.2
No unmet need for doctor care due to costs in past 12 months	-1.4	-3.4, 0.6	-1.1	-6.5, 4.3
Sample size	45,068		6,041	

Source: 2011-13 and 2017 Behavioral Risk Factor Surveillance System (BRFSS). **Notes**: Low-income is defined as family income at or below 138 percent of the FPL. Low-income is imputed in the BRFSS. Best comparison states for not expanding Medicaid are AL, FL, KS, MS, NE, SC, SD, and TX. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. [a] Because of measurement error due to gaps in survey fielding in some states, the comparison groups for the analysis of the receipt of a flu vaccine are limited to AL, MS, NE and SD for the comparison to not expanding Medicaid, limited to OH and KY for the comparison to expanding Medicaid without a demonstration, and limited to MI for the comparison to expanding Medicaid with a different demonstration. For sample sizes pertaining to flu shot estimates, see Table D.16. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.7: Difference-in-Differences Estimates for Changes in Health Care Access and Affordability for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2018 (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% confidence Interval	Estimate	95% confidence Interval
Compared to Not Expanding Medicaid				
Had a personal doctor at the time of the survey	1.5	-1.0, 3.9	3.9	-2.4, 10.3
Had a routine checkup in past 12 months	3.7***	1.0, 6.3	6.1*	-1.2, 13.4
Received flu vaccine in past 12 months [a]	-0.1	-3.0, 2.7	-0.4	-5.7, 5.0
No unmet need for doctor care due to costs in past 12 months	-0.4	-2.3, 1.5	-0.6	-6.8, 5.5
Sample size	164,362		46,057	
Compared to Expanding Medicaid without a Demonstration				
Had a personal doctor at the time of the survey	0.4	-2.0, 2.9	0.5	-5.5, 6.5
Had a routine checkup in past 12 months	4.3***	1.6, 7.0	4.4	-3.1, 12.0
Received flu vaccine in past 12 months [a]	-2.0	-5.0, 1.0	-4.4	-10.3, 1.4
No unmet need for doctor care due to costs in past 12 months	-1.2	-3.2, 0.7	-5.8*	-12.2, 0.6
Sample size	101,169		26,732	
Compared to Expanding Medicaid with a Different Demonstration				
Had a personal doctor at the time of the survey	-2.1	-4.8, 0.7	-4.0	-11.2, 3.2
Had a routine checkup in past 12 months	1.9	-1.2, 4.9	1.5	-5.7, 8.8
Received flu vaccine in past 12 months [a]	-5.3***	-8.5, -2.1	-5.5*	-12.1, 1.0
No unmet need for doctor care due to costs in past 12 months	-2.6**	-4.8, -0.3	-6.0*	-12.9, 1.0
Sample size	42,670		11,199	

Source: 2011-13 and 2018 Behavioral Risk Factor Surveillance System (BRFSS). **Notes**: Low-income is defined as family income at or below 138 percent of the FPL. Low-income is imputed in the BRFSS. Best comparison states for not expanding Medicaid are AL, FL, KS, MS, NE, SC, SD, and TX. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. [a] Because of measurement error due to gaps in survey fielding in some states, the comparison groups for the analysis of the receipt of a flu vaccine are limited to AL, MS, NE and SD for the comparison to not expanding Medicaid, limited to OH and KY for the comparison to expanding Medicaid without a demonstration, and limited to MI for the comparison to expanding Medicaid with a different demonstration. For sample sizes pertaining to flu shot estimates, see Table D.16. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.8: Difference-in-Differences Estimates for Changes in Health Care Access and Affordability for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and the Third and Fourth Years Following Implementation of the Medicaid Expansion (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% confidence Interval	Estimate	95% confidence Interval
Compared to Expanding Medicaid Without a Demonstration				
Had a personal doctor at the time of the survey	0.7	-1.0, 2.5	1.5	-2.4, 5.5
Had a routine checkup in past 12 months	3.1***	1.0, 5.1	5.0**	0.3, 9.6
Received flu vaccine in past 12 months [a]	1.4	-0.9, 3.8	-0.8	-6.7, 5.1
No unmet need for doctor care due to costs in past 12 months	-0.1	-1.5, 1.3	-1.7	-5.3, 2.0
Sample size	127,866		33,794	
Compared to Expanding Medicaid with a Different Demonstration				
Had a personal doctor at the time of the survey	-1.4	-3.4, 0.6	-2.0	-7.4, 3.4
Had a routine checkup in past 12 months	0.6	-1.8, 3.1	3.1	-2.3, 8.5
Received flu vaccine in past 12 months [a]	-0.7	-3.2, 1.8	-1.9	-6.6, 2.8
No unmet need for doctor care due to costs in past 12 months	-1.6*	-3.3, 0.0	-1.6	-6.5, 3.3
Sample size	55,240		14,670	

Source: 2011-13 and 2016-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** The postperiod is 2017-18 for Indiana and 2016-17 for the comparison states. Low-income is defined as family income at or below 138 percent of the FPL. Low-income is imputed in the BRFSS. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. [a] Because of measurement error due to gaps in survey fielding in some states, the comparison groups for the analysis of the receipt of a flu vaccine are limited to AL, MS, NE and SD for the comparison to not expanding Medicaid, limited to OH and KY for the comparison to expanding Medicaid without a demonstration, and limited to MI for the comparison to expanding Medicaid with a different demonstration. For sample sizes pertaining to flu shot estimates, see Table D.16. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.9: Difference-in-Differences Estimates of Changes in Health Care Access and Affordability for Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017-18 (postperiod) for Each of the Best Comparison States

	Group of Best Comparison States that Did Not Expand Medicaid								Group of Best Comparison States that Expanded Medicaid without a Demonstration					Group of Best Comparison States that Expanded Medicaid with a Different Demonstration	
	SC^	AL	FL	KS	MS	NE	SD	TX	OH^	CO	KY	ND	PA	MI^	NH
Had a personal doctor at the time of the survey	1.8	0.7	2.8**	2.5**	0.3	0.9	1.1	0.8	2.7**	2.0	-0.5	3.2**	1.0	-2.1*	0.6
Had a routine checkup in past 12 months	-0.8	6.0***	0.6	3.4***	2.7	-3.4**	1.7	3.1*	2.4*	2.2	1.6	2.6	0.9	-3.0**	-0.1
Received flu vaccine in past 12 months [a]	NA	0.4	NA	NA	2.8	-2.2*	5.0***	NA	0.5	NA	2.6*	NA	NA	-0.7	NA
No unmet need for doctor care due to costs in past 12 months	0.01	1.3	0.1	0.9	-0.4	2.0**	0.8	1.7	-1.6*	0.6	-1.6	3.4***	0.6	-2.0**	-1.6

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes**: ^ indicates single-best comparison state within group of best comparison states. For sample sizes, see Table D.16. NA is estimate not available. [a] Because of measurement error due to gaps in survey fielding in some states, the comparison groups for the analysis of the receipt of a flu vaccine are limited to AL, MS, NE and SD for the comparison to not expanding Medicaid, limited to OH and KY for the comparison to expanding Medicaid without a demonstration, and limited to MI for the comparison to expanding Medicaid with a different demonstration. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.10: Difference-in-Differences Estimates of Changes in Health Access and Affordability for Childless Adults Ages 21 to 64 in Indiana between 2011-13 (preperiod) and Third and Fourth Years Following Implementation of the Medicaid Expansion (postperiod) for Each of the Best Comparison States

	Group of Best Comparison States that Expanded Medicaid without a Demonstration					Group of Best Comparison States that Expanded Medicaid with a Different Demonstration	
	OH^	CO	KY	ND	PA	MI^	NH
Had a personal doctor at the time of the survey	0.04	1.8	1.8	2.2	0.2	-1.7	-0.9
Had a routine checkup in past 12 months	3.0**	2.7**	0.4	6.7***	3.0**	-0.4	2.7
Received flu vaccine in past 12 months[a]	0.8	NA	1.7	NA	NA	-0.7	NA
No unmet need for doctor care due to costs in past 12 months	-1.9**	-0.1	-1.6	4.2***	1.1	-2.1**	-0.4

Source: 2011-13 and 2016-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes**: The postperiod is 2017-18 for Indiana and 2016-17 for the comparison states. ^ indicates single-best comparison state within group of best comparison states. For sample sizes, see Table D.16. NA is estimate not available. [a] Because of measurement error due to gaps in survey fielding in some states, the comparison groups for the analysis of the receipt of a flu vaccine are limited to AL, MS, NE and SD for the comparison to not expanding Medicaid, limited to OH and KY for the comparison to expanding Medicaid without a demonstration, and limited to MI for the comparison to expanding Medicaid with a different demonstration. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using two-tailed test.

Table D.11: Difference-in-Differences Estimates for Changes in Health Behaviors and Health Status for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017 (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% confidence Interval	Estimate	95% confidence Interval
Compared to Not Expanding Medicaid				
Smoker at the time of the survey	2.0 *	-0.1, 4.2	2.9	-2.4, 8.3
Smoker who did not try to quit in past 12 months	0.9	-0.6, 2.5	2.0	-2.2, 6.1
Health status was fair or poor at the time of the survey	2.1 **	0.4, 3.9	3.3	-0.9, 7.5
Physical health was not good in past 30 days	1.3	-1.1, 3.7	1.2	-3.9, 6.4
Mental health was not good in past 30 days	0.5	-1.9, 2.9	-0.8	-6.2, 4.6
Had an activity limitation due to health at the time of the survey	3.4 ***	1.3, 5.5	3.1	-2.0, 8.3
Sample size	174,879		26,208	
Compared to Expanding Medicaid without a Demonstration				
Smoker at the time of the survey	1.7	-0.5, 3.9	2.0	-3.5, 7.4
Smoker who did not try to quit in past 12 months	0.9	-0.7, 2.5	1.2	-2.9, 5.3
Health status was fair or poor at the time of the survey	1.3	-0.5, 3.0	1.4	-3.6, 6.3
Physical health was not good in past 30 days	0.6	-1.9, 3.0	1.9	-3.7, 7.6
Mental health was not good in past 30 days	-0.7	-3.2, 1.8	-0.6	-6.8, 5.6
Had an activity limitation due to health at the time of the survey	1.4	-0.8, 3.5	1.3	-4.4, 7.1
Sample size	104,746		14,330	
Compared to Expanding Medicaid with a Different Demonstration				
Smoker at the time of the survey	0.9	-1.7, 3.5	3.5	-3.7,10.7
Smoker who did not try to quit in past 12 months	0.4	-1.5, 2.3	0.8	-3.9, 5.5
Health status was fair or poor at the time of the survey	1.2	-0.9, 3.3	0.9	-6.1, 7.9
Physical health was not good in past 30 days	-1.2	-4.1, 1.8	-1.3	-7.8, 5.3
Mental health was not good in past 30 days	0.2	-2.8, 3.1	-1.8	-9.1, 5.5
Had an activity limitation due to health at the time of the survey	0.4	-2.2, 2.9	0.0	-6.4, 6.4
Sample size	45,068		6,041	

Source: 2011-13 and 2017 Behavioral Risk Factor Surveillance System (BRFSS). **Notes**: Low-income is defined as family income at or below 138 percent of the FPL. Low-income is imputed in the BRFSS. Best comparison states for not expanding Medicaid are AL, FL, KS, MS, NE, SC, SD, and TX. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.12: Difference-in-Differences Estimates for Changes in Health Behaviors and Health Status for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2018 (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% confidence Interval	Estimate	95% confidence Interval
Compared to Not Expanding Medicaid				
Smoker at the time of the survey	0.9	-1.5, 3.4	1.4	-4.3, 7.1
Smoker who did not try to quit in past 12 months	-0.7	-2.4, 1.0	-1.9	-5.6, 1.7
Health status was fair or poor at the time of the survey	1.6	-0.4, 3.6	4.7 *	-0.6, 10.0
Physical health was not good in past 30 days	-0.3	-3.0, 2.5	-2.3	-8.7, 4.2
Mental health was not good in past 30 days	2.1	-0.7, 5.0	1.2	-5.6, 7.9
Had an activity limitation due to health at the time of the survey	2.2 *	-0.3, 4.7	2.6	-3.4, 8.6
Sample size	164,362		46,057	
Compared to Expanding Medicaid Without a Demonstration				
Smoker at the time of the survey	0.4	-2.1, 3.0	0.1	-5.6, 5.8
Smoker who did not try to quit in past 12 months	-1.0	-2.7, 0.8	-3.7 *	-7.8, 0.3
Health status was fair or poor at the time of the survey	1.2	-0.8, 3.3	4.8	-1.4, 11.0
Physical health was not good in past 30 days	0.3	-2.6, 3.1	0.2	-6.3, 6.6
Mental health was not good in past 30 days	1.7	-1.3, 4.6	2.1	-4.5, 8.8
Had an activity limitation due to health at the time of the survey	1.2	-1.4, 3.7	2.4	-4.1, 9.0
Sample size	101,169		26,732	
Compared to Expanding Medicaid with a Different Demonstration				
Smoker at the time of the survey	1.0	-1.8, 3.7	0.3	-6.2, 6.9
Smoker who did not try to quit in past 12 months	-0.8	-2.7, 1.1	-3.3	-8.0, 1.5
Health status was fair or poor at the time of the survey	1.1	-1.2, 3.4	1.9	-5.0, 8.8
Physical health was not good in past 30 days	-1.6	-4.9, 1.6	-3.8	-11.0, 3.3
Mental health was not good in past 30 days	1.9	-1.4, 5.2	0.2	-7.0, 7.4
Had an activity limitation due to health at the time of the survey	0.8	-2.0, 3.7	-0.1	-7.3, 7.2
Sample size	42,670		11,199	

Source: 2011-13 and 2018 Behavioral Risk Factor Surveillance System (BRFSS). **Notes**: Low-income is defined as family income at or below 138 percent of the FPL. Low-income is imputed in the BRFSS. Best comparison states for not expanding Medicaid are AL, FL, KS, MS, NE, SC, SD, and TX. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.13: Difference-in-Differences Estimates for Changes in Health Behaviors and Health Status for Childless Adults and Low-income Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) the Third and Fourth Years Following Implementation of the Medicaid Expansion (postperiod) Using the Group of Best Comparison States

	All Childless Adults		Low-income Childless Adults	
	Estimate	95% confidence Interval	Estimate	95% confidence Interval
Compared to Expanding Medicaid Without a Demonstration				
Smoker at the time of the survey	0.7	-1.2, 2.5	-1.0	-7.7, 5.6
Smoker who did not try to quit in past 12 months	0.2	-1.2, 1.5	-1.2	-5.8, 3.4
Health status was fair or poor at the time of the survey	2.0***	0.5, 3.5	3.7**	0.1, 7.2
Physical health was not good in past 30 days	0.7	-1.3, 2.8	2.7	-1.9, 7.4
Mental health was not good in past 30 days	1.4	-0.7, 3.5	1.4	-3.1, 5.8
Had an activity limitation due to health at the time of the survey	2.4***	0.6, 4.2	3.5	-1.9, 8.9
Sample size	127,866		33,794	
Compared to Expanding Medicaid with a Different Demonstration				
Smoker at the time of the survey	-0.9	-3.1, 1.3	0.1	-7.2, 7.4
Smoker who did not try to quit in past 12 months	-1.3	-2.9, 0.3	-2.2	-6.1, 1.6
Health status was fair or poor at the time of the survey	2.1**	0.4, 3.8	4.4*	-0.2, 8.9
Physical health was not good in past 30 days	-0.8	-3.2, 1.6	1.9	-3.2, 7.1
Mental health was not good in past 30 days	2.6**	0.1, 5.0	4.7*	-0.7, 10.1
Had an activity limitation due to health at the time of the survey	1.5	-0.6, 3.6	4.6*	-0.5, 9.7
Sample size	55,240		14,670	

Source: 2011-13 and 2016-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes**: The postperiod is 2017-18 for Indiana and 2016-17 for the comparison states. Low-income is defined as family income at or below 138 percent of the FPL. Low-income is imputed in the BRFSS. Best comparison states for expanding without a demonstration are CO, KY, ND, OH, and PA. Best comparison states for expanding with a different demonstration are MI and NH. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.14: Difference-in-Differences Estimates of Changes in Health Behaviors and Health Status for Childless Adults Ages 21 to 64 in Indiana Between 2011-13 (preperiod) and 2017-18 (postperiod) for Each of the Best Comparison States

	Group of Best Comparison States that Did Not Expand Medicaid								Group of Best Comparison States that Expanded Medicaid Without a Demonstration					Group of Best Comparison States that Expanded Medicaid with a Different Demonstration	
	SC^	AL	FL	KS	MS	NE	SD	TX	OH^	CO	KY	ND	PA	MI^	NH
Smoker at the time of the survey	1.9	2.4*	2.4**	1.5	0.9	2.0*	2.3	0.8	1.0	2.9**	1.5	1.1	1.0	1.6	-0.3
Smoker who did not try to quit in past 12 months	0.7	1.4	0.8	-0.03	-0.6	0.4	0.6	-0.03	-0.4	1.1	1.2	-0.4	-0.8	-0.01	-0.3
Health status was fair or poor at the time of the survey	1.8*	2.9**	1.8*	0.5	3.2**	2.1**	0.6	0.9	1.7*	0.9	1.5	2.4**	0.3	1.0	0.8
Physical health was not good in past 30 days	0.3	3.4**	4.6***	-0.1	-1.6	0.4	-1.1	-0.8	0.9	-0.2	2.4	1.3	-1.2	-2.8**	-0.04
Mental health was not good in past 30 days	-0.5	1.3	5.5***	-0.1	-2.1	-0.2	1.8	-0.7	-0.9	1.4	3.4**	0.6	-2.3	-0.1	2.5
Had an activity limitation due to health at the time of the survey	2.2*	5.1***	6.0***	1.6	2.4	1.6	1.8	1.4	1.4	0.6	2.2*	3.1**	-0.5	0.2	0.7

Source: 2011-13 and 2017-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** ^ indicates single-best comparison state within group of best comparison states. For sample sizes, see Table D.16. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using a two-tailed test.

Table D.15: Difference-in-Differences Estimates of Changes in Health Behaviors and Health Status for Childless Adults Ages 21 to 64 in Indiana between 2011-13 (preperiod) and Third and Fourth Years Following Implementation of the Medicaid Expansion (postperiod) for Each of the Best Comparison States

	Group of Best Comparison States that Expanded Medicaid Without a Demonstration					Group of Best Comparison States that Expanded Medicaid with a Different Demonstration	
	OH^	CO	KY	ND	PA	MI^	NH
Smoker at the time of the survey	-0.5	1.3	1.6	1.1	0.8	0.5	-2.4
Smoker who did not try to quit in past 12 months	-1.1	0.6	1.0	-0.05	0.05	-1.3	-1.4
Health status was fair or poor at the time of the survey	2.3**	1.0	3.0***	2.5**	1.6	2.1**	1.9
Physical health was not good in past 30 days	0.5	0.3	3.9***	1.6	-0.9	-1.1	-0.7
Mental health was not good in past 30 days	1.2	1.6	4.9***	2.4	-1.4	1.2	4.7***
Had an activity limitation due to health at the time of the survey	2.8**	1.7	4.0***	3.2**	0.9	2.3**	1.1

Source: 2011-13 and 2016-18 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** The postperiod is 2017-18 for Indiana and 2016-17 for the comparison states. ^ indicates single-best comparison state within group of best comparison states. For sample sizes, see Table D.16. ***/**/***** Significantly different from zero at the .10/.05/.01 level, using two-tailed test.

Table D.16: Sample Sizes for 2011-13 and Alternate Postperiods for Childless Adults and Low-income Childless Adults Ages 21 to 64 for Indiana and the Groups of Best Comparison States

	American Community Survey		Behavioral Risk Factor Surveillance System	
	All Childless Adults	Low-income Childless Adults	All Childless Adults	Low-income Childless Adults
Indiana				
Postperiod is 2017-18	115,325	30,254	18,829	5,352
Postperiod is 2017	92,028	24,638	16,050	4,620
Postperiod is 2018	92,219	24,588	13,796	3,908
Indiana and Comparison States that Did Not Expand Medicaid				
Postperiod is 2017-18	1,205,419	338,774	207,227	58,747
Postperiod is 2017	956,769	274,493	174,879	49,177
Postperiod is 2018	958,943	273,378	164,362	46,057
Postperiod is 2017-18 for receipt of flu vaccine [a]	-	-	95,117	14,047
Postperiod is 2017 for receipt of flu vaccine [a]	-	-	79,948	12,010
Postperiod is 2018 for receipt of flu vaccine [a]	-	-	77,517	11,567
Indiana and Comparison States that Expanded Medicaid without a Demonstration				
Postperiod is 2017-18	743,165	188,029	123,978	32,836
Postperiod is 2017	593,237	153,261	104,746	27,803
Postperiod is 2018	593,665	151,784	101,169	26,732
Postperiod is 3rd and 4th post-implementation years	742,323	189,856	127,866	33,794
Postperiod is 2017-18 for receipt of flu vaccine [a]	-	-	64,438	10,241
Postperiod is 2017 for receipt of flu vaccine [a]	-	-	53,298	8,679
Postperiod is 2018 for receipt of flu vaccine [a]	-	-	51,192	8,343
Postperiod is 3rd and 4th post-implementation years for receipt of flu vaccine [a]	-	-	65,168	10,380
Indiana and Comparison States that Expanded Medicaid with a Different Demonstration				
Postperiod is 2017-18	319,090	84,794	54,112	14,284
Postperiod is 2017	255,038	69,387	45,068	11,901
Postperiod is 2018	255,081	69,001	42,670	11,199
Postperiod is 3rd and 4th post-implementation years	319,399	85,635	55,240	14,670
Postperiod is 2017-18 for receipt of flu vaccine [a]	-	-	41,218	5,779
Postperiod is 2017 for receipt of flu vaccine [a]	-	-	34,359	4,982
Postperiod is 2018 for receipt of flu vaccine [a]	-	-	31,988	4,564
Postperiod is 3rd and 4th post-implementation years for receipt of flu vaccine [a]	-	-	41,976	5,948

(continued)

Table D.16 (continued)

	American Community Survey		Behavioral Risk Factor Surveillance System	
	All Childless Adults	Low-income Childless Adults	All Childless Adults	Low-income Childless Adults
Indiana and Each Comparison State for 2017-18				
Alabama	199,195	56,695	33,383	10,382
Florida	467,572	131,427	52,363	16,620
Kansas	162,799	40,957	54,013	13,198
Mississippi	164,820	48,099	32,487	10,514
Nebraska	146,138	36,463	52,943	13,104
South Carolina	200,182	55,339	41,086	12,628
South Dakota	128,985	33,137	32,793	8,558
Texas	543,003	148,435	39,962	11,450
Colorado	212,235	51,417	42,539	10,560
Kentucky	193,285	54,104	40,162	12,413
North Dakota	127,976	32,440	31,323	7,466
Ohio	325,417	85,845	43,102	12,236
Pennsylvania	345,552	85,239	42,168	11,644
Michigan	293,537	80,211	41,219	11,724
New Hampshire	140,878	34,837	31,722	7,932

Source: 2011-13 and 2016-18 American Community Survey (ACS) and Behavioral Risk Factor Surveillance System (BRFSS).
N**otes**: Low-income is defined as family income at or below 138 percent of the FPL. Low-income is imputed in the BRFSS. [a] Because of measurement error due to gaps in survey fielding in some states, the comparison groups for the analysis of the receipt of a flu vaccine are limited to AL, MS, NE and SD for the comparison to not expanding Medicaid, limited to OH and KY for the comparison to expanding Medicaid without a demonstration, and limited to MI for the comparison to expanding Medicaid with a different demonstration.