

# Federal Evaluation of Montana Health and Economic Livelihood Partnership (HELP): Draft Interim Evaluation Report

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# Table of Contents

EXECUTIVE SUMMARY
What Did the Evaluation Examine?8
Findings from the Evaluation9
Policy Implications11
I. Introduction
Design of the Federal Evaluation13
Scope of the Interim and Final Summative Evaluation Reports14
Organization of the Interim Evaluation Report14
II. Montana's Medicaid Program and the Design of HELP15
Montana's Medicaid Program Before HELP15
HELP Design Features, 2016-201815
III. Qualitative Assessment of HELP 24
Research Questions24
Data, Methods, and Limitations24
Results
IV. Beneficiary Surveys
Overview of the Survey Approach47
Survey Data Analysis
Survey Findings
Discussion80
Limitations81
V. Impact Analysis Through 2017
Research Questions
Data, Methods, and Limitations83
Summary of Impact Analysis112
VI. Lessons Learned from HELP113
Appendices



# List of Tables

Table II.1: HELP delivery system and cost-sharing policies by HELP premium exemption status, 2016-         2018       19
Table II.2: HELP copayment structure for selected services by enrollee income level, 201821
Table II.3: HELP disenrollment and debt assessment policies by premium exemption status, 2016-201823
Table IV.1: Survey domains and questions by respondent group
Table IV.2: Self-reported characteristics of enrollees and disenrollees         54
Table IV.3: Comparison of HELP to Prior Health Insurance         68
Table IV.4: Differences between disenrollee groups in understanding of HELP       72
Table IV.5: Differences between disenrollee groups in access to care
Table IV.6: Differences between disenrollee groups in affordability of HELP         77
Table IV.7: Differences between disenrollee groups in satisfaction with HELP
Table V.1: Crosswalk of Reported and Imputed Family Income Relative to FPL for Adults Ages 19 to 64 in Montana based on American Community Survey, 2011-13 (pre-period) and 2016-17 (post-period)86
Table V.2: Comparison States for Adults Ages 19 to 64 in Montana
Table V.3: Changes in Health Insurance Coverage, Health Care Access and Affordability, and HealthBehaviors and Health Status for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and2016-17 (post-period)93
Table V.4: Changes in Health Insurance Coverage, Health Care Access and Affordability, and HealthBehaviors and Health Status for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and2017 (post-period)
Table V.5: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults andLow-income Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period)Using Group of Best Comparison States
Table V.6: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults Ages19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of BestComparison States, by Gender and Age
Table V.7: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults Ages19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of BestComparison States, by Parent Status
Table V.8 Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults Ages19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) for the Single-bestComparison State and Each Remaining Best Comparison State100
Table V.9: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Lower- income Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, Based on Alternate Measures of Lower Income



Table V.10: Difference-in-Differences Estimates for Changes in Health Care Access and Affordability for Adults and Low-income Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States
Table V.11: Difference-in-Differences Estimates of Changes in Health Care Access and Affordability for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, by Gender and Age
Table V.12: Difference-in-Differences Estimates of Changes in Health Care Access and Affordability for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, by Parent Status
Table V.13: Difference-in-Differences Estimates of Changes in Health Care Access and Affordability for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) for the Single-best Comparison State and Each Remaining Best Comparison State
Table V.14: Difference-in-Differences Estimates for Changes in Health Behaviors and Health Status forAdults and Low-income Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17(post-period) Using Group of Best Comparison States
Table V.15: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults Ages19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of BestComparison States, by Gender and Age
Table V.16: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults Ages19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of BestComparison States, by Parent Status
Table V.17: Difference-in-Differences Estimates of Changes in Health Behaviors and Health Status forAdults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) for Single-best Comparison State and Each Remaining Best Comparison State



# List of Figures

Figure IV.1: Overall understanding of HELP	56
Figure IV.2: Understanding of HELP by demographic subgroup	57
Figure IV.3: Understanding of HELP premiums and copay features	
Figure IV.4: Understanding of the unpaid premium payment policies and	59
their linkage to HELP coverage	59
Figure IV.5: Functional Understanding of Premium Payment Policies Relative to Self-Reported Understanding of HELP	60
Figure IV.6: Information-seeking about HELP	61
Figure IV.7: Helpfulness of information regarding HELP among those who sought information/a	
Figure IV.8: Had any health insurance in 12 months prior to enrolling in HELP	62
Figure IV.9: Cost as a barrier to accessing needed care by demographic subgroups	63
Figure IV.10: Monthly premium amounts	64
Figure IV.11: Affordability of monthly premium	65
Figure IV.12: Who pays premium?	65
Figure IV.13: Concerns about affordability of premium	66
Figure IV.14: Overall satisfaction with HELP	67
Figure IV.15: Satisfaction with individual features of HELP	
Figure IV.16: Disenrollee Groups by Disenrollment Reasons	70
Figure IV.17: Understanding of HELP premium and copayment features	71
Figure IV.18: Unable to get health care due to cost, by type of disenrollment	73
Figure IV.19: Premium amounts for disenrollees as a whole	74
Figure IV.20: Premium amounts, by type of disenrollment	75
Figure IV.21: Premium affordability, by type of disenrollment	76
Figure IV.22: Worries about making premiums, by type of disenrollment	76
Figure IV.24: Overall satisfaction with HELP by type of disenrollment	

# **EXECUTIVE SUMMARY**

In November 2015, Montana received approval from the Centers for Medicare & Medicaid Services (CMS) to implement a Medicaid Section 1115 demonstration allowing the state's alternative Medicaid expansion under the Affordable Care Act (ACA). The demonstration is called the Montana Health and Economic Livelihood Partnership (HELP). Enrollment in HELP started January 1, 2016, and as of September 2018, more than 100,000 Montanans were enrolled.<sup>1</sup> In December 2017, CMS granted a demonstration amendment to HELP modifying two of its components to reduce demonstration costs and administrative burden.<sup>2</sup>

Similar to the ACA Medicaid expansion demonstrations in other states (e.g., Arkansas, Indiana, and Michigan), HELP encourages enrollees to be prudent health care purchasers and take responsibility for their health care through premiums, copayments, and strategies to promote healthy behaviors. HELP also includes provisions that allow Montana to disenroll some newly eligible individuals with incomes above 100 percent of the federal poverty level (FPL) who do not pay their premiums on a timely basis. To improve continuity of care and reduce the "churn" of individuals losing and then regaining insurance, Montana's demonstration provides 12-month continuous eligibility for all enrollees. Before the 2017 demonstration amendment, HELP included a public-private third-party administrator plan from which some enrollees received care and a premium credit that applied to some enrollees' cost-sharing obligations. These two components were removed from the demonstration in the 2017 waiver amendment.

# What Did the Evaluation Examine?

In August 2015, CMS awarded a contract to Social & Scientific Systems, Inc. and their partner Urban Institute (henceforth known as the evaluation team) to conduct an evaluation of the HELP demonstration. The federal evaluation has three main goals:

- Understand and document the design, implementation, and ongoing operations of HELP;
- Document enrollee understanding of and experiences with HELP; and
- Estimate the overall effects of HELP on health insurance coverage, health care access and affordability, and health behaviors and health.

To fully assess the impact of the program and achieve the above goals, the evaluation team designed and implemented a comprehensive mixed-methods evaluation of HELP that is currently ongoing. The first phase of the evaluation included:

- A qualitative component with;
  - Site visits with information obtained from eight focus groups with HELP enrollees as part of the site visits—four in 2017 and four in 2018.

<sup>&</sup>lt;sup>1</sup> "HELP Enrollment by Month," DPHHS Montana Medicaid Expansion Dashboard, October 4, 2018, retrieved from <u>https://dphhs.mt.gov/helpplan/medicaidexpansiondashboard</u>.

<sup>&</sup>lt;sup>2</sup> "CMS Approved Amendment: HELP Program Demonstration," Centers for Medicare & Medicaid Services, December 20, 2017, retrieved from <u>https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mt/mt-HELP-program-ca.pdf</u>.

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- Semi-structured interviews in Billings, Browning, Bozeman, Butte, Havre, and Helena with HELP stakeholders, including state officials, health care providers and provider association representatives, consumer advocates, and other non-state observers of the demonstration.
- o Document review of published and gray literature, and program statistics.
- Mixed-mode surveys of 2,180 HELP enrollees and 2,187 HELP disenrollees conducted in late fall
  of 2017, that asked about HELP enrollees' and disenrollees' experiences with the program
  including knowledge of the program, cost as a barrier to access, affordability of the program,
  and satisfaction with the program.
- An impact analysis that relied on a quasi-experimental difference-in-differences evaluation design and data from the American Community Survey (ACS) and the Behavioral Risk Factor Surveillance System (BRFSS) that compares changes over time for adults in Montana to changes for similar adults in similar comparison states.

This report is part of the federal evaluation of Montana's 2016 Medicaid demonstration.<sup>3</sup> Results from follow-up surveys of HELP enrollees and disenrollees conducted in 2018, as well as additional impact analyses using administrative data from Montana will be presented in the forthcoming summative evaluation report.

# **Findings from the Evaluation**

Findings from all three components of this HELP evaluation show that the program had significant and positive effects, although, as with any program, implementation and administration faced some challenges. Overall, there were substantial gains in health insurance coverage; beneficiaries for the most part expressed satisfaction with the program; and stakeholders believed it had positive economic impacts by decreasing hospital uncompensated care costs and stimulating economic growth in the state.

Allowing Montana to use a section 1115 demonstration resulted in a program that achieved a key goal of both the ACA and the state—a significant expansion in health insurance coverage. As of September 2018, nearly 100,000 Montanans were enrolled in HELP. Moreover, based on results from the impact analysis, the expansion in health insurance coverage exceeded the gains that would have been expected if the state had expanded Medicaid without a demonstration or with a demonstration more similar to those of Michigan or New Hampshire. Apart from increases in health insurance coverage, the three components of the assessment of HELP provide results that may be informative to other states considering designing and implementing section 1115 Medicaid demonstrations.

### From the key stakeholder interviews we found:

<u>Strong stakeholder engagement and collaboration with the state expedites system change</u>. While state officials and stakeholders acknowledged that it took time and compromise to pass the Medicaid expansion in Montana, once HELP legislation was enacted, the deep collaboration between the state

<sup>&</sup>lt;sup>3</sup> <u>https://www.medicaid.gov/medicaid-chip-program-information/by-topics/waivers/1115/downloads/mt/help-program/mt-help-program-fed-state-eval-dsgn-051617.pdf</u>.

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and stakeholders in implementing HELP created a win-win situation for hospitals, the broader health care system, and the uninsured in Montana.

<u>Changing patterns of health care use.</u> While findings from stakeholder interviews and focus groups indicate continued gaps in enrollee understanding of HELP, there were evidence of changes in health care behaviors in response to program changes, as more enrollees were reported to be obtaining preventive care over time. These changes were noted by state officials and other interviewees, and also appeared to be supported by the early impact estimates.

<u>Flexibility in program design is important</u>. State officials and other interviewees highlighted the importance of periodically revisiting the HELP demonstration design based on actual program experience. Their findings that the 2 percent premium credit as well as copayments for non-emergent use of the emergency room were difficult to track and administer resulted in the elimination of both these program features.

#### Survey and focus group findings showed:

<u>Satisfaction with the HELP program was high among current enrollees</u>. A majority of enrollees reported being somewhat to very satisfied with individual features of HELP, such as monthly premiums, the ability to see their doctors as well as choice of doctors, and coverage of needed health care services. Among the disenrollee respondents, nearly 50 percent indicated that they would choose to re-enroll in HELP.

<u>HELP enrollees' and disenrollees' had limited understanding of the individual features of HELP.</u> Enrollees and disenrollees in focus groups in focus groups expressed confusion about some of the basic components of HELP such as what is coverage by the program as well as some of the more complex features of HELP such as premium credits. This was consistent with findings from the surveys of HELP enrollees and disenrollees.

<u>Access to health care improved for many beneficiaries.</u> Focus group and stakeholder interviews showed that access to needed healthcare services was viewed favorably by both beneficiaries and stakeholders. Survey results indicated that most beneficiaries reported receiving needed services and that cost was a barrier to receiving services for fewer than 20 percent of enrollees. With gains in health insurance coverage, beneficiaries perceived increases in access relative to their prior coverage status. However, even with HELP coverage, access barriers were more prevalent for dental and vision services than for other services, based on both focus group and survey results.

#### Findings from the impact analyses indicate:

<u>Health insurance coverage increased in Montana.</u> We find strong evidence that Montana's HELP demonstration expanded health insurance coverage for adults beyond what would have been expected if Montana had not expanded Medicaid, a view echoed by site visit interviewees. Health insurance coverage also increased in Montana relative to similar states that expanded Medicaid, without a demonstration or with a different demonstration.

*Early evidence suggests that the use of preventive care increased in Montana relative to similar states, regardless of Medicaid expansion status.* Given that the post-implementation period for this analysis only extends through 2017, it is still early to see changes in access and affordability measures under



Montana's 2016 demonstration. Even so, we do see some evidence of increases in the use of preventive care relative to similar states, with gains in routine check-ups and receipt of a flu vaccine in Montana for all adults and low-income adults, although only few of the estimates for low-income adults are statistically significant.

### **Policy Implications**

Based on results from this evaluation, Montana's HELP program provided coverage and access to care for about 100,000 Montanans, and was viewed positively by the majority of stakeholders and beneficiaries we interviewed or surveyed. While the design of HELP was intended to encourage enrollees to take responsibility for their health care through premiums, copayments, and strategies to promote healthy behaviors, these features produced administrative complexity that sometimes confused beneficiaries, or were administratively difficult to implement (such as copayments for emergency room visits). In addition, programs are not implemented in a vacuum, and state infrastructure and budget affect both implementation and program administration. States contemplating implementing or revising their Medicaid programs may wish to learn from Montana's experiences with specific program features, such as use of a third-party administration (TPA), or with their experiences with beneficiary outreach and education, which appears to be necessary for many beneficiaries in order to use the program effectively.

# 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 January 2019, 29 states had opted to implement the Medicaid expansion as set out in the ACA, while eight states had expanded coverage using alternate approaches through section 1115 demonstrations.<sup>4</sup> Though long a hallmark of Medicaid, section 1115 demonstrations have gained renewed prominence with the Trump Administration's interest in trying new ways to improve the Medicaid program.<sup>5</sup> Chief among the strategies that the Centers for Medicare & Medicaid Services (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.<sup>6</sup>

Montana received approval to implement the ACA Medicaid expansion through a section 1115 demonstration in November 2015.<sup>7</sup> The State implemented the demonstration, called the Health and Economic Livelihood Partnership or HELP, on January 1, 2016.<sup>8</sup> In December 2017, CMS approved an amendment to Montana's section 1115 demonstration that is to continue through December 2020. As of September 2018, nearly 100,000 Montanans were enrolled in HELP.<sup>9</sup>

This report provides an overview of the HELP demonstration through 2018. It first outlines the design and scope of the federal evaluation of HELP, along with the scope of this Interim Evaluation Report and that of the Final Summative Evaluation Report for the federal evaluation. Subsequent sections describe the design of HELP and modifications made to the program over time, followed by results from focus groups, structured interviews, beneficiary surveys, and quantitative analyses of secondary datasets. Finally, this report presents an overall discussion and conclusions based on all of the evaluation components and thoughts on the HELP program moving forward.

<sup>&</sup>lt;sup>4</sup> "State Health Facts: Status of State Action on the Medicaid Expansion," Kaiser Family Foundation, January, 2019, <u>https://www.kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/</u>.

<sup>&</sup>lt;sup>5</sup> "Verma Outlines Vision for Medicaid, Announces Historic Steps Taken to Improve the Program," U.S. Centers for Medicare & Medicaid Services, November 7, 2017, <u>https://www.cms.gov/newsroom/press-releases/verma-outlines-vision-medicaid-announces-historic-steps-taken-improve-program</u>.

<sup>&</sup>lt;sup>6</sup> "About Section 1115 Demonstrations," Medicaid.gov, no date (accessed May 13, 2019), <u>https://www.medicaid.gov/medicaid/section-1115-demo/about-1115/index.html</u>.

<sup>&</sup>lt;sup>7</sup> The legislation that enacted the Medicaid expansion is to sunset on June 30, 2019 unless reauthorized by the Montana legislature.

<sup>&</sup>lt;sup>8</sup> When Montana received approval for HELP, it also received a section 1915(b)(4) Fee-for-Service Selective Contracting Demonstration, which authorized a defined provider network and is associated with the HELP demonstration. The section 1915 demonstration is not covered under the federal evaluation of HELP.

<sup>&</sup>lt;sup>9</sup> "HELP Enrollment by Month," Montana DPHHS Montana Medicaid Expansion Dashboard, October 4, 2018, <u>https://dphhs.mt.gov/helpplan/medicaidexpansiondashboard</u>.

# **Design of the Federal Evaluation**

In 2015, Social & Scientific Systems, Inc. (SSS) and the Urban Institute (together referred to in this report as the evaluation team) were awarded a base year and three option year contract (September 2015 to September 2019) to conduct the federal evaluation of Indiana's section 1115 demonstration—Healthy Indiana Plan (HIP) 2.0. The evaluation of Montana's HELP demonstration was added to the contract in 2016. The federal evaluation of HELP has four principal objectives, namely:<sup>10</sup>

- Understand the design, implementation, and administrative costs of HELP;
- Document enrollee understanding of and experiences with HELP, including experiences with premiums, copayments, enrollment, and disenrollment;
- Estimate the impacts of Montana's Medicaid expansion, including the third-party administrator (TPA) plan, on health insurance coverage, access to and use of health care, quality of health care, health care affordability, and health behaviors; and
- Provide timely information on HELP that can inform CMS, Montana, and other states as they consider ways to improve the Medicaid program.

To achieve these objectives, the federal evaluation of HELP has three components that rely on qualitative and quantitate analyses:

- Qualitative analyses entailing document review and two rounds of site visits (September 2017 and September 2018), including conducting informational interviews with HELP stakeholders (including state officials, health care providers and provider association representatives, consumer advocates, and other non-state observers of the demonstration), and focus groups with HELP enrollees;
- HELP beneficiary surveys (2017 and 2018) and descriptive analyses based on Medicaid administrative data; and
- Impact analyses using both Medicaid administrative data (through 2018) and national survey data (through 2017).<sup>11</sup>

The goals of the qualitative analyses were to provide careful documentation of HELP implementation and operations, as well as successes and challenges Montana faced in managing the demonstration. The qualitative analyses were also to provide an in-depth assessment of consumer experiences with HELP through the enrollee focus groups and the beneficiary surveys. The qualitative analyses were designed to inform the evaluation's descriptive analyses and the impact analyses in two fundamental ways: 1) helping guide the focus of the descriptive and impact components and 2) providing invaluable context for interpreting results from those analyses. The goals of the impact analyses were to assess the extent

<sup>&</sup>lt;sup>10</sup> "Evaluation Design Report for Montana HELP Federal Evaluation," Social & Scientific Systems, Inc., (Silver Spring, MD: Centers for Medicare & Medicaid Services, 2017), <u>https://www.medicaid.gov/medicaid-chip-program-information/by-topics/waivers/1115/downloads/mt/help-program/mt-help-program-fed-state-eval-dsgn-051617.pdf</u>.

<sup>&</sup>lt;sup>11</sup> Because the national survey data to be used for the impact analysis are released in the fall of the year after the survey is fielded (e.g., data for 2017 are released in fall 2018), the final year of survey data available to the HELP evaluation is 2017.



to which HELP 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.

### Scope of the Interim and Final Summative Evaluation Reports

The federal evaluation of HELP includes two major reports: an Interim Evaluation Report and a Final Summative Evaluation Report. The Interim Evaluation Report, which is presented in this document, covers findings from the 2017 and 2018 site visits, which includes information obtained from key informant interviews and enrollee focus groups; beneficiary surveys from 2017; and impact estimates using national survey data through 2017. The Final Summative Evaluation Report, which will be provided to CMS in late 2019, will update the Interim Evaluation Report to include the analyses of Medicaid administrative data through 2018 as well as the second wave of HELP beneficiary surveys from 2018. Importantly, while the 2018 site visit and beneficiary surveys conducted under the evaluation capture the changes Montana made to HELP in 2018 under the 2017 demonstration amendments, the impact analyses using national survey component is limited to 2011 to 2017.

# **Organization of the Interim Evaluation Report**

Section II provides a brief overview of Montana's Medicaid program before HELP implementation and discusses key programmatic features of the demonstration. The qualitative assessment of HELP is provided in section III, followed by results from the HELP beneficiary surveys in section IV and the quantitative assessment of the impacts of HELP in section V. In section VI, we discuss lessons learned from HELP.



# II. Montana's Medicaid Program and the Design of HELP

This section provides background on Montana's Medicaid program prior to the implementation of HELP and an overview of the design of the demonstration, including changes made to the demonstration as part of amendments made in 2017.

## **Montana's Medicaid Program Before HELP**

Before HELP, Montana's Medicaid program covered traditional low-income populations generally comparable to the national average. In 2014, qualifying adults, including parents and other caretakers in families with dependent children, were covered up to 47 percent FPL, with pregnant women covered up to 157 percent FPL, and disabled adults up to 72 percent FPL.<sup>12</sup> Nondisabled childless adults were not eligible for Medicaid prior to HELP. Average monthly enrollment in Montana's Medicaid program was about 125,000, with children comprising more than 60 percent of enrollment in 2015, just before HELP was implemented.<sup>13</sup> Reflecting the broader Montana health care market, Medicaid services were (and continue to be) delivered and paid for primarily on a fee-for-service (FFS) basis, the one exception to this being Montana's Passport to Health, the state's primary care case management (PCCM) program, which provides a flat per member per month payment to providers for PCCM enrollees. Finally, though Montana's Medicaid eligibility standards were comparatively low before HELP, its Medicaid benefit packages for children and the aged/blind and disabled were relatively generous, covering several optional services, including dental, denture, and vision services.<sup>14</sup>

Between the 2013 and 2015 sessions, the state developed a compromise bill to put forward in the 2015 session that would expand Medicaid through a section 1115 demonstration. Interviewees said that other states' section 1115 demonstrations were reviewed, but HELP was "made in Montana and homegrown." Senate Bill 405 was passed in April 2015. Included in the underlying authorizing legislation was a "sunset" provision, which was originally slated to terminate on June 30, 2019 unless the legislation was reauthorized. Documents to establish the demonstration were submitted to CMS on September 15, 2015. After some revisions in the design negotiated between the state and CMS, Montana received approval to implement HELP on November 2, 2015.

### HELP Design Features, 2016-2018

Like ACA Medicaid expansion demonstrations in other states (e.g., Arkansas, Indiana, and Michigan), HELP is designed to encourage enrollees to be prudent health care purchasers, taking responsibility for their health care through premiums, copayments, and provisions that allow Montana to disenroll some

<sup>&</sup>lt;sup>12</sup> "The Montana Medicaid Program: Montana Department of Public Health and Human Services Report to the 2015 Legislature, State Fiscal Years 2013/2014", MT DPHHS, January 5, 2015, <u>https://dphhs.mt.gov/Portals/85/Documents/2015MedicaidReport.pdf</u>.

<sup>&</sup>lt;sup>13</sup> "The Montana Medicaid Program: Montana Department of Public Health and Human Services Report to the 2017 Legislature, State Fiscal Years 2015/2016," MT DPHHS, (Helena: Montana Department of Public Health and Human Services, 2017).

<sup>&</sup>lt;sup>14</sup> "Medicaid Benefits Data Collection," Kaiser Family Foundation, no date (accessed November 7, 2017), <u>https://www.kff.org/data-collection/medicaid-benefits/</u>.

demonstration enrollees who do not pay their premiums on time.<sup>15</sup> The demonstration also authorized 12-month continuous eligibility for expansion adults. In this section, the report describes key components of HELP when the demonstration was launched in 2016, as well as changes Montana made to the demonstration through the 2017 demonstration amendments, which were implemented January 1, 2018.

According to the CMS approved special terms and conditions (STCs) of Montana's 1115 demonstration, the HELP demonstration has two central objectives<sup>16</sup>:

- Encourage enrollees to be discerning health care responsibility, take personal responsibility for their health care decisions, and develop health-conscious behaviors through the use of premiums and copayments
- Promote continuity of coverage through 12-month continuous eligibility.

To help achieve these objectives, HELP included the following design features when it launched on January 1, 2016:

- Expanded Medicaid eligibility to adults with income up to 138 percent FPL who were not previously eligible for Medicaid in Montana;
- Required premiums equal to 2 percent of household income for HELP enrollees with incomes between 51 and 138 percent FPL who were not otherwise exempted from provisions of the demonstration;<sup>17</sup>
- Operated two health plans to deliver services to HELP enrollees. One was a public-private TPA plan that provided services to enrollees who were subject to premiums; the other, Montana's Medicaid state plan, delivered services to enrollees who were exempt from premiums;
- All HELP enrollees were subject to copayments that followed Montana's state plan, though the amount of some copayments varied by income;

<sup>&</sup>lt;sup>15</sup> "Special Terms and Conditions: Montana Health and Economic Livelihood Partnership (HELP) Program Demonstration," Centers for Medicare and Medicaid Services, approved November 2, 2015, <u>https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mt/mt-HELP-program-ca.pdf</u>.

<sup>&</sup>lt;sup>16</sup> "Montana Health Economic Livelihood Partnership Plan (HELP) Program Section 1115 Research and Demonstration Waiver Application," Montana Department of Public Health and Human Services (DPHHS), September 15, 2015, <u>https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-</u> <u>Topics/Waivers/1115/downloads/mt/HELP-program/mt-HELP-program-pending-app-09162015.pdf</u>.

<sup>&</sup>lt;sup>17</sup> In addition to exempting adults with incomes below 50 percent FPL from premiums, when HELP launched Montana also exempted individuals who were medically frail, individuals who the state had determined had exceptional health care needs, individuals who lived in a region where the TPA plan was not able to contract with sufficient providers, individuals who the state determined required continuity of coverage that was unavailable in the TPA plan or could not be effectively delivered through the TPA plan, and individuals otherwise exempted from premiums or copayments by federal Medicaid law (e.g., Native Americans). "Montana Health and Economic Livelihood Partnership (HELP) Program Demonstration", Centers for Medicare and Medicaid Services, approved November 2, 2015, <u>https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mt/mt-HELP-program-ca.pdf.</u>



- HELP enrollees subject to premiums received a credit toward copayments of up to 2 percent of income;
- Some nonexempt HELP enrollees could be disenrolled from HELP for failure to pay premiums; and
- All HELP enrollees had 12-month continuous eligibility in HELP.

Although not part of the HELP demonstration's STCs, Montana's demonstration also includes a voluntary workforce development program called HELP-Link.<sup>18</sup> Launched at the same time as HELP, HELP-Link aims to reduce reliance on Medicaid for health insurance and strengthen Montana's workforce.<sup>19</sup>

In September 2017, Montana formally submitted a request to CMS to amend the HELP demonstration. On December 20, 2017, CMS approved the amendments, which Montana implemented on January 1, 2018.<sup>20</sup> Under the amendment request, Montana asked to eliminate the public-private TPA plan and transition HELP enrollees who were previously served by the TPA plan to Montana's Medicaid state plan. Montana also asked to eliminate the premium credit that applied to some HELP enrollees' cost-sharing obligations. The amendments were designed to reduce demonstration costs and the administrative burden of the demonstration.

The following section describes specific program design features.

## Covered Population and Exempt/Nonexempt Enrollees

Montana's demonstration covers adults ages 19-64 with income at or below 138 percent FPL, excluding adults who were eligible for Medicaid prior to the ACA's Medicaid expansion (e.g., in 2013, these included parents and other caretakers of dependent children with incomes up to 33 percent FPL and pregnant women up to 150 percent FPL).<sup>21</sup> As noted above, nondisabled childless adults were not eligible for Medicaid in Montana prior to HELP. HELP provides 12 months of continuous Medicaid eligibility to the HELP expansion population.

Within the HELP covered population, Montana identifies two key population subgroups: individuals who are exempt from paying premiums for HELP coverage and individuals who are not exempt from paying premiums for HELP coverage. In the initial design for HELP, exempt enrollees obtained their health care through Montana's traditional Medicaid program while nonexempt enrollees obtained care through the

<sup>&</sup>lt;sup>18</sup> "Montana Health and Economic Livelihood Partnership (HELP) Act," Montana State Legislature, April 29, 2015, <a href="https://leg.mt.gov/bills/2015/sb0499/SB0405">https://leg.mt.gov/bills/2015/sb0499/SB0405</a> x.pdf; "HELP-Link: The Montana HELP Plan Workforce Program," Montana Department of Labor and Industry, no date (accessed December 2017), <a href="https://montanaworks.gov/help-link">https://montanaworks.gov/help-link</a>.

<sup>&</sup>lt;sup>19</sup> "HELP-Link Program Report," Montana Department of Labor and Industry, July 2018.

<sup>&</sup>lt;sup>20</sup> "CMS Approved Amendment: HELP Program Demonstration," Centers for Medicare and Medicaid Services, December 20, 2017, <u>https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-</u> <u>Topics/Waivers/1115/downloads/mt/mt-HELP-program-ca.pdf</u>.

<sup>&</sup>lt;sup>21</sup> "The Montana Medicaid Program: Montana Department of Public Health and Human Services Report to the 2015 Legislature, State Fiscal Years 2013/2014", MT DPHHS, January 5, 2015, <u>https://dphhs.mt.gov/Portals/85/Documents/2015MedicaidReport.pdf</u>.



public-private TPA plan. Under the state's 2017 demonstration amendments, the TPA was eliminated (discussed below).

In the initial design of HELP, exemptions from HELP premiums were based on both the characteristics of demonstration enrollees and on the health care that could be provided to enrollees under the TPA plan. Specifically, individuals were exempt from HELP premiums if they met any one of the following criteria:

- were medically frail;
- were determined by the state to have exceptional health care needs;
- lived in an area where the TPA was not able to contract with sufficient providers;
- the state determined that they require continuity of coverage that was not available or could not be effectively delivered through the TPA; or
- were otherwise exempted from premiums or copayments by federal Medicaid law (e.g., had income at or below 50 percent FPL or were American Indian/Alaska Native).<sup>22</sup>

With the elimination of the TPA plan under the 2017 demonstration amendments, the exemptions from premiums related to the TPA plan were also eliminated; other exemptions remained in effect.<sup>23</sup>

## **Delivery System**

As noted above, when HELP launched, services were provided to demonstration enrollees through one of two delivery systems—the public-private partnership TPA plan or Montana's traditional Medicaid program plan (Table II.1). Both the TPA plan and the Montana state Medicaid plan reimbursed providers on a FFS basis. The TPA plan was responsible for, among other things, contracting with a network of providers, reimbursing providers, invoicing enrollees for premiums, and tracking premium payment levels to ensure that enrollees' out-of-pocket spending did not exceed the five-percent federal maximum consistent with federal requirements.

<sup>&</sup>lt;sup>22</sup> "Montana Health and Economic Livelihood Partnership (HELP) Program Demonstration", Centers for Medicare and Medicaid Services, approved November 2, 2015, <u>https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mt/mt-HELP-program-ca.pdf</u>.

<sup>&</sup>lt;sup>23</sup> "CMS Approved Amendment: HELP Program Demonstration," Centers for Medicare and Medicaid Services, December 20, 2017, <u>https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-</u> <u>Topics/Waivers/1115/downloads/mt/mt-HELP-program-ca.pdf</u>.

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HELP	Delivery System		Cost-Sharing				
Premium	Plan Admi	Plan Administrator		Copayments	Premium Credit		Cost-sharing
Exemption Status	2016-2017	2018	2016-2018	2016-2018	2016-2017	2018	Limit 2016-2018
Exempt	Montana Medicaid	Montana Medicaid	None	Maximum allowed by federal law	Not applicable	Not applicable	Per quarter, up to 5% of household income
Nonexempt	TPA Plan	Montana Medicaid	Equal to 2% of household income	Maximum allowed by federal law	Per quarter, equal to 2% of household income	None	Per quarter, up to 5% of household income

Table II.1: HELP delivery system and cost-sharing policies by HELP premium exemption status, 2016-2018

**Note:** As of 2018, the following individuals are exempt from premiums under the HELP demonstration: individuals who are medically frail, individuals whom the state has determined have exceptional health care needs, individuals who live in an area where the state is unable to contract with sufficient providers, individuals whom the state determines require continuity of coverage that is not available, and individuals who are otherwise exempt from premiums or copayments by federal Medicaid law (e.g., American Indians/Alaska Natives and individuals with incomes at or below 50 percent FPL). Prior to the 2018 amendments to HELP, other populations were also exempt from the HELP demonstration, including individuals who lived in areas where the TPA was not able to contract with sufficient providers or individuals whom the state determined require continuity of coverage that was not available or could not be effectively delivered through the TPA. With the elimination of the TPA plan in 2018, these exemptions no longer applied. ("Montana Health and Economic Livelihood Partnership (HELP) Program Demonstration," CMS, approved November 2, 2015, <u>https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mt/mt-HELP-program-ca.pdf.</u>)

Because of state budget concerns and the belief that eliminating the TPA plan would yield considerable savings in HELP administrative costs, Montana requested as part of its 2017 demonstration amendment submission that the TPA plan be eliminated and all TPA enrollees be transitioned to the Montana's Medicaid state plan. CMS approved the request, and on January 1, 2018 HELP enrollees whose services were delivered through the TPA plan transitioned to Montana's Medicaid state plan. In December 2017, just before the elimination of the TPA plan, about 21 percent of HELP enrollees (20,050 individuals) services were delivered through the TPA plan.<sup>24</sup>

# Enrollee Cost-Sharing

All cost-sharing features of HELP have remained the same over the course of the demonstration except the premium credit, which was eliminated as part of Montana's 2017 demonstration amendment (Table II.2). We discuss the different component of HELP's cost-sharing provisions in this section.

**Premiums.** Exempt HELP enrollees are not subject to premiums whereas nonexempt enrollees are charged monthly premiums equal to 2 percent of individual income.

With the elimination of the TPA plan, the state became responsible for collecting enrollee premiums, a new administrative function for the state. To facilitate the transition, the state relied on its existing fiscal

<sup>&</sup>lt;sup>24</sup> "HELP Program Demonstration: Section 1115 Waiver Annual Report Year 2," State of Montana, August 8, 2018.

division to collect HELP premiums, but established a new two-person call center. The new call center handles inquiries from HELP enrollees about premium collections, debt associated with past-due premiums, and other premium-related matters. Apart from these new programmatic tools, Montana relied on the existing infrastructure of its traditional Medicaid program to support onboarding TPA enrollees.

**Premium credit.** Until the 2017 demonstration amendments were implemented, the HELP demonstration included provisions that allowed for a premium credit. Under the credit, each calendar quarter nonexempt HELP enrollees received a credit equal to what they had paid in premiums. The credit could be applied toward any copayments they owed during that quarter. Thus, enrollees were *only* charged copayments if they exceed the dollar value of premiums they had paid in any given quarter. Every three months, enrollees' premium-copayment comparison was reset. The premium credit was established to help ease enrollees' financial burden of having to pay both a premium and copayments.

As of January 1, 2018, the premium credit was removed from the HELP demonstration. Unlike termination of the TPA plan, eliminating the premium credit was not done for budgetary reasons, but to eliminate the burden of administering the credit.

Copayments. Co-payments are not a feature of the demonstration but rather are authorized under Montana's state Medicaid plan. All HELP enrollees are subject to copayments set at the maximum level provided by federal Medicaid law.<sup>25</sup> The HELP demonstration eliminated copayments for preventive care, which was also seen as a way to promote personal responsibility—that is, encouraging HELP enrollees to be proactive in their health care and use primary care services.<sup>26</sup> As shown in Table II.2, with some exceptions, the level of copayment varies by income, consistent with federal law. For example, enrollees at or below 100 percent FPL are subject to a \$4 copay for a doctor's visit and a \$75 copayment for a hospital stay whereas for enrollees with income above 100 percent FPL, copayments are 10 percent of the reimbursement the state pays to the providers for the services rendered. As noted above, no copayments are charged for preventive services as broadly defined in the HELP demonstration. For prescription drugs, copayments are the same flat-fee regardless of income, though there is no copayment for generic drugs. With the exception of pharmacy services, copayments are not collected at the point of service to ensure individuals are not paying co-payments and premiums that are more than 5 percent of their aggregate household income or, if applicable, the premium credit is being applied. Providers can only bill HELP enrollees for copayments after the state adjudicates the claim and determines what copayment amount, if any, should be applied.

https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/mt/mt-HELP-program-ca.pdf.

<sup>&</sup>lt;sup>25</sup> "Overview of Medicaid Cost Sharing and Premium Requirements", Medicaid.gov, (PowerPoint presentation, November 25, 2014), <u>https://www.medicaid.gov/state-resource-center/mac-learning-collaboratives/learning-collaborative-state-toolbox/downloads/cost-sharing-premium-requirements.pdf</u>.

<sup>&</sup>lt;sup>26</sup> Before the HELP demonstration, Montana charged Medicaid enrollees copayments for all services. As part of the demonstration, the state submitted a Preventive Services Protocol defining the procedure codes and services that would not be subject to copayments. "CMS Approved Amendment: HELP Program Demonstration, Attachment C, Appendix 1, "Centers for Medicare and Medicaid Services, December 20, 2017,



Copayments for non-emergent use of the emergency room are also the same regardless of income. As allowable under federal law and not a part of the HELP demonstration, Montana originally intended to charge demonstration enrollees an \$8 copayment for non-emergent use of the emergency room. As stated in Montana's HELP Operational Protocol, all emergency department visits are "not subject to cost sharing unless the hospital provides a written attestation to the State that the provider meets the State's requirements for imposing co-payments for emergency department services."<sup>27</sup> Requirements include conducting an Emergency Medical Treatment and Labor Act–compliant screening that concludes the enrollee's condition is non-emergent, providing the enrollee with the name and location of an alternative services provider, and determining that the alternative provider can provide services at a lower cost-sharing amount. As described in further detail below, the state opted not to apply an \$8 copayment for non-emergency use of the emergency room.

Service	Copayments for Enrollees with Incomes at or Below 100% FPL	Copayments for Enrollees with Incomes Above 100% FPL
Inpatient Hospital Stay	\$75	10% of state provider reimbursement
Physician Office Visit (Primary or Specialty Care)	\$4	10% of state provider reimbursement
Lab and Radiology	\$4	10% of state provider reimbursement
Prescription Drugs		
Generic	\$0	\$0
Preferred Brand	\$4	\$4
Non-Emergent Emergency Room Use	\$8	\$8

Table II.2: HELP copa	vment structure for s	elected services by	enrollee income level, 2018
	yment structure for s	Sciecce scivices by	

**Note:** FPL = Federal poverty level. The following services are not subject to copayments under federal or state law: emergency services, preventive health care services, pregnancy-related services, family planning services, immunizations, generic drugs, and medically necessary health screenings.

**Cost-sharing limit**. Consistent with federal limits, for the entirety of the demonstration, HELP enrollees pay no more than 5 percent of their aggregate household income out-of-pocket (copayments and, if applicable, premiums) per calendar quarter.

# Disenrollment and Debt Assessment for Nonexempt Enrollees

The HELP demonstration includes provisions for assessing debt on nonexempt enrollees and possible disenrollment for those who fail to make timely premium payments. These provisions were unchanged with the 2017 demonstration amendments. As reported in Table II.3, nonexempt enrollees with incomes at or below 100 percent FPL are not disenrolled from HELP for failure to pay premiums, but any unpaid

<sup>&</sup>lt;sup>27</sup> "CMS Approved Amendment: HELP Program Demonstration," Centers for Medicare and Medicaid Services, December 20, 2017.

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premiums incurred by enrollees in this income group are considered a debt that the State of Montana may collect or assess.

Nonexempt enrollees with income above 100 percent FPL who fail to pay their premiums, after receiving a nonpayment notice and a 90-day grace period, can lose their HELP coverage. Individuals who are disenrolled may reenroll if they pay their past due premiums, or after the Montana Department of Revenue sends a debt notice (which can take no more than 90 days) informing them that a portion of their next state tax refund will be withheld to pay overdue HELP premiums.<sup>28</sup> Individuals seeking reenrollment within the same 12-month continuous eligibility period do not need to submit a new HELP application;<sup>29</sup> instead, HELP coverage can be reinstated online by paying their overdue premiums or after receiving a debt notice from the state indicating that the unpaid premium balance has been assessed.<sup>30</sup> Thus, HELP disenrollment provisions are a "soft" lockout akin to what many states use in their Children's Health Insurance Program (CHIP) but with debt assignment for unpaid premiums.

The state legislation that enacted HELP provided for several exemptions for disenrollment for failing to pay premiums by nonexempt enrollees with income above 100 percent FPL. Specifically, if a person meets any two of the following criteria they are not subject to disenrollment: they (1) have been discharged from the US military service within the previous 12 months; (2) are enrolled in college or a university in Montana; (3) are participating in a wellness program or enrolled in a state-approved healthy behavior plan (e.g., a diabetes prevention program; a tobacco cessation program); (4) are in a substance use treatment program; or (5) are seeing a primary care provider participating in a PCCM program such as a PCMH (patient-centered medical home).<sup>31</sup> However, these individuals are still subject to debt assessment.

<sup>&</sup>lt;sup>28</sup> "Montana Health and Economic Livelihood Partnership (HELP) Program Demonstration," State of Montana, approved November 2, 2015. See Attachment B—MT HELP Demonstration Operations Protocol.

<sup>&</sup>lt;sup>29</sup> A new application is needed, however, if the enrollee reapplies outside the 12-month continuous eligibility period in which he or she was disenrolled.

<sup>&</sup>lt;sup>30</sup> "Montana's Healthcare Plan: HELP Members," Montana DPHHS, no date (accessed November 8, 2017), <u>http://dphhs.mt.gov/helpplan</u>.

<sup>&</sup>lt;sup>31</sup> S. 405, 64th Leg., Reg. Sess. (Mont. 2015).

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Premium Exemption Status	Subject to Disenrollment for Failure to Pay Premiums	Debt Assessment for Past-Due Premiums
Exempt	Not applicable	Not applicable
Nonexempt		
51-100% FPL	No	Yes
101-138% FPL	Yes, after 90-day grace period with some exceptions	Yes

#### Table II.3: HELP disenrollment and debt assessment policies by premium exemption status, 2016-2018

**Notes:** FPL = Federal poverty level. Disenrollment for non-payment of premiums are not applied to nonexempt HELP enrollees who meet any two of the following requirements: enrollees who have been discharged from the US military service within the previous 12 months, are enrolled in a university in Montana, are participating in a wellness program or enrolled in a state-approved healthy behavior plan, are enrolled in a substance use treatment program, or are seeing a provider participating in a primary care case management program.

# 12-Month Continuous Eligibility

HELP provides for 12-month continuous eligibility for enrollees, which allow individuals to stay enrolled in the demonstration for a full year regardless of income changes. The purpose of providing 12-month continuous eligibility is to help increase overall coverage of newly eligible individuals<sup>.32</sup> It can also help stabilize insurance coverage by reducing the effects of insurance "churn" that can be caused by fluctuations in enrollee income.

<sup>&</sup>lt;sup>32</sup> "Montana Health and Economic Livelihood Partnership (HELP) Program Demonstration," State of Montana, approved November 2, 2015.

# III. Qualitative Assessment of HELP

The goal of the qualitative component of the HELP evaluation is to understand and document the implementation and ongoing administration of HELP and evaluate enrollees' experience under Montana's Medicaid expansion. The qualitative assessment relies on document reviews and site visits to Montana in 2017 and 2018, which included key informant interviews and focus groups with HELP enrollees. We begin this chapter by describing the design for the qualitative component of the evaluation, its research questions, data, methods and limitations. We then present the qualitative results that, in this Interim Evaluation Report, provide findings from the 2017 and 2018 site visits, supplemented by context provided through the document review. Additional information on the 2017 site visit is provided in a separate report to CMS.<sup>33</sup> In this section, we discuss the development of HELP and how respondents viewed evolution of the demonstration over time. We then discuss respondents' views of implementation and ongoing operations of, and enrollee experiences with HELP for major components of the demonstration: outreach, enrollment and redetermination, enrollee education, cost-sharing and access to care. The chapter ends with a brief summary of the qualitative findings. Appendix A provides additional information on the methodology for the focus groups.

# **Research Questions**

The qualitative assessment of HELP addresses three basic questions:

- 1. How were the different components of HELP designed and implemented?
- 2. What progress has been made in implementing HELP, and what have been the successes and challenges of implementing and administering HELP so far?
- 3. What were enrollees' understanding of and experiences with HELP?

# Data, Methods, and Limitations

### Data

The primary data sources for the qualitative analysis was information obtained through document review and site visits to Montana during the weeks of September 11, 2017, and September 17 and September 24, 2018. During the site visits, Urban Institute researchers conducted semi-structured interviews in Billings, Browning, Bozeman, Butte, Havre, and Helena with HELP stakeholders, including state officials, health care providers and provider association representatives, consumer advocates, and other non-state observers of the demonstration.<sup>34</sup> Names of potential interviewees were obtained

<sup>&</sup>lt;sup>33</sup> "Federal Evaluation of HELP: Montana Health and Economic Livelihood Partnership Plan- A Look at the Program a Year and a Half into Implementation," The Urban Institute and Social & Scientific Systems, Inc., (Silver Spring, MD: Centers for Medicare & Medicaid Services, 2018), <u>https://www.medicaid.gov/medicaid/section-1115demo/downloads/evaluation-reports/mt-help-focus-group-site-visit-rpt.pdf</u>.

<sup>&</sup>lt;sup>34</sup> Specifically, in 2017 Urban Institute researchers spoke with state officials (6), health care providers and provider association representatives (7), consumer advocates (3), and other non-state observers of the demonstration (2). Because of scheduling conflicts, we conducted 4 of the interviews by telephone before or after the 2017 site visit week. In 2018, we spoke with state officials (8), health care providers and provider association representatives (6), consumer advocate (2), and other non-state observers of the demonstration (2). Because of scheduling conflicts, we conducted before or after the site visit weeks in 2018.



through a variety of sources, including Montana state officials, state health care observers and experts, and our review of HELP documents and the grey literature. From this list of prospective interviewees, we selected interview respondents to provide us with a range of perspectives on HELP. 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 a total of eight focus groups with HELP enrollees as part of the site visits--four in 2017 and four in 2018. In 2017, we conducted two focus groups in Helena, one with exempt HELP enrollees and one with nonexempt TPA plan enrollees. We also conducted two focus groups with a mixture of exempt and nonexempt TPA plan enrollees, one in Havre and one in Browning. Helena is the state capital and, with nearly 30,000 residents, is the sixth largest city in Montana. Havre and Browning are both small towns located in the northern center part of the state.

In 2018, we also conducted four focus groups in the eastern part of the state: two in Billings, one in Livingston, and one in Forsyth. Billings is the largest city in Montana with nearly 110,000 residents. Livingston and Forsyth are both rural towns, to the west and east of Billings. In a departure from the 2017 focus groups, in 2018 we purposefully recruited nearly twice as many nonexempt HELP enrollees as exempt enrollees to get perspectives from those affected by the elimination of the TPA plan and the premium credit under the 2017 demonstration amendments.

In both 2017 and 2018, researchers from the Urban Institute recruited HELP enrollees for the focus groups. Focus group participants had to meet several criteria as a prerequisite to participation. Specifically, they had to meet the following requirements:

- had been enrolled in HELP for at least four months;
- were between the ages of 18 and 64;
- spoke English as their primary language; and
- had a home address with a zip code located within one of the focus group areas.

More information on the selection of focus group participants is provided in Appendix A.

The focus groups were held in the facilities of local community organizations such as hospitals, health clinics and libraries. The focus group discussion was semi-structured and encompassed a core set of questions to be asked at each of the four groups. The topics addressed included: health insurance coverage history, HELP marketing and outreach, HELP eligibility determination, enrollment, and renewal, HELP cost-sharing and affordability, access to care and benefits under HELP, experience with HELP-Link, impacts of having health coverage on daily life, and suggestions for improving HELP. In 2018, we also covered the elimination of the TPA plan and the premium credit, and discussed the future of the HELP program given that the program was scheduled to sunset 9 months following our focus groups. Each focus group lasted approximately 90 minutes. The focus groups were audio recorded to provide back-up for the note taker. Recordings were destroyed after note taking was completed.

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

# Methods

Notes from both the stakeholder interviews and focus groups were reviewed and confirmed using the audio-recordings. Interview notes and focus group notes were examined using two different methods. For the interview notes, the files containing the full set of interview notes were uploaded and coded with NVivo qualitative analysis software for thematic analysis using well-established techniques to facilitate reliability and validity.<sup>35, 36</sup> We used an iterative approach for data analysis that combined both inductive and deductive coding. We began by drafting a preliminary coding sheet to provide researchers with consistent guidelines on classifying notes into the major topics addressed in the interviews. 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 visits interviews. The researchers carefully reviewed the notes from each interview and coded participant responses to the appropriate component following the coding sheet. Major themes and subthemes were identified through a process of cutting and sorting the coded notes to compare themes by different type of interviewed stakeholder, 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.

Focus group notes however, did not use the coding sheet that was described above. Instead, the Urban Institute researchers who participated in the site visits and focus groups reviewed the full set of notes and categorized participant responses in accordance to the core set of topics contained in the moderator's guide. Similarly, to the treatment of interview notes, major themes, divergent opinions and supporting quotes were all summarized within each topic area for the focus group notes. Careful review of the HELP documents obtained to support the qualitative analysis provided context and understanding of the HELP program. This understanding informed the 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.

### Limitations

The qualitative component of the evaluation is meant to tell the story of HELP from the perspective of a range of stakeholders involved, including state officials, health care providers and provider association representatives, and HELP enrollees. While this information provides important context for understanding and interpreting the impact findings of HELP presented in section V of this report, qualitative findings presented in this section are based on stakeholder assessments of HELP and should not be interpreted as providing estimates of the impacts of HELP. Data from stakeholder interviews and focus groups offer important perspectives but the information is self-reported and therefore limited by the memory and experience of the individuals we spoke to.

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<sup>&</sup>lt;sup>35</sup> Devers KJ. How will we know "good" qualitative research when we see it? Beginning the dialogue in health services research. *Health Serv Res.* 1999;34(5 Pt 2):1153-1188.

<sup>&</sup>lt;sup>36</sup> Bradley EH, Curry LA, Devers KJ. Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health Serv Res.* 2007;42(4):1758-1772. doi:10.1111/j.1475-6773.2006.00684.x.

Finally, while interviewees are designated as representatives of their particular stakeholder type (for example, state officials can speak on behalf of state government, and provider association representatives can speak on behalf of providers), focus group participants are not meant to be representative of all HELP enrollees, but rather provide examples from a range of HELP enrollee perspectives. Further, the focus groups provide rich details on HELP enrollees' perceptions and experiences, but they do not provide full representation of enrollee feedback on the demonstration. This type of information is provided in section IV, which reports on the HELP Beneficiary Surveys.

# Results

In this section we describe respondents' thoughts on the development of HELP. We first describe respondents' views of implementation, ongoing operations and enrollee experiences with HELP, including outreach, enrollment and coverage renewal, enrollee education, cost-sharing, disenrollment and assessed debt, and access to health care. We then present respondents' views how the demonstration changed and evolved between 2017 and 2018. We conclude with a discussion of stakeholder assessments of HELP. The discussion of the development of HELP is based on information reported by interviewees, including Montana officials, health care providers and provider association representatives, consumer advocates, and non-state observers, in our 2017 site visit. Focus group findings were not used in this discussion since HELP enrollees were likely unaware of how the demonstration was developed. Findings from 2017 and 2018 stakeholder interviews and the focus groups were used to inform the remainder of the analyses. When appropriate we add context based on published statistics and documents.

# Development of HELP

In our 2017 site visit, interviewees, including state officials, health care providers, provider association representatives, consumer advocates, and non-state observers acknowledged that it took time and compromise to pass the Medicaid expansion in the Montana legislature. Certain program features in the HELP legislation were felt to be critical for passage, including requiring enrollees to "have some skin in the game" through premiums and copayments, having a public-private TPA plan administer program benefits, and implementing a workforce training program. In addition, stakeholders noted that it was important that the legislation provide sufficient flexibility to the state to conduct demonstration negotiations with CMS.

# **HELP** legislation

It took time and considerable compromise among Montana stakeholders to reach consensus on taking up the ACA Medicaid expansion, according to interviewees, including state officials, health care providers, consumer advocates, and an outside observer. Interviewees readily acknowledged that the expansion "took some political maneuvering" and had to be analyzed not as a "pure policy problem but as a political problem" to pass in the Montana legislature. Stakeholders said the legislature worked to pass expansion in two consecutive sessions, 2013 and 2015.<sup>37</sup> Democratic Governor Steve Bullock was

<sup>&</sup>lt;sup>37</sup> The Montana legislature meets for 90 days every other year.

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described as advocating for a "pure" or "straight" Medicaid expansion during the 2013 legislative session, but the measure failed by one vote.

### Essential program features required for legislation to pass

Interviewees across the board, including state officials, health care providers, provider association representatives, and consumer advocates, stated that covering low-income, uninsured Montanans was the main goal of HELP, but they also said several program features were critical to the legislation that ultimately was enacted. One was ensuring that HELP enrollees had "some skin in the game," which was accomplished by imposing financial and personal responsibility through copayments, premiums, and the risk of program disenrollment for failing to pay premiums.

During our 2017 site visit, a range of stakeholders, including state officials, health care providers, provider association representatives, a consumer advocate, and non-state observers, said having a TPA plan deliver health care services was critical to getting the HELP legislation enacted because it provided a public-private approach. As several interviewees, including state officials and consumer advocates explained, a TPA plan was something that "legislators and policymakers were comfortable with" because a comparable arrangement had long been used in Montana's CHIP program, which is generally well regarded in the state. In addition, including the TPA plan was a "quasi-private market" solution that was "politically palatable." One consumer advocate interviewee described the TPA plan as a "creative" compromise because it appealed to stakeholders who wanted to "contain the growth of government," as well as to those who wanted to keep HELP from becoming only a private-market endeavor. The TPA plan also provided the state with a large preexisting provider network, which health care providers and state officials said helped with the demonstration's rapid implementation.

Another feature many stakeholders, such as state officials, health care providers, and consumer advocates, said was critical to getting the HELP legislation enacted was the inclusion of HELP-Link. A voluntary workforce development program, HELP-Link was established with the passage of the HELP legislation to provide able-bodied HELP enrollees with job training and skills. A primary goal of HELP-Link is to raise HELP enrollees' income to reduce long-term dependence on Medicaid. Importantly, no Medicaid funds are used to fund HELP-Link; instead, it is financed solely with Montana state revenues.

Finally, a health care provider interviewee commented that it was a "really fine line" to craft legislation that would pass in Montana but "not be so far off the intent [of the ACA] that it would still be granted a waiver." Stakeholders also said that it was critical that the legislation "give the governor negotiating room [with CMS] on the waiver." For example, the HELP legislation called for all enrollees to pay premiums, but during demonstration negotiations CMS required Montana to eliminate premiums for those with incomes at or below 50 percent FPL and other groups, according to state officials. Also, during demonstration negotiations, CMS required Montana to add the premium credit to the demonstration.

# Implementation, Ongoing operations, and Enrollee Experiences with HELP

In this section, we discuss implementation and ongoing operations of HELP and enrollee experience with the demonstration, examining six major program areas: outreach, enrollment and coverage renewal, enrollee education, cost-sharing, disenrollment and debt assessment, and access to health care. Both site visits revealed that HELP has enjoyed widespread support and appreciation since the demonstration

was first launched and which continued into 2018. This sentiment was expressed by all participants in the focus groups and across all stakeholders we spoke with. At the same time, some implementation glitches and targeted concerns about the ongoing operations of the demonstration were noted by both interviewees and focus group participants.

# Outreach

When Montana launched HELP on January 1, 2016, a robust and coordinated outreach effort was mounted by the state, community organizations, and providers. A range of strategies were used to publicize HELP, including advertising campaigns and direct one-on-one outreach to prospective enrollees. By 2018, however, publicity campaigns for HELP by the state were reported to have stopped but interviewees and focus group participants said that outreach by enrollment assisters at federally-qualified health centers (FQHCs), financial counselors at hospitals, and state staff at local Offices of Public Assistance (OPAs) continued.

## State and private organizations active in initial outreach for HELP

Early on in the demonstration, many private organizations and the state engaged in outreach to potential enrollees and providers about the availability of HELP coverage. For example, in 2017 several interviewees, including state officials and consumer advocates mentioned the TPA plan ran television, radio, and social media advertisements announcing the HELP program, and provider interviewees said hospitals, too, paid for ads. The Montana Primary Care Association (MPCA) was described by several interviewees, including health care providers and provider association representatives, consumer advocates, and an outside observer, as being a major player in publicizing HELP. MPCA created a website for consumers (www.coverMT.org); advertised on billboards, social media, and radio; and created and mailed brochures to providers to give to patients. Meanwhile, Montana Medicaid sent direct mailings and computer-dialed follow-up calls to individuals it had assessed likely to be eligible for Medicaid, based on income data from Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) programs. Montana Medicaid also sent letters to FQHCs that used national survey data to identify the number of potentially eligible individuals in their county. They also facilitated informational meetings with external stakeholders such as hospitals to educate them about the availability of HELP coverage.

### How enrollees learn about HELP

When we asked HELP enrollees in our focus groups how they learned about HELP, in both 2017 and 2018 they most often reported hearing about the program when receiving assistance enrolling in other social services programs, like food stamps (SNAP), cash assistance (TANF), or publicly funded insurance for their child (through Medicaid/CHIP), often at their local OPA office. Several focus group participants also said providers or staff at health centers or hospitals referred them to HELP. Some also said they found out about HELP on their own, either on healthcare.gov or the state's Medicaid website. A minority heard about it from family and friends or outreach from the state or the local media.

# Enrollment and Coverage Renewal

Most participants in our focus groups in both 2017 and 2018 said the HELP application process was easy to complete and most commonly enrolled in the program through one of the local state-operated OPAs,

a health care provider or online. Focus group participants found renewing coverage even easier, involving mailing back a form informing the state of any changes to an enrollee's income or other circumstances. However, we did hear more about enrollment problems in our 2018 focus groups among participants who had an issue or had a question about enrolling in, maintaining, or reactivating HELP coverage. Several focus group participants said they had to drive long distances to find an open OPA or had waited on hold for hours to speak with an OPA staff member (through the Montana Public Assistance Help Line).

# Enrollment in HELP

Most focus group participants in both 2017 and 2018 reported they found the HELP application straightforward, as one participant put it, "I knew I was eligible right away, and then I got a card a few weeks later. It was the easiest thing I ever got from the government." Focus group participants reported using various methods to enroll in HELP coverage, including applying online through healthcare.gov or apply.mt.gov. As one participant shared, "2016 is when I signed up, through the government health care website, because they were making you pay if you don't have health care, so that was the main reason I signed up. So I put my income in there, and it said I was eligible [for HELP]."

Other focus group participants said they enrolled at a hospital or FQHC, often with assistance from staff. For example, one focus group enrollee said, "For me, I basically got signed up by one of the nurses when I had a heart attack. I was having a serious health problem and didn't have insurance at the time...They filled everything out while I was sitting there in the hospital." Another participant reported, "I went through [an enrollment assister at the health center] and I didn't have to turn anything in. She just did it all on the computer. [It took] 20 minutes."

Several focus group participants said they were asked if they wanted to apply for HELP during the application or renewal process for their participation in other government programs, such as food stamps or CHIP. For example, one focus group participant shared, "During a recertification for food stamps, they sent me a letter saying I could be eligible for the new expansion... They sent me a letter saying all I had to do was just put an 'x' in the box saying I wanted it, and I got it." Other participants reported OPA staff assisted them with enrollment, such as one participant who said, "[The office of public assistance] did all the work for me. They had all my information, so they transferred [all of it] to Medicaid. I had my answer in three to four days—it was very fast—and the rest is history."

### **HELP eligibility determination**

A consistent problem reported in both 2017 and 2018 by focus group participants and health care providers was the length of time it took the state to make an eligibility determination for HELP and for enrollees to get their insurance identification card in the mail. In our 2018 focus group, participants said the time it took to get their HELP insurance identification card after submitting their application ranged from days to weeks, or sometimes even a month or two. Several focus group participants volunteered that their health care providers would look up whether they had HELP coverage online and treated them even if they did not yet have a card. While keeping within the federal required 45-day limit, <sup>38</sup> state officials acknowledged that processing Medicaid applications was taking longer than they preferred.

#### <sup>38</sup> 42 CFR §435.912

Though a hiring freeze had previously prevented the Montana Department of Public Health and Human Services (DPHHS) from replacing departed staff, one state official in our 2018 site visit told us they had recently received approval to hire more staff, which may speed up HELP application processing.<sup>39</sup>

### State budget issues and enrollment

OPA staff help individuals enroll in social service programs, including Medicaid, and have played a significant role in enrolling people into HELP, according to several interviewees, including health care providers and consumer advocates. Because of budget matters and closure of some OPAs, fewer state staff were available in 2018 than in earlier years to help people encountering issues when enrolling in, trying to maintain, or reactivating HELP coverage. This was a major concern for focus group participants in 2018 but not in 2017. Some HELP enrollees in our 2018 focus groups, for example, commented that it has become more difficult to obtain assistance from OPAs due to the closures. Participants described scenarios that prompted them to call or try to meet with OPA staff about HELP coverage, some of which occurred after they were already enrolled in the HELP and needing help to find out how to pay their premiums, for example. Focus group participants reported that multi-hour hold times, sometimes up to four hours, can occur on the OPA-staffed helpline. For example, one focus group participant said, "When I first got on [HELP], it was easy to get a hold of a person [same] day, within 30 minutes. Then... they changed their phone system... It took me four hours of being on hold and no one talked to me, so I was like, 'I guess I lost that game.'" Another participant shared, "I called once and I waited for hours and hours, and I still didn't get anybody. I don't have that kind of time." A few focus group participants reported unreturned voicemails. For example, one participant said, "I hate calling the call center. It took them two weeks to get back to me... I called them every day."

Since only state staff can process Medicaid applications in Montana, closed OPAs meant some potential Medicaid enrollees, particularly in more rural areas of the state, no longer have access to local, inperson enrollment help. Despite these challenges, enrollment growth in HELP continued to be strong: between September 2017 and September 2018, HELP enrollment grew 15 percent, from 83,373 to 96,108 enrollees.<sup>40</sup> The state is aware of these issues, and one state official told us they were recently authorized to hire more OPA staff, which should increase HELP enrollees' access to staff assistance.

#### **HELP** renewal

In a typical month in 2017, about half of HELP enrollees up for redetermination renewed their coverage. <sup>41,42</sup> The vast majority of enrollees up for renewal did not renew on time because they either did not

<sup>&</sup>lt;sup>39</sup> Notwithstanding the interview and focus group feedback that was provided, based on data compiled by the Centers for Medicare and Medicaid Services, for the time period of February to April 2018, Montana was processing 40 to 60 percent of its MAGI applications in under 7 days.

<sup>&</sup>lt;sup>40</sup> "HELP Enrollment by Month," DPHHS Montana Medicaid Expansion Dashboard, October 4, 2018.

<sup>&</sup>lt;sup>41</sup> "Montana HELP Program 1115 Waiver: Annual Reporting Measures for Second Demonstration Year", data produced in Appendix B of the Annual Report for Demonstration Year 2, State of Montana, August 8, 2018.

<sup>&</sup>lt;sup>42</sup> Note that the State of Montana has made 2018 HELP program data available in its Annual Report for Demonstration Year 3. However, the state found issues with the computations of the monthly reporting measures, which were still in the process of being corrected at the time of writing this report (June 2019).



complete renewal paperwork in time to renew coverage, did not complete paperwork properly, did not provide required documentation or were lost to follow-up.<sup>43</sup>

Among HELP enrollees in both our 2017 and 2018 focus groups who had gone through at least one coverage renewal, most said the process was simple. (Because our focus groups were comprised of individuals currently enrolled in HELP, we do not know about the coverage renewal experiences of people no longer enrolled in the demonstration). Most reported receiving a letter containing their personal and income information that asked them to indicate if anything had changed and to mail back their response. For example, one participant reported, "They sent me a packet of paperwork to renew... They just wanted an update on if my information has changed, financial or otherwise, and I filled it out and sent it back to them." There were other focus group participants who reported not needing to do anything to renew their coverage, such as one participant who shared, "I just get letters saying that they renewed it... It is an automatic renewal."

Some participants said they needed to complete a telephone interview with OPA staff to finish the process. Though many said the interview was brief and easy, others said it was sometimes inconvenient and could take time to set up an appointment. For example, one focus group participant shared, "[The phone interview] is at their convenience is the only problem. So if you're working and they call back, you have to take the call. It took about 15 minutes. They have all of the information... they just want to know [if] anything has changed."

### **Enrollee Education**

Since implementation of the demonstration, enrollees report having received limited education about how HELP coverage works. Many HELP enrollees in our focus groups in both 2017 and 2018 said that information they are provided with on how the program works was lacking. When asked how HELP could be improved, focus group participants most often mentioned that they wished they had been given more information about the program. External stakeholders, including health care providers and consumer advocates, also felt more enrollee education is needed. Though Montana officials in our 2017 site visit maintained that enrollee education was sufficient, by 2018 the state had started working on developing strategies to improve enrollee education.

#### Education about HELP coverage

With the termination of the TPA plan in 2018, education for all HELP enrollees consists of Montana Medicaid mailing enrollees an insurance identification card and a letter with a link to a website where a "member guide" containing plan benefits is posted.<sup>44</sup> In 2017, Montana officials felt that this was sufficient and did not view enrollee education as a problem. They also noted that they had not received

 <sup>&</sup>lt;sup>43</sup> "Montana HELP Program 1115 Waiver: Annual Reporting Measures for Second Demonstration Year", data produced in Appendix B of the Annual Report for Demonstration Year 2, State of Montana, August 8, 2018;
 "Montana HELP Program 1115 Waiver: Annual Reporting Measures for Third Demonstration Year", data produced in Appendix B of the Annual Report for Demonstration Year 3, State of Montana, March 1, 2019.

<sup>&</sup>lt;sup>44</sup> The TPA plan, before it was eliminated, did more in the way of enrollee education. Among other things, the plan sent enrollees a welcome kit, which included a welcome letter, a participant guide, and instructions on accessing an online patient portal. In addition, because all TPA plan enrollees paid premiums, the plan sometimes included information about HELP with monthly premium invoices.

a lot of questions or comments from HELP enrollees. One state official reported that nitty-gritty details such as how copays are determined were "kept away from members" because it "isn't a member's job to know" such things.

Many external stakeholders in both 2017 and 2018, including health care providers and provider association representatives and consumer advocates felt that Montana Medicaid could do more to educate HELP enrollees, although some did not view this as a priority. One health care provider felt there was "a lot more that can and should be done to help with health insurance literacy," because many people gaining coverage through HELP have never had health insurance before and do not know what words like "copayments" mean. Another health care provider commented that HELP enrollees may not have access to a desktop computer and may only be able to access the internet from a smartphone, making it hard to read the "giant PDF" on HELP benefits available on DPHHS' website. At the same, another health care provider said, "Nobody really cares how their insurance works."

HELP enrollees in our focus groups said they *did* want more information about how their coverage works. Better information about what HELP does and does not cover and better customer service were the most common recommendations from participants. As one focus group participant said, "Tell us more about what's covered. Access to someone who can answer questions would be a good thing."

At the time of our 2018 site visit, Montana was working on strategies to improve enrollee education. As one state official acknowledged that "for a while, [enrollee] outreach was not [the state's contractor]'s priority," but the state has now directed its contractor to reallocate resources toward beneficiary education. This state official described several ways Montana is working to improve enrollee education, including:

- having its contractor call new enrollees at more convenient times (between the hours of 3 to 6 pm rather than midday) to tell them about their benefits and cost-sharing requirements and ask if they have any questions;
- having its contractor update a video on the DPHHS website describing enrollees' benefits to make it more engaging;
- revising language in enrollee notices the state mails so that they are easier to understand; and
- hiring a new employee to focus exclusively on Medicaid enrollee education.

# **Cost Sharing**

HELP includes copayments for all enrollees and premiums for those with income above 50 percent FPL who are not exempt. Stakeholders universally viewed HELP premiums as affordable, and enrollees in focus groups agreed that premiums were affordable and fair. However, HELP administrative data indicate that many enrollees do not pay their pay premiums, suggesting that premiums may be challenging for some. Many 2017 interviewees, including state officials, health care providers, and provider association representatives, and focus group participants reported that, except for pharmacies, providers did not actively bill for copayments. In 2018 we heard a mixed story: Though most health care providers and provider association representatives again said that copayments were still not generally being collected in 2018, some focus group participants and other health care providers and provider association representatives.



#### Level of HELP premiums

State officials felt that HELP premiums were affordable. Given the strong enrollment in HELP, officials highlighted that premiums at 2 percent of income were less of a barrier than they had expected. As one state official put it, "We expected a lot more disincentive [to enroll in HELP] because of the premium." Focus group participants in both 2017 and 2018 similarly felt that their monthly premiums were fair and affordable. (Given focus groups and surveys consisted of HELP enrollees who at the time were enrolled in the program, we do not have the perspective of people who are eligible for HELP but decide not to enroll because of the cost of the premiums). Some focus group participants reported it was cheaper than what they had been paying for other coverage before, such as one who shared, "[The premium] is more than fair. I was paying \$1,200 for COBRA!" Another focus group participant said, "Way before Obamacare, I used to pay \$75 a week [for health insurance] ... so I quit carrying it... because I couldn't afford it. I played insurance roulette for years... but I lucked out that the bullet never went off. I was young and really didn't care. Now I pay \$24 a month." In addition, enrollees in the focus groups who were paying their premiums said they were happy to be contributing, as one participant put it, "I felt grateful because I feel like I should be paying something. They could charge me four times as much and it would still be half of what I was paying before. I would gladly pay more because I want to do my part."

At the same time, some enrollees in our focus groups reported difficulty making their monthly payments. For example, one 2018 focus group participant shared, "I thought a \$20 premium was a little high when I was unemployed." Several focus group participants also reported falling behind on their premiums at times due to inconsistent or lost invoices, such as one enrollee who shared, "They didn't send me my invoice for three months, and then they sent it all at once and I paid it all. And my coverage kept going." Another focus group participant reported, "I didn't even know I had to pay; I thought it [HELP] was free. I didn't get any emails or anything... but according to them, I had fallen behind five months. I didn't lose my coverage... I paid, and I'm fine now."

Like these examples, nearly all focus group participants who reported being late in premium payments did not experience interruptions in coverage. This could be because disenrollment only applies to HELP enrollees with incomes above 100 percent of FPL (Table II.3). It could also be because HELP has several exemptions to disenrollment. Focus group participants appreciated the 90-day grace period to pay past due premiums before being disenrolled. As one 2017 focus group participant said, "The back of my card says you can be up to 90 days past due before they'll do anything; I used that to my advantage. There have been.... months when I couldn't pay [my premium], and I made up for it the following month. I appreciated that they didn't kick me off after just one month not paying."

Program administrative data suggest that paying monthly premiums is challenging for many HELP enrollees, particularly those with the lowest incomes. In December 2017, for example, HELP data show that among the 20,050 enrollees who owed premiums, roughly half (45.1. percent) paid them that month. For enrollees with income between 51 and 100 percent FPL 42.3 percent paid their premiums

for the month, whereas 49.1 percent of those with income above 100 percent FPL paid.<sup>45,46</sup> This share of enrollees paying their premiums in the month for different income levels was consistent throughout 2017.<sup>47</sup>

## Administrative complexity of HELP copayments

As described in Section II, two copayment schedules are used in HELP: a flat copayment fee for those at or under 100 percent of FPL and a percentage of the state's reimbursement to the provider for those above 100 percent FPL (Table II.2). State officials said implementing the variable copayment has been challenging: "An operational nightmare.... [causing] more work and more difficulty," according to one state official. Since providers do not know enrollee income, the state must determine which copayment schedule should be applied to a claim. In addition, to comply with federal requirements and provide enrollee protection, the state tracks whether an enrollee has reached the quarterly 5 percent aggregate household cap in order to identify whether a copayment can be imposed. Because of these programmatic features, providers are not permitted to collect copayments at the point of service, which had been a long-standing part of Montana's traditional Medicaid program, but instead must send the enrollee a bill to collect any copayment. State officials (2017) and health care provider association representatives (2018) said pharmacists are the single exception because they typically have systems capable of billing in real time, and the same copayment level for prescription drugs applies to all enrollees regardless of income.

## Provider billing for copayments from HELP enrollees

Provider association representatives and health care providers, including leaders of hospitals and FQHCs said they generally do not bill HELP enrollees for copayments, or only send bills if the amount owed is above some threshold. One health care provider in 2017 explained that they write off a bill if it is less than \$4.99 in a 30-day billing cycle; if the amount owed exceeds that during the period, they will bill. A provider association representative said, "[HELP] copays are just a pain. They're just symbolic." Another health care provider said that HELP copayments are commonly referred to as "the faux pay." Accordingly, this same interviewee explained that HELP enrollees also qualify for the facility's financial assistance program, "so we don't even ask [HELP enrollees] by the very fact that they have a Medicaid card." It becomes part of our charity care and is written off, this interviewee explained. Some focus group participants were aware of write offs, such as one participant who reported, "My shot [copay] was \$4. I said, 'Do I owe you guys anything?' and they said, 'No, we wrote it off.'"

Though most (estimated to be about 85 percent by one state official) Montana physicians are employed by hospitals, independent providers do not have a write-off option available to hospital physicians. For

<sup>&</sup>lt;sup>45</sup> "HELP Program 1115 Waiver: Quarter 4 Measures December 2017 Data," data produced in the Annual Report for Demonstration Year 2, State of Montana, August 8, 2018.

<sup>&</sup>lt;sup>46</sup> Note that the State of Montana has made 2018 HELP program data available in its Annual Report for Demonstration Year 3. However, the state found issues with the computations of the monthly reporting measures, which were still in the process of being corrected at the time of writing this report (June 2019).

<sup>&</sup>lt;sup>47</sup> "HELP Program Demonstration: Section 1115 Waiver Annual Report Year 2 (2017)," State of Montana, August 8, 2018.

independent physicians, not collecting copayments from HELP enrollees is "bad debt," as one provider association representative explained.

Montana officials were aware that providers are not generally billing enrollees for copayments and aware of the difficulty providers have with collecting them. As one state official said, copayments are "providers' biggest issue with [HELP]." At the same time, Montana officials said that collecting copayments is providers' responsibility and that eliminating copayments and having Medicaid pay the full amount to providers would be a "huge cost to the state," as one official put it.

While health care providers said they tend not to bill enrollees for copayments, several focus group participants in 2018 said they had been invoiced for these payments, a departure from what enrollees shared in our 2017 focus groups. In part the difference may be due to our purposefully overpopulating 2018 focus groups with higher-income HELP enrollees (who face the more substantial copayment schedule) to assess how enrollees were affected by the elimination of the TPA plan. It could be that copayments owed by this group were sufficiently high enough that providers billed them.

When copayments were required, most focus group participants said they were affordable, such as one participant who said, "I think they're fabulous. I went to the dentist and paid \$4. I got medical tests at the doctor and it was \$16. Our total copayment bill was \$45, and they said pay however much you can or whenever you can. It was really flexible." Another participant shared, "I get copays... for my therapy. I go every week and it is \$4. Compared to what I was paying, yes, [it's affordable]. I was paying \$15-\$20 every week." Only one focus group participant in 2018 reported copays created a barrier to receiving care, saying, "If I don't have [money for the copay], I don't go [to the doctor], which is why I am in pain right now. It's just not in the budget."

### Emergency room copayments for nonemergent care

Though Montana originally intended to charge an \$8 copayment for nonemergent emergency room use, it was not implemented. As one state official explained, "We did a cost-benefit analysis to see where we would financially land on how much it would take to administer [the copayment for nonemergent emergency room care] ... compared to what it would recover, and how much [the] appeal process and burden on the hospital to be labeling and marking [patients]—and it did not pan out. We looked at this twice." State officials also noted that emergency room use has not materially changed over time under HELP. But, as one health care provider observed, without implementing the emergency room copayment a perverse incentive has been created: HELP enrollees who go to their primary care provider can be charged a copayment for that visit but if they instead go to the emergency room there is no copayment.

### **Disenrollment and Assessed Debt**

Disenrollment of nonexempt enrollees from HELP for failing to pay premiums has been consistently low but program administrative data show that a sizable minority of HELP enrollees have accrued debt owed to the State of Montana because of past due premiums.
#### Disenrollment from HELP for failure to pay premiums

Disenrollment from HELP for not paying premiums was low in 2017. In December 2017, only 2.5 percent of premium paying enrollees with income above 100 percent of FPL, a group subject to disenrollment provisions for failing to pay premiums, were disenrolled for not paying their premiums.<sup>48,49</sup> At the same time, half (49.1 percent) of enrollees with income above 100 percent FPL paid their premiums in December 2017<sup>50</sup> The low disenrollment rate could be partly attributed to HELP's many disenrollment exemptions. Only one of our focus group participants in 2017 and two in 2018 had experienced disenrollment from HELP for not paying their premiums, including one who shared, "I had to start paying [premiums], and then I didn't pay, and I got behind. They gave me the boot I guess, but they took it out of my taxes.<sup>51</sup> But then I went recently, I think it was in January, and I reapplied and they just gave me Medicaid back."

### Assessed debt for past due premiums

While disenrollment from coverage is low, a sizable share of HELP enrollees has accrued debt owed to the state because of past due premiums. As explained in Chapter II, any unpaid premiums incurred by nonexempt enrollees are considered a debt owed to the State of Montana. After a 90-day grace period, the Montana Department of Revenue sends a debt notice (which can take no more than 90 days) to enrollees who fail to make premium payments informing them that a portion of their next state tax refund will be withheld to pay their overdue HELP premiums.<sup>52</sup> December 2017 data show that more than a quarter (27.5percent) of HELP enrollees who owed premiums that month also had collectible debt owed to the State of Montana. Of those with collectible debt, 75.3 percent had income below 100 percent of FPL.<sup>53,54</sup>

<sup>&</sup>lt;sup>48</sup> "HELP Program 1115 Waiver: Quarter 4 Measures December 2017 Data," data produced in the Annual Report for Demonstration Year 2, State of Montana, August 8, 2018.

<sup>&</sup>lt;sup>49</sup> "HELP Program 1115 Waiver: Quarter 3 Measures September: Note that the State of Montana has made 2018 Data," HELP program data available in Annual Report for Demonstration Year 3, State of Montana, March 1.

However, the state found issues with the computations of the monthly reporting measures, which were still in the process of being corrected at the time of writing this report (June 2019.).

<sup>&</sup>lt;sup>50</sup> "HELP Program 1115 Waiver: Quarter 34 Measures September 2018December 2017 Data," data produced in the Annual Report for Demonstration Year 32, State of Montana, March 1, 2019August 8, 2018.

<sup>&</sup>lt;sup>51</sup> This participant is likely referring to a provision under HELP that allows the State of Montana to deduct past due premiums from an individual's state tax refund.

<sup>&</sup>lt;sup>52</sup> "Montana Health and Economic Livelihood Partnership (HELP) Program Demonstration," State of Montana, approved November 2, 2015. See Attachment B—MT HELP Demonstration Operations Protocol.

<sup>&</sup>lt;sup>53</sup> "HELP Program 1115 Waiver: Quarter 34 Measures September 2018December 2017 Data," data produced in the Annual Report for Demonstration Year 32, State of Montana, March 1, 2019.August 8, 2018.

<sup>&</sup>lt;sup>54</sup> Note that the State of Montana has made 2018 HELP program data available in its Annual Report for Demonstration Year 3. However, the state found issues with the computations of the monthly reporting measures, which were still in the process of being corrected at the time of writing this report (June 2019).

## Access to Care

Interviewees across the board, including state officials, health care providers, provider association representatives, and consumer advocates, and focus group participants said that HELP provides good access to health care services, despite the cutbacks in Medicaid dental and vision care services.

#### Access to core health care services

HELP enrollees in focus groups generally reported good access to services, perhaps because most providers in Montana accept Medicaid.<sup>55</sup> As one focus group participant shared, "My [access] has been really good. [HELP] has been accepted everywhere." Participants in our focus groups also told us they visit the doctor more often since enrolling in HELP, seeking care before health issues turn into medical emergencies. For example, one focus group participant said, "I go [to the doctor] twice a year now, but before I had insurance I would not go at all unless it was severe." Enrollees in our focus groups also said they obtain more preventive and dental services than before and were highly satisfied with their access to health care. As one participant reported, "You get the help you need. I hadn't had a teeth cleaning in 11 years until I got [this coverage]. That was really nice. It felt good to be able to do that." According to state data, as of December 2017, the most commonly used preventive services were dental care, followed by cholesterol screening and wellness exams.<sup>56</sup>

Interviewees, including state officials, health care providers, and provider association representatives agreed that a high share of HELP enrollees use preventive services. As further evidence that HELP provides enrollees good access to care, interviewees highlighted that emergency room use for nonemergent and general emergency room use has not increased with the implementation of HELP. Some interviewees, including provider association representatives and health care providers, however, did cite difficulties accessing primary care in rural communities and specialty services. Participants in our focus groups echoed this sentiment, such as one participant who shared, "Not everyone you need is in Livingston. If you have to see a specialist, you have to go to Billings, Bozeman, Helena." Provider association representatives reported these problems can be attributed to an inadequate supply of both primary and specialty care providers in the state, as opposed to being a HELP or Medicaid-specific issue.

#### 2017 reductions in Medicaid benefits

As mentioned previously because of state budget issues, Montana implemented benefit reductions for the Medicaid program, including for HELP demonstration enrollees, in November 2017. Chief among the reductions were the elimination of some adult dental services (e.g., crowns, bridges, and dentures) and the shift from annual to biannual eye exams and glasses.<sup>57</sup> Focus group participants said they had been affected by recent reductions to Medicaid benefits. In particular, several expressed concern over the reduction in covered dental services and new limits to vision services. Several said they had already

<sup>&</sup>lt;sup>55</sup> Kelly G. "Medicare and Medicaid Participation Rates for Doctors by State", *MD Magazine*, October 19, 2016, <u>https://www.mdmag.com/physicians-money-digest/columns/the-doctor-report/10-2016/medicare-and-medicaid-participation-rates-for-doctors-by-state</u>.

<sup>&</sup>lt;sup>56</sup> "HELP Program Demonstration: Section 1115 Waiver Annual Report Year 2 (2017)," State of Montana, August 8, 2018.

<sup>&</sup>lt;sup>57</sup> "Montana Healthcare Programs Member Notice", MT DPHHS, February 13, 2018, https://dphhs.mt.gov/Portals/85/hrd/documents/MemberNotice021318.pdf.



incurred large out-of-pocket costs, such as one participant who shared, "There were a lot of things that they took away. They took away a lot of dental stuff. I'm trying to pay for a root canal, and my poor dentist is getting \$25 a month because we're going in the hole. I had to take money out of my retirement fund from when I was working just to pay the bills." Other enrollees in focus groups reported they had forgone needed care because of these benefit reductions. For example, one participant said, "With dental, some procedures weren't covered, so I just didn't get those procedures. I couldn't afford them, like root canals and crowns." Another focus group participant shared, "I can get my prescription at the eye checkup, but I can only get glasses every two years, but as a diabetic, my prescription changes every year."

#### **12-Months Continuous Eligibility**

State officials, health care providers and a health care provider association representative felt that offering 12-month continuous eligibility to HELP enrollees has been very helpful in providing stabilizing coverage and improving continuity of care, particularly for preventive care services. As one provider said, "I think that's [12-month continuous eligibility is] super super helpful.... because that in and out of coverage is really difficult to track from our perspective as to maybe I'm scheduled for surgery and maybe it's next month, and I lost my coverage but when I scheduled it I had coverage." Another provider noted the importance of continuous eligibility for seasonal workers, "Continuous eligibility is super important for folks who [are] low income, who are right on the [income eligibility] line. We see that all of the time. And it's just so challenging, especially in Montana where we have so much seasonal employment. We have so much [income] fluctuation."

Apart from providing better continuity of care and health care for enrollees, state officials said offering 12-month continuous eligibility seen as way to save on demonstration administrative spending: With 12-month eligibility, it takes fewer eligibility administrative staff to implement and maintain the eligibility function for HELP. As one official said, 12-month continuous eligibility has been "cost neutral if not beneficial...Very happy we did continuous eligibility. Frees them [state staff] to do one-time enrollment because you don't have people going on and off."

## Stakeholder assessment of the effects of HELP

In our 2018 site visit, several interviewees, including state officials, health care providers, and provider associations representatives, noted that recently available data and reports suggest that HELP has achieved many goals stated in Montana's 2015 demonstration application, including increasing access to high-quality health care, encouraging Montanans to take greater responsibility for their health, reducing hospital uncompensated care costs, and boosting Montana's economy.

## Enrollee access to health care and health

Many interviewees said the biggest achievement of HELP was providing coverage and access to health care to "100,000 lives in a state of a million people," as one state official put it. Enrollment was "way more than we anticipated," another state official highlighted. Correspondingly, several interviewees, including state officials, health care providers, provider association representatives, and a consumer advocate, noted the decline in Montana's uninsured rate, which dropped from 23.6 percent in 2013 to



16.5 percent in 2017 for nonelderly adults (18 to 64 years).<sup>58</sup> With the launch of HELP and associated expanded coverage, interviewees, such as state officials, health care providers and provider association representatives, also emphasized the number of enrollees using preventive services. In September 2018, the state reported that more than 85,000 demonstration enrollees had received preventive care since HELP began.<sup>59</sup> HELP was also credited with allowing the state to expand substance use disorder (SUD) services and helping rebuild the state's behavioral health care systems, which one interviewee said was "critically needed." As one state official explained, with HELP, many individuals now access SUD treatment services through Medicaid, which allows the state to use block grant funds for SUD prevention rather than SUD treatment.

Several participants in our focus groups reported that having HELP coverage and access to health care lead to improvements in their health which allowed them to be more productive, such as one focus group enrollee who said, "It has made me healthier and able to work." Another participant reported, "I've gotten more work done in the last four years than I have in all my life. Before I had this insurance, I had nothing, all my life basically. I couldn't afford to have it." Other enrollees in the focus groups shared that HELP has allowed them access to needed care that they previously could not afford, such as one focus group enrollee who said, "It has made a huge difference for us. We would not have been able to afford care... Without it, I might not be here. It has been lifesaving." Another participant shared, "I was letting my dental care spiral out of control because I couldn't afford it. [This care] got me back on track, health wise." Finally, several focus group participants shared that having HELP coverage "gives a sense of security and peace of mind," such as one participant who said, "It has changed my life. It makes me feel good that if I need to go see a doctor for something, I know I can instead of blowing it off."

#### Enrollee engagement in health care

Some state officials suggested that HELP has been successful in getting enrollees to take responsibility for their health care, highlighting the number of enrollees receiving preventive care, how much has been collected in premiums, and the demonstration's low disenrollment rate as indicators of engagement. However, several interviewees, including other state officials and a consumer advocate, felt it was too soon to make this assessment. As one state official observed, having the experience in HELP "will help [enrollees] when and if they go onto other insurance... but I think, right now, we are so early into [coverage]." In the first year of the demonstration, many enrollees "weren't ready to be engaged in their health care. They just needed their health care to be taken care of for the first time... but now as they have been able to stay on, they have really started taking a focus on their own and changing their life." Focus group participants said that with the coverage afforded by HELP they have been able to obtain health care services much more frequently than in the past. As one participant put it, "I go [to the doctor] twice a year now, but before I had insurance I would not go at all unless it was severe." Another

<sup>&</sup>lt;sup>58</sup> "2011 to 2015 American Community Survey 5-Year Estimates for Montana", United States Census Bureau, no date (accessed June 3, 2019); "2013 to 2017 American Community Survey 5-Year Estimates for Montana", United States Census Bureau, no date (accessed June 3, 2019).

<sup>&</sup>lt;sup>59</sup> "Montana Medicaid Expansion Dashboard," MT DPHHS, October 4, 2018, <u>https://dphhs.mt.gov/helpplan/medicaidexpansiondashboard</u>.



said, "I've probably been [to the doctor] 15 times in the past year. [During the previous year without insurance] I never went."

#### HELP and health care providers

Interviewees such as state officials, health care providers, provider association representatives, and a consumer advocate commented that HELP has benefited health care providers, particularly hospitals. One report states that, between 2015 and 2016, uncompensated care costs declined 44.9 percent, and declined further in 2017.<sup>60</sup> State officials, health care providers, a consumer advocate, and an outside observer also noted that funneling new resources to hospitals has especially helped stabilize some rural hospitals' finances and reduced their risk of closure. FQHCs have also benefited from HELP, according to health care providers. "Medicaid expansion has been a game changer [for us]," as reported by one FQHC executive.

#### HELP and state economic growth

State officials, a provider association representative, a consumer advocate and an outside observer mentioned recent studies that highlight how HELP has economically benefitted Montana.<sup>61</sup> Perhaps the report that has received the most attention used an economic forecasting model to predict the impact of Medicaid expansion on Montana's economy.<sup>62</sup> Based on that forecasting model, HELP is predicted to have brought at least \$350 million in new spending to the state each year, which in 2018 is predicted to have generated \$265 million in personal income and more than 5,000 new jobs.

### **Evolution of HELP Demonstration, 2017-2018**

#### Elimination of TPA Plan

Effective January 1, 2018, Montana's state Medicaid plan became the only plan for HELP enrollees. When asked about the transition, enrollees in the focus groups reported that they did not experience any disruptions in coverage. Generally, focus group participants did not view elimination of the TPA as a big change, as one participant said, "I thought it was odd that there was a new card, but other than that, it didn't seem to be too different." Most recalled being notified of the changeover, but some enrollees said they were not made aware of the transition (see education section below.). In part, the lack of perceived change could reflect there was considerable overlap between the TPA plan and Medicaid's provider networks, which state officials said help to minimize disruption and to maintain enrollees' continuity of care. The state also reached out to the few providers in the TPA's provider network who

<sup>&</sup>lt;sup>60</sup> "Medicaid Expansion: How It Affects Montana's State Budget, Economy, and Residents," Manatt Health, June 2018.

<sup>&</sup>lt;sup>61</sup> "2018 Report to the Governor and Legislative Finance Committee," HELP Act Oversight Committee, submitted August 2018; "Medicaid Expansion: How It Affects Montana's State Budget, Economy, and Residents," Manatt Health, June 2018; and "The Economic Impact of Medicaid Expansion in Montana," The Bureau of Business and Economic Research, April 2018, <u>https://mthcf.org/wp-content/uploads/2018/04/BBER-MT-Medicaid-Expansion-Report\_4.11.18.pdf</u>.

<sup>&</sup>lt;sup>62</sup> The economic forecasting model used is the Regional Economic Models, Inc., which is contained in the *The Economic Impact of Medicaid Expansion in Montana* report produced by The Bureau of Business and Economic Research in April 2018.



were not in the state's Medicaid network to invite them to join Medicaid's network. If the state could not convince a provider to join the Medicaid network, it notified HELP enrollees served by this provider that the provider was no longer in network.

#### Transitioning TPA plan enrollees to Montana's Medicaid plan

Most interviewees, including state officials, health care providers, provider association representatives, a consumer advocate, and an outside observer, described the transition from the TPA plan to Montana Medicaid as a nonissue. State officials characterized the transition as a success, evidenced by various program measures, including seeing no real differences or gaps in HELP eligibility, continued premium payments, and limited program disenrollment. Non-state interviewees, including health care providers and one consumer advocate also recognized that the state handled the changeover well, particularly considering that the transition occurred while the DPHHS was dealing with staffing and resource cutbacks because of the state's budget crisis. At the same time, two interviewees (a health care provider association representative and a state official) said that early on in the transition there were a few issues concerning finalizing claims data and directing members' premium payments from the TPA plan to the state.

Montana state officials attributed the efficient transition to several factors, including having an existing Medicaid provider network that had extensive overlap with the TPA plan, which helped ensure enrollee continuity of care. Further, before the TPA plan was terminated the state already handled some aspects of claims processing for TPA enrollees, including prescription drugs and dental services. Thus, the state's Medicaid claims system already had some "contact" with the TPA plan enrollees which also was said to help smooth the transition.

Interviewees in our 2018 site visit, including state officials, health care providers, provider association representatives, and a consumer advocate, as well as HELP enrollees in focus groups reported no problems with the elimination of the TPA plan. Similarly, state officials said the elimination of the premium credit was without issue. Most focus group participants, however, were not aware that the premium credit had been removed in part because several did not understand what the credit was. As is discussed below, that may reflect a lack of copayments as most providers were said to not collect copayments from HELP enrollees.

Overwhelmingly, interviewees, including state officials, health care providers, provider association representatives, and non-state observers, said the budget reductions that began in July 2017 affected the HELP program and its enrollees more than the changes made through the 2017 demonstration amendment.

#### Bringing administration of HELP under a single entity

Most interviewees, including state officials, health care providers, and provider association representatives, stressed that removing the TPA plan and consolidating HELP into one entity simplified the administration of HELP. One state official claimed removing this "two-tiered system" in favor of a single program for service delivery made it "easier and clearer" for enrollees. Previously, as this state official explained, under the two-tiered system if an enrollee's income "go[es] up slightly you have a different customer service." Also, state officials remarked that with the elimination of the TPA plan the demonstration has become easier to manage because they now only administer one plan for all

Montana Medicaid enrollees, with HELP enrollees now in the traditional Medicaid plan, which the state has run for decades. Health care provider interviewees agreed that administration of the HELP has gotten easier from an eligibility and payment standpoint. Finally, eliminating the TPA has yielded substantial savings on program administrative costs, the reason Montana pursued the change, according to one state official. Specifically, according to this official, the state had been paying the TPA plan \$25 per HELP member per month for administration, whereas the state's cost to administer its FFS plan is substantially cheaper, about \$5.50 per member per month.

#### Enrollee education and outreach and elimination of the TPA plan

The state sponsored some special one-time enrollee mailings to educate HELP enrollees affected by the TPA plan elimination. The month before the handover, the state mailed out new insurance identification cards to HELP TPA enrollees who would continue to be eligible for coverage in 2018, along with a notice that their benefits would remain largely unchanged.<sup>63</sup> Montana also hosted conference calls for Medicaid enrollees to share their questions, which a state official said were well attended. In addition, the state offered in-person meetings for enrollees, but these were not well attended, according to state officials. The state also distributed a "frequently asked questions" document to staff in local OPAs. In addition, DPHHS' updated its website to reflect program changes. Meanwhile, the TPA plan included a notice with invoices mailed to HELP enrollees starting three months before the handover took place on January 1, 2018. TPA plan staff reported getting only a few calls from enrollees about these notices. Montana's FQHC association also educated enrollment assisters at health clinics about the forthcoming transition so they could talk with HELP enrollees about any changes to their coverage.

While Montana officials felt enrollee education about the elimination of the TPA was effective, enrollees in our focus groups did not understand why the change occurred. Several participants reported that they were sometimes unclear on changes being made to the program. Most participants who had been enrolled in the TPA plan said they remembered receiving a letter informing them of the change, but also said that the letter had no information about what the implications were for them. For example, one focus group participant said, "[They] didn't explain anything. They just said [the TPA] was ending the program and we are switching to someone else." Another participant shared, "I do remember something when it changed that freaked me out. They sent out a thing that said we were no longer covered, and then they sent another thing saying we were covered now by another thing. I don't remember exactly."

By 2018, the state was no longer actively purchasing advertising to promote the availability of HELP coverage though it continued to make Medicaid eligibility information available on its website. In response, Montana health care providers and provider association representatives said were they doing more outreach for HELP. This included training patient financial counselors to advise patients about websites with information on HELP (e.g., healthcare.gov or the Montana's Medicaid webpage), and directing patients to enrollment assisters at FQHCs. Local OPAs also have continued to perform some HELP outreach, according to interviewees and focus group participants.

<sup>&</sup>lt;sup>63</sup> "Montana Medicaid Expansion Changes for Members," MT DPHHS, no date (accessed December 7, 2018), <u>https://dphhs.mt.gov/Portals/85/hrd/documents/helpplan/MemberStufferAExistingMembers.pdf</u>.

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## **Termination of Premium Credit**

The other major design change included in the 2017 demonstration amendments was removing the premium credit from the demonstration. Under the credit, TPA enrollees received a premium credit equal to the amount of premiums they paid during a calendar quarter that could apply toward any copayments incurred over the quarter. Interviewees, including state officials and an outside observer, said the premium credit was difficult to administer. For one, it required continuous tracking by the TPA of how much each enrollee had paid in premiums and copayments incurred as well as ensuring the 5 percent cost-sharing limit per enrollee was maintained. One interviewee noted that the TPA had the technology capabilities to support this level of tracking but not the state. With the elimination of the TPA and with all premium-paying HELP enrollees transitioned to Montana Medicaid plan, the state asked to eliminate the credit. As a Montana state official said in a 2017 interview, the credit was eliminated because it was "amazingly administratively inefficient for not a lot of gain—difficult for clients to understand and for us to administer."

State officials interviewed expected some complaints from enrollees about the elimination of the premium credit, because enrollees now go "right into the copay" without the protection of the credit, but that did not occur, according to officials. This could be partly explained by a lack of copayments, as most providers were said to not collect copayments from HELP enrollees (see below). Consistent with that, focus group participants who had been enrolled in the TPA plan expressed confusion over what the premium credit was, and many also said they had not noticed that it had been removed from the plan.

## Montana's Budget Situation and HELP

State officials, health care providers, provider association representatives, a consumer advocate and an outside observer said general changes to Montana's Medicaid program and other state agencies had a more significant effect on HELP than terminating the TPA or eliminating the premium credit. In response to declining revenues, Montana reduced state government spending, including that for the DPHHS, beginning in July 2017.<sup>64</sup> Another wave of reductions occurred in November 2017.<sup>65</sup> As one state official interviewed in the 2018 site visit said, between 2017 and 2018, the "biggest impact [on the demonstration] has been our [general Medicaid] cuts to services," not eliminating the TPA or premium credit. Among the cuts made to Montana Medicaid, including HELP, was a 2.99 percent cut to provider reimbursements and reduced dental benefits. Though Medicaid, and, therefore, HELP, retained preventive dental services (e.g., cleanings, fillings, and x-rays), specialty dental services (e.g., dentures, crowns, and bridges) were eliminated. Of all the reductions and changes in the past 12 months, the dental cutbacks drew the most complaints from Medicaid and HELP enrollees, according to state officials.

Enrollees in the 2018 focus groups echoed this with many saying they had been affected by the recent cuts to Medicaid. In particular, many expressed concern over the reduction in covered dental services and new limits to vision services. Several said they had already incurred large out-of-pocket costs, such as one participant who shared, "There were a lot of things that they took away. They took away a lot of

<sup>&</sup>lt;sup>64</sup> S. 261, 65th Leg., Reg. Sess. (Mont. 2017).

<sup>&</sup>lt;sup>65</sup> "2017 November Special Session Fiscal Report," Legislative Fiscal Division, December 11, 2017, <u>https://leg.mt.gov/content/Publications/fiscal/interim/Dec-2017/LFC-Special-Session-Fiscal-Report.pdf</u>.

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dental stuff. I'm trying to pay for a root canal, and my poor dentist is getting \$25 a month because we're going in the hole. I had to take money out of my retirement fund from when I was working just to pay the bills." Other focus groups participants reported they had forgone needed care because of these cuts. For example, one participant said, "With dental, some procedures weren't covered, so I just didn't get those procedures. I couldn't afford them, like root canals and crowns."

With improving revenue projections as of the time of our 2018 site visit, Montana has begun backfilling some of the recent cutbacks, including reinstating provider rates and restoring specialty dental benefits effective October 1, 2018.<sup>66</sup>

## Summary of Implementation Findings

Findings from the qualitative component of the evaluation indicate that Montana was successful in implementing the core components of HELP in a timely and effective way. Interviewees comprising state officials, health care providers, provider associations, consumer advocates and non-state observers universally viewed HELP as a major Medicaid expansion with just a few glitches. Enrollees in our focus groups agreed. Interviewees stressed the importance of compromise among health care stakeholders to reach a consensus on the design of HELP, one that could pass muster in the Montana legislature.

Initial outreach for HELP was viewed as a success in large measure because of the collaboration relationship established between the state and Montana health care stakeholders. Reflecting this, enrollment in the demonstration ramped up quickly and reached more than 70,000 within the first year—a number the state had originally projected would take four years to achieve. As of September 2018, nearly 100,000 Montanans were enrolled in HELP. Interviewees representing all stakeholder categories and focus group enrollees described access to care provided under HELP as being good, which could partly reflect that Montana Medicaid is a fairly generous payer, ranking second among states for physician payment across all services in 2016.<sup>67</sup> . Several focus group participants commented how HELP has improved their health and wellbeing. In addition, stakeholders universally viewed HELP premiums as affordable, and enrollees in focus groups agreed that premiums were affordable and fair. However, HELP administrative data indicate that many enrollees do not pay their pay premiums, suggesting that premiums may be challenging for some.

At the same time, interviewees and HELP enrollees in focus groups identified some issues with the demonstration. A consistent problem reported in both 2017 and 2018 by focus group participants and health care providers was the length of time it took the state to make an eligibility determination for HELP and for enrollees to get their insurance identification card in the mail. These issues could reflect the fallout from the state hiring freeze and the closure of several OPAs due to Montana's budget problems. Focus group participants and external stakeholders in both 2017 and 2018 also said that the state provides only limited education about how HELP works, with focus group participants often mentioning that they wished they had more information on the program. Though Montana officials in

<sup>&</sup>lt;sup>66</sup> "Senate Bill 9 Base Budget Appropriations 2018 Biennium," Governor's Office of Budget and Program Planning, August 30, 2018, <u>http://budget.mt.gov/Portals/29/docs/SB%209%20Appropriation%20Restoration.pdf</u>.

<sup>&</sup>lt;sup>67</sup> "Medicaid-to-Medicare Fee Index," Kaiser Family Foundation, no date (accessed December 7, 2018), <u>https://www.kff.org/medicaid/state-indicator/medicaid-to-medicare-</u> feeindex/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D.

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our 2017 site visit maintained that enrollee education was sufficient, by 2018 the state had started working on developing strategies to improve enrollee education.

Importantly, the work presented here is descriptive and thus does not provide definitive evidence on the impacts of the demonstration, but the qualitative findings suggest that Montana has made headway on some major goals set out for HELP. Most prominently, interviewees across the board report that HELP extended Medicaid coverage and provided good access to care to nearly 100,000 additional individuals, which is about 10 percent of the Montana's total population.

## IV. Beneficiary Surveys

The purpose of the HELP beneficiary surveys is to enable the evaluation team to answer the following fundamental research questions:

- What are beneficiaries' experiences under HELP, including premiums and copays, and health care access and affordability?
- To what extent do beneficiaries understand how the HELP plan works, including premiums and copays, premium credits, and nonpayment premium consequences?
- How do experiences vary for HELP enrollees and disenrollees, and for key population subgroups (e.g., based on age, income, health status)?

To fully assess the impact of the program, SSS designed and implemented a comprehensive mixedmethods evaluation of HELP that included surveys of HELP beneficiaries who were nonexempt from the demonstration. A follow-up survey covering the period December 2017-October 2018 has been fielded, the findings from which will be presented in a follow-up report. This chapter presents findings from surveys of HELP current and former enrollees and their knowledge and experiences with the plan for the period January 2016 – November 2017.

## **Overview of the Survey Approach**

We conducted a mixed-mode (mail and web) survey of individuals who were enrolled in the Montana HELP program as of May 2017, and another mixed-mode (mail and web) survey of individuals who had been previously enrolled but had disenrolled from that program as of May 2017. Survey questions covered five major topic areas, also called domains. Substantive domains reflecting priority policy areas include: *beneficiary understanding, beneficiary experience, affordability, access to care, and satisfaction with HELP*. These topics for evaluation were identified to help assess beneficiary understanding and experience in HELP across both the enrollee and disenrollee versions of the survey.

We randomly sampled 2,180 enrollees and 2,187 disenrollees from the sample frame. These sample sizes aimed to yield 700 completed enrollee and 700 completed disenrollee surveys. We targeted 700 completed enrollee and disenrollee surveys as the number of completes we would need to detect differences between sub-groups within each respondent group, although we anticipated that disenrollees would be difficult to reach and/or be less likely to respond, and that this targeted response rate would be challenging to achieve. A total of 655 individuals (30.0%) of the enrollee cohort submitted an enrollee survey form. This response rate is comparable to that seen in other surveys of Medicaid enrollees.<sup>68</sup> For the disenrollee survey, only 178 individuals (8.1%) in the sample returned a disenrollee survey. This low response rate may be attributable to a combination of factors including disenrollees being difficult to locate; and disenrolled respondents' status changing back to being enrolled during survey field period, thereby excluding them from answering the disenrollee survey.

Weighting of the enrollee and disenrollee survey data produced estimates representative of their respective sampling frames. In particular, we compared respondents and non-respondents on available demographic factors of sex, race, age group, urban/rural residence, and Federal Poverty Level (FPL)

<sup>&</sup>lt;sup>68</sup> Barnett & Sommers, 2017; Carlson, DeVoe, & Wright, 2006.



category. For each survey, sample weights were developed to account for the probabilities of selection and to adjust for known ineligibility and nonresponse to reduce potential bias. All reported results are from analysis of weighted surveys. More information on survey methodology and design may be found in Appendix B.

## Survey Administration

We conducted a mixed-mode (mail and web) survey of individuals who were enrolled in the Montana HELP program as of May 2017, and another mixed-mode (mail and web) survey of individuals who had been previously enrolled but had disenrolled from that program as of May 2017.<sup>69</sup>

The survey field period began in late July 2017 with an initial survey packet mailed to enrollees and disenrollees, and continued for fourteen weeks. The survey packet included a cover letter notifying them of survey selection and explaining the purpose of the survey. Also included in the survey packet were an invitation with a URL to the web version of the survey, a printed survey questionnaire, and a stamped pre-addressed return envelope. The survey fieldwork continued with additional mailings and telephone follow-up by trained interviewers through late fall 2017. We concluded the field period in mid-November 2017 and accepted web and paper survey submissions through December 2017.

#### Survey Sample and Response Rates

The sample frames (i.e., the lists of individuals meeting the inclusion criteria, and thus eligible to be sampled) for the enrollee and the disenrollee survey were derived from the State of Montana HELP administrative database. At the time of sample frame creation, this database contained HELP program participation records for each month during January 2016 – May 2017. Any individual who participated in the HELP program at any time during that period was included in the database.

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We calculated response rates based on complete survey submissions received through November 19, 2017, where as long as the respondents answered at least one question in addition to the screening

<sup>&</sup>lt;sup>69</sup> Further details about the survey methodology may be found in Appendix B.

<sup>&</sup>lt;sup>70</sup> Barnett & Sommers, 2017; Carlson, DeVoe, & Wright, 2006.

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questions, we considered it a response, and included all answered questions in the analysis. Particularly in light of the low response rate, we saw no reason to discard any information that was provided. Response rates for the primary questions (those not subject to being skipped based on other answers) were generally 90%-95%.

Table IV.1A-H below presents the survey data elements that are specific to the enrollee and disenrollee surveys, as well as those that overlap across both surveys. Areas of overlap included the eligibility screening questions for the survey that asked about current enrollment in the program, demographic questions, and the domains on access to care, affordability of HELP, and satisfaction with HELP.

#### Table IV.1: Survey domains and questions by respondent group

#### A. About Your HELP Enrollment

	Enrollee Survey	Disenrollee Survey
Are you currently enrolled in the "Montana Health and Economic Livelihood Partnership Plan" (also called "HELP")?	$\checkmark$	$\checkmark$
How long have you been enrolled in HELP?	$\checkmark$	
Since you enrolled in HELP, was there ever a time you lost your coverage or were disenrolled from HELP?	$\checkmark$	
About how long were you disenrolled from HELP?	$\checkmark$	
Have you ever been enrolled in HELP?		$\checkmark$
Were you enrolled in HELP within the last 12 months?		$\checkmark$
How long ago did your HELP enrollment end?		$\checkmark$
Why did your HELP enrollment end? (I got an increase in my income and was no longer eligible for HELP; I had other health insurance available to me; I could not afford my monthly HELP premiums; I no longer wanted HELP coverage; I did not pay my premium within 90 days)		$\checkmark$
Would you try to re-enroll in HELP if you could?		$\checkmark$

#### B. Before you enrolled in HELP

	Enrollee Survey	Disenrollee Survey
In the 12 months before you enrolled in HELP, did you have any health insurance?	$\checkmark$	
How long did you have that health insurance?	$\checkmark$	
What type of health insurance did you have?	$\checkmark$	
In the 12 months before you enrolled in HELP, did you get any preventive care (such as a routine checkup, blood pressure check, flu shot, family planning services, prenatal services, cholesterol or cancer screening)?	$\checkmark$	



## C. About your HELP Plan

	Enrollee Survey	Disenrollee Survey
How well do you think you understand how your HELP plan works?	$\checkmark$	
When you enrolled in HELP, did you look for any information in written materials or on the Internet about the HELP plan?	$\checkmark$	
How helpful was the information about the HELP plan?	$\checkmark$	
When you enrolled in HELP, did you get information or help from a customer service representative?	$\checkmark$	
How helpful was the information you got?	$\checkmark$	
From the time you submitted your application until your HELP coverage started, how much time did it take?	$\checkmark$	

## D. Experiences after Leaving HELP

	Enrollee Survey	Disenrollee Survey
After you were no longer enrolled in HELP, was there any time you needed health care but did not get it because of cost?		$\checkmark$
After you were no longer enrolled in HELP, what types of health care were you unable to get because of cost?		$\checkmark$
After you were no longer enrolled in HELP, did you go to a doctor, nurse, or any other health professional or get prescription drugs?		$\checkmark$
After you were no longer enrolled in HELP, were any of your health care visits for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.		$\checkmark$
Do you have any health insurance coverage right now?		$\checkmark$
What type of health insurance do you have?		$\checkmark$
How long have you had your current health insurance?		$\checkmark$
After you were no longer enrolled in HELP, how long did it take you to get your current health insurance?		$\checkmark$



## E. <u>Premiums and Copayments</u>

	Enrollees	Disenrollees
How much is/was your monthly HELP premium?	$\checkmark$	$\checkmark$
How is/was that monthly premium paid, if at all?	$\checkmark$	$\checkmark$
Which of the following groups help/helped pay for monthly premium?	$\checkmark$	$\checkmark$
Would you say the amount of your monthly premium is/was: (more than I can afford, an amount that I can afford, less than I can afford, not sure/don't know)	$\checkmark$	$\checkmark$
In the last 6 months/while you were in help, how worried were you about not having enough money to pay your monthly premium?	$\checkmark$	$\checkmark$
What do you think will happen/would happen, if anything, if your monthly premium is not paid within 90 days?	$\checkmark$	$\checkmark$
Please tell us whether each of the following are/were a part of your HELP Plan: (payment of any unpaid premiums within 90 days will allow me to keep my HELP coverage; payment of any unpaid premiums after 90 days will allow me to re-enroll in HELP within 12 months of my HELP plan start date; any unpaid premium balance may be collected from my future state income tax refunds)	$\checkmark$	✓
In the last 6 months/while you were in HELP, have you paid any copays?	$\checkmark$	$\checkmark$
In the last 6 months/while you were in HELP, would you say the amount you were required to pay for copays was: (more than I can afford, an amount that I can afford, less than I can afford, not sure/don't know)	$\checkmark$	$\checkmark$
The last time you received a bill for a copay, how was that copay paid, if at all?	$\checkmark$	
How easy or hard was it to understand how HELP copays work?	$\checkmark$	$\checkmark$
For each of the following statements about HELP premiums, premium credits, and copays, please tell us whether each of the following are/were a part of your HELP Plan: (monthly premiums depend on my income; copays depend on which health care service(s) I use; premium credits go toward copays owed; copays must be paid out of my own pocket once my premium credit is used up; copays will not be collected at the time of my health care service(s); unpaid premiums may be collected against my future state income tax refunds)	V	√



## F. Access to Care

	Enrollees	Disenrollees
In the last 6 months, did you go to a doctor, nurse, or any other health professional or get prescription drugs?	$\checkmark$	
In the last 6 months, were any of your health care visits for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.	$\checkmark$	
In the last 6 months, was there any time you needed health care but did not get it because of cost?	$\checkmark$	
In the last 6 months, what types of health care were you unable to get because of cost? (a visit to the doctor when I was sick; preventive care; a follow up visit to get tests or care recommended by my doctor; dental care; vision (eye) care; prescription drugs; emergency room care)	$\checkmark$	
As part of your HELP plan, is/was there an \$8 copay for going to the emergency room for a non-emergency condition?	$\checkmark$	$\checkmark$
In the last 6 months/while you were in HELP, was there a time you thought about going to the emergency room when you needed care?	$\checkmark$	$\checkmark$
In the last 6 months/while you were in HELP, when you needed care did you go to the emergency room?	$\checkmark$	$\checkmark$
What was the main reason you did not go to the emergency room for care?	$\checkmark$	$\checkmark$

## G. Satisfaction with HELP

	Enrollees	Disenrollees
Thinking about your overall experience with HELP, would you say you are: (very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, very dissatisfied, not sure/don't know)	$\checkmark$	$\checkmark$
Please tell us how satisfied or dissatisfied are you with each HELP item below: (enrollment process; length of time for coverage to begin; ability to see my doctor; choice of doctors; coverage of health care services that I need; how copays work; cost of premiums; paying the same amount each month for premiums)	$\checkmark$	$\checkmark$
For each of the following items, how does your current HELP plan compare to your previous health insurance plan? (ability to afford my plan; coverage of health care services that I need; ability to see my doctor; ability to get health care services that I need)	$\checkmark$	



#### H. About You

	Enrollees	Disenrollees
Would you say that in general your health is: (excellent, very good, good, fair, poor)	$\checkmark$	$\checkmark$
What is the highest grade or level of school that you have completed?	$\checkmark$	$\checkmark$
What best describes your employment status?	$\checkmark$	$\checkmark$
What is your age?	$\checkmark$	$\checkmark$
Are you male or female?	$\checkmark$	$\checkmark$
Are you of Hispanic, Latino/a, or Spanish origin?	$\checkmark$	$\checkmark$
What is your race?	$\checkmark$	$\checkmark$
Please circle the number of people in your family (including yourself) that live in your household. Mark only one answer that best describes your family's total income over the last year before taxes and other deductions. Your best estimate is fine.	$\checkmark$	$\checkmark$
Did someone help you complete this survey?	$\checkmark$	$\checkmark$
How did that person help you?	$\checkmark$	$\checkmark$

## Sample Characteristics

Table IV.2 shows self-reported demographic features of the 655 enrollee and 178 disenrollee survey respondents. Of the HELP enrollees, about 57 percent were female. The enrollee respondents were roughly evenly spread among age groups. Over one-third of enrollees were employed full-time, and close to 40 percent had at least some high school or had graduated from high school. The vast majority of enrollee respondents were white. With respect to self-reported health status, just over half of enrollee respondents reported being in excellent or very good health.

In the case of the HELP disenrollees, 62 percent were female. Over 40 percent of the disenrollees were between 25 and 34 years of age and approximately the same proportion were employed full-time, while one-third only had a high school education (or less). Ninety-three percent of disenrollees were white. A little over one-half of disenrollees reported being in excellent or very good health.



	Enrollees (N=655)			nrollees =178)
	N	Wgtd.	N	Wgtd.
		Percent†		Percent†
Sex				
Female	387	57% (2.17)	108	62% (3.71
Age				
18-24	56	13% (1.78)	33	19% (3.06
25-34	185	35% (2.10)	73	42% (3.82
35-44	131	19% (1.59)	27	19% (3.25
45-54	105	13% (1.23)	15	8% (2.13)
55 and older	172	20% (1.50)	27	10% (1.86
Employment Status				
Employed, full-time	238	38% (2.12)	73	43% (3.84
Employed, part-time	176	27% (1.87)	24	13% (2.60
Self-employed	121	17% (1.53)	23	12% (2.45
Student or Homemaker*	38	6% (1.07)	18	11% (2.52
Unable to work for health reasons	28	4% (0.76)	20	10% (2.34
Unemployed	45	7% (1.08)	17	9% (2.10)
Highest Level of Education Completed				
8th grade or less	12	2% (0.47)	-	-
Some high school/high school graduate or GED	259	39% (2.11)	61	33% (3.60
Some college or 2 year degree	242	36% (2.03)	62	36% (3.73
4 year college graduate	86	14% (1.56)	34	19% (3.06
More than 4 year college degree	47	8% (1.15)	19	11% (2.42
Self-Reported Health Status				
Excellent	87	14% (1.47)	32	18% (2.89
Very Good	247	39% (2.09)	60	34% (3.64
Good	225	33% (2.06)	55	31% (3.59
Fair	71	10% (1.24)	23	13% (2.61
Poor	17	3% (0.66)	6	4% (1.57)
Race				
White	631	96% (1.00)	164	93% (1.95
Other	10	2% (0.74)	10	5% (1.71)

#### Table IV.2: Self-reported characteristics of enrollees and disenrollees

**\*Note**: Employment status categories "Student" and "Homemaker" have been combined into one category. Standard error in parentheses.



## **Survey Data Analysis**

Based on the enrollee and disenrollee data files, the evaluation team developed tabular analyses to assess overall awareness and understanding of the HELP program among enrollees and disenrollees. We also present their responses to questions about their experiences accessing health care while in HELP and after leaving HELP. Weighting of the enrollee and disenrollee survey data produced estimates representative of their respective sampling frames. Analyses consisted of univariate and bivariate statistics on key evaluation questions, complemented by statistical tests where comparison of subgroups were relevant and appropriate.

As sample sizes permitted, we conducted analyses by key demographic features. In addition to sex, subgroups consisted of age, employment status, educational background, urban/rural residence and federal poverty level (FPL). Given the small number of respondents, particularly among disenrollees, we had to consolidate some of these demographic categories to allow subgroup sample sizes large enough to run statistical significance tests. Accordingly, these demographic variables were consolidated to two levels each:

- 1) Sex (Male; or Female)
- 2) Age Group (19-44 years; or 45+ years)
- Educational Attainment (Some high school/high school diploma; or some college/college graduate)
- 4) Employment status (Any employment; or No employment)
- 5) Residence (Rural; or Urban)
- 6) Federal poverty level (>50-100%; or >100-133%)

Z scores and other tests of significance, as appropriate, were used to determine whether enrollee and disenrollee subgroups differed statistically with respect to the key variables that measure understanding, access, affordability, and satisfaction with the HELP program. Statistical significance was defined as any comparison with p<0.05.

In addition, we also looked at key measures within the previously-outlined domains for different subgroups including by age, sex, educational attainment, FPL, and employment status. Because of the small sample size associated with the disenrollee sample, particularly when stratified by demographic subgroups, estimates may appear to be different but are not statistically significantly different due to large standard errors.

## **Survey Findings**

We present key survey findings below for respondent characteristics and for each of the following survey domains; understanding/awareness of the HELP program; access to care while in HELP and after leaving HELP; affordability of HELP; and satisfaction with the HELP program. We report key findings separately by enrollees and disenrollees. Because of the differences between enrollees and disenrollees, the study is not designed for cross-comparisons between the two groups. However, the analysis looks at similar issues for the two groups including each group's knowledge of and satisfaction with the program, as well as how it affected their access to health care.

## Enrollee Experiences with and Perception of HELP

Survey questions in this domain examine how well beneficiaries understand their premiums and copays, premium credits, and the consequences of premium non-payment.

## Understanding of the HELP Program

When asked about their overall understanding of the HELP program, the majority of enrollee respondents said they only understood the program 'somewhat well' (Figure IV.1). This is consistent with enrollee responses to questions about their understanding of the specific features of the HELP program.



## Figure IV.1: Overall understanding of HELP

Source: Survey of HELP enrollees covered between January 2016 – May 2017; N=655 Note: Weighted averages presented in chart.

A smaller proportion of females reported they only understood HELP somewhat or not at all relative to males (Figure IV.2). Members of the 18-44 age group were significantly more likely to report that they only understood HELP somewhat or not at all, compared to older individuals. Respondents did not differ significantly on other demographic characteristics when reporting that they understood the HELP



program somewhat/not at all well. Given the minimal variation we note for questions about enrollee "understanding of HELP" when stratifying by subgroups, for the rest of the questions we will present them for enrollees overall, and not by demographic subgroups.





**Source**: Survey of HELP enrollees covered between January 2016 – May 2017; **N**=655 **Note**: Standard errors in parentheses; \* indicates statistically significant differences at the p <0.05 level.

Figure IV.3 displays respondents' understanding of HELP premium and copay policies. The HELP plan features that enrollees were most familiar with included monthly premiums being a function of income, and copays depending on the particular health care services that are used.

However, far fewer respondents demonstrated awareness of the other features of HELP such as being able to use premium credits towards copays owed, or that copays must be paid out of pocket once premium credits are used up or that copays would not be collected at the time of health care services.





## Figure IV.3: Understanding of HELP premiums and copay features

Figure IV.4 examines whether enrollees understood the specificities about the monthly premium payment features of the HELP plan. This question was asked only of enrollees who indicated that they knew their HELP coverage would end as a result of non-payment of premium within 90 days.

Of those who indicated that they knew their coverage would end as a result of non-payment of premium within 90 days, less than half the respondents were aware that paying unpaid premiums within 90 days would enable them to retain HELP coverage, while only about one quarter of enrollees were aware that paying unpaid premiums after 90 days would allow them to re-enroll within 12 months of their HELP plan start date.

**Source:** Survey of HELP enrollees covered between January 2016 – May 2017 **N**=655 **Note**: Standard errors in parentheses; \* indicates statistically significant differences at the p <0.05 level.



## Figure IV.4: Understanding of the unpaid premium payment policies and their linkage to HELP coverage



**Source:** Survey of HELP enrollees covered between January 2016 – May 2017: N=471 Note: Weighted averages presented in chart.

In total, responses to questions about the details of the program indicate that enrollees are either unaware of or do not fully understand the nuances of the program.

# Understanding of HELP Premiums and Copays by Self-Reported Overall Understanding of HELP

As noted previously, about 90 percent of enrollees claimed to understand HELP "Very well" or "Somewhat", with the great majority claiming the latter category. We were interested in examining whether this self-assessment represents true understanding, or perhaps, instead, some level of false confidence. Several survey questions asked the enrollees about some of the important details of the HELP program.

Enrollees' functional understanding of premium payment policies relative to self-reported understanding of HELP is displayed in Figure IV.5. In general, self-reported understanding of HELP was positively correlated with functional understanding, although the level of demonstrated understanding differed considerably across topic areas. For example, 76 percent of those who reported understanding "Very well" knew that non-payment of HELP premiums could lead to disenrollment from HELP. Conversely, only 12 percent of those who reported understanding "Very well" knew that their premium credits go towards copays.



## Figure IV.5: Functional Understanding of Premium Payment Policies Relative to Self-Reported Understanding of HELP



**Source:** Survey of HELP enrollees covered between January 2016 – May 2017; **N**=655 **Note**: Standard errors in parentheses; \* indicates statistically significant differences at the p <0.05 level.

## Information-Seeking about HELP

As part of the implementation of HELP, the state of Montana was required to perform an outreach and education campaign to provide information about the program to newly eligible beneficiaries. As mentioned in section I – a variety of strategies were used by the state, as well as community organizations and providers to publicize HELP. These included advertising campaigns, as well welcome packets and brochures provided by the TPA to new enrollees. In this section, we explore whether respondents sought to avail themselves of the informational materials and services.

Respondents were asked about their information-seeking behavior and whether or not they searched for information in written materials or on the internet about the HELP plan, or if they tried to get information or help from a customer service representative. As the information presented above in Figures IV.4 and IV.5 show, it appears that functional understanding of HELP was incomplete, at best, among enrollees. This section examines whether enrollees sought assistance in understanding HELP through either internet searches or telephone customer support.

Overall, most enrollees sought some information about the HELP program. About 34 percent of individuals sought no information about HELP, while about one quarter sought information from both



customer service as well as written materials/internet (Figure IV.6). The design of the survey did not include specific questions about the content of the information requests.



Figure IV.6: Information-seeking about HELP

A larger proportion of respondents answered reported information/help received from a customer service representative was very helpful (61 percent) compared to 35 percent who said they found the written materials/internet information about HELP to be very helpful (Figure IV.7). We also analyzed information-seeking behavior by demographic subgroups and found no significant differences.





**Source**: Survey of HELP enrollees covered between January 2016 – May 2017; N=318; Note: Weighted averages presented in chart.

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**Source**: Survey of HELP enrollees covered between January 2016 – May 2017; **N**=655. **Note**: Weighted averages presented in chart

#### Key Takeaways

In general, while a large proportion (70 percent) of enrollee respondents reported that they understood "somewhat well" how HELP works overall, their responses to questions on individual program features including premium credits being used towards copays, demonstrated an incomplete understanding of program specifics. In addition, a greater proportion of respondents (43 percent) reported being aware of features such as paying unpaid premiums within 90 days would help them retain HELP coverage, while only 5 percent were aware of the \$8 copay for visiting the emergency room for a non-emergent condition. However, we noted that while two-thirds of enrollees had sought information, either via the internet or telephone customer support, about HELP, it appears that enrollees' understanding of the program's nuances was not necessarily improved despite having accessed additional information.

## Cost as a Barrier to Accessing Care

In this section, we examined whether the premium and copayments features of HELP posed a barrier to access to care for enrollees. We also examined whether respondents understood that non-emergent use of the ER would lead to a copayment.

Eighty-five percent of enrollees said they did not face any cost barriers to accessing care. Only 14 percent mentioned not being able to get health care due to cost considerations in the past 6 months. Of those reporting any barriers to access due to cost, 59 percent reported problems accessing dental care and 45 percent reported problems accessing vision care. As shown in Figure IV.8 below, about half of enrollees reported having had health insurance prior to enrolling in HELP.





**Source:** Survey of HELP enrollees covered between January 2016 – May 2017. **N**=655. Weighted averages shown in chart.

Of enrollees who had health insurance prior to HELP, 77 percent of the respondents had health insurance for all 12 months prior to enrollment in HELP, and 61 percent had received some preventive care prior to enrolling in HELP. In addition, we examined whether cost considerations had acted as a barrier to accessing specific types of care after enrollment in HELP, including visits to health professionals, getting a prescription, and preventive care to name a few. We found that seventy one

percent of enrollees reported having gone to a health professional or getting a prescription in past six months. Only 14 percent reported not being able to get health care due to cost considerations in the past six months. These respondents went on to answer the questions about which types of care they were unable to access, and reported that the greatest challenges were accessing dental (59 percent) and/or vision care (45%) detailed findings are presented in the tables in Appendix D.

## Cost as a Barrier to Access by Demographic Subgroups

Among those who responded that they could not access needed health care in the last six months due to cost considerations, none of the differences between demographic groups approached statistical significance. Figure IV.9 shows the percentages of enrollees, by demographic groups, who reported that they did not get some needed care due to concerns over cost. Since there is little variation across subgroups, the remainder of the findings will only be reported for enrollees overall and not by subgroup.



Figure IV.9: Cost as a barrier to accessing needed care by demographic subgroups

**Source**: Survey of HELP enrollees covered between January 2016 – May 2017; **N**=655. **Note**: Standard errors in parentheses; No statistically significant differences found between demographic subgroups; Weighted averages shown in chart.

## Key Takeaways

Among HELP enrollees, cost does not appear to be a barrier to accessing care, as only 14 percent of enrollee respondents mentioned not being able to get health care due to cost considerations in the past 6 months. This is consistent with other nationwide studies that show that Medicaid enrollees in general report low rates of being unable to access medical, specialty, dental/vision care, or prescription drugs due to cost, particularly compared to uninsured adults.<sup>71</sup> Dental and vision care were more problematic,

<sup>&</sup>lt;sup>71</sup> Medicaid Access in Brief: Adults' Experiences in Obtaining Medical Care



with a large proportion of the enrollee respondents reporting being unable to access dental care (59 percent) and/or vision care (45 percent).

### Affordability of the HELP Program

This domain examines whether respondents found their monthly premiums and any copayments for services to be affordable, and whether they had concerns about not being able to make their premium payments. Respondents were queried on their monthly premium payment amounts, how affordable they found their premium, how worried they were about making their premium payments, and if they self-paid their premiums or if someone other than the respondent paid their premium for them.

Most enrollee respondents had a monthly premium payment between \$10 and \$39. Only six percent reported having monthly premiums between \$40 and \$49, while about seven percent reported monthly premium amounts in excess of \$50 (Figure IV.10). About 15 percent thought the premiums were more than they could afford. Fifty percent reported that they were "not at all" worried about being able to make their monthly premium payments.



#### Figure IV.10: Monthly premium amounts

Source: Survey of HELP enrollees covered between January 2016 – May 2017; N=655. Note: Weighted averages shown in chart

Furthermore, as Figure IV.11 depicts, a majority of 76 percent felt that the premiums were an amount of they could afford. About 15 percent of enrollees thought the premiums were more than they could afford, while three percent of enrollees considered their premiums to be less than they could otherwise afford.







Source: Survey of HELP enrollees covered between January 2016 – May 2017; N=655.

Note: Weighted averages shown in chart

In order to understand how premium affordability may vary by demographic subgroups, we also looked into the proportion of enrollee respondents who had concerns about HELP premiums being more than they could afford, by demographic subgroup. Differences in responses by demographic subgroups were not statistically significant.

In an attempt to understand to what extent beneficiaries could afford the premiums on their own or required help paying them, a follow-up question asked enrollees who paid their premiums for them – whether they were self-paid or paid by someone else. While, 83 percent of enrollees reported paying for their premiums themselves, three percent reported that someone else paid the full amount of their premium, and eight percent said their premium had not been paid (Figure IV.12).



Figure IV.12: Who pays premium?

Source: Survey of HELP enrollees covered between January 2016 – May 2017; N=655 Note: Weighted averages shown in chart

We also examined whether or not respondents were worried about paying their monthly premiums. Half of the surveyed enrollees reported some degree of concern about their ability to make the monthly premiums (Figure IV.13).

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Figure IV.13: Concerns about affordability of premium

Source: Survey of HELP enrollees covered between January 2016 – May 2017; N=655 Note: Weighted averages shown in chart

Only about 24 percent of enrollees reported paying copays in the last six months, and of those who did pay the copay, 69 percent said it was an amount they could afford. About 25 percent said it was more than they could afford (see Appendix D tables). As was noted in the context of the affordability of premiums, there does not appear to be any demographic variation in the level of anxiety/concern/worry in making the monthly premium payments.

## Key Takeaways

The majority (79 percent) of enrollee respondents considered their monthly premiums to be affordable, and half of the enrollee respondents reported that they were not at all worried about being able to make their monthly premiums. When asked to compare HELP to their prior health insurance (for those with prior coverage), 63 percent of enrollee respondents found it the same or better than their previous coverage with respect to their ability to afford their plan.

## Satisfaction with HELP

Finally, to assess overall enrollee perception about HELP, beneficiaries were asked how satisfied they were with the HELP program overall. Respondents were asked to rate both their overall satisfaction with the HELP program, as well as their satisfaction with key features of the program. Close to half the enrollee respondents reported being very satisfied with the program, while about one-quarter were somewhat satisfied (Figure IV.14). A large proportion (77 percent) of enrollees also felt that the affordability of HELP was as good as, or better than, whatever insurance they previously held.





#### Figure IV.14: Overall satisfaction with HELP

Source: Survey of HELP enrollees covered between January 2016 – May 2017; N=655 Note: Weighted averages shown in chart

When respondents were asked about their satisfaction with particular features of the HELP program, more than half reported being somewhat to very satisfied with these various plan elements (Figure IV.15). More than 80 percent of respondents were somewhat to very satisfied with paying the same amount each month for premiums, the length of time it took for their coverage to begin, the ability to see their doctors, the enrollment process and coverage of health care services they needed. Around three quarters of enrollee respondents were somewhat to very satisfied with their choice of doctors as well as the cost of their premiums, while over 60 percent were satisfied with how copays work.





#### Figure IV.15: Satisfaction with individual features of HELP

**Source**: Survey of HELP enrollees covered between January 2016 – May 2017; N=529; Note: Weighted averages shown in chart

In total, enrollee respondents felt that HELP was as good as, or better than, whatever insurance they previously held (Table IV.3). In particular, most enrollee respondents appeared to feel that HELP coverage was the same or better than their coverage under their prior insurance, particularly when it came to their ability to afford the HELP plan coverage.

Health Insurance Features	Better	Same	Worse	Not sure
Ability to afford plan (N=345)	63%	14%	13%	5%
Coverage of needed health care services (N=345) Ability to see my doctor	35%	38%	10%	12%
(N=322)	25%	54%	7%	9%
Ability to get needed health care services (N=323)	31%	46%	10%	8%

Source: Survey of HELP enrollees covered between January 2016 – May 2017; Note: Weighted averages shown in table

#### Key Takeaways

A majority of enrollees were somewhat to very satisfied with individual features of HELP including a consistent monthly premium payment amount and the ability to see their doctors as well as choice of doctors, and coverage of healthcare services needed. About 60 percent of enrollees were somewhat to very satisfied with how copays work in HELP. In general, although there were several features of HELP that many enrollees did not fully understand, they expressed satisfaction with the program and believe it improved their access to care, and ability to see their doctors as well as giving them their choice of doctors.

## Disenrollees Experiences with and Perception of HELP

Among the 178 disenrollees responding, we looked to see if there were any patterns in their disenrollment and their perceptions of the HELP program and experiences after leaving HELP. A majority of disenrollees became disenrolled through improvement in their circumstances, hereby referred to in this report as "voluntary disenrollees." A smaller but still sizeable proportion indicated that they were disenrolled due to being unable to afford the premium or because they did not pay the premium. The third category of disenrollees includes individuals who did not select any of the offered reasons for their loss of coverage. Since the response offerings for this group may not have included their specific reason for disenrollment, we assumed their loss of coverage was not related to increased income or availability of other health insurance.

We found it important to examine three groups among disenrollees according to the general reason individuals disenrolled. We expected that responses to many of the questions on the disenrollee survey would differ according to these two sets of circumstances (voluntary vs. involuntary disenrollment). For example, we might expect the first subgroup to have obtained other insurance coverage and therefore to have an easier time getting care after disenrollment than those in the involuntarily enrolled subgroup. As shown in Figure IV.16 below, the three groups of disenrollees were:

- There were 96 (54 percent) disenvollee respondents who reported no longer needing or qualifying for subsidized health coverage either due to increased income or coverage availability from other sources; we refer to these individuals as "voluntary disenvollees";
- There were 48 (27 percent) disenrollee respondents who cited inability or failure to pay premiums as a reason for disenrollment; we refer to these individuals as "involuntary disenrollees"; and finally,
- 3) There were 34 (19 percent) disenrollee respondents who did not provide a reason for disenrollment in their response to the survey; we refer to these individuals as "unspecified disenrollees".

Among respondents who said they did not need/want HELP coverage anymore, 91 percent had some form of other insurance coverage. Among those who said they were disenrolled for non-payment, 76 percent indicated they had some other form of coverage. Of this 76 percent, over four-fifths said they now were covered by standard Medicaid. In contrast, those who said they did not need/want HELP coverage but currently have other insurance coverage, only one quarter were enrolled in standard Medicaid after disenrollment from HELP.



## Figure IV.16: Disenrollee Groups by Disenrollment Reasons

Because of the small size of the response for disenrollees, we conducted regression analyses using SAS<sup>®</sup> Proc Surveyreg to test for differences between voluntary and involuntary disenrollees, and voluntary and *unspecified* disenrollees, on select variables of interest across the four key survey domains. Results are presented in Tables IV.4-IV.7 placed under each key survey domain below.

## Understanding/Awareness of the HELP Program

As with enrollees, we were interested in examining how well disenrollees had understood the specific features of the HELP program during the time that they were enrolled. Responses were solicited across three dimensions – whether the feature was *part of the HELP Plan, not part of the HELP plan,* and *not sure*. Overall, as depicted in Figure IV.17, while 67 percent of disenrollees knew that monthly premiums depend on income, the proportions of disenrollees who knew that the other features were also part of the HELP plan were much smaller, ranging from 15 percent who knew that copays will not be collected at the time of health care services, to 42 percent who knew that copays depend on which health care services used.





## Figure IV.17: Understanding of HELP premium and copayment features

Source: Survey of HELP disenrollees who were disenrolled between January 2016-May 2017; N=118 Note: Weighted averages shown in chart

The pattern for the disenrollees held even when disaggregated by type of disenrollment (Table IV.4). All three types of disenrollees were more likely to indicate that they thought monthly premiums depended on income, and copays depended on health care services used. However, fewer proportions of all three disenrollee types exhibited understanding of the other features specific to HELP. No significant differences were seen across these types of disenrollees in their understanding of the program features.



Understanding of HELP	Voluntary	Involuntary	Unspecified
Pay unpaid premiums w/in 90 days – keep HELP coverage	31% (6.08)	34% (8.14)	29% (9.38)
Pay unpaid premiums after 90 days, re-enroll w/in 12 mos. of HELP plan start date	16% (4.76)	19% (6.37)	23% (9.03)
Unpaid premium balance may be collected from future state income tax refunds	39% (6.46)	40% (8.57)	26% (9.20)
Monthly premiums depend on income	69% (4.82)	66% (7.07)	62% (8.61)
Copays depend on health care services used	43% (5.19)	40% (7.32)	50% (8.90)
Premium credits go towards copays owed	11% (3.17)	13% (5.18)	5% (3.71)
Copays paid OOP once premium credits used up	29% (4.74)	27% (6.73)	30% (8.22)
Copays not collected at time of health care service	21% (4.30)	9% (4.45)	16% (6.52)

Table IV.4: Differences between disenrollee groups in understan	ding of HELP
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Source: Survey of HELP disenrollees who were disenrolled between January 2016 – May 2017; N=178

#### Key Takeaways

Similar to enrollee respondents, disenrollee respondents also demonstrated an incomplete understanding of individual program features. However, the understanding of individual program features did not appear to differ significantly by type of disenrollment. The features understood by a large proportion of disenrollees both overall and by type of disenrollment appear to be monthly premiums being a function of income, and copays depending on health care services used.

## Cost as a Barrier to Accessing Care

In contrast to the enrollee analysis, for disenrollees we examined whether they reported any barriers to accessing health care due to cost concerns after being disenrolled from HELP. We examine this for disenrollees stratified by type of disenrollment.

Seventy five percent of disenrollees reported no barriers to accessing care due to cost concerns after their disenrollment from HELP. As seen in Figure IV.18, by disenrollee group, voluntary disenrollees reported fewer barriers to accessing care due to cost concerns after being disenrolled from HELP than involuntary and unknown reason disenrollees.




Figure IV.18: Unable to get health care due to cost, by type of disenrollment

**Source**: Survey of HELP disenrollees who were disenrolled between January 2016 – May 2017; N=178 Note: Weighted averages shown in chart.

In addition to looking at the inability to access care due to cost considerations for disenrollees overall, we also stratified disenrollees by disenrollment type and examined specific elements of access to care that they faced challenges with due to cost considerations (Table IV.5). Involuntary and unspecified disenrollees were significantly more likely to be unable to get a visit to the doctor, or access prescription drugs, and ER care. Unspecified disenrollees were more likely to also be unable to access ER care compared to voluntary disenrollees.

Access to care	Voluntary	Involuntary	Unspecified
Unable to get health care due to cost	13% (3.50)	28% (6.78)*	36% (8.83)*
Unable to get visit to doctor	21% (13.05)	74% (11.81)*	78% (13.81)*
Unable to get preventive care	38% (14.88)	40% (14.23)	72% (14.26)
Unable to get follow up visit/tests	42% (14.83)	62% (13.40)	79% (13.65)*
Unable to get dental care	60% (14.72)	76% (12.69)	61% (15.75)
Unable to get vision care	40% (15.09)	40% (13.85)	61% (15.75)
Unable to get Rx	17% (9.95)	70% (13.05)*	68% (15.48)*
Unable to get ER care	0%	50% (14.42)*	48% (16.20)*

Note: \*Indicates differences that were significant from voluntary disenrolled at p<0.05 level. Standard error in parentheses.

# Key Takeaways

In general cost did not appear to be a barrier to accessing care for disenrollees after leaving HELP. By type of disenrollment, involuntary and unspecified disenrollees were more likely to report that they faced barriers to accessing care due to cost. When there were cost barriers, this pattern held, with involuntary and unspecified disenrollees being more likely to report barriers to accessing specific types of care compared to voluntary disenrollees.

# Affordability of the HELP Program

Because affordability or premiums and copayments or the lack thereof might be a factor in respondents no longer being enrolled in HELP, we examined the affordability of HELP overall as well as stratified by type of disenrollment.

We note that only about 10 percent of disenrollee respondents indicated that they paid a premium of over \$50 monthly. A little less than one quarter of respondents said their monthly premium was between \$20-\$29, and a little over one-fifth of the respondents were unsure about or did not know their premium payment amount (Figure IV.19).



#### Figure IV.19: Premium amounts for disenrollees as a whole

Source: Survey of HELP disenrollees who were disenrolled between January 2016 – May 2017; N=178 Note: Weighted averages shown in chart.

Figure IV.20 shows the distribution of premium amounts by type of disenrollment. Involuntary disenrollees were more likely to have premiums between \$20 and \$29 or greater than \$50 compared to other disenrollees.





Figure IV.20: Premium amounts, by type of disenrollment

Source: Survey of HELP disenrollees who were disenrolled between January 2016 – May 2017; N=178 Note: Weighted averages shown in chart.

We then examined what disenrollees perceived about premiums being more than they could afford, broken out by type of disenrollment, because we were interested in seeing whether the type of disenrollment was related to perceptions of affordability. A larger proportion of involuntary disenrollees reported finding their premiums to be more than they could afford, when compared to voluntary or unknown disenrollees (Figure IV.21).





Figure IV.21: Premium affordability, by type of disenrollment

Source: Survey of HELP disenrollees who were disenrolled between January 2016 – May 2017; N=52 Note: Weighted averages shown in chart.

We also looked into disenrollees' concerns about their premium payments by type of disenrollment, to see if there was a larger proportion of involuntary disenrollees who reported being worried about making their payments (Figure IV.22). Involuntary disenrollees were also more likely to report being somewhat, very or extremely worried about their premiums compared to voluntary or unknown disenrollees.



Figure IV.22: Worries about making premiums, by type of disenrollment

**Source:** Survey of HELP disenrollees who were disenrolled between January 2016 – May 2017; N=178; Weighted averages shown in chart.

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In addition, we examined differences between disenrollee groups in their perceptions of the affordability of HELP premiums and copays (Table IV.6).

Affordability of HELP	Voluntary	Involuntary	Unspecified
Paid any copays	24% (4.47)	33% (7.03)	48% (8.91)*
Affordability of copays (Copays more than I can afford)	21% (8.65)	47% (13.03)	12% (8.61)
Affordability of monthly premium (Premiums more than I can afford)	8% (2.86)	80% (5.82)*	18% (6.93)
Very/Extremely worried about monthly premium	5% (2.33)	50% (7.45)*	12% (5.93)

### Table IV.6: Differences between disenrollee groups in affordability of HELP

**Source:** Survey of HELP disenrollees disenrolled between January 2016-May 2017; **N**=178; **Note:** \*Indicates differences that were significant from voluntary disenrolled at p<0.05 level. Standard error in parentheses.

#### Key Takeaways

About half of disenrollee respondents considered premium payments to be affordable. Involuntary disenrollees were more likely than voluntary or unknown reason disenrollees to respond that they were extremely worried about their premiums, while those disenrolled for unspecified reasons were more likely than voluntary disenrollees to have paid any copayments.

# Satisfaction with the HELP Program

We examined disenrollees satisfaction with the HELP program overall, as well as with specific program features, for all disenrollees as well as stratified by disenrollee groups based on type of disenrollment. For disenrollee respondents as a whole, we found that a little over a quarter reported being very satisfied with the program, and about the same proportion reported being neither satisfied nor dissatisfied, while 22 percent reported being somewhat satisfied (Figure IV.23).





### Figure IV.23: Overall satisfaction with HELP

Source: Survey of HELP disenrollees who were disenrolled between January 2016 – May 2017; N=178 Note: Weighted averages shown in chart.

When asked about their overall level of satisfaction with the HELP program, those disenrolled for unspecified reasons reported the most satisfaction, while involuntary disenrollees appeared to be the least satisfied (Figure IV.24).





Source: Survey of HELP disenrollees who were disenrolled between January 2016 – May 2017; N=178 Note: Weighted averages shown in chart.

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After examining overall satisfaction for disenrollees as a whole and by disenrollment type, we also stratified disenrollees by type of disenrollment and examined their satisfaction with specific elements of HELP. Consistent with how the different disenrollee types responded to questions about their overall satisfaction with the different elements of HELP – in general those disenrolled for unknown reasons were the most satisfied with specific HELP features, followed by voluntary disenrollees, while the involuntary disenrollees reported the least satisfaction (Table IV.7). The proportion of respondents disenrolled for unspecified reasons who reported being somewhat to very satisfied overall with HELP was significantly higher than voluntary disenrollees, and similarly the proportion of involuntary disenrollees. The proportion of involuntary disenrollees who reported being somewhat to very satisfied with paying the same amount every month for premiums as well as the cost of premiums was significantly lower than voluntary disenrollees.

Overall Satisfaction with HELP	Voluntary	Involuntary	Unspecified
Somewhat to very satisfied	50% (5.24)	27% (6.51)*	72% (7.98)*
Satisfaction with specific HELP features (Somewhat to very satisfied)			
How copays work	48% (6.67)	31% (8.56)	70% (8.82)
Paying same amount each month for premiums	77% (5.67)	29% (8.60)*	71% (9.28)
Length of time for coverage to begin	68% (6.25)	47% (9.41)	72% (9.10)
Cost of premiums	67% (6.35)	26% (8.53)*	71% (9.28)
Enrollment process	64% (6.51)	41% (9.31)	65% (9.53)
Ability to see my doctor	68% (6.33)	62% (9.17)	76% (8.55)
Choice of docs	60% (6.61)	52% (9.44)	67% (9.29)
Coverage of health care services respondent needed	63% (6.52)	54% (9.44)	69% (9.28)

#### Table IV.7: Differences between disenrollee groups in satisfaction with HELP

Source: Survey of HELP disenrollees who were disenrolled between January 2016 – May 2017; N=178 Note: Weighted averages shown in chart.

#### Key Takeaways

Based on their recall of the HELP program, close to 50 percent of disenrolled respondents reported being somewhat to very satisfied with the program when enrolled in it. Respondents who were disenrolled because they had obtained other insurance coverage (i.e. voluntarily disenrolled) reported higher satisfaction levels with HELP compared to those who were disenrolled for non-payment of premiums.



# Discussion

As part of the federal evaluation of HELP, the evaluation team conducted the first wave of surveys with enrolled and disenrolled HELP beneficiaries in the late summer/ fall of 2017. Respondents were surveyed about their understanding of and experiences with HELP, as well as on other domains including affordability of HELP, and for those disenrolled from the program, experiences after leaving HELP.

Although most HELP enrollees and disenrollees claim to understand the overall HELP program well or somewhat well, HELP enrollees' and disenrollees' understanding of the individual features of HELP appears to be incomplete. Two-thirds of enrollee respondents appear to have sought assistance with understanding HELP either via the internet or through contacting customer support. This was particularly true for some of the more complex features such as premium credits going towards copays owed, and that copays must be paid out of pocket once premium credits are used up, as well as the feature that unpaid premiums are collected against future state income tax refunds. This is consistent with findings from focus groups with HELP enrollees as well as interviews with HELP stakeholders. Stakeholders expressed concern that the concept of a premium credit is complex, and that the feature has been difficult for state officials to explain and for enrollees to understand.

A large majority of enrollee respondents found their monthly premiums to be affordable. In contrast, only a slight majority (55 percent) of disenrollees said that the amount of their monthly premium was affordable or less than they could afford. About twice the proportion of disenrollees thought their premium amounts were more than they could afford compared to enrollees. Few enrollee respondents had been subject to copays in the six months prior to answering the survey, but of those that reported paying copays, close to three-quarters indicated that the copays were affordable

In general, HELP enrollees and disenrollees did not appear to have experienced barriers to accessing care, particularly with respect to cost. Over two-thirds of enrollees reported visiting a health professional in the last six months or getting prescription drugs. Only 13 percent of enrollee respondents mentioned not being able to get health care due to cost considerations in the past six months, and for 45-59 percent of these individuals, it was dental and/or vision care that proved challenging to obtain. The majority of disenrollees reported that they did not have trouble accessing care after being disenrolled from HELP -- potentially because many of them were voluntarily disenrolled and obtained other insurance coverage post-disenrollment from HELP.

Satisfaction with the HELP program was high among current enrollees, but somewhat less so among those disenrolled from the program. A majority of enrollees were somewhat to very satisfied with individual features of HELP including monthly premiums, the ability to see their doctors as well as choice of doctors, and coverage of health care services needed by these enrollee respondents. A smaller proportion expressed satisfaction with how copays work, which could be attributable to their lack of understanding about copays in HELP. Among the disenrollee respondents, as is to be expected, those who voluntarily disenrolled from the program appeared to be more satisfied than those who were disenrolled from the program for non-payment of premiums. However, nearly 50 percent of disenrollee respondents did indicate that they would choose to re-enroll in HELP.

# Limitations

As noted previously, response rates on the surveys were low. In addition, respondents who switched statuses between the time that the sample was drawn, and their receipt of the survey had to be analyzed separately. Our sample non-response analysis found disproportionate response rates by age group among enrollees, and by age and urban/rural residence among disenrollees. However, differences in responses between the differing demographic groups were quite modest, thus minimizing concern about a demographic bias in survey results.

Given the low overall response rate, it is reasonable to wonder if the decision to respond or not respond to the survey is more directly related to a respondent's experience, understanding and usage. For example, it is conceivable that participants who have had negative experiences with the program would be more likely to respond in order to air any grievances, thus distorting estimates of program usage and satisfaction. Conversely, it is also conceivable that individuals who do not understand or make use of the HELP program may be reluctant to respond, thus distorting estimates of program understanding and usage.

It is important to interpret results as representing respondents' *perceptions* of the program. In some cases, this may not give an accurate reflection of the program itself. For example, respondents self-evaluated on how well they believed they understood the HELP program, but these self-evaluations had little connection to actual understanding demonstrated on questions about specific features of HELP. In fact, some important facets of the program were almost completely unfamiliar – even to respondents who claimed a very strong understanding of HELP. In such a case, a high self-evaluation of understanding might be better interpreted as a level of misunderstanding rather than of understanding.

# V. Impact Analysis Through 2017

The qualitative analysis of Chapter III and the survey results from Chapter IV established that Montana was successful at implementing the core components of HELP, including launching a major Medicaid coverage expansion to most adults up to 138 percent of FPL. The goal of the impact analysis is to assess the extent to which HELP has caused the changes in enrollee outcomes that were intended under the demonstration. Specifically, the impact analysis assesses whether HELP led to gains in health insurance coverage, health care access and affordability, and health behaviors and health status relative to what would have been expected under the other policy choices available to Montana--not expanding Medicaid, expanding Medicaid without a demonstration, and expanding Medicaid with a different demonstration. In making that assessment, the impact analysis relied on a quasi-experimental difference-in-differences evaluation design and data over time from the American Community Survey (ACS) and the Behavioral Risk Factor Surveillance System (BRFSS) that compares changes over time for adults in Montana to changes for similar adults in similar comparison states. In this Interim Evaluation Report, we report on impact estimates for changes from the baseline period (2011-13) through 2017, which is the first full year of operation for HELP.

To preview our findings through 2017, HELP led to a significant increase in health insurance coverage in Montana. Between 2011-13 and 2016-17, health insurance coverage for adults increased significantly more in Montana than what would have been expected if Montana had not expanded Medicaid. Further, under HELP Montana achieved larger gains in coverage than would have been expected if Montana had expanded Medicaid without a demonstration or with a different demonstration such as the demonstrations in Michigan and New Hampshire. There is also some early evidence of gains in health care access and affordability, as well as health status under HELP relative to both states that did and did not expand Medicaid.

While these findings point to early successes under HELP, the impact analysis has several limitations. Most importantly, we rely on quasi-experimental methods, which compare changes over time between Montana and similar states that provide the counterfactual for what would have happened in Montana in the absence of HELP. Because it is not possible to identify states that match Montana across all dimensions (e.g., demographic, social, economic, health, and political context), any differences identified in the comparisons between Montana and the comparison states will reflect those factors as well as differences in Medicaid expansion strategies. In addition, this Interim Evaluation Report is limited to national survey data from the ACS and BRFSS, which means the impact analysis focuses on the overall impacts of HELP for the outcomes available in those surveys. We do not have the data needed to disentangle the impacts of different components of HELP nor do we have the data to look at outcomes beyond those available in the ACS and BRFSS. However, the Final Summative Evaluation Report will include an analysis based on Medicaid administrative data through 2018. Finally, the impact estimates reported here are based on data through 2017, which is early in the post-implementation period for Montana, which implemented HELP in 2016.

In the remainder of this chapter, we present the research questions that motivate the impact analysis, followed by a discussion of our data and methods, and the limitations of our data and methods. We then present the results from the assessment of the impacts of HELP. There are three appendices to this chapter: Appendices E and F provide more detailed information on two data preparation tasks and the



development of the comparison groups for Montana, respectively. Appendix G provides supplemental tables to support the impact estimates.

#### **Research Questions**

The impact analysis is organized around three research questions:

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

We hypothesize that Montana's alternative Medicaid expansion demonstration will lead to gains in health insurance coverage and other outcomes relative to not expanding Medicaid. In particular, given Montana's 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 no *a priori* expectations regarding the impacts of Montana's expansion demonstration relative to other strategies for expanding Medicaid, including expanding without a demonstration and expanding with a different type of demonstration than MT HELP.

We expect the changes introduced under the HELP demonstration to first affect the overall health insurance coverage and the mix of public and private health insurance coverage in the state, 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.

#### **Data, Methods, and Limitations**

#### Data

We used data from the ACS and BRFSS from 2011 to 2017. The ACS is a nationally representative survey of the US population conducted by the Census Bureau that collects information on Americans' demographic, housing, and socioeconomic characteristics, including their health insurance coverage at the time of the survey. The ACS is conducted by internet and mail, with telephone and in-person follow-up. The BRFSS is a nationally representative survey conducted by state health departments in conjunction with the Centers for Disease Control and Prevention that collects information on health insurance coverage at the time of the survey, health care access and affordability over the past 12 months, and health behaviors and health status.<sup>72</sup> Because the BRFSS is fielded continuously over the year, the 12-month look-back period for some measures will include months from the prior calendar

<sup>&</sup>lt;sup>72</sup> "About BRFSS," Centers for Disease Control and Prevention, last reviewed and updated May 16, 2014, <u>https://www.cdc.gov/brfss/about/index.htm</u>.

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year. The BRFSS is conducted by telephone based on random-digit-dial telephone samples of landline telephone and cell phone numbers.

Compared with the BRFSS, the ACS has the advantage of a larger sample size (5,493 versus 3,648 adults for Montana in 2017),<sup>73</sup> a higher response rate (93.7<sup>74</sup> versus 54.2<sup>75</sup> in 2017), and greater consistency in survey fielding and data processing across states and over time. To increase the consistency of the BRFSS data across states and over time, we reweighted the state BRFSS samples using a consistent set of variables based on the ACS. We also imputed for item nonresponse for key variables in the BRFSS; the Census Bureau imputes for item nonresponse in the public use files for the ACS. The imputation and reweighting processes for the BRFSS are described in Appendix E.

**Study time period.** We define the pre-HELP period as 2011 to 2013.<sup>76</sup> This provides a three-year baseline period before implementation of the ACA's Medicaid expansion and the start of the Marketplace provisions.<sup>77</sup> We exclude 2014 from the study period as a transition year associated with the Marketplace rollout and Medicaid expansions in many states. We treat 2016-17 as the post-HELP period, but also report estimates for 2017 alone since 2016, the first year of the HELP demonstration, was a transition year in Montana. Since we are limited to a single year after full implementation of the demonstration, the estimates reported here should be considered early estimates of the impacts of Montana's Medicaid expansion demonstration, particularly for measures of health care access and affordability and measures of health behaviors and health.

**Study population.** The ACA's Medicaid expansion targets adults with family income at or below 138 percent of the federal poverty level (FPL). As described in Chapter II, under Montana's alternative Medicaid expansion demonstration there are different provisions applied to different income groups under HELP. Unfortunately, the ACS and BRFSS do not provide the information needed to identify those groups. Therefore, we focus on the impacts for all adults and the low-income adult population targeted by the Medicaid expansion: adults with family income at or below 138 percent of FPL. We also examine the impacts for subsets of adults within the low-income group, including those with family income at or

<sup>&</sup>lt;sup>73</sup> While the ACS has the advantage of a larger Montana sample size in the 2016-17 period, the Montana BRFSS had a larger sample size in the 2011-13 period.

<sup>&</sup>lt;sup>74</sup> "American Community Survey Response Rates," US Census Bureau, no date (accessed July 26, 2018), <u>https://www.census.gov/acs/www/methodology/sample-size-and-data-quality/response-rates/</u>.

<sup>&</sup>lt;sup>75</sup> Centers for Disease Control and Prevention, *Behavioral Risk Factor Surveillance System: 2016 Summary Data Quality Report* (Atlanta: Centers for Disease Control and Prevention, 2017); https://www.cdc.gov/brfss/annual\_data/2016/pdf/2016-sdqr.pdf.

<sup>&</sup>lt;sup>76</sup> We explored two alternate pre-HELP 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-HELP 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-HELP period of 2012-13. The choice of pre-period had little effect on the findings. Thus, we focus on the results using the 2011-13 pre-period in the report and provide estimates for key outcomes using the 2011-12 and 2012-13 pre-periods in Appendix G (Table G.3). The 2011-13 pre-period provides the larger sample size for the pre-period, which is important for analyses that rely on subsets of the overall sample.

<sup>&</sup>lt;sup>77</sup> Some states implemented the ACA's Medicaid expansion before 2014. As discussed in Appendix F, those states are excluded from this analysis.

below 50 percent of FPL and at or below 100 percent of FPL.<sup>78</sup> However, identifying those income groups in the BRFSS involves some degree of measurement error (see below), and sample sizes are often small (rendering the impact estimates less precise). We focus on adults ages 19 to 64.

**Identifying low-income adults.** The income eligibility standards for adults ages 19 to 64 under the ACA's Medicaid expansion is based on the income of the adult and his or her family. While the majority of adults 19 to 64 are in single-family households, 41.9 percent were part of multiple family households in 2011-13.<sup>79</sup> Since the ACS collects detailed information on household composition and income for all members of the household, it is possible to identify members of the same family within the household and to construct measures of family income relative to FPL that align with Medicaid income-eligibility categories. By contrast, the BRFSS has little information on household composition and provides a single measure of household income based on broad categories.<sup>80</sup> Consequently, we cannot approximate Medicaid income-eligibility categories using the income measure in the BRFSS.

We attempt to address this limitation of the BRFSS by using the information from the ACS on the relationship between household income and family income relative to FPL to impute family income relative to FPL in the BRFSS. As outlined in Appendix E, we impute measures of family income at or below 50 percent of FPL, at or below 100 percent of FPL, at or below 138 percent of FPL, and above 500 percent of FPL for adults ages 19 to 64 in the BRFSS based on data from the ACS. While we are not able to assess the imputation accuracy of family income in the BRFSS directly, we can apply the same imputation process to the ACS and compare reported family income relative to FPL and imputed family income relative to FPL in the ACS as one check on the BRFSS imputation process. That comparison indicates a fair amount of error in the imputation process. As shown in Table V.1, 19.1 percent of the adults in Montana imputed to have family income at or below 138 percent of FPL in the ACS reported family income above that level in 2011-13. Further, 8.7 percent of the adults imputed to have family income below that level in 2011-13. The patterns of measurement error were similar in 2016.

<sup>&</sup>lt;sup>78</sup> Impact estimates for lower income adults for key outcomes are provided in Appendix G (Table G.4).

<sup>&</sup>lt;sup>79</sup> Authors' tabulation of the 2011-13 ACS.

<sup>&</sup>lt;sup>80</sup> The household income categories available in the BRFSS are: 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 \$75,000 or more.



Table V.1: Crosswalk of Reported and Imputed Family Income Relative to FPL for Adults Ages 19 to 64 in Montana based on American Community Survey, 2011-13 (pre-period) and 2016-17 (post-period)

	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 relative to FPL (%)									
At or below 50%	63.2	49.7	39.1	2.6	0.3				
At or below 100%	80.9	75.1	61.9	4.6	0.5				
At or below 138%	87.6	86.4	80.9	8.7	1.0				
Above 138%	12.4	13.6	19.1	91.3	99.0				
Above 500%	0.7	1.0	0.9	27.2	75.3				
Sample size	425	678	922	2,451	732				
Years 2016-17									
Reported family income relative to FPL (%)									
At or below 50%	58.4	47.3	37.6	1.9	0.4				
At or below 100%	78.5	74.3	61.8	4.4	0.9				
At or below 138%	82.6	83.2	75.4	8.1	1.2				
Above 138%	17.4	16.8	24.6	91.9	98.8				
Above 500%	1.3	0.8	1.3	32.4	74.4				
Sample size	250	410	550	1,650	549				

Source: 2011-13 and 2016-17 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%. The imputation of family income relative to FPL is described in Appendix E. The imputation process was based on a random sample of 80% of the ACS sample. These estimates are based on the 20% of the ACS sample reserved for testing the imputation process.



In presenting impact estimates for low-income adults in the body of the report, we focus on adults with family income at or below 138 percent of FPL. However, we provide estimates for a range of lower income groups based on both household income and family income relative to FPL as a sensitivity analysis in Appendix G (Table G.4). Because of the limitations of the imputed family income measures in the BRFSS, we also provide estimates for adults with low educational attainment as another proxy for low income. However, low educational attainment is only a rough proxy for low income. Among US adults ages 19 to 64 with a high school education or less, 38.9 percent reported family income at or below 138 percent of FPL over the 2011-13 period based on the ACS. The comparable figure for Montana was much lower, at 37.0 percent (data not shown). Given the measurement error in the income measures in the BRFSS, we have more confidence in estimates for the full sample than those for subgroups of the sample based on income.

**Outcome measures.** We focused on the following measures of health insurance coverage, health care access and affordability, and health behaviors and health status:

- 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);
- 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; and
  - Had no unmet need for doctor care due to costs in the past 12 months.<sup>81</sup>
- 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); and
  - Had an activity limitation due to health issues at the time of the survey.

Health insurance coverage at the time of the survey is available in the ACS and BRFSS. We focus on the health insurance measures from the ACS because the ACS provides a larger sample size for Montana than does the BRFSS and because the ACS provides information on a respondent's type of health insurance coverage. Although we report on the type of health insurance coverage, evidence suggests

<sup>&</sup>lt;sup>81</sup> We frame this as a "positive" outcome so that higher values indicated better access and affordability across all the measures examined.

that respondents misreport their coverage type in surveys, particularly between Medicaid or other public coverage and direct purchase.<sup>82, 83, 84</sup>

Measures of health care access and affordability, health behaviors, and health status are from the BRFSS.<sup>85</sup> Given the larger sample sizes in the ACS, the estimates of the impacts on health insurance coverage from the ACS are more precise than the impact estimates for the remaining measures based on the BRFSS.

Because the ACS and BRFSS are both fielded continuously over the year (with 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 tried to quit smoking in the past 12 months) will include periods from the previous calendar year. For adults interviewed in July 2016, for example, the past 12 months would include August through December 2015 and January through July 2016. Consequently, the look-back period in the BRFSS for those measures exacerbates the lag between the likely impacts of Montana's demonstration on health care access and affordability and health outcomes (which are expected to be on a slower path than any impacts on health insurance coverage) and the ability to detect those impacts with the available data, which are limited to 2017 in this report.

# Methods

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

 $Y_{ist} = \beta_1 MONTANA_t + \beta_2 POST_t + \beta_3 (MONTANA * POST_t) + X_i\beta_4 + \varepsilon$ 

Where Y is the outcome of interest for individual *i* in state *s* and time *t*; MONTANA takes the value one for individuals from Montana and zero for individuals in the comparison group; POST is a dummy for the post-HELP period relative to the pre-HELP period; and **X** is a vector of individual and family characteristics.  $\beta_3$ , the coefficient on the interaction term between MONTANA and POST, provides the

<sup>&</sup>lt;sup>82</sup> Call, Kathleen T., Michael E. Davern, Jacob A. Klerman, and Victoria Lynch. "Comparing Errors in Medicaid Reporting across Surveys: Evidence to Date." *Health Services Research* 48, no. 2pt1 (2013): 652-664.

<sup>&</sup>lt;sup>83</sup> Boudreaux, Michel H., Kathleen Thiede Call, Joanna Turner, Brett Fried, and Brett 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.

<sup>&</sup>lt;sup>84</sup> Noon, James M., Leticia E. Fernandez, and Sonya R. Porter. "Response error and the Medicaid undercount in the current population survey." *Health services research* 54, no. 1 (2016): 34-43.

<sup>&</sup>lt;sup>85</sup> Although not a formal part of the federal evaluation, we also examined changes in employment over time as a supplement to understanding any changes in employer-sponsored insurance (ESI) coverage over time. Those estimates are provided in Appendix G (Table G.14). There were no significant differences in changes in employment for adults in Montana and similar adults in the comparison states between 2011-13 and 2016.



DD estimates of the impact of Montana's Medicaid expansion on the outcome in the post-HELP period relative to the comparison group.

**Defining the comparison groups.** As noted, we consider three counterfactuals for Montana'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 F. We provide an overview of the process here. We began by sorting states by their Medicaid expansion status (i.e., did not expand Medicaid under the ACA, expanded Medicaid without a demonstration, and expanded Medicaid with a demonstration) and by their similarity to Montana over the baseline period (2011-13) in terms of Medicaid and section 1115 income-eligibility standards.

We selected comparison states that were similar to Montana in terms of Medicaid and section 1115 income-eligibility standards, the uninsurance rate, and measures of health care access and health status for adults over the baseline period. As described in Appendix F and shown in Table V.2, we identified the group of best comparison states and the single-best comparison state from among that group. 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 HELP. Given our inability to control for all the potential differences between Montana and the comparison states that could confound the impact estimates, we have more confidence in estimates that are consistent across multiple comparison groups.

	Group of Best Comparison States	Single-best Comparison State
Similar states that did not expand Medicaid	GA, NC, WY	WY
Similar states that expanded Medicaid without a demonstration	KY, ND	ND
Similar states that expanded Medicaid with a different demonstration	MI, NH	MI

#### Table V.2: Comparison States for Adults Ages 19 to 64 in Montana

**Notes:** See Appendix F for a description of the process for defining the group of best comparison states and the single-best comparison state.

As shown in Table V.2, the group of best comparison states includes three states that did not expand Medicaid, two 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 under its demonstration, and Michigan, which requires premium-like contributions through a version of a health savings account under its demonstration.

**Reweighting the comparison groups.** After selecting the states to be included in each of the comparison groups, we adjusted the weights of each group of best comparison states to account for differences in

the states' populations<sup>86</sup> and implemented propensity score reweighting<sup>87</sup> for the groups of best comparison states, the single-best comparison state, and each of the remaining states in the group of best comparison states to increase the comparability of the adults between the comparison states and Montana. We describe the reweighting of the comparison groups in detail in Appendix F.

Propensity score models identify the adults in each comparison group who are most similar to the adults in Montana. By using the propensity scores to create inverse probability weights, adults in the comparison states who were more similar to adults in Montana received larger weights while those who were less similar to Montana adults received lower weights. This reweighting pulled the distribution of characteristics of comparison group members closer to the characteristics of adults in Montana. After the propensity score reweighting, the demographic and socioeconomic characteristics of the Montana sample and the comparison group samples were quite similar, as shown in Tables F.16-F.18 using the ACS. The companion tables using the BRFSS are provided in Tables F.19-F.21.

**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,<sup>88</sup> controlling for the individual and family characteristics from the propensity score models as an additional adjustment for differences between adults in Montana 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.<sup>89</sup> The analyses using the ACS and BRFSS were conducted using Stata version 15.1.<sup>90</sup> All estimates using the BRFSS and ACS were weighted and used Stata's "svy" command to control for the complex designs of the surveys.<sup>91</sup> An example of the DD estimation results for health insurance coverage for adults using the ACS and BRFSS is provided in Table G.1.

**Sensitivity analyses and falsification tests.** We assessed the robustness of our findings to an alternate approach to propensity score reweighting (entropy balancing; described in Appendix E) and alternate estimation strategies for the DD models (using logit and probit regression rather than linear probability models) for a subset of key outcomes. We report on those sensitivity analyses for selected outcomes in

<sup>&</sup>lt;sup>86</sup> Balancing for state population ensures that a very large state does not overwhelm the contributions of smaller states in the group of comparison states.

<sup>&</sup>lt;sup>87</sup> As a sensitivity test, we also reweighted using entropy balancing. The choice of reweighting approach had little impact on the findings, as shown for key outcomes in Appendix G (Table G.2).

<sup>&</sup>lt;sup>88</sup> Linear probability models generally provide reliable estimates over average effects. See Joshua D. Angrist and Jorn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricist's Companion* (Princeton, NJ: Princeton University Press, 2008).

<sup>&</sup>lt;sup>89</sup> 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.

<sup>&</sup>lt;sup>90</sup> StataCorp, Stata Statistical Software: Release 15 (College Station, TX: StataCorp LLC, 2017).

<sup>&</sup>lt;sup>91</sup> We also ran models that incorporated clustering by state rather than the design variables specific to the surveys, given the state focus of the analyses. Because those models yielded very small differences in standard errors (i.e., changes in the second or third decimal place), however, we do not report the results from those models here.

Table G.2. We find that the alternate approach to propensity score reweighting and the alternate estimation methods had little effect on the DD estimates. Therefore, we focus in the report on the results based on the linear probability models using propensity score reweighting.

We also conducted falsification tests for higher-income adults who should not be affected by Montana's Medicaid expansion demonstration. We use high family income (above 500 percent of FPL), high household income (at or above \$75,000), and, as a proxy for higher income, high levels of education (four-year college graduate or more). Among US adults ages 19 to 64 with a college degree or more, 48.4 percent reported family income above 500 percent of FPL over the 2011-13 period based on the ACS. The comparable figure for Montana was 35.1 percent (data not shown). Thus, higher education attainment is only a rough proxy for higher income.

The falsification tests based on family income at or above 500 percent of FPL in the ACS are strongest because the sample reflects a high-income population relative to Medicaid eligibility standards. The falsification tests based on household income for the ACS and BRFSS and on imputed family income for the BRFSS are weaker because those "high-income" populations include some low- and moderate-income adults who could be affected by the demonstration or other coverage provisions of the ACA, including the introduction of the Marketplace (see Appendix E). For example, based on Table E.4, we expected about 24.7 percent of those imputed to have family income above 500 percent of FPL in the BRFSS over the 2011-13 period to be below that level, and based on Table E.2, we expected more than 47.2 percent of those reporting household income at or above \$75,000 in 2011-13 to have family income below 500 percent of FPL in both the ACS and BRFSS. Thus, for instances where we estimate an effect of HELP based on measures of household income, we would expect to estimate smaller effects under the falsification tests rather than no effects.

The estimates from the DD models are based on two-tailed hypothesis tests in which we reject the null hypothesis of no difference between Montana 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 Montana 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 disentangle the impacts of different components of HELP. 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 Montana and the comparison groups persist. 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 HELP impacts using multiple comparison groups.

Further, the national 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 Montana relative to the comparison groups for measures of health insurance coverage than for the remaining outcomes examined.

Finally, as noted, these estimates are from early in the Montana demonstration (2017) and thus may not capture the eventual effects of HELP. 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 HELP 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 so that the data for 2017 includes some months in 2016 for nearly all sample members, where 2016 was a transition year for Montana.

# Results

# Simple Differences over Time

Table V.3 provides simple differences in the study outcomes for adults ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period). As shown, we see significant gains in health insurance coverage for Montana adults in 2016-17 relative to the pre-period, as well as significant gains in health care access and affordability. There was also a significant reduction in the share of Montana adults who were smoking at the time of the survey and in having days in which their physical health was not good in the past 30 days, although there were no significant changes in the remaining measures of health behaviors or health status.

Table V.4 provides simple differences in study outcomes for adults ages 19 to 64 in Montana between 2011-13 (pre-period) and a post-period limited to 2017. The patterns of change here are similar to those observed for 2016-17, although with smaller sample sizes. We report on 2016-17 in the remainder of the chapter to take advantage of the larger sample sizes. Appendix Tables G.9 and G.10 provide DD estimates based on the 2017 post-period. In the remainder of this section, we present DD models to assess the changes over time for adults under Montana's HELP *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 HELP demonstration.

Table V.3: Changes in Health Insurance Coverage, Health Care Access and Affordability, and Health Behaviors and Health Status for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period)

	2011-13	2016-17	Difference		
Health insurance coverage (%)					
Had health insurance coverage at the time of the survey	75.6	87.9	12.3	***	
Type of coverage					
Medicaid or other public coverage	9.2	16.5	7.3	***	
Employer-sponsored insurance	56.8	59.0	2.2	**	
Direct purchase or other coverage	9.6	12.4	2.8	***	
Health care access and affordability (%)					
Had a personal doctor at the time of the survey	68.2	68.6	0.4		
Had a routine checkup in past 12 months	56.2	62.1	6.0	***	
Received flu vaccine in past 12 months	31.4	34.8	3.5	***	
No unmet need for doctor care due to costs in past 12 months	85.9	88.6	2.7	***	
Health behaviors and health status (%)					
Smoker at the time of the survey	21.3	18.2	-3.1	***	
Smoker who did not try to quit in past 12 months	9.9	9.0	-1.0		
Health status was fair or poor at the time of the survey	13.6	13.3	-0.4		
Physical health was not good in past 30 days	35.0	30.8	-4.1	***	
Mental health was not good in past 30 days	34.7	33.8	-0.9		
Had an activity limitation due to health at the time of the survey	21.6	20.7	-0.9		
Sample size for ACS	16,604	10,903			
Sample size for BRFSS	18,997	7,271			

**Source:** Health insurance coverage: 2011-13 and 2016-17 American Community Survey (ACS); Health care access and affordability, health behaviors, and health: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS). Notes: \*/\*\*/\*\*\* Significantly different from value for 2011-13 at the .10/.05/.01 levels, using a two-tailed test.

Table V.4: Changes in Health Insurance Coverage, Health Care Access and Affordability, and Health Behaviors and Health Status for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2017 (post-period)

	2011-13	2017	Difference		
Health insurance coverage (%)					
Had health insurance coverage at the time of the survey	75.6	87.6	12.1	***	
Type of coverage					
Medicaid or other public coverage	9.2	16.3	7.2	***	
Employer-sponsored insurance	56.8	59.4	2.7	**	
Direct purchase or other coverage	9.6	11.9	2.3	***	
Health care access and affordability (%)					
Had a personal doctor at the time of the survey	68.5	67.1	-1.4		
Had a routine checkup in past 12 months	56.9	63.6	6.8	***	
Received flu vaccine in past 12 months	31.9	34.9	3.1	**	
No unmet need for doctor care due to costs in past 12 months	86.5	87.6	1.1		
Health behaviors and health status (%)					
Smoker at the time of the survey	21.0	17.3	-3.7	***	
Smoker who did not try to quit in past 12 months	9.8	8.9	-0.8		
Health status was fair or poor at the time of the survey	13.5	13.9	0.4		
Physical health was not good in past 30 days	34.2	31.5	-2.7	*	
Mental health was not good in past 30 days	34.3	34.9	0.6		
Had an activity limitation due to health at the time of the survey	21.1	22.4	1.3		
Sample size for ACS	16,604	5,493			
Sample size for BRFSS	18,997	3,648			

**Source:** Health insurance coverage: 2011-13 and 2017 American Community Survey (ACS); Health care access and affordability, health behaviors, and health: 2011-13 and 2017 Behavioral Risk Factor Surveillance System (BRFSS).

\*/\*\*/\*\*\* Significantly different from value for 2011-13 at the .10/.05/.01 levels, using a two-tailed test.

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

Adults in Montana experienced significant gains in health insurance coverage between 2011-13 and 2016-17 relative to the changes for adults in similar states that did not expand Medicaid (Table V.5). Under HELP, health insurance coverage for all adults increased 6.1 percentage points (p<.01) relative to similar adults in the group of best comparison states that did not expand Medicaid. As would be expected given HELP's focus on low-income adults, the relative gains in coverage under HELP were larger for low-income adults (defined as adults with family income at or below 138 percent of FPL), at 10.9 percentage points (p<.01).

When compared with similar states that expanded Medicaid (whether without a demonstration or with a different demonstration), there were also significant gains in health insurance coverage in Montana between 2011-13 and 2016-17. Health insurance coverage increased by about 3.0 percentage points (p<.01) for all adults in Montana relative to both states that expanded Medicaid without a demonstration and those that expanded with a different demonstration, while the gain in coverage for low-income adults was only statistically significant relative to states that expanded with a different demonstration (4.1 percentage points, p<.05). Relative to states that expanded with a different demonstration, Montana saw statistically significant gains in Medicaid coverage for all adults (1.4 percentage points, p<.05) and for low-income adults (3.3 percentage points, p<.10). Thus, the gains in health insurance coverage under HELP relative to the gains that would have been expected had Montana pursued other Medicaid expansion strategies tended to be larger.

Table V.5: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults andLow-income Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States

		All A	dults	Lo	w-inco	me Adults	
	Esti	Estimate 95% confidence Interval		Estimate		95% confidence Interval	
Compared to Not Expanding Medicaid							
Had health insurance coverage at the time of the survey	6.1	***	4.5, 7.7	10.9	***	7.5, 14.2	
Type of coverage							
Medicaid or other public coverage	6.1	***	4.8, 7.4	14.3	***	10.9, 17.7	
Employer-sponsored insurance	0.2		-1.7, 2.2	-0.2		-3.8, 3.3	
Direct purchase or other coverage	-0.2		-1.6, 1.1	-3.2	**	-5.7, -0.8	
Compared to Expanding Medicaid without a Demonstration							
Had health insurance coverage at the time of the survey	3.0	***	1.4, 4.6	2.1		-1.4, 5.6	
Type of coverage							
Medicaid or other public coverage	0.3		-1.1, 1.7	-0.2		-3.8, 3.4	
Employer-sponsored insurance	0.3		-1.7, 2.4	1.4		-2.3, 5.2	
Direct purchase or other coverage	2.4	***	0.9, 3.8	0.9		-1.8, 3.6	
Compared to Expanding Medicaid with a Different Demonstration							
Had health insurance coverage at the time of the survey	3.3	***	1.7, 4.8	4.1	**	0.9, 7.4	
Type of coverage							
Medicaid or other public coverage	1.4	**	0.1, 2.7	3.3	*	-0.0, 6.7	
Employer-sponsored insurance	1.4		-0.5, 3.3	2.0		-1.4, 5.4	
Direct purchase or other coverage	0.4		-0.9, 1.7	-1.2		-3.6, 1.2	

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** Low-income is defined as family income at or below 138% of the Federal Poverty Level (FPL). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).



The estimates of the impacts of HELP on health insurance coverage relative to the different comparison groups are consistent across population subgroups for adults, with significant gains for men and women and older and younger adults (Table V.6) and for parents (Table V.7). For childless adults, the findings are more mixed, with significant gains in Montana relative to states that did not expand Medicaid and those that expanded Medicaid without a demonstration, but similar relative changes for states that expanded Medicaid with a different demonstration.

**State-specific impact estimates.** As a check on the impact estimates based on the group of best comparison states, we also estimated the impacts of Montana's demonstration relative to the single-best comparison state and to each of the remaining states in the group of best comparison states. As shown in Table V.8, we find significantly larger coverage gains in Montana relative to the single-best comparison state (Wyoming) and each of the two remaining comparison states that did not expand Medicaid (Georgia and North Carolina). In each of the three states, the findings can be attributed to the significantly larger relative gains in Montana of roughly 6 percentage points (p<.01).

In contrast, the results were mixed when we compared Montana with the states in the group of best comparison states that expanded Medicaid without a demonstration. Montana had a significantly larger gain in health insurance coverage relative to the single-best comparison state (North Dakota), but the same relative gain as the other comparison state (Kentucky). Those differences were driven by a significantly larger gain in Medicaid coverage in Montana relative to North Dakota and a significantly smaller gain in Medicaid coverage in Montana relative to Kentucky.

Finally, compared to each of the states that expanded Medicaid with a different demonstration (Michigan and New Hampshire), Montana had a significantly larger gain in health insurance coverage, reflecting, in part, a significantly larger gain in Medicaid coverage. Thus, the relative impact of Montana's section 1115 demonstration on health insurance coverage tended to be larger than the impacts of similar states that expanded Medicaid with a different demonstration and within the range of impacts observed for similar states that expanded Medicaid without a demonstration.

Table V.6: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, by Gender and Age

		By G	ender		Ву	By Age			
	Men Women		-	Younger than age 45		Age 45 or older			
Compared to Not Expanding Medicaid									
Had health insurance coverage at the time of the survey	6.6	***	5.7	***	7.7	***	4.3	***	
Type of coverage									
Medicaid or other public coverage	5.0	***	7.2	***	6.5	***	5.5	***	
Employer-sponsored insurance	1.5		-0.8		0.3		0.4		
Direct purchase or other coverage	0.1		-0.6		0.9		-1.6	*	
Compared to Expanding Medicaid without a Demonstration									
Had health insurance coverage at the time of the survey	3.6	***	2.5	**	4.1	***	1.6	*	
Type of coverage									
Medicaid or other public coverage	-0.3		0.9		1.2		-0.8		
Employer-sponsored insurance	1.5		-0.7		0.3		0.4		
Direct purchase or other coverage	2.4	**	2.3	**	2.7	***	2.1	**	
<u>Compared to Expanding Medicaid with a</u> <u>Different Demonstration</u>									
Had health insurance coverage at the time of the survey	3.1	***	3.6	***	4.6	***	1.8	*	
Type of coverage									
Medicaid or other public coverage	0.3		2.6	***	1.8	*	0.8		
Employer-sponsored insurance	2.3	*	0.6		1.6		1.4		
Direct purchase or other coverage	0.4		0.4		1.2		-0.4		

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

Table V.7: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, by Parent Status

	By Parent Status				
	Ра	rent	Childless Adult		
Compared to Not Expanding Medicaid					
Had health insurance coverage at the time of the survey	7.7	***	5.4	***	
Type of coverage					
Medicaid or other public coverage	7.2	***	5.6	***	
Employer-sponsored insurance	0.4		0.2		
Direct purchase or other coverage	0.1		-0.4		
Compared to Expanding Medicaid without a Demonstration					
Had health insurance coverage at the time of the survey	5.6	***	1.7	*	
Type of coverage					
Medicaid or other public coverage	3.3	**	-1.0		
Employer-sponsored insurance	-0.2		0.5		
Direct purchase or other coverage	2.5	**	2.3	**	
Compared to Expanding Medicaid with a Different Demonstration					
Had health insurance coverage at the time of the survey	7.1	***	1.4		
Type of coverage					
Medicaid or other public coverage	4.3	***	0.2		
Employer-sponsored insurance	1.6		1.2		
Direct purchase or other coverage	1.2		0.0		

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

Table V.8 Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults Ages19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) for the Single-bestComparison State and Each Remaining Best Comparison State

	-	e-best son State	Remaining Best Comparison State				
Compared to Not Expanding Medicaid	v	/Y	Ģ	βA	NC		
Had health insurance coverage at the time of the survey	6.3	***	6.1	***	6.0	***	
Type of coverage							
Medicaid or other public coverage	6.2	***	6.2	***	6.0	***	
Employer-sponsored insurance	-0.4		0.1		0.3		
Direct purchase or other coverage	0.5		-0.2		-0.3		
Compared to Expanding Medicaid without a Demonstration	N	ND KY					
Had health insurance coverage at the time of the survey	5.9	***	0.9				
Type of coverage							
Medicaid or other public coverage	4.8	***	-3.0	***			
Employer-sponsored insurance	-1.0		2.0	**			
Direct purchase or other coverage	2.2	**	1.9	***			
Compared to Expanding Medicaid with a Different Demonstration	Ν	ЛІ	Ν	ІН		1	
Had health insurance coverage at the time of the survey	3.1	***	3.5	***			
Type of coverage							
Medicaid or other public coverage	1.3	**	1.9	**			
Employer-sponsored insurance	1.0		1.8				
Direct purchase or other coverage	0.8		-0.2				

Source: 2011-13 and 2016-17 American Community Survey (ACS).

Notes: For sample sizes, see Table G.6 (Montana) and G.7 (each of Montana's comparison states).



**Differences in impact estimates by income.** The estimates of the relative impacts of HELP on changes in health insurance coverage relative to not expanding Medicaid tend to be larger for lower-income adults, as would be expected given the focus of HELP policies on low-income adults (Table V.9). For example, the estimated effect of HELP on changes in health insurance coverage relative to not expanding Medicaid is 6.1 percentage points (p<.01) for all adults, 10.9 percentage points (p<.01) for adults with family income at or below 138 percent FPL, and 12.3 percentage points (p<.01) for adults with family income at or below 50 percent of FPL (p<.01). Although smaller in magnitude, there were also significant differences for lower-income adults under HELP relative to expanding Medicaid with a different demonstration. By contrast, there were no significant differences in the impacts of HELP for lower-income adults relative to similar adults in states that expanded Medicaid without a demonstration, which is consistent with the findings in Table V.5.

Table V.9: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Lowerincome Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, Based on Alternate Measures of Lower Income

	Compared to Not Expanding Medicaid		Compare Expand Medica withou Demonstr	ling aid ıt a	Compared to Expanding Medicaid with a Different Demonstration	
Had health insurance coverage at the time of the survey						
Core model	6.1	***	3.0	***	3.3	***
With family income at or below 50% FPL	12.3	***	-0.8		4.9	**
With family income at or below 100% FPL	12.4	***	1.9		5.3	***
With family income at or below 138% FPL	10.9	***	2.1		4.1	**
With household income below \$25,000	10.1	***	1.9		4.0	*
With household income below \$50,000	10.0	***	3.3	**	3.9	***
High school graduate/GED or less	11.4	***	3.5	**	6.1	***

Source: 2011-13 and 2016-17 American Community Survey (ACS);

**Notes:** FPL = Federal poverty level. Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states). \*/\*\*/\*\*\* Estimate differs significantly from zero at the .10/.05/.01 levels, using two-tailed tests.



Consistent with the focus of the policy changes on lower-income adults under HELP, we find little change in health insurance coverage in Montana for higher-income adults with income above 500 percent FPL relative to the comparison groups regardless of the Medicaid expansion status of the comparison group (Tables G.5).

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

As discussed, we would expect a lag between any changes in health insurance coverage under HELP and any subsequent effects on health care access and affordability. This lag is further compounded because of the 12-month look-back period for many of the health care access and affordability measures in the BRFSS. Given those data limitations, we would not necessarily expect to see robust changes in health care access and affordability in Montana between 2011-13 and 2016-17 relative to the comparison states. Nonetheless, we do see significant increases in Montana in the shares of adults with a routine checkup and a flu vaccine in the past 12 months relative to not expanding Medicaid, to expanding Medicaid without a demonstration, and to expanding Medicaid with a different demonstration (Table V.10).

The gains in health care access in Montana relative to the comparison states are generally consistent across population subgroups, with significant gains for men and women and older and younger adults (Table V.11) and for parents and childless adults (Table V.12). Consistent with the findings reported in Table V.10, the effects are strongest for the comparison to states that did not expand Medicaid and to states that expanded Medicaid without a demonstration. There are weaker findings for the comparison to states that expanded Medicaid with a different demonstration, which likely reflects the mixed findings for the two states in that comparison group—there are no significant differences relative to the single-best comparison state (Michigan), while there were significant differences relative to the other comparison state (New Hampshire) (Table V. 13). For the comparison to states that did not expand Medicaid and states that expanded Medicaid without a demonstration, there were significant gains in Montana relative to each of the comparison states for at least one outcome, as well as a few cases where the gains in Montana were significantly less than the comparison state (e.g., less likely to have a personal doctor relative to North Carolina and more likely to have affordability issues relative to Kentucky.

Table V.10: Difference-in-Differences Estimates for Changes in Health Care Access and Affordability for Adults and Low-income Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States

	All Adults			Low-income Adults			
	Estim	ate	95% confidence Interval	Estim	ate	95% confidence Interval	
Compared to Not Expanding Medicaid							
Had a personal doctor at the time of the survey	0.8		-1.3, 2.9	0.6		-3.9, 5.2	
Had a routine checkup in past 12 months	4.7	***	2.5, 6.9	4.7	**	0.1, 9.3	
Received flu vaccine in past 12 months	2.9	***	0.8, 5.1	2.4		-2.1, 7.0	
No unmet need for doctor care due to costs in past 12 months	1.3	*	-0.2, 2.8	4.5	*	-0.1, 9.0	
Compared to Expanding Medicaid without a							
<u>Demonstration</u>							
Had a personal doctor at the time of the survey	1.9	*	-0.1, 3.9	0.1		-4.4, 4.5	
Had a routine checkup in past 12 months	4.6	***	2.4, 6.8	-0.4		-5.7, 4.8	
Received flu vaccine in past 12 months	3.6	***	1.5, 5.8	-0.2		-4.5, 4.1	
No unmet need for doctor care due to costs in past 12 months	-0.5		-1.9, 1.0	-1.7		-5.6, 2.2	
Compared to Expanding Medicaid with a Different Demonstration							
Had a personal doctor at the time of the survey	0.2		-1.8, 2.2	-1.1		-5.9, 3.7	
Had a routine checkup in past 12 months	2.6	**	0.4, 4.8	-0.3		-5.7, 5.0	
Received flu vaccine in past 12 months	1.8	*	-0.3, 4.0	0.5		-3.7, 4.7	
No unmet need for doctor care due to costs in past 12 months	-1.0		-2.5, 0.5	-1.5		-5.4, 2.4	

Source: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS).

**Notes:** Low-income is defined as family income at or below 138% of the Federal Poverty Level (FPL). Family income relative to FPL is imputed in the BRFSS (see Appendix E). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states). \*/\*\*/\*\*\* Significantly different from zero at the .10/.05/.01 levels, using two-tailed tests. Table V.11: Difference-in-Differences Estimates of Changes in Health Care Access and Affordability for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, by Gender and Age

	By Gender			By Age				
	Ме	n	Women		Younger than age 45		Age 45 or older	
Compared to Not Expanding Medicaid								
Had a personal doctor at the time of the survey	1.1		0.5		2.2		-0.8	
Had a routine checkup in past 12 months	3.4	**	6.0	***	5.9	**	3.5	**
Received flu vaccine in past 12 months	2.5		3.4	**	1.5		4.5	***
No unmet need for doctor care due to costs in past 12 months	1.0		1.6		2.3	*	0.1	
Compared to Expanding Medicaid without a Demonstration								
Had a personal doctor at the time of the survey	3.5	**	0.3		3.4	**	0.0	
Had a routine checkup in past 12 months	4.4	**	4.8	***	4.1	**	5.0	***
Received flu vaccine in past 12 months	3.6	**	3.8	**	1.7		5.8	***
No unmet need for doctor care due to costs in past 12 months	-0.9		0.0		-1.5		0.6	
Compared to Expanding Medicaid with a Different Demonstration								
Had a personal doctor at the time of the survey	0.7		-0.4		1.6		-1.4	
Had a routine checkup in past 12 months	2.0		3.0	**	3.0	*	2.1	
Received flu vaccine in past 12 months	1.3		2.2		1.6		2.2	
No unmet need for doctor care due to costs in past 12 months	-2.2	**	0.2		-1.0		-1.1	

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

Table V.12: Difference-in-Differences Estimates of Changes in Health Care Access and Affordability forAdults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) UsingGroup of Best Comparison States, by Parent Status

	By Parent Status					
	Ра	rent	Childless Adult			
Compared to Not Expanding Medicaid						
Had a personal doctor at the time of the survey	0.7		0.9			
Had a routine checkup in past 12 months	6.2	***	3.8	***		
Received flu vaccine in past 12 months	2.6		3.2	**		
No unmet need for doctor care due to costs in past 12 months	1.8		1.0			
Compared to Expanding Medicaid without a Demonstration						
Had a personal doctor at the time of the survey	1.7		1.9			
Had a routine checkup in past 12 months	4.8	***	4.3	***		
Received flu vaccine in past 12 months	3.1	*	3.9	***		
No unmet need for doctor care due to costs in past 12 months	-1.0		-0.2			
Compared to Expanding Medicaid with a Different Demonstration						
Had a personal doctor at the time of the survey	0.5		0.0			
Had a routine checkup in past 12 months	5.3	***	0.9			
Received flu vaccine in past 12 months	1.6		2.1			
No unmet need for doctor care due to costs in past 12 months	-0.1		-1.6	*		

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

Table V.13: Difference-in-Differences Estimates of Changes in Health Care Access and Affordability for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) for the Single-best Comparison State and Each Remaining Best Comparison State

	-	e-best ison State	Remai	Remaining Best Compariso			
Compared to Not Expanding Medicaid	WY		GA		N	IC	
Had a personal doctor at the time of the survey	1.1		3.4	***	-2.0	*	
Had a routine checkup in past 12 months	1.6		7.3	***	6.6	***	
Received flu vaccine in past 12 months	2.3	*	2.9	**	3.0	**	
No unmet need for doctor care due to costs in past 12 months	2.3	**	1.0		0.2		
Compared to Expanding Medicaid without a Demonstration	ND		КҮ				
Had a personal doctor at the time of the survey	2.6	**	1.4				
Had a routine checkup in past 12 months	7.9	***	1.1				
Received flu vaccine in past 12 months	3.3	***	4.3	***			
No unmet need for doctor care due to costs in past 12 months	3.0	***	-2.3	***			
Compared to Expanding Medicaid with a Different Demonstration	МІ		NH				
Had a personal doctor at the time of the survey	-0.1		0.9				
Had a routine checkup in past 12 months	1.8		3.8	***			
Received flu vaccine in past 12 months	1.5		2.5	*			
No unmet need for doctor care due to costs in past 12 months	-0.6		-1.1				

Source: 2011-13 and 2016-17 American Community Survey (ACS).

Notes: For sample sizes, see Table G.6 (Montana) and G.7 (each of Montana's comparison states).



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

As with the expected lag in any impacts of Montana's Medicaid expansion demonstration on health care access and affordability, we would not necessarily expect to see robust changes in health behaviors and health status in Montana relative to the comparison states between 2011-13 and 2016-17. Consistent with that expectation, we find few significant differences in changes in health behaviors or health status in Montana relative to the comparison states, regardless of Medicaid expansion status (Table V.14). However, Montana residents were significantly less likely to report that their physical health was not good in the past 30 days relative to each group of comparison states. Further, there was evidence of gains in health status in Montana relative to states that expanded Medicaid with a different demonstration across several other measures, including smokers who had not tried to quit and activity limitations due to health.

Gains in health behaviors and health status in Montana relative to the comparison states are also observed across population subgroups, although the particular gains vary for men and women and older and younger adults (Table V.15) and for parents and childless adults (Table V.16). For example, women and older adults, but not men and younger adults, in Montana were less likely to report that their mental health was not good in the past 30 days relative to each group of comparison states.

**State-specific impact estimates.** As a check on the impact estimates based on the group of best comparison states, we also estimated the impacts of Montana's demonstration relative to the single-best comparison state and to each of the remaining states in the group of best comparison states. As shown in Table V.17, adults in Montana reported improvements in health behaviors relative to two of the seven comparison states and improvements in health status relative to five of the seven comparisons states. The only states where there were no significant differences in relative changes in health behaviors or health status were Wyoming and Kentucky.

Table V.14: Difference-in-Differences Estimates for Changes in Health Behaviors and Health Status for Adults and Low-income Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States

	All Adults			Low-income Adults			
	Estimate		95% confidence Interval	Estimate		95% confidence Interval	
Compared to Not Expanding Medicaid							
Smoker at the time of the survey	0.1		-1.6, 1.9	0.6		-3.8, 4.9	
Smoker who did not try to quit in past 12 months	-0.3		-1.6, 1.1	0.3		-3.5, 4.0	
Health status was fair or poor at the time of the survey	-0.2		-1.6, 1.1	-0.5		-4.3, 3.3	
Physical health was not good in past 30 days	-2.6	**	-4.7, -0.6	-3.3		-7.9, 1.4	
Mental health was not good in past 30 days	-1.6		-3.8, 0.6	-2.5		-7.3, 2.3	
Had an activity limitation due to health at the time of the survey	-0.8		-2.6, 0.9	-1.6		-6.0, 2.9	
Compared to Expanding Medicaid without a Demonstration							
Smoker at the time of the survey	0.4		-1.4, 2.1	0.7		-3.6, 4.9	
Smoker who did not try to quit in past 12 months	0.5		-0.8, 1.8	1.4		-2.7, 5.5	
Health status was fair or poor at the time of the survey	-0.9		-2.2, 0.5	-1.4		-5.4, 2.5	
Physical health was not good in past 30 days	-2.0	*	-4.1, 0.1	-2.5		-6.8, 1.9	
Mental health was not good in past 30 days	-1.7		-3.9, 0.5	-3.0		-7.4, 1.5	
Had an activity limitation due to health at the time of the survey	-1.0		-2.8, 0.8	-1.3		-5.2, 2.7	
Compared to Expanding Medicaid with a Different Demonstration							
Smoker at the time of the survey	-1.2		-3.0, 0.5	-0.9		-5.0, 3.2	
Smoker who did not try to quit in past 12 months	-1.2	*	-2.5, 0.1	-0.5		-3.6, 2.6	
Health status was fair or poor at the time of the survey	-0.8		-2.2, 0.5	-1.9		-5.4, 1.5	
Physical health was not good in past 30 days	-4.1	**	-6.2, -2.0	-4.4	*	-9.2, 0.3	
Mental health was not good in past 30 days	-1.5		-3.6, 0.7	-1.0		-5.9, 3.9	
Had an activity limitation due to health at the time of the survey	-3.2	** *	-5.0, -1.4	-3.1		-7.1, 0.9	

Source: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS). Notes:

Low-income is defined as family income at or below 138% of the Federal Poverty Level (FPL). Family income relative to FPL is imputed in the BRFSS (see Appendix E). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states). \*/\*\*/\*\*\* Significantly different from zero at the .10/.05/.01 levels, using two-tailed tests.
Table V.15: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, by Gender and Age

	By Gender				By Age				
	Men		Women		-	-		Age 45 or older	
Compared to Not Expanding Medicaid									
Smoker at the time of the survey	0.9		-0.5		1.1		-0.8		
Smoker who did not try to quit in past 12 months	-0.5		0.1		0.5		-1.0		
Health status was fair or poor at the time of the survey	-1.5		1.1		-1.0		1.0		
Physical health was not good in past 30 days	-3.1	**	-2.1		-3.9	**	-1.1		
Mental health was not good in past 30 days	-0.4		-2.7	*	-0.8		-2.4	*	
Had an activity limitation due to health at the time of the survey	-0.9		-0.7		-1.3		-0.2		
Compared to Expanding Medicaid without a Demonstration									
Smoker at the time of the survey	-0.1		0.8		2.3	*	-1.4		
Smoker who did not try to quit in past 12 months	0.2		0.9		2.4	**	-1.5	*	
Health status was fair or poor at the time of the survey	-1.6	*	-0.2		-1.7	*	0.3		
Physical health was not good in past 30 days	-2.2		-1.8		-2.2		-1.7		
Mental health was not good in past 30 days	-0.2		-3.3	**	-0.8		-2.7	*	
Had an activity limitation due to health at the time of the survey	-0.5		-1.4		-0.6		-1.3		
Compared to Expanding Medicaid with a Different Demonstration									
Smoker at the time of the survey	-1.3		-1.0		-0.7		-1.6		
Smoker who did not try to quit in past 12 months	-2.0	**	-0.3		-0.6		-1.7	**	
Health status was fair or poor at the time of the survey	-1.6	*	0.0		-1.3		0.1		
Physical health was not good in past 30 days	-4.1	** *	-4.1	***	-4.7	**	-3.0	**	
Mental health was not good in past 30 days	0.8		-3.8	**	-0.6		-2.3	*	
Had an activity limitation due to health at the time of the survey	-2.4	*	-4.0	***	-3.1	**	-3.0	**	

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

\*/\*\*/\*\*\* Significantly different from zero at the .10/.05/.01 levels, using two-tailed tests.

Table V.16: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, by Parent Status

	By Parent Status			
	Parent		Childles	ss Adult
Compared to Not Expanding Medicaid				
Smoker at the time of the survey	-1.6		1.3	
Smoker who did not try to quit in past 12 months	-1.4		0.5	
Health status was fair or poor at the time of the survey	-1.5		0.7	
Physical health was not good in past 30 days	-2.4		-2.7	**
Mental health was not good in past 30 days	-1.6		-1.6	
Had an activity limitation due to health at the time of the survey	-1.9		-0.1	
Compared to Expanding Medicaid without a Demonstration				
Smoker at the time of the survey	0.2		0.6	
Smoker who did not try to quit in past 12 months	-0.4		1.0	
Health status was fair or poor at the time of the survey	-2.1	**	-0.1	
Physical health was not good in past 30 days	-1.0		-2.7	**
Mental health was not good in past 30 days	-2.9		-1.0	
Had an activity limitation due to health at the time of the survey	-1.0		-1.0	
Compared to Expanding Medicaid with a Different				
<u>Demonstration</u>				
Smoker at the time of the survey	-1.8		-0.8	
Smoker who did not try to quit in past 12 months	-2.6	***	-0.3	
Health status was fair or poor at the time of the survey	-2.3	**	0.1	
Physical health was not good in past 30 days	-1.7		-5.6	***
Mental health was not good in past 30 days	-1.9		-1.4	
Had an activity limitation due to health at the time of the survey	-2.4	*	-3.7	***

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

\*/\*\*/\*\*\* Significantly different from zero at the .10/.05/.01 levels, using two-tailed tests.

Table V.17: Difference-in-Differences Estimates of Changes in Health Behaviors and Health Status for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) for Single-best Comparison State and Each Remaining Best Comparison State

	-	e-best ison State	Remair	ning Best (	Comparisor	States
Compared to Not Expanding Medicaid		VY	GA		NC	
Smoker at the time of the survey	0.4		-0.9		0.9	
Smoker who did not try to quit in past 12 months	0.1		-0.5		-0.2	
Health status was fair or poor at the time of the survey	0.2		-0.6		-0.5	
Physical health was not good in past 30 days	-1.8		-3.5	**	-2.8	**
Mental health was not good in past 30 days	0.0		-1.4		-2.4	*
Had an activity limitation due to health at the time of the survey	0.8		-1.8		-1.0	
Compared to Expanding Medicaid without a Demonstration	^	ND	К	ΥY		
Smoker at the time of the survey	0.5		0.3			
Smoker who did not try to quit in past 12 months	0.2		0.7			
Health status was fair or poor at the time of the survey	-1.0		-0.7			
Physical health was not good in past 30 days	-2.3	*	-1.6			
Mental health was not good in past 30 days	-2.7	**	-0.7			
Had an activity limitation due to health at the time of the survey	-1.5		-0.7			
Compared to Expanding Medicaid with a Different Demonstration	I	мі	N	Н		
Smoker at the time of the survey	-0.6		-2.4	**		
Smoker who did not try to quit in past 12 months	-1.5	**	-1.2			
Health status was fair or poor at the time of the survey	-0.7		-1.3			
Physical health was not good in past 30 days	-4.7	***	-3.4	**		
Mental health was not good in past 30 days	-2.6	**	0.1			
Had an activity limitation due to health at the time of the survey	-3.5	***	-2.9	**		

Source: 2011-13 and 2016-17 American Community Survey (ACS).

Notes: For sample sizes, see Table G.6 (Montana) and G.7 (each of Montana's comparison states).

\*/\*\*/\*\*\* Significantly different from zero at the .10/.05/.01 levels, using two-tailed tests.



#### **Summary of Impact Analysis**

Between 2011-13 (the period just before the ACA's Medicaid expansion and the launch of the Marketplace) and 2016-17 (the first two years after the implementation of Montana's section 1115 HELP demonstration), health insurance coverage in Montana was significantly higher than what would have been expected if Montana had not expanded Medicaid. Specifically, the change in health insurance coverage in Montana was 6.1 percentage points (p<.01) higher for all adults and 10.9 percentage points (p<.01) higher for low-income adults relative to the group of best comparison states (Georgia, North Carolina, and Wisconsin) that did not expand Medicaid.

Beyond simply examining the impact of HELP relative to no Medicaid expansion, an equally important question is how the impact of HELP on health insurance coverage compared to the impacts of alternate strategies for Medicaid expansions, such as, expanding without a section 1115 demonstration or expanding with a different demonstration. We find that the gains in health insurance coverage for adults under HELP were significantly larger than those achieved by either the group of best comparison states (Kentucky and North Dakota) that expanded Medicaid without a demonstration or the group of best comparison states (Michigan and New Hampshire) that expanded Medicaid with a different demonstration.

# VI. Lessons Learned from HELP

This evaluation explored stakeholder as well as beneficiary views on the Montana HELP demonstration and assessed the impact of the demonstration on health insurance coverage and access to care. Findings from all three components of this HELP evaluation show that the program had significant and positive effects. However, as with any program, implementation and administration were not seamless. Overall, health insurance coverage increased substantially; beneficiaries were largely satisfied with the program; and stakeholders believed it had positive economic impacts by increasing hospital payments and reducing uninsurance rates.

One of the principal lessons from Montana's section 1115 demonstration is that allowing Montana to use a section 1115 demonstration resulted in a program that achieved a key goal of both the ACA and the state—a significant expansion in health insurance coverage. As of September 2018, nearly 100,000 Montanans were enrolled in HELP. Moreover, the expansion in health insurance coverage exceeded the gains that would have been expected if the state had expanded Medicaid without a demonstration or with a demonstration more similar to those of Michigan or New Hampshire.

Apart from increases in health insurance coverage, the three components of the assessment of HELP provides a number of additional insights, which lessons other states considering designing and implementing section 1115 Medicaid demonstrations may find beneficial to take into account:

- Satisfaction with the HELP program was high among current enrollees, but somewhat less so among those disenrolled from the program. A majority of enrollees were somewhat to very satisfied with individual features of HELP including monthly premiums, the ability to see their doctors as well as choice of doctors, and coverage of health care services needed by these enrollee respondents. Among the disenrollee respondents, as is to be expected, those who voluntarily disenrolled from the program appeared to be more satisfied than those who were disenrolled from the program for non-payment of premiums. However, nearly 50 percent of disenrollee respondents did indicate that they would choose to re-enroll in HELP.
- HELP enrollees' and disenrollees' understanding of the individual features of HELP appears to be incomplete. This finding consistency came across from focus groups with HELP enrollees, interviews with HELP stakeholders, as well as from the survey results. This was particularly true for some of the more complex features such as premium credits going towards copays owed, and that copays must be paid out of pocket once premium credits are used up, as well as the feature that unpaid premiums are collected against future state income tax refunds. Focus groups and survey results also show issues with beneficiary outreach and assistance, which could reduce beneficiary, and in some cases provider, confusion about who is eligible, what is covered and what copayments are required.
- Access to health care improved for many beneficiaries. Focus group and stakeholder interviews showed that access was viewed favorably by both beneficiaries and stakeholders. With gains in health insurance coverage, enrollees in focus groups said their access to care had improved relative to their access before being covered under HELP. Access barriers were more prevalent for dental and vision services than for other services, even with HELP coverage. There is also some early evidence of gains in health care access and affordability, as well as gains in health behaviors and health status in Montana relative to states that did not expand Medicaid and

Draft Interim Evaluation Report for Montana HELP Federal Evaluation July 22, 2019. Not for attribution or distribution without permission from CMS. those that expanded Medicaid with or without a demonstration. However, given that the results are based on the first two years under HELP, a longer follow-up period is needed to more fully assess the impacts of HELP on health care access and affordability, health behaviors, and health status.

- Strong stakeholder engagement and collaboration with the state expedites system change. While state officials and stakeholders acknowledged that it took time and compromise to pass the Medicaid expansion in Montana, once HELP legislation was enacted, the deep collaboration between the state and stakeholders in implementing HELP created a win-win situation for hospitals, the broader health care system, and the uninsured in Montana.
- Changing patterns of health care use is hard and requires a long-term commitment. One of HELP's goals is to promote 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 HELP, 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 early impact estimates appear to support.
- Flexibility in program design is important. State officials and other interviewees highlighted the importance of periodically revisiting the HELP demonstration design based on actual program experience. For example, the administrative complexity of the original design of the 2 percent premium credit was difficult for the TPA plan to track and was a source of confusion for enrollees. As a result, Montana eliminated the premium credit as part of its 2017 demonstration amendments. Similarly, owing to administrative concerns and after conducting several costbenefit analyses, the state decided not to implement copayments for non-emergent use of the emergency room.
- **Broader state contextual issues have important implications.** Montana experienced a significant budget crisis in 2017. In a cost saving measure, Montana as part of its 2017 demonstration amendments eliminated the TPA plan and brought all HELP enrollees into the state's traditional Medicaid plan, thereby removing the public-private partnership feature of HELP. Montana's budget crisis also affected the state hiring which caused Medicaid eligibility and enrollment problems, both for the general Medicaid program and for the HELP demonstration enrollees

While this federal evaluation will not continue to track HELP as it moves forward, there is more that can be learned from Montana's section 1115 demonstration beyond the first two years of implementation. This is especially true for HELP given that on May 8, 2019, the Montana legislature reauthorized HELP as part of the Medicaid Reform and Integrity Act, which calls for several program changes including introducing community engagement requirements for some HELP enrollees and eliminating copayments. 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 in 2018 and beyond.



Social & Scientific Systems, Inc.

Appendices

Appendix A: Methodological Approach for Focus Groups

As part of our qualitative data collection under the Montana Medicaid expansion evaluation, we conducted focus groups with current beneficiaries enrolled in coverage through HELP. These focus groups captured HELP enrollees' reflections on their experiences in the program and obtained their perspectives and opinions on the program's strengths and weaknesses. Focus groups provide valuable and nuanced insights into individuals' experiences with a product, process, or program, but by their nature, they obtain information from relatively few people and thus cannot be presumed to represent the entire population of interest. Over three consecutive days in September 2018, Urban Institute researchers conducted four focus groups in Billings, Livingston, and Forsyth, Montana. All four focus groups included both exempt and premium-paying enrollees.

To help recruit HELP enrollees for focus groups, the Montana Medicaid agency gave evaluators recruitment lists containing names, contact information, and demographic information (e.g., income, ethnicity, Native American status) of both exempt and premium-paying HELP enrollees living in Billings, Livingston, and Forsyth. In each locality, we drew proportional subsamples from the larger full samples to approximately represent the distributions of enrollees by income (less than 51 percent, 51 to 100 percent, and more than 100 percent of FPL), eligibility status (exempt or paying premiums), and self-reported Native American status. A focus group ideally has between 8 and 10 people; to allow for attrition, we recruited 16 people for each group. Thus, for each of the four focus groups, recruitment efforts proceeded until recruiters secured commitments from 16 participants.

Like last year, we recruited HELP enrollees for focus group participation via "cold" telephone calls. Using the telephone numbers listed in the state-provided recruitment lists, recruiters tried to reach HELP enrollees by phone to describe the purpose of the focus groups and solicit their participation. Enrollees who expressed interest in participating in the focus group were asked to state their preferred method for receiving confirmation. Most requested that confirmation be delivered by e-mail or text message, but some requested confirmation by phone. Recruiters followed up multiple times between initial recruitment and the day of the focus groups to confirm event logistics (e.g., start time, location). In addition, we placed "reminder" emails, texts, or calls to each person who agreed to participate on the day before each focus group.

As detailed in **Appendix Table A1**, 33 HELP enrollees participated in the four focus groups (though 16 recruits had repeatedly confirmed their intent to attend each focus group). Researchers purposefully recruited about twice as many premium-paying enrollees as exempt enrollees to get perspectives from those affected by the elimination of the TPA and the premium credit. Nineteen of the 33 participants were female, and all participants were white. Though researchers attempted to recruit participants of other races, as well as of Native American status, all declined to participate.

	Premium-Paying Participants	Exempt Participants	Total
Focus Group 1	7	3	10
Focus Group 2	5	2	7
Focus Group 3	7	2	9
Focus Group 4	4	3	7
Total	23	10	33

#### Appendix Table A1. Focus Group Composition and Participation

Each focus group lasted between 90 and 120 minutes, and each participant received a \$60 gift card in appreciation of their participation. We also provided a light meal to participants. During the focus group design phase, the evaluation team developed a moderator's guide with a core set of questions exploring enrollees' experiences with HELP across the following dimensions:

- marketing and outreach
- enrollment process
- first impressions of the program
- renewal process
- cost sharing and affordability
- access to care, benefits, and health care use
- satisfaction with care quality
- impacts of having health coverage on daily life
- suggestions for improving the program
- HELP-Link program
- future issues, including the I-185 ballot initiative

We explored all dimensions, except the HELP-Link program and future issues, in the first wave of focus groups conducted in 2017.

At the start of each focus group, we gave all participants two copies of an informed consent form in accordance with Urban Institute Institutional Review Board rules, regulations, and prior approval. The form emphasized that enrollees' participation was voluntary and their privacy would be protected. After summarizing the content of the informed consent form, participants were asked to sign one copy for the evaluators and to keep a copy for their own records. We digitally recorded and transcribed all focus group proceedings; we destroyed recordings when we finished transcription and cleaning notes.

To analyze the results of the focus groups, the evaluation team used the same commonly accepted qualitative research methods as last year. Unabridged transcripts and field notes served as the basis for the analysis. Evaluators carefully reviewed focus group notes and transcripts and categorized participant responses using a structure that mirrored the content of the focus group moderator's guides. Dominant themes, divergent opinions, and experiences were noted and summarized. Finally, relevant quotations were selected based on frequency and richness to illustrate key points.

Appendix B: Methodological Approach for the HELP Beneficiary Surveys

#### **Survey Sample and Response Rates**

The sample frames (i.e., the lists of individuals meeting the inclusion criteria, and thus eligible to be sampled) for the enrollee and the disenrollee survey were derived from the State of Montana HELP administrative database. At the time of sample frame creation, this database contained HELP program participation records for each month during January 2016 – May 2017. Any individual who participated in the HELP program at any time during that period was included in the database.

Once included in the database, HELP enrollees had at least one record for each calendar month indicating current status (enrolled/disenrolled), reason for enrollment/disenrollment, income category relative to the federal poverty level, and demographic/residential information including zip codes which were then used to classify individuals as living in urban/rural areas<sup>1</sup>. In the event of a change in any component of an individual's status or demographics in a given month, the individual would have an additional record.

We devised processing rules for the administrative data to best approximate our inclusion/exclusion criteria for the sample frame for the survey using the information available. The enrollee survey sample frame consisted of all individuals aged 19-64 who resided in Montana and were enrolled in the HELP program in May 2017 and had indication of enrollment in each of the prior five months. "Unequivocal enrollment" was defined as having a record for May 2017 in which the "Eligibility\_Indicator" field had an entry of "1" with no indication of failure to pay premium, and no separate record for that month indicating ineligibility. This definition was intended to capture individuals who were currently enrolled, and had been enrolled for sufficient time (at least 6 months) to have experience with the aspects of the program examined in this survey.

The disenrollee sample frame consisted of all individuals aged 19-64 who had been enrolled in Montana HELP at some point during the previous 6 months, but were unequivocally listed as disenrolled from the HELP program as of May 2017. "Unequivocal disenrollment" was defined as having a record for May, 2017 in which the "Eligibility\_Indicator" field had an entry of "0", and no separate record for that month indicating eligibility. We excluded anyone whose first enrollment in the program occurred more than 12 months prior to the time of sample frame determination (May, 2017).

We randomly sampled 2,180 enrollees and 2,187 disenrollees from the sample frames of 19,994 records and 2,378 records, respectively. These sample sizes aimed to yield 700 completed enrollee and 700 completed disenrollee surveys. We calculated response rates based on complete survey submissions received through December 22, 2017, where as long as the respondents answered at least one question in addition to the screening questions, we considered it a response, and included all answered questions in the analysis. Particularly in light of the low response rate, we saw no reason to discard any information that was provided. Response rates for the primary questions (those not subject to being skipped based on other answers) was generally 90%-95%. A total of 655 individuals (31.1%) of the enrollee cohort submitted an enrollee survey form. This response rate is comparable to that seen in

<sup>&</sup>lt;sup>1</sup> Urban/rural was defined by mapping respondent zip codes to their corresponding county FIPS, and then using the county FIPs codes to classify them into core-based statistical areas (CBSAs). If a county fell in a CBSA it was considered urban. Counties that did not meet the definition of a CBSA were assigned as rural.

other surveys of Medicaid enrollees (Barnett & Sommers, 2017). For the disenrollee survey, only 178 individuals (9.3%) in the sample returned a disenrollee survey. This low response rate is comparable to that seen in other surveys targeting subjects with low socioeconomic status.

We anticipated that between the date of survey subject selection and the date of subject response, some individuals in the samples would change status from enrollee to disenrollee, or vice versa. For those selected for the disenrollee survey, 197 (9.0%) of the disenrollee sample reported that they were currently enrolled or unsure if currently enrolled in HELP, 74 (3.4%) had never been enrolled or were unsure if ever enrolled in HELP, and 5 (0.2%) said they had not been enrolled in the last 12 months. Seventy-four (3.4%) of the enrollee sample reported that they were not currently enrolled or unsure if they were unsure if ever enrolled in HELP.

#### Sample Non-Response Analysis

We conducted a non-response analysis to examine whether survey respondents and non-respondents differed on demographic factors by which program experiences or opinions might conceivably differ. In particular, we compared respondents and non-respondents on available demographic factors of sex, race, age group, urban/rural residence, and FPL category. Table B1 below shows percentage distributions of sex, race, urban/rural, FPL, and age group for the two sample populations, separately for those who responded and those who did not. Note that the information source for this table is the Montana administrative file, so that non-respondent information can be included and fairly compared to respondent information. For all other tables with demographic variables, the information comes from survey responses. Hence, the demographics in Table B1 may vary slightly from what is shown in other tables.

Among disenrollees there were no significant differences between the respondents and nonrespondents on the demographic factors examined. For the enrollee population, the only statistically significant difference we found on the five observable characteristics between respondents and nonrespondents was for age group, with only 49% of respondents being in the 19-39 age group, compared to 68% among non-respondents. The sample survey data are weighted in order to compensate for bias introduced by these differences between the respondents and non-respondents.

#### **Sample Weights**

For each survey, sample weights were developed in three steps to account for the probabilities of selection and to adjust for known ineligibility and nonresponse to reduce potential bias. The initial weight for each person in the sampling frame was calculated as the reciprocal of a given record's probability of selection from the sampling frame. To create the base weight, the initial weight was further adjusted by multiplying it by the number of records each person had in the sampling frame to compensate for unequal probabilities of selection.

The adjustment for ineligibility and nonresponse involved the creation of strata defined by demographic characteristics related to response. For the enrollees, the variables used for the adjustment strata were age (19-29 years, 30-39 years, 40-59 years, and 60+ years), race (nonwhite and white), gender, and residential location (urban and rural). Age (19-34 years, 35-49 years, and 50+ years) and residential

location (urban and rural) were used for the adjustment strata for the disenrollees. Within these strata, adjustment factors for ineligibility and nonresponse were computed and applied to the base weights of the samples.

The eligibility weight is calculated using the ratio of the sum of the weights for the survey respondents, nonrespondents and known ineligible participants to the sum of the weights for the respondents and nonrespondents. The base weight is multiplied by the ineligibility adjusted ratio for respondents and nonrespondents to yield the eligibility weight.

The final weight accounts for differential non-response by demographic groups. The nonresponse adjustment factor is calculated as the ratio of the sum of eligible respondents plus eligible nonrespondents over eligible respondents. The nonresponse adjusted weight is calculated as the product of the eligibility weight and the nonresponse adjustment factor for survey respondents to derive the final sampling weight.

Appendix Table B1: Demographic Features of Respondents, Non-respondents and Sample Pools

	Respondents (N=655)	Non-Respondents (N=1,449)
Sex		
Female	59%	55%
Male	41%	45%
Race		
White	85%	81%
Other/Unspecified	15%	19%
Age Group*		
19-39	49%	68%
40-59	37%	26%
60+	14%	6%
FPL		
0 - <= 50%	1%	1%
>50% - <=100%	51%	56%
>100% - 133%	48%	44%
Residence		
Urban	35%	38%
Rural	65%	62%

#### Enrollee Sample

\* P<0.05 for comparison of Respondents to Non-Respondents by Pearson chi-square test.

Appendix Table B2: Demographic Features of Respondents, Non-respondents and Sample Pools

	Respondents (N=178)	Non-Respondents (N=1,728)
Sex		
Female	61%	57%
Male	39%	43%
Race		
White	86%	80%
Other/Unspecified	14%	20%
Age Group*		
19-34	61%	59%
35-49	19%	27%
50+	20%	14%
FPL		
0 - <= 50%	88%	85%
>50% - <=100%	4%	7%
>100% - 133%	8%	8%
Residence*		
Urban	31%	39%
Rural	69%	61%

#### **Disenrollee Sample**

\* P<0.05 for comparison of Respondents to Non-Respondents by Pearson chi-square test.

Appendix C: HELP Beneficiary Survey Questionnaires

Appendix C1: HELP Beneficiary Survey: Enrollee Survey

# Montana Health and Economic Livelihood Partnership Plan Beneficiary Survey: Enrollees

#### PRA Disclosure Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0938-1332. The time required to complete this information collection is estimated to average **15 minutes** per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: CMS, 7500 Security Boulevard, Attn: PRA Reports Clearance Officer, Mail Stop C4-26-05, Baltimore, Maryland 21244-1850.

#### Introduction and Directions for Completing the Survey

The Centers for Medicare & Medicaid Services is conducting this survey to ask about your recent experiences receiving health care and should take about **15 minutes** to complete.

Your participation is voluntary, and there is no loss of benefits or penalty of any kind for deciding not to participate. You may skip any questions that you do not feel comfortable answering. Your participation in this research is private, and we will not share your name or any other identifying information with any outside organization. You may notice a number on the cover of the survey. This number is ONLY used to let us know if you returned the survey. Please contact the survey help desk toll-free at 1-855-443-2692 with questions about this research.

- Use pen with blue or black ink.
- Mark all your answers with an 'X'.
- If you make an error, cross it out with a single line and mark the correct answer.
- If you are told to skip a question, follow the arrow for instructions about what question to answer next.

Study ID

# **About Your HELP Enrollment**

The State of Montana currently runs an insurance program called the Montana Health and Economic Livelihood Partnership (HELP) Plan for adults ages 19 to 64.

1. Are you currently enrolled in the "Montana Health and Economic Livelihood Partnership Plan" (also called "HELP")?

	Yes
	No Not sure/Don't know
	Not sure/Don't know
How lo	ng have you been enrolled in HELP?

1 to 3 months

2.

- 4 to 6 months
- 7 to 12 months
- More than 12 months

3. Since you enrolled in HELP, was there ever a time you lost your coverage or were disenrolled from HELP?

Yes

No	
Not sure/Don't know	

#### 4. About how long were you disenrolled from HELP?



- 1 to 3 months
- More than 3 months



# Before You Enrolled in Your HELP Plan

For the next few questions, please think back to the 12 months before you enrolled in HELP. 5. In the 12 months before you enrolled in HELP, did you have any health insurance? Yes No ← GO TO QUESTION 9 Not sure/Don't know 6. How long did you have that health insurance? All 12 months 6 to 11 months Less than 6 months 7. What type of health insurance did you have? Mark one or more. Medicaid Private (insurance from an employer or union or purchased directly from insurance company) TRICARE or other military health care, including Veterans Health (VA enrollment) Indian Health Service Other Not sure/Don't know

8. In the 12 months <u>before you enrolled</u> in HELP, did you get any preventive care (such as a routine checkup, blood pressure check, flu shot, family planning services, prenatal services, cholesterol or cancer screening)?

Yes

\_ No

Not sure/Don't know

### About Your HELP Plan



#### Premiums and Copays

The following questions are about your understanding and experience with HELP premiums and copays.

#### 15. How much is your <u>monthly</u> HELP premium?

- 🗌 \$0 to \$9
- S10 to \$19
- Section \$29 \$20 to \$29
- \$30 to \$39
- 🗌 \$40 to \$49
- \$50 and above
- Not sure/Don't know

#### 16. How is that monthly premium paid, if at all?



- Someone pays the full amount for me
  - I pay part and someone else pays part
- ☐ The premium has not been paid
- Not sure/Don't know

≻ GO TO QUESTION 18

- **17.** Which of the following groups help pay for your monthly premium? *Mark one or more.* 
  - Family or friends
  - Community or non-profit organization (such as church, multi-cultural organization)
  - Health services organizations

Health care provider

- \_\_\_\_ Employer
- Other

- 18. Would you say the amount of your monthly premium is:
  - More than I can afford
  - An amount that I can afford
  - Less than I can afford
  - Not sure/Don't know

19. In the last 6 months, how worried were you about not having enough money to pay your monthly premium?

- Not at all worried
- A little worried
- Somewhat worried
- Very worried
- Extremely worried
- 20. What do you think will happen, if anything, if your monthly premium is <u>not paid</u> within 90 days?
  - □ Nothing will happen  $\rightarrow$  GO TO QUESTION 22
  - My HELP coverage could end
  - □ Not sure/Don't know  $\rightarrow$  GO TO QUESTION 22
- **21.** For each of the following statements, please tell us whether you think it is part of your HELP plan. *Please mark one answer in each row.*

		Part of your HELP plan	Not part of your HELP plan	Not sure
a.	Payment of any unpaid premiums <u>within 90 days</u> will allow me to keep my HELP coverage			
b.	Payment of any unpaid premiums <u>after 90 days</u> will allow me to re-enroll in HELP within 12 months of my HELP plan start date			
с.	Any unpaid premium balance may be collected from my future state income tax refunds			

22. In the last 6 months, have you paid any copays? Copays are payments owed by you to your health care provider for health care services that you receive. You are responsible for paying the provider after the claim has been processed.

Yes	
No	GO TO QUESTION 26
Not sure/Don't know	

23. In the last 6 months, would you say the amount you were required to pay for copays was:

- More than I could afford
- An amount that I could afford
- Less than I could afford
- Not sure/Don't know

24. The last time you received a bill for a copay, how was that copay paid, if at all?

- 🗌 I paid it
- Someone paid it for me
- The copay has not been paid
- Not sure/Don't know

#### 25. How easy or hard was it to understand how HELP copays work?

- Very easy
- Somewhat easy
- Neither easy nor hard
- Somewhat hard
- Very hard

# 26. For each of the following statements about <u>HELP premiums, premium credits, and copays</u>, please tell us whether you think it is part of your HELP plan. *Please mark one answer in each row.*

		Part of your HELP plan	Not part of your HELP plan	Not sure
a.	Monthly premiums depend on my income			
b.	Copays depend on which health care service(s) I use			
с.	Premium credits go toward copays owed			
d.	Copays must be paid out of my own pocket once my premium credit is used up			
e.	Copays will not be collected at the time of my health care service(s)			
f.	Unpaid premiums may be collected against my future state income tax refunds			

	Access to Care
For th	ne following questions please think about your health care experiences in the last 6 months.
27.	In the last 6 months, did you go to a doctor, nurse, or any other health professional or get prescription drugs? Yes No No Not sure/Don't know GO TO QUESTION 29
28.	In the last 6 months, were any of your health care visits for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.  Yes No Not sure/Don't know
29.	In the last 6 months, was there any time you needed health care but did not get it because of cost? Yes No → GO TO QUESTION 31
30.	In the last 6 months, what types of health care were you unable to get because of cost? Please mark one answer in each row.

		Yes	INO	N/A
a.	A visit to the doctor when I was sick			
b.	Preventive care (such as blood pressure check, flu shot, family planning services, prenatal services, cholesterol or cancer screenings)			
с.	A follow up visit to get tests or care recommended by my doctor			
d.	Dental care			
e.	Vision (eye) care			
f.	Prescription drugs			
g.	Emergency room care			

The next set of questions is about emergency room (ER) care and treatment.

Some people use emergency rooms for both <u>emergency</u> and <u>non-emergency care</u>. An emergency is defined as any condition that could endanger your life or cause permanent disability if not treated immediately.

- 31. As part of your HELP plan, is there an \$8 copay for going to the emergency room for a non-emergency condition?
  - Yes
  - Not sure/Don't know
- 32. In the last 6 months, was there a time you thought about going to the emergency room when you needed care?
  - Yes



33. In the last 6 months, when you needed care did you go to the emergency room?

	Yes	$\rightarrow$	GO	то	QUES	STION	35
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No

#### 34. What was the main reason you <u>did not</u> go to the emergency room for care?

- Did not have a way to get there or could not afford to get there
- Went to my doctor's office or clinic instead
- Did not want to pay a copay
- Waited to see if I would get better on my own
- Some other reason

# Satisfaction with HELP

#### 35. Thinking about your overall experience with HELP, would you say you are:

- Very Satisfied
- Somewhat Satisfied
- □ Neither Satisfied nor Dissatisfied → GO TO QUESTION 37
- Somewhat Dissatisfied
- Very Dissatisfied
- □ Not sure/Don't know  $\rightarrow$  GO TO QUESTION 37

#### 36. Please tell us how satisfied or dissatisfied you are with each <u>HELP</u> item below.

Please mark one answer in each row.

		Very Satisfied	Somewhat Satisfied	Neutral	Somewhat Dissatisfied	Very Dissatisfied
a.	Enrollment process					
b.	Length of time for coverage to begin					
с.	Ability to see my doctor					
d.	Choice of doctors					
e.	Coverage of health care services that I need					
f.	How copays work					
g.	Cost of premiums					
h.	Paying the same amount each month for premiums					

Now think about your current HELP plan compared to the health insurance plan you had in the 12 months before you enrolled in HELP.

If you <u>did not</u> have a health insurance plan	GO TO QUESTION 38
in the 12 months before you enrolled in HELP	

**37.** For each of the following items, how does your <u>current HELP plan</u> compare to your <u>previous health insurance</u> <u>plan</u>? *Please mark one answer in each row.* 

		Better	The same	Worse	Not sure
a.	Ability to afford my plan				
b.	Coverage of health care services that I need				
с.	Ability to see my doctor				
d.	Ability to get health care services that I need				

# **About You** Would you say that in general your health is: What is the highest grade or level of school that you have completed? Some high school, but did not graduate High school graduate or GED

- Some college or 2-year degree
- 4-year college graduate

8th grade or less

More than 4-year college degree

#### 40. What best describes your employment status?

- Employed full-time
- Employed part-time
- Self-employed
- A homemaker
- A full-time student
- Unable to work for health reasons
- Unemployed

#### 41. What is your age?

38.

39.

Excellent

Very good

Good

Fair

Poor

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

#### 42. Are you male or female?

- Male
- Female

43. Are you of Hispanic, Latino/a, or Spanish origin? *Mark one or more.* 

- No, not of Hispanic, Latino/a, or Spanish origin
- Yes, Mexican, Mexican American, Chicano/a
- Yes, Puerto Rican
- Yes, Cuban
- Yes, another Hispanic, Latino/a, or Spanish origin

#### 44. What is your race? Mark one or more.

- White
- Black or African-American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Other Pacific Islander

45. Please circle the number of people in your family (including yourself) that live in your household. Mark only one answer that best describes your family's total income over the last year before taxes and other deductions. Your best estimate is fine.

Family size (including yourself)	Family Income Per Year						
One person	At or below \$6,000	Above \$6,000 and up to \$12,000	Above \$12,000 and less than \$17,000	At or above \$17,000			
Two people	At or below \$8,000	Above \$8,000 and up to \$16,000	Above \$16,000 and less than \$22,000	At or above \$22,000			
Three people	At or below \$10,000	Above \$10,000 and up to \$20,000	Above \$20,000 and less than \$28,000	At or above \$28,000			
Four people	At or below \$12,000	Above \$12,000 and up to \$25,000	Above \$25,000 and less than \$34,000	At or above \$34,000			
Five people	At or below \$14,000	Above \$14,000 and up to \$29,000	Above \$29,000 and less than \$40,000	At or above \$40,000			
Six people	At or below \$16,000	Above \$16,000 and up to \$33,000	Above \$33,000 and less than \$45,000	At or above \$45,000			
Seven people	At or below \$19,000	Above \$19,000 and up to \$37,000	Above \$37,000 and less than \$51,000	At or above \$51,000			
Eight people	At or below \$21,000	Above \$21,000 and up to \$41,000	Above \$41,000 and less than \$57,000	At or above \$57,000			
Nine people	At or below \$23,000	Above \$23,000 and up to \$45,500	Above \$45,500 and less than \$63,000	At or above \$63,000			
Ten or more people	At or below \$25,000	Above \$25,000 and up to \$50,000	Above \$50,000 and less than \$69,000	At or above \$69,000			

#### 46. Did someone help you complete this survey?

Yes

 $\square$  No  $\rightarrow$  THANK YOU. Please return the completed survey in the postage-paid envelope.

#### 47. How did that person help you? *Mark one or more.*

- Read the questions to me
- Wrote down the answers I gave



Translated the questions into my language

#### THANK YOU

Please return the completed survey in the postage-paid envelope.

Social & Scientific Systems, Inc. 4505 Emperor Blvd, Suite 400 Durham, NC 27703 Appendix C2: HELP Beneficiary Survey: Disenrollee Survey

# Montana Health and Economic Livelihood Partnership Plan Beneficiary Survey: Disenrollees

#### PRA Disclosure Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0938-1332. The time required to complete this information collection is estimated to average **15 minutes** per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: CMS, 7500 Security Boulevard, Attn: PRA Reports Clearance Officer, Mail Stop C4-26-05, Baltimore, Maryland 21244-1850.

#### Introduction and Directions for Completing the Survey

The Centers for Medicare & Medicaid Services is conducting this survey to ask about your recent experiences receiving health care and should take about **15 minutes** to complete.

Your participation is voluntary, and there is no loss of benefits or penalty of any kind for deciding not to participate. You may skip any questions that you do not feel comfortable answering. Your participation in this research is private, and we will not share your name or any other identifying information with any outside organization. You may notice a number on the cover of the survey. This number is ONLY used to let us know if you returned the survey. Please contact the survey help desk toll-free at 1-855-443-2692 with questions about this research.

- Use pen with blue or black ink.
- Mark all your answers with an 'X'.
- If you make an error, cross it out with a single line and mark the correct answer.
- If you are told to skip a question, follow the arrow for instructions about what question to answer next.

# About Your HELP Enrollment

The State of Montana currently runs an insurance program called the Montana Health and Economic Livelihood Partnership (HELP) Plan for adults ages 19 to 64.

1. Are you currently enrolled in the "Montana Health and Economic Livelihood Partnership Plan" (also called "HELP")?

Yes → GO TO END

No



#### 2. Have you ever been enrolled in HELP?

Yes	
No	
Not sure/Don't know	GO TO END

Study ID

#### 3. Were you enrolled in HELP within the last 12 months?

Yes

No → GO TO END

#### 4. How long ago did your HELP enrollment end?

- Less than 3 months
- 3 to 6 months
- More than 6 months
- Not sure/Don't know

#### 5. Why did your HELP enrollment end? *Please mark one answer in each row.*

My HELP enrollment ended because	Yes	No	Not Sure
a. I got an increase in my income and was no longer eligible for HELP			
b. I had other health insurance available to me			
c. I could not afford my monthly HELP premiums			
d. I no longer wanted HELP coverage			
e. I did not pay my premium within 90 days			

#### 6. Would you try to re-enroll in HELP if you could?

Yes

No


## **Experiences After Leaving HELP**

The following questions are about your understanding and experiences since you left HELP.

7. After you were no longer enrolled in HELP, was there any time you needed health care but did not get it because of cost?



8. After you were no longer enrolled in HELP, what types of health care were you unable to get because of cost? *Please mark one answer in each row.* 

		Yes	No	N/A
a.	A visit to the doctor when I was sick			
b.	Preventive care (such as blood pressure check, flu shot, family planning services, prenatal services, cholesterol or cancer screenings)			
c.	A follow up visit to get tests or care recommended by my doctor			
d.	Dental care			
e.	Vision (eye) care			
f.	Prescription drugs			
g.	Emergency room care			

9. After you were no longer enrolled in HELP, did you go to a doctor, nurse, or any other health professional or get prescription drugs?

Yes	
No	
Not sure/Don't know	GO TO QUESTION 11

10. After you were no longer enrolled in HELP, were any of your health care visits for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.

	Yes
	No
	Not sure/Don't know
11.	Do you have any health insurance coverage right now?
	Yes
	<ul> <li>No</li> <li>Sot sure/Don't know</li> <li>GO TO QUESTION 15</li> </ul>
12.	What type of health insurance do you have? Mark one or more.
	Private (insurance from an employer or union or purchased directly from insurance company)
	TRICARE or other military health care, including Veterans Health (VA enrollment)
	Medicaid
	Medicare
	Indian Health Service
	Other

Not sure/Don't know

13. How long have you had your current health insurance?





More than 6 months

14. After you were no longer enrolled in HELP, how long did it take you to get your current health insurance?







## **Premiums and Copays**

The following questions are about your understanding and experiences with HELP monthly premiums and copays **while you were in HELP**.

- 15. While you were in HELP, how much was your <u>monthly</u> HELP premium?
  - \$0 to \$9
  - 510 to \$19
  - \$20 to \$29
  - \$30 to \$39
  - \$40 to \$49
  - \$50 and above
  - Not sure/Don't know

#### 16. How was that monthly premium paid, if at all?



- Someone paid the full amount for me
- I paid part and someone else paid part
- The premium has not been paid
- Not sure/Don't know

**GO TO QUESTION 18** 

- **17.** Which of the following groups helped pay for your monthly premium? *Mark one or more.* 
  - Family or friends
  - Community or non-profit organization (such as church, multi-cultural organization)
  - Health services organizations
  - Health care provider
  - Employer
  - Other

#### 18. While you were in HELP, would you say the amount of your monthly premium was:

- More than I could afford
- An amount that I could afford
- Less than I could afford
- Not sure/Don't know

# 19. While you were in HELP, how worried were you about not having enough money to pay your monthly premium?



- A little worried
- Somewhat worried
- Very worried
- Extremely worried

# 20. While you were in HELP, what did you think would happen, if anything, if your monthly premium was <u>not paid</u> within 90 days?

□ Nothing would change  $\rightarrow$  GO TO QUESTION 22

- My HELP coverage would end
- □ Not sure/Don't know  $\rightarrow$  GO TO QUESTION 22

## **21.** For each of the following statements, please tell us whether you thought it was part of your HELP plan. *Please mark one answer in each row.*

		Part of your HELP plan	Not part of your HELP plan	Not sure
6	<ul> <li>Payment of any unpaid premiums <u>within 90 days</u> would have allowed me to keep my HELP coverage</li> </ul>			
k	D. Payment of any unpaid premiums <u>after 90 days</u> would have allowed me to re-enroll in HELP within 12 months of my HELP plan start date			
C	c. Any unpaid premium balance may be collected from my future state income tax refunds			

22. While you were in HELP, did you pay any copays? Copays are payments owed by you to your health care provider for health care services that you receive. You are responsible for paying the provider after the claim has been processed.

Yes	
No	GO TO QUESTION 25
Not sure/Don't know	

23. While you were in HELP, would you say the amount you were required to pay for copays was:

- More than I could afford
- An amount that I could afford
- Less than I could afford
- Not sure/Don't know

#### 24. How easy or hard was it to understand how HELP copays work?

- Very easy
- Somewhat easy
- Neither easy nor hard
- Somewhat hard
- Very hard

# 25. For each of the following statements about <u>HELP premiums, premium credits, and copays</u>, please tell us whether you thought they were part of your HELP plan. *Please mark one answer in each row.*

		Part of your HELP plan	Not part of your HELP plan	Not sure
a.	Monthly premiums depend on my income			
b.	Copays depend on which health care service(s) I use			
с.	Premium credits go toward copays owed			
d.	Copays must be paid out of my own pocket once my premium credit is used up			
e.	Copays will not be collected at the time of my health care service(s)			
f.	Unpaid premiums may be collected against my future state income tax refunds			

### Access to Care

Some people use emergency rooms for both <u>emergency</u> and <u>non-emergency care</u>. An emergency is defined as any condition that could endanger your life or cause permanent disability if not treated immediately.

For the following questions, please think about your experience while you were in HELP.

- 26. As part of your HELP plan, was there an \$8 copay for going to the emergency room for a non-emergency condition?
  - Yes
  - No
  - Not sure/Don't know
- 27. While you were in HELP, was there a time you thought about going to the emergency room when you needed care?
  - Yes
  - □ No  $\rightarrow$  GO TO QUESTION 30
- 28. While you were in HELP, when you needed care, did you go to the emergency room?
  - $\Box$  Yes  $\rightarrow$  GO TO QUESTION 30
  - No

29. What was the main reason you <u>did not</u> go to the emergency room for care?

- Did not have a way to get there or could not afford to get there
- Went to my doctor's office or clinic instead
- Did not want to pay a copay
- Waited to see if I would get better on my own
- Some other reason

## Satisfaction with HELP

#### 30. Thinking about your overall experience with HELP, would you say you are:

- Very Satisfied
- Somewhat Satisfied
- □ Neither Satisfied nor Dissatisfied → GO TO QUESTION 32
- Somewhat Dissatisfied
- Very Dissatisfied
- □ Not sure/Don't know  $\rightarrow$  GO TO QUESTION 32

#### 31. Please tell us how satisfied or dissatisfied you are with each <u>HELP</u> item below.

Please mark one answer in each row.

		Very Satisfied	Somewhat Satisfied	Neutral	Somewhat Dissatisfied	Very Dissatisfied
a.	Enrollment process					
b.	Length of time for coverage to begin					
c.	Ability to see my doctor					
d.	Choice of doctors					
e.	Coverage of health care services that I need					
f.	How copays work					
g.	Cost of premiums					
h.	Paying the same amount each month for premiums					

## About You

32.	Would you say that in general your health is:
	Excellent
	Very good
	Good
	Fair
	Poor
33.	What is the highest grade or level of school that you have completed?
	8th grade or less
	Some high school, but did not graduate
	High school graduate or GED
	Some college or 2-year degree
	4-year college graduate
	More than 4-year college degree
34.	What best describes your employment status?
	Employed full-time
	Employed part-time
	Self-employed
	A homemaker
	A full-time student
	Unable to work for health reasons
	Unemployed
35.	What is your age?
	18 to 24
	25 to 34
	35 to 44
	45 to 54
	55 to 64
	<ul> <li>55 to 64</li> <li>65 to 74</li> </ul>

#### 36. Are you male or female?

- Male
- Female

37.

38.

Are you of Hispanic, Latino/a, or Spanish origin? *Mark one or more.*No, not of Hispanic, Latino/a, or Spanish origin

Yes, Mexican, Mexican American, Chicano/a

Yes, Puerto Rican

Yes, Cuban

Yes, another Hispanic, Latino/a, or Spanish origin

What is your race? *Mark one or more.*White

Black or African-American

American Indian or Alaska Native

Asian

Native Hawaiian or Other Pacific Islander

39. Please circle the number of people in your family (including yourself) that live in your household. Mark only one answer that best describes your family's total income over the last year before taxes and other deductions. Your best estimate is fine.

Family size (including yourself)	Family Income Per Year				
One person	At or below \$6,000	Above \$6,000 and up to \$12,000	Above \$12,000 and less than \$17,000	At or above \$17,000	
Two people	At or below \$8,000	Above \$8,000 and up to \$16,000	Above \$16,000 and less than \$22,000	At or above \$22,000	
Three people	At or below \$10,000	Above \$10,000 and up to \$20,000	Above \$20,000 and less than \$28,000	At or above \$28,000	
Four people	At or below \$12,000	Above \$12,000 and up to \$25,000	Above \$25,000 and less than \$34,000	At or above \$34,000	
Five people	At or below \$14,000	Above \$14,000 and up to \$29,000	Above \$29,000 and less than \$40,000	At or above \$40,000	
Six people	At or below \$16,000	Above \$16,000 and up to \$33,000	Above \$33,000 and less than \$45,000	At or above \$45,000	
Seven people	At or below \$19,000	Above \$19,000 and up to \$37,000	Above \$37,000 and less than \$51,000	At or above \$51,000	
Eight people	At or below \$21,000	Above \$21,000 and up to \$41,000	Above \$41,000 and less than \$57,000	At or above \$57,000	
Nine people	At or below \$23,000	Above \$23,000 and up to \$45,500	Above \$45,500 and less than \$63,000	At or above \$63,000	
Ten or more people	At or below \$25,000	Above \$25,000 and up to \$50,000	Above \$50,000 and less than \$69,000	At or above \$69,000	

#### 40. Did someone help you complete this survey?

Yes

 $\square$  No  $\rightarrow$  THANK YOU. Please return the completed survey in the postage-paid envelope.

#### 41. How did that person help you? Mark one or more.

- Read the questions to me
- Wrote down the answers I gave
- Answered the questions for me
- Translated the questions into my language

#### THANK YOU

Please return the completed survey in the postage-paid envelope.

Social & Scientific Systems, Inc. 4505 Emperor Blvd, Suite 400 Durham, NC 27703 Appendix D: Results from the HELP Beneficiary Surveys

## **RESULTS FROM THE ENROLLEE SURVEYS**

## Understanding of and Information-Seeking About HELP

How well do you think you understand how your HELP plan works?	Weighted Percent	Standard Error of Weighted Percent
Very well	20%	1.62
Somewhat	70%	1.96
Not at all	9%	1.28

When you enrolled in HELP, did you look for any information in written materials or on the Internet about the HELP plan?	Weighted Percent	Standard Error of Weighted Percent
Yes	41%	2.10
Νο	57%	2.13
{If Yes} How helpful was the information about the HELP plan?		
Very helpful	35%	3.13
Somewhat helpful	59%	3.23
Not at all helpful	5%	1.26

When you enrolled in HELP, did you get information or help from a customer service representative?	Weighted Percent	Standard Error of Weighted Percent
Yes	47%	2.14
Νο	51%	2.15
{If Yes} How helpful was the information you got?		
Very helpful	61%	3.10
Somewhat helpful	33%	2.90
Not at all helpful	4%	1.94

What do you think will happen, if anything, if your monthly premium is not paid within 90 days?	Weighted Percent	Standard Error of Weighted Percent
Nothing will happen	2%	0.61
My HELP coverage could end	71%	1.93
Not sure/Don't know	25%	1.83
{If response=My HELP coverage could end} Please tell us whether each of the following are a part of your HELP Plan		
Payment of any unpaid premiums within 90 days will allow me to keep my HELP coverage		
Part of your HELP plan	43%	2.52
Not part of your HELP plan	8%	1.30
Not sure	48%	2.56
Payment of any unpaid premiums after 90 days will allow me to re- enroll in HELP within 12 months of my HELP plan start date		
Part of your HELP plan	26%	2.23
Not part of your HELP plan	7%	1.25
Not sure	67%	2.40
Any unpaid premium balance may be collected from my future state income tax refunds		
Part of your HELP plan	30%	2.28
Not part of your HELP plan	5%	0.94
Not sure	65%	2.38

How easy or hard was it to understand how HELP copays work?*	Weighted Percent	Standard Error of Weighted Percent
Very easy	24%	3.58
Somewhat easy	36%	4.00
Neither easy nor hard	21%	3.64
Somewhat hard	9%	2.22
Very hard	7%	2.39

\*Only answered by respondents who said they had paid copays in the last 6 months

Please tell us whether each of the following are a part of your HELP Plan	Weighted Percent	Standard Error of Weighted Percent
Monthly premiums depend on my income		
Part of your HELP plan	75%	1.90
Not part of your HELP plan	3%	0.72
Not sure	20%	1.76
Copays depend on which health care services(s) I use		
Part of your HELP plan	44%	2.15
Not part of your HELP plan	6%	1.00
Not sure	48%	2.15
Premium credits go toward copays owed		
Part of your HELP plan	11%	1.28
Not part of your HELP plan	13%	1.34
Not sure	75%	1.81
Copays must be paid out of my own pocket once my premium credit is used up		
Part of your HELP plan	26%	1.84
Not part of your HELP plan	7%	1.16
Not sure	65%	2.04
Copays will not be collected at the time of my health care service(s)		
Part of your HELP plan	23%	1.79
Not part of your HELP plan	19%	1.74
Not sure	57%	2.14
Unpaid premiums may be collected against my future state income tax refunds		
Part of your HELP plan	28%	1.91
Not part of your HELP plan	4%	0.71
Not sure	67%	2.01

As part of your HELP plan, is there an \$8 copay for going to the emergency room for a non-emergency condition?	Weighted Percent	Standard Error of Weighted Percent
Yes	5%	0.98
No	10%	1.49
Not sure/Don't know	82%	1.78

#### Cost as a Barrier to Access to Care

In the last 6 months, did you go to a doctor, nurse, or any other health professional or get prescription drugs?	Weighted Percent	Standard Error of Weighted Percent
Yes	71%	2.01
No	26%	1.94
Not sure/Don't know	1%	0.54
{If Yes} In the last 6 months, were any of your health care visits for a routine checkup?		
Yes	47%	2.50
No	50%	2.51
Not sure/Don't know	2%	0.57
In the last 6 months, was there any time you needed health care but did not get it because of cost?		
Yes	14%	1.49
No	85%	1.58
{If Yes} What types of health care were you unable to get because of cost?		
A visit to the doctor when I was sick		
Yes	25%	5.22
Νο	55%	5.95
N/A	17%	4.79
Preventive care		
Yes	33%	5.79
No	51%	5.96
N/A	13%	4.41

	Weighted Percent	Standard Erro of Weighted Percent
A follow up visit to get tests or care recommended by my doctor		
Yes	34%	5.61
No	49%	5.96
N/A	14%	3.61
Dental care		
Yes	59%	5.93
No	30%	5.43
N/A	8%	4.04
Vision (eye) care		
Yes	45%	5.85
No	42%	5.90
N/A	10%	4.20
Prescription drugs		
Yes	31%	5.55
No	56%	5.86
N/A	10%	3.05
Emergency room care		
Yes	14%	3.84
No	66%	5.36
N/A	17%	4.04

In the last 6 months, was there a time you thought about going to the emergency room when you needed care?	Weighted Percent	Standard Error of Weighted Percent
Yes	23%	1.85
No	75%	1.90
{If Yes} In the last 6 months, when you needed care did you go to the emergency room?		
Yes	62%	4.64
Νο	38%	4.64
{If No} What was the main reason you did not go to the emergency room for care?		
Did not have a way to get there or could not afford to get there	13%	9.06
Went to my doctor's office or clinic instead	29%	6.93
Did not want to pay a copay	3%	2.30
Waited to see if I would get better on my own	42%	7.84
Some other reason	11%	4.24

#### Affordability of HELP

How much is your monthly HELP premium?	Weighted Percent	Standard Error of Weighted Percent
\$0 to \$9	2%	0.96
\$10 to \$19	26%	1.87
\$20 to \$29	36%	2.01
\$30 to \$39	15%	1.48
\$40 to \$49	6%	0.94
\$50 and above	7%	1.29
Not sure/Don't know	6%	1.11
How is that monthly premium paid, if at all?		
l pay it	83%	1.83
Someone pays the full amount for me	3%	0.80
I pay part and someone else pays part	0%	0.23

	Weighted Percent	Standard Error of Weighted Percent
The premium has not been paid	8%	1.38
Not sure/Don't know	4%	0.93
{If response= "Someone pays the full amount for me" or "I pay part and someone else pays part"}		
Which of the following groups help pay for monthly premium?*		
Family or friends	78%	10.08
Other (includes community or non-profit organization, health services organizations, health care provider, employer, and other)	22%	10.08

 $\ensuremath{^*}\xspace$  respondents could pick more than one category of the above

Would you say the amount of your monthly premium is:	Weighted Percent	Standard Error of Weighted Percent
More than I can afford	15%	1.65
An amount that I can afford	76%	1.91
Less than I can afford	3%	0.64
Not sure/Don't know	4%	0.89
In the last 6 months, how worried were you about not having enough money to pay your monthly premium?		
Not at all worried	50%	2.15
A little worried	21%	1.66
Somewhat worried	13%	1.39
Very worried	7%	1.12
Extremely worried	7%	1.36

In the last 6 months, have you paid any copays?	Weighted Percent	Standard Error of Weighted Percent
Yes	24%	1.79
No	65%	2.04
Not sure/Don't know	9%	1.25
{If Yes}		
In the last 6 months, would you say the amount you were required to pay for copays was:		
More than I could afford	25%	3.70
An amount that I could afford	69%	4.07
Less than I could afford	3%	2.21
Not sure/Don't know	1%	1.03
The last time you received a bill for a copay, how was that copay paid, if at all?		
l paid it	77%	3.79
Someone paid it for me	5%	2.44
The copay has not been paid	10%	2.71
Not sure/Don't know	5%	1.71

#### Satisfaction with HELP

Thinking about your overall experience with HELP, would you say you are:	Weighted Percent	Standard Error of Weighted Percent
Very Satisfied	48%	2.14
Somewhat Satisfied	25%	1.83
Neither Satisfied nor Dissatisfied	15%	1.72
Somewhat Dissatisfied	5%	1.03
Very Dissatisfied	1%	0.45
Not sure/Don't know	5%	0.94

{If response= "Very/Somewhat Satisfied" or "Very/Somewhat Dissatisfied}	Weighted Percent	Standard Err of Weighted Percent
How satisfied or dissatisfied are you with:		
Enrollment Process		
Very Satisfied	57%	2.33
Somewhat Satisfied	25%	2.07
Neutral	12%	1.58
Somewhat Dissatisfied	4%	0.84
Very Dissatisfied	2%	0.61
Length of time for coverage to begin		
Very Satisfied	63%	2.26
Somewhat Satisfied	23%	1.97
Neutral	10%	1.42
Somewhat Dissatisfied	3%	0.80
Very Dissatisfied	1%	0.38
Ability to see my doctor		
Very Satisfied	69%	2.17
Somewhat Satisfied	16%	1.74
Neutral	10%	1.41
Somewhat Dissatisfied	2%	0.77
Very Dissatisfied	2%	0.58
Choice of doctors		
Very Satisfied	60%	2.27
Somewhat Satisfied	17%	1.69
Neutral	15%	1.63
Somewhat Dissatisfied	5%	1.10
Very Dissatisfied	2%	0.59
Coverage of health care services that I need		
Very Satisfied	58%	2.32
Somewhat Satisfied	26%	2.06

	Weighted Percent	Standard Error of Weighted Percent
Neutral	10%	1.42
Somewhat Dissatisfied	4%	0.92
Very Dissatisfied	2%	0.61
How copays work		
Very Satisfied	41%	2.29
Somewhat Satisfied	19%	1.89
Neutral	33%	2.20
Somewhat Dissatisfied	3%	0.78
Very Dissatisfied	2%	0.69
Cost of premiums		
Very Satisfied	61%	2.29
Somewhat Satisfied	14%	1.56
Neutral	18%	1.86
Somewhat Dissatisfied	4%	0.91
Very Dissatisfied	3%	0.79
Paying the same amount each month for premiums		
Very Satisfied	75%	2.06
Somewhat Satisfied	14%	1.65
Neutral	7%	1.24
Somewhat Dissatisfied	2%	0.78
Very Dissatisfied	1%	0.45

In the 12 months before you enrolled in HELP, did you have any health insurance?	Weighted Percent	Standard Erro of Weighted Percent
Yes	53%	2.15
No	44%	2.14
Not sure/Don't know	2%	0.68
{If Yes}		
How long did you have that health insurance?		
All 12 months	77%	2.50
6 to 11 months	14%	2.00
Less than 6 months	7%	1.70
What type of health insurance did you have?*		
Medicaid	20%	2.32
Private	54%	2.87
Other (including TRICARE, Indian Health Service, and other)	22%	2.40
Not Sure/Don't Know	3%	0.93
For each of the following items, how does your current HELP plan compare to your previous health insurance plan?		
Ability to afford my plan		
Better	63%	2.81
The same	14%	2.05
Worse	13%	1.96
Not sure	5%	1.31
Coverage of health care services that I need		
Better	35%	2.75
The same	38%	2.82
Worse	10%	1.66
Not sure	12%	1.86
Ability to see my doctor		
Better	25%	2.52
The same	54%	2.88
Worse	7%	1.48

	Weighted Percent	Standard Error of Weighted Percent
Not sure	9%	1.64
Ability to get health care services that I need		
Better	31%	2.71
The same	46%	2.87
Worse	10%	1.74
Not sure	8%	1.50

\*respondents could pick more than one category of the above

### Before Enrolled in HELP and HELP Coverage

In the 12 months before you enrolled in HELP, did you get any preventive care (such as a routine checkup, blood pressure check, flu shot, family planning services, prenatal services, cholesterol or cancer screening)?	Weighted Percent	Standard Error of Weighted Percent
Yes	61%	2.84
No	30%	2.65
Not sure/Don't know	8%	1.62

\*Only answered by respondents who said they had health insurance before they enrolled in HELP

From the time you submitted your application until your HELP coverage started, how much time did it take?	Weighted Percent	Standard Error of Weighted Percent
Less than a month	40%	2.08
1 to 3 months	33%	2.04
More than 3 months	4%	0.79
Not sure/Don't know	21%	1.81

How long have you been enrolled in HELP?	Weighted Percent	Standard Error of Weighted Percent
1 to 3 months	3%	0.78
4 to 6 months	16%	1.75
7 to 12 months	31%	1.94
More than 12 months	49%	2.15
Since you enrolled in HELP, was there ever a time you lost your coverage or were disenrolled from HELP?		
Yes	10%	1.50
No	83%	1.84
Not sure/Don't know	7%	1.16
{If Yes} About how long were you disenrolled from HELP?		
Less than 1 month	30%	8.49
1 to 3 months	44%	7.97
More than 3 months	12%	5.30
Not sure/Don't know	14%	5.70

## **RESULTS FROM THE DISENROLLEE SURVEYS**

## Understanding of HELP

While you were in HELP, what did you think would happen, if anything, if your monthly premium was not paid within 90 days?	Weighted Percent	Standard Error of Weighted Percent
Nothing would change	6%	1.87
My HELP coverage would end	66%	3.66
Not sure/Don't know	26%	3.37
{If response=My HELP coverage would end} Please indicate whether you thought the following features were part of your HELP Plan		
Payment of any unpaid premiums within 90 days would have allowed me to keep my HELP coverage		
Part of your HELP plan	31%	4.34
Not part of your HELP plan	13%	3.17
Not sure	54%	4.71
Payment of any unpaid premiums after 90 days would have allowed me to re-enroll in HELP within 12 months of my HELP plan start date		
Part of your HELP plan	18%	3.54
Not part of your HELP plan	11%	2.98
Not sure	69%	4.33
Any unpaid premium balance may be collected from my future state income tax refunds		
Part of your HELP plan	37%	4.56
Not part of your HELP plan	4%	1.89
Not sure	57%	4.69

Please indicate whether you thought the following features were part of your HELP Plan	Weighted Percent	Standard Error of Weighted Percent
Monthly premiums depend on my income		
Part of your HELP plan	67%	3.62
Not part of your HELP plan	4%	1.42
Not sure	28%	3.47
Copays depend on which health care service(s) I use		
Part of your HELP plan	43%	3.83
Not part of your HELP plan	7%	2.14
Not sure	48%	3.86
Premium credits go toward copays owed		
Part of your HELP plan	11%	2.35
Not part of your HELP plan	12%	2.52
Not sure	76%	3.27
Copays must be paid out of my own pocket once my premium credit is used up		
Part of your HELP plan	29%	3.51
Not part of your HELP plan	5%	1.71
Not sure	65%	3.69
Copays will not be collected at the time of my health care service(s)		
Part of your HELP plan	17%	2.93
Not part of your HELP plan	25%	3.37
Not sure	57%	3.84
Unpaid premiums may be collected against my future state income tax refunds		
Part of your HELP plan	33%	3.64
Not part of your HELP plan	5%	1.69
Not sure	61%	3.77

As part of your HELP plan, was there an \$8 copay for going to the emergency room for a non-emergency condition?	Weighted Percent	Standard Error of Weighted Percent
Yes	4%	1.48
No	18%	2.98
Not sure/Don't know	76%	3.29

How easy or hard was it to understand how HELP copays work?	Weighted Percent	Standard Error of Weighted Percent
Very easy	33%	6.73
Somewhat easy	21%	5.77
Neither easy nor hard	27%	6.06
Somewhat hard	15%	5.15
Very hard	3%	2.41

## Access to Care

After you were no longer enrolled in HELP, was there any time you needed health care but did not get it because of cost?	Weighted Percent	Standard Erron of Weighted Percent
Yes	21%	3.19
No	75%	3.37
Not sure/Don't know	3%	1.30
{If Yes} What types of health care were you unable to get because of cost?		
A visit to the doctor when I was sick		
Yes	57%	8.59
Νο	37%	8.33
N/A	6%	4.07
Preventive Care		
Yes	49%	8.77
No	45%	8.68
N/A	6%	4.07
A follow up visit to get tests or care recommended by my doctor		
Yes	60%	8.48
No	34%	8.08
N/A	6%	4.44
Dental care		
Yes	66%	8.32
No	25%	7.57
N/A	9%	5.14
Vision (eye) care		
Yes	46%	8.75
No	47%	8.74
N/A	6%	4.44
Prescription drugs		
Yes	52%	8.77
No	41%	8.65
N/A	7%	4.85

	Weighted Percent	Standard Error of Weighted Percent
Emergency room care		
Yes	33%	8.25
No	56%	8.71
N/A	11%	5.62
While you were in HELP, was there a time you thought about going to the emergency room when you needed care?		
Yes	23%	3.32
No	75%	3.36
{If Yes} While you were in HELP, when you needed care, did you go to the emergency room?		
Yes	63%	8.06
Νο	34%	7.99
{If No} What was the main reason you did not go to the emergency room for care?		
Did not have a way to get there or could not afford to get there	16%	10.97
Went to my doctor's office or clinic instead	15%	10.64
Did not want to pay a copay	16%	10.97
Waited to see if I would get better on my own	23%	12.35
Some other reason	20%	13.01

After you were no longer enrolled in HELP, did you go to a doctor, nurse, or any other health professional or get prescription drugs?	Weighted Percent	Standard Error of Weighted Percent
Yes	64%	3.70
No	35%	3.67
Not sure/Don't know	1%	0.53
{If Yes} After you were no longer enrolled in HELP, were any of your health care visits for a routine checkup?		
Yes	45%	4.86
No	46%	4.86
Not sure/Don't know	7%	2.31

## Affordability of HELP

How much was your monthly HELP premium?	Weighted Percent	Standard Error of Weighted Percent
\$0 to \$9	13%	2.62
\$10 to \$19	15%	2.71
\$20 to \$29	23%	3.29
\$30 to \$39	12%	2.51
\$40 to \$49	6%	1.77
\$50 and above	10%	2.34
Not sure/Don't know	21%	3.11
How was that monthly premium paid, if at all?		
l paid it	44%	3.83
Someone paid the full amount for me	4%	1.65
I paid part and someone else paid part	1%	0.53
The premium has not been paid	26%	3.41
Not sure/Don't know	24%	3.30
{If response= "Someone paid the full amount for me" or "I paid part and someone else paid part"}		
Which of the following groups helped pay for monthly premium?*		
Family or friends	50%	19.11
Other (includes community or non-profit organization, health services organizations, health care provider, employer, and other)	39%	18.75

\*respondents could pick more than one category of the above

While you were in HELP, would you say the amount of your monthly premium was:	Weighted Percent	Standard Error of Weighted Percent
More than I could afford	29%	3.53
An amount that I could afford	51%	3.86
Less than I could afford	4%	1.43
Not sure/Don't know	14%	2.64

While you were in HELP, how worried were you about not having enough money to pay your monthly premium?	Weighted Percent	Standard Error of Weighted Percent
Not at all worried	48%	3.86
A little worried	15%	2.79
Somewhat worried	16%	2.82
Very worried	9%	2.20
Extremely worried	9%	2.26

While you were in HELP, did you pay any copays? Copays are payments owed by you to your health care provider for health care services that you receive. You are responsible for paying the provider after the claim has been processed.	Weighted Percent	Standard Error of Weighted Percent
Yes	31%	3.57
No	57%	3.82
Not sure/Don't know	12%	2.37

While you were in HELP, would you say the amount you were required to pay for copays was:	Weighted Percent	Standard Error of Weighted Percent
More than I could afford	26%	6.22
An amount that I could afford	71%	6.45
Less than I could afford	2%	2.21
Not sure/Don't Know	1%	1.28

## Satisfaction with HELP

Thinking about your overall experience with HELP, would you say you are:	Weighted Percent	Standard Error of Weighted Percent
Very Satisfied	26%	3.38
Somewhat Satisfied	22%	3.14
Neither Satisfied nor Dissatisfied	26%	3.46
Somewhat Dissatisfied	9%	2.28
Very Dissatisfied	9%	2.22
Not sure/Don't know	7%	1.81

Please tell us how satisfied or dissatisfied you are with each HELP item below.	Weighted Percent	Standard Error of Weighted Percent
Enrollment process		
Very Satisfied	37%	4.58
Somewhat Satisfied	21%	3.87
Neutral	25%	4.18
Somewhat Dissatisfied	8%	2.72
Very Dissatisfied	8%	2.64
Length of time for coverage to begin		
Very Satisfied	43%	4.71
Somewhat Satisfied	21%	3.85
Neutral	28%	4.28
Somewhat Dissatisfied	3%	1.67
Very Dissatisfied	5%	2.09
Ability to see my doctor		
Very Satisfied	48%	4.77
Somewhat Satisfied	20%	3.71
Neutral	21%	3.92
Somewhat Dissatisfied	5%	2.15

	Weighted Percent	Standard Error of Weighted Percent
Very Dissatisfied	5%	2.25
Choice of doctors		
Very Satisfied	41%	4.68
Somewhat Satisfied	19%	3.60
Neutral	30%	4.47
Somewhat Dissatisfied	7%	2.44
Very Dissatisfied	2%	1.13
Coverage of health care services that I need		
Very Satisfied	41%	4.66
Somewhat Satisfied	21%	3.83
Neutral	19%	3.81
Somewhat Dissatisfied	10%	2.89
Very Dissatisfied	8%	2.66
How copays work		
Very Satisfied	30%	4.35
Somewhat Satisfied	18%	3.61
Neutral	39%	4.67
Somewhat Dissatisfied	7%	2.48
Very Dissatisfied	6%	2.24
Cost of premiums		
Very Satisfied	45%	4.73
Somewhat Satisfied	12%	3.19
Neutral	21%	3.93
Somewhat Dissatisfied	9%	2.83
Very Dissatisfied	10%	2.84
Paying the same amount each month for premiums		
Very Satisfied	51%	4.77
Somewhat Satisfied	13%	3.21

	Weighted Percent	Standard Error of Weighted Percent
Neutral	24%	4.09
Somewhat Dissatisfied	4%	1.99
Very Dissatisfied	7%	2.44

#### End of HELP Enrollment

How long ago did your HELP enrollment end?	Weighted Percent	Standard Error of Weighted Percent
Less than 3 months	16%	2.83
3 to 6 months	27%	3.35
More than 6 months	50%	3.86
Not sure/Don't know	8%	2.05

Why did your HELP enrollment end?	Weighted Percent	Standard Error of Weighted Percent
I got an increase in my income and was no longer eligible for HELP		
Yes	22%	3.23
No	55%	3.84
Not Sure	19%	3.03
I had other health insurance available to me		
Yes	53%	3.85
No	30%	3.56
Not Sure	14%	2.63
I could not afford my monthly HELP premiums		
Yes	25%	3.34
No	52%	3.86
Not Sure	21%	3.08

	Weighted Percent	Standard Error of Weighted Percent
I no longer wanted HELP coverage		
Yes	17%	2.85
No	57%	3.81
Not Sure	23%	3.25
I did not pay my premium within 90 days		
Yes	16%	2.85
No	57%	3.82
Not Sure	24%	3.30

Would you try to re-enroll in HELP if you could?	Weighted Percent	Standard Error of Weighted Percent
Yes	50%	3.86
No	30%	3.53
Not sure/Don't know	20%	3.03

### Health Insurance Coverage after HELP

Do you have any health insurance coverage right now?	Weighted Percent	Standard Error of Weighted Percent
Yes	83%	2.88
No	15%	2.78
Not sure/Don't know	1%	0.65
{If Yes} What type of health insurance do you have?*		
Private	41%	4.18
Medicaid	47%	4.23
Other (includes TRICARE or other military health care, Medicare, Indian Health Service, and other)	18%	3.10
Not Sure/Don't Know	100%	0.00
How long have you had your current health insurance?		
Less than one month	4%	1.67
Between 1 and 6 months	40%	4.14

	Weighted Percent	Standard Error of Weighted Percent
More than 6 months	56%	4.20
How long did it take you to get your current health insurance?		
Less than one month	75%	3.66
Between 1 and 6 months	18%	3.29
More than 6 months	6%	1.97

\*respondents could pick more than one category of the above
Appendix E: Data Preparation for the Impact Analysis

This appendix addresses our data preparation work for impact analyses using the American Community Survey (ACS) and Behavioral Risk Factor Surveillance System (BRFSS). All tables for Appendix E are included at the end of the appendix.

# 1. American Community Survey (ACS)

The ACS is used to analyze the impacts of HELP 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 2011-2017 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 19 to 64 who were living in Montana or one of Montana'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, family size, family income, whether the family has investment income, multiple family household status, household size, household income, homeownership and state of residence. 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. For the family income measure, we calculated family income relative to the federal poverty level (FPL) based on the modified adjusted gross income (MAGI) definition that is used to determine Medicaid eligibility under the Affordable Care Act (ACA). <sup>1, 2</sup>

# 2. Behavioral Risk Factor Surveillance System (BRFSS)

The BRFSS is used to analyze the impacts of HELP 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 2011-17 raw 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 19 to 64 who were living in Montana or one of Montana'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.<sup>3</sup> Once we had addressed missing data, we constructed the analytic variables needed for the analysis. Those variables

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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); <u>http://shadac.org/sites/default/files/publications/SHADAC\_Brief27.pdf</u>.

<sup>&</sup>lt;sup>3</sup> Unlike BRFSS public use files, the ACS public use files include imputations for item nonresponse.

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
  - $\circ$  Had no unmet need for doctor care due to costs in the past 12 months<sup>4</sup>
- 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

Larger values for the health care access and affordability measures indicate better access and affordability, while larger values for the health behaviors and health status indicate poorer health behaviors and health status.

The control variables for the BRFSS analyses included gender, age, race/ethnicity, educational attainment, marital status, employment status, multiple family household status, household size, household income, homeownership and state of residence.

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 Montana and its comparison states) and over time (e.g., between 2011-13 and 2016-17). Unlike the ACS, which provides a weight that is constructed consistently across all the states and over time, each state in the BRFSS constructs its own weight in each year of the survey. We discuss our approach to imputing for missing data and developing consistent weights for the BRFSS across states and over time below.

# a) 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 assign values for missing data for one important variable that the BRFSS does not ask about at all, but which is needed for the analysis: family income relative to FPL. Similarly, we assign values for missing data for one variable that the BRFSS asks about in the landline samples but did not ask about in the cell-phone samples in 2011-13: the number of adults in the household. That is, we address a problem with missing data that arises 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

<sup>&</sup>lt;sup>4</sup> We frame this as a "positive" outcome so that higher values indicated better access and affordability across all the measures examined.

common in microsimulation models, which often need to supplement existing data sources with additional measures to support policy analyses. <sup>5</sup> For example, the Congressional Budget Office uses a similar regression-based imputation strategy that relies on the Survey of Income and Program Participation, the Health and Retirement Study, and the Current Population Survey to impute missing variables in the primary database used in its microsimulation model. <sup>6</sup> 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. 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 household home ownership. All of the variables to be imputed were either binary variables or categorical variables. Item nonresponse was low for most variables (1.5 percent or less) but was more of an issue for household income (between 10.1 and 15.7 percent). Missing data for the number of adults in the household was less than 0.1 percent for the landline sample and at 3.5 percent for the cell-phone sample in 2016 but 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: 19-20, 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

<sup>&</sup>lt;sup>5</sup> For simplicity, we refer to all of 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.

<sup>&</sup>lt;sup>6</sup> AJ Schwabish and JH Topoleski, "Modeling Individual Earnings in CBO's Long-Term Microsimulation Model," Working paper 2013-04 (Washington, DC: Congressional Budget Office, 2013).

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 categories for the full sample for each individual year (Stage 3).

- 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 cellphone sample of the survey.<sup>7</sup> 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 cellphone sample in 2011-13.<sup>8</sup> 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.<sup>9</sup> For this imputation, we appended BRFSS data from the years 2011 through 2016 into a single file and imputed the number of adults in the household, an ordered categorical variable, using ordered logit regression.<sup>10</sup> 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.<sup>11</sup> The model included gender, age, race/ethnicity, educational attainment, marital status, number of children in the household, number of adults in the

<sup>&</sup>lt;sup>7</sup> 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.

<sup>&</sup>lt;sup>8</sup> 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.

<sup>&</sup>lt;sup>9</sup> 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 cellphone sample that is similar to cellphone sample of the 2011-13 BRFSS. We cannot identify a similar sample in the ACS.

<sup>&</sup>lt;sup>10</sup> Estimating the model using multinomial logit regression instead of ordered logit regression for these variables yielded comparable findings.

<sup>&</sup>lt;sup>11</sup> Estimating the model using multinomial logit regression instead of ordered logit regression yielded comparable findings.

household, multiple family household status, <sup>12</sup> state of residence, and being in the cell phone sample for the survey.

Table E.1 provides a summary of demographic and socioeconomic characteristics of adults in Montana during the 2011-13 baseline period 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.

**Imputing for missing family income.** Because the population targeted by the Medicaid expansion under the HELP 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. Table E.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 Montana'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, including gender, age, race/ethnicity, educational attainment, marital status, number of adults in the household, number of children in the household, employment status, household income categories,<sup>13</sup> and state of residence. Because BRFSS collects little information on other household members, we were not able to control for other 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. Adults living alone were adults living in a household with one adult and no children. Adults living in

<sup>&</sup>lt;sup>12</sup> 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.

<sup>&</sup>lt;sup>13</sup> 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.

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. 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.

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.<sup>14</sup> Table E.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 Montana adults ages 19 to 64 in the 2011-13 BRFSS sample and 52 percent for the 2016 sample. The comparable figures were about 60 percent for the 2011-13 BRFSS sample and 56 percent for the 2016 sample for Montana's comparison states. The selection of comparison states is discussed in Appendix F, with the list of comparison states provided in Table F.1 (column 5).

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 E.4 provides a crosswalk of predicted and reported family income relative to FPL for adults ages 19 to 64 in Montana based on the ACS.<sup>15</sup> As shown, roughly 80 percent of the adults who were predicted to have family income at or below 138 percent of FPL reported their income in that category. However, that of course means that roughly 20 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 10 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 Montana's comparison states, as shown in Table E.5. Thus, the impact estimates for low-income adults should be viewed as rough approximations of the actual impacts of HELP.

<sup>&</sup>lt;sup>14</sup> 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.

<sup>&</sup>lt;sup>15</sup> 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.

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 pre-period (2011-13) and for the post-period. Table E.6 summarizes the predicted family income for adults ages 19 to 64 in Montana in the BRFSS sample in 2011-13 and 2016 by reported household income. Table E.7 provides comparable information for adults 19 to 64 in Montana's comparison states.

# b) 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 19 to 64, the age group targeted by the HELP demonstration, and reweighted to ACS population characteristics for adults ages 19 to 64.

For the reweighting, we used the user-written "ipfweight" command in Stata<sup>16</sup> 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 within each variable. 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;

<sup>&</sup>lt;sup>16</sup> M Bergmann, "IPFWEIGHT: Stata Module to Create Adjustment Weights for Surveys," statistical software components S457353 (Boston: Boston College Department of Economics, 2011).

- household income: less than \$35,000, \$35000-\$74,999, and \$75,000 or more; and
- homeownership: someone in household owns or is buying the residence and no one in household owns or is buying the residence.

Tables E.8 and E.9 show the distribution of the samples for Montana and Montana's comparison states, respectively, for the original BRFSS weights and for the revised BRFSS weights for selected measures.<sup>17</sup>

<sup>&</sup>lt;sup>17</sup> 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 Montana (described later in this section), this data problem does not affect the analyses for Montana.

Appendix Table E.1: Selected Characteristics of Adults Ages 19 and Older in Montana Before and After Imputation for Item Nonresponse in the Behavioral Risk Factor Surveillance System, 2011-13 (preperiod) and 2016-17 (post-period)

	201	1-13	201	6-17	
FemaleMaleMissingge (%)19-2526-4445-6465+Missingace/ethnicity (%)Non-Hispanic whiteOther race/ethnicityMissingducational attainment (%)Less than high school graduate/GEDHigh school graduate/GEDSome collegeCollege graduate or moreMissing	Before Imputation	After Imputation	Before Imputation	After Imputation	
Gender (%)					
Female	49.7	49.7	49.9	49.9	
Male	50.3	50.3	50.1	50.1	
Missing	0.0		0.1		
Age (%)					
19-25	11.8	11.8	11.9	11.9	
26-44	29.6	29.7	30.1	30.1	
45-64	37.3	37.5	34.4	34.4	
65+	20.9	21.0	23.7	23.7	
Missing	0.4		0.0		
Race/ethnicity (%)					
Non-Hispanic white	10.5	10.5	11.2	11.4	
Other race/ethnicity	88.7	89.5	87.5	88.6	
Missing	0.8		1.4		
Educational attainment (%)					
Less than high school graduate/GED	8.9	8.9	7.9	7.9	
High school graduate/GED	30.7	30.8	29.8	30.0	
Some college	34.1	34.2	35.0	35.2	
College graduate or more	26.1	26.1	26.9	27.0	
Missing	0.2		0.4		
Marital status (%)					
Married	57.6	57.8	54.8	55.0	
Widowed/separated/divorced	20.4	20.5	21.9	22.0	
Never married	21.6	21.7	22.9	23.0	
Missing	0.4		0.5		

	201	1-13	201	6-17
	Before Imputation	After Imputation	Before Imputation	After Imputation
Number of adults in household (%)				
1	13.3	23.3	25.7	26.0
2	39.5	57.7	55.3	55.6
3 or more	11.0	19.0	18.3	18.4
Missing	36.2		0.7	
Number of children in household (%)				
No children	66.7	66.8	67.9	68.3
1	12.5	12.5	12.2	12.3
2	12.4	12.5	10.9	11.1
3 or more	8.2	8.3	8.2	8.3
Missing	0.2		0.7	
Employment status (%)				
Not employed	41.8	41.9	40.6	40.8
Employed	57.9	58.1	58.8	59.2
Missing	0.3		0.6	
Household Income (%)				
Less than \$25,000	30.0	34.5	23.6	29.5
\$25,000-\$49,999	27.2	30.0	23.6	28.3
\$50,000-\$74,999	14.1	15.5	15.3	17.4
\$75,000 or more	18.6	20.0	21.8	24.7
Missing	10.1		15.7	
Household owns home (%)				
Does not own home	28.4	28.5	29.0	29.2
Owns home	71.1	71.5	70.4	70.8
Missing	0.6		0.6	
Sample size	28,301	28,301	11,772	11,772

Source: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS). Note: Estimates are weighted by the original BRFSS weights.

Appendix Table E.2: Crosswalk of Household Income Categories from Behavioral Risk Factor Surveillance System and Reported Family Income Relative to FPL for Adults Ages 19 to 64 in the American Community Survey, 2011-13 (pre-period) and 2016-17 (post-period)

		Behav	ioral Risk Facto	r Surveillance S	ystem Househ	old Income Cat	egories	
	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	84.5	37.1	26.1	20.7	15.5	11.7	7.9	6.0
At or below 100% FPL	99.9	78.7	55.5	40.9	26.4	17.8	11.7	9.0
At or below 138% FPL	99.9	99.9	79.9	62.9	42.7	25.0	15.1	11.2
Above 138% FPL	0.1	0.1	20.1	37.1	57.3	75.0	84.9	88.8
Above 500% FPL	0.0	0.0	0.0	0.0	0.0	0.0	6.0	52.8
Sample size	311,582	179,852	189,197	214,372	439,991	666,225	1,014,778	2,267,039
<u>Year 2016-17</u>								
Reported family income (%)								
At or below 50% FPL	87.7	40.8	28.8	20.7	15.9	11.6	8.0	5.9
At or below 100% FPL	100.0	82.7	59.7	45.0	28.9	18.3	12.1	8.9
At or below 138% FPL	100.0	100.0	83.3	64.5	47.9	27.2	16.2	11.2
Above 138% FPL	0.0	0.0	16.7	35.5	52.1	72.8	83.8	88.8
Above 500% FPL	0.0	0.0	0.0	0.0	0.0	0.0	4.6	48.8
Sample size	158,329	90,792	96,050	114,504	242,438	385,836	632,492	1,815,413

Source: 2011-13 and 2016-17 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%.

Appendix Table E.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 oi more		
Adults who live alone										
At or below 50% FPL			В	В	В	В	В	В		
At or below 100% FPL	А			В	В	В	В	В		
At or below 138% FPL	А	А		В	В	В	В	В		
Above 138% FPL	В	В		А	А	А	А	А		
Above 500% FPL	В	В	В	В	В	В				
Adults who live in a single-family household										
At or below 50% FPL				В	В	В	В	В		
At or below 100% FPL	А	А				В	В	В		
At or below 138% FPL	А	А	А				В	В		
Above 138% FPL	В	В	В				А	А		
Above 500% FPL	В	В	В	В	В	В	В			
Adults who live in a multiple-family household										
At or below 50% FPL										
At or below 100% FPL	А									
At or below 138% FPL	А	А								
Above 138% FPL	В	В								
Above 500% FPL	В	В	В	В	В	В	В			

**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; B = assigned to not have family income in category; Blank = not affected by 95-percent rule.

Appendix Table E.4: Crosswalk of Reported and Imputed Family Income Relative to FPL for Adults Ages 19 to 64 in Montana in the American Community Survey, 2011-13 (pre-period) and 2016-17 (post-period)

		Imputed	Family Income Relati	ve 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	63.2	49.7	39.1	2.6	0.3	
At or below 100% FPL	80.9	75.1	61.9	4.6	0.5	
At or below 138% FPL	87.6	86.4	80.9	8.7	1.0	
Above 138% FPL	12.4	13.6	19.1	91.3	99.0	
Above 500% FPL	0.7	1.0	0.9	27.2	75.3	
Sample size	425	678	922	2,451	732	
<u>Year 2016-17</u>						
Reported family income (%)						
At or below 50% FPL	58.4	47.3	37.6	1.9	0.4	
At or below 100% FPL	78.5	74.3	61.8	4.4	0.9	
At or below 138% FPL	82.6	83.2	75.4	8.1	1.2	
Above 138% FPL	17.4	16.8	24.6	91.9	98.8	
Above 500% FPL	1.3	0.8	1.3	32.4	74.4	
Sample size	250	410	550	1,650	549	

Source: 2011-13 and 2016-17 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%. The imputation of family income relative to FPL is described in Appendix E. The imputation process was based on a random sample of 80% of the ACS sample. The estimates reported here are based on the 20% of the ACS sample reserved for testing the imputation process.

Appendix Table E.5: Crosswalk of Reported and Imputed Family Income Relative to FPL for Adults Ages 19 to 64 in Montana's Comparison States in the American Community Survey, 2011-13 (pre-period) and 2016-17 (post-period)

		Imputed	Family Income Relat	ive to FPL	
	At or below 50%	At or below 100%	At or below 138%	Above 138%	Above 500%
<u>Years 2011-13</u>					
Reported family income (%)					
At or below 50% FPL	67.5	54.4	45.9	3.1	0.8
At or below 100% FPL	82.3	75.7	66.6	5.9	1.3
At or below 138% FPL	87.7	84.4	80.0	9.6	1.8
Above 138% FPL	12.3	15.6	20.0	90.4	98.2
Above 500% FPL	1.4	1.6	1.7	35.1	76.1
Sample size	158,866	242,388	309,420	744,695	278,339
<u>Year 2016-17</u>					
Reported family income (%)					
At or below 50% FPL	66.2	52.4	44.0	3.2	0.8
At or below 100% FPL	80.4	73.0	64.2	6.1	1.4
At or below 138% FPL	85.9	81.8	76.9	9.7	2.0
Above 138% FPL	14.1	18.2	23.1	90.3	98.0
Above 500% FPL	1.6	1.9	2.1	36.3	71.8
Sample size	92,687	143,702	184,393	521,078	206,418

Source: 2011-13 and 2016-17 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%. The selection of comparison states is described in Appendix F. These tabulations include all comparison states in Table F.1, column 5. The imputation of family income relative to FPL is described in Appendix E. The imputation process was based on a random sample of 80% of the ACS sample. The estimates reported here are based on the 20% of the ACS sample reserved for testing the imputation process.

Appendix Table E.6: Crosswalk of Reported Household Income and Imputed Family Income Relative to FPL for Adults Ages 19 to 64 in Montana in the Behavioral Risk Factor Surveillance System, 2011-13 (pre-period) and 2016-17 (post-period)

		Imputed	Family Income Relat	ive to FPL	
	At or below 50%	At or below 100%	At or below 138%	Above 138%	Above 500%
<u>Years 2011-13</u>					
Reported household income (%)					
Less than \$15,000	47.5	40.2	32.9	0.0	0.0
\$15,000-\$19,999	14.1	17.8	18.0	1.5	0.0
\$20,000-\$24,999	11.0	14.0	16.0	3.6	0.0
\$25,000-\$34,999	7.0	8.1	10.6	6.7	0.0
\$35,000-\$49,999	8.0	8.6	11.3	21.4	0.0
\$50,000-\$74,999	5.2	5.0	5.4	21.9	4.4
\$75,000 or more	7.2	6.2	5.7	44.9	95.6
Sample size	2,226	4,017	5,872	13,342	3,497
<u>Year 2016-17</u>					
Reported household income (%)					
Less than \$15,000	34.5	30.0	24.0	0.0	0.0
\$15,000-\$19,999	15.5	18.4	18.2	0.9	0.0
\$20,000-\$24,999	10.1	13.0	14.0	2.4	0.0
\$25,000-\$34,999	9.9	10.1	12.9	4.8	0.0
\$35,000-\$49,999	10.9	11.5	14.1	16.0	0.0
\$50,000-\$74,999	9.1	7.9	8.0	20.8	2.3
\$75,000 or more	10.1	9.2	8.8	55.2	97.7
Sample size	966	1,691	2,336	4,996	1,405

Source: 2011-13 and 2016-17 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 E.8).

Appendix Table E.7: Crosswalk of Reported Household Income and Imputed Family Income Relative to FPL for Adults Ages 19 to 64 in Montana's Comparison States in the Behavioral Risk Factor Surveillance System, 2011-13 (pre-period) and 2016-17 (post-period)

		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	39.9	33.7	28.4	0.0	0.0					
\$15,000-\$19,999	12.8	15.5	15.4	0.9	0.0					
\$20,000-\$24,999	10.0	12.7	13.9	2.4	0.0					
\$25,000-\$34,999	7.3	8.7	10.8	4.6	0.0					
\$35,000-\$49,999	10.8	11.6	13.7	16.8	0.0					
\$50,000-\$74,999	7.1	7.1	7.4	20.3	4.1					
\$75,000 or more	12.0	10.8	10.4	55.0	95.9					
Sample size	124,745	209,399	280,802	667,612	237,331					
Years 2016-17										
Reported household income (%)										
Less than \$15,000	31.7	26.3	21.9	0.0	0.0					
\$15,000-\$19,999	12.4	14.6	14.4	0.6	0.0					
\$20,000-\$24,999	9.8	12.8	13.6	1.7	0.0					
\$25,000-\$34,999	7.5	8.8	10.7	3.3	0.0					
\$35,000-\$49,999	12.8	13.5	15.8	13.7	0.0					
\$50,000-\$74,999	8.5	8.6	8.9	17.9	2.7					
\$75,000 or more	17.2	15.4	14.7	62.7	97.3					
Sample size	79,666	134,663	177,563	403,385	150,661					

**Source:** 2011-13 and 2016-17 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 E.9). The selection of comparison states is described in Appendix F. These tabulations include all comparison states Table F.1, column 5.

	Original BRFSS Weights	Revised BRFSS Weights		
Female (%)	49.8	50.0		
Age (%)				
21-25	11.6	15.1		
26-44	29.3	37.6		
45-64	35.6	47.3		
Race/ethnicity (%)				
Non-Hispanic white	88.9	88.0		
Other race/ethnicity	11.1	12.0		
Educational attainment (%)				
High school graduate/GED or less	30.9	28.9		
Some college	34.2	36.7		
College graduate or more	26.0	28.3		
Marital status (%)				
Married	55.7	55.2		
Widowed/separated/divorced	20.7	17.3		
Never married	23.6	27.6		
Household size (%)				
1	19.5	12.3		
2	38.6	38.3		
3 or more	41.9	49.3		
Multiple family household (%)	66.2	57.4		
Employed (%)	41.7	25.9		
Household Income (%)				
Less than \$25,000	32.5	21.9		
\$25,000-\$49,999	29.3	25.2		
\$50,000-\$74,999	16.3	17.1		
\$75,000 or more	22.0	35.8		
Household owns home (%)	29.3	30.2		
Sample size	40,346	40,346		

Appendix Table E.8: Selected Characteristics of Adults Ages 19 to 64 in Montana Before and After Reweighting to Create More Consistent Weights Across States and Over Time in the Behavioral Risk Factor Surveillance System, 2011-13 (pre-period) and 2016-17 (post-period)

Source: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS).

	Original BRFSS Weights	Revised BRFSS Weights
Female (%)	48.7	49.2
Age (%)		
21-25	12.1	15.1
26-44	32.5	40.9
45-64	34.1	44.1
Race/ethnicity (%)		
Non-Hispanic white	64.9	69.5
Other race/ethnicity	35.1	26.4
Educational attainment (%)		
High school graduate/GED or less	28.5	26.4
Some college	30.6	35.2
College graduate or more	26.4	29.9
Marital status (%)		
Married	50.9	52.6
Widowed/separated/divorced	20.2	16.0
Never married	29.0	31.5
Household size (%)		
1	16.4	10.6
2	32.9	31.8
3 or more	50.8	57.6
Multiple family household (%)	55.0	49.4
Employed (%)	43.5	26.3
Household Income (%)		
Less than \$25,000	31.1	17.8
\$25,000-\$49,999	25.1	21.3
\$50,000-\$74,999	14.8	16.1
\$75,000 or more	29.1	44.8
Household owns home (%)	32.6	30.8
Sample size	2,326,051	2,326,051

Appendix Table E.9: Selected Characteristics of Adults Ages 19 to 64 in Montana'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 (pre-period) and 2016-17 (post-period)

Source: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS).

**Notes:** The selection of comparison states is described in Appendix F. These tabulations include all comparison states in Table F.1, column 5.

Appendix F: Constructing the Comparison Groups for the Impact Analysis

The impact analysis estimates the effects of Montana's HELP demonstration using difference-indifferences (DD) methods based on data for 2011-2017 from two national surveys: the American Community Survey (ACS) and the Behavioral Risk Factor Surveillance System (BRFSS). DD models compare changes over time in a treatment group (in this case, Montana) 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 HELP demonstration). This technical appendix describes the process for selecting the comparison groups to be used in the DD models to estimate the effects of the HELP demonstration. All tables for Appendix F are provided at the end of the appendix.

Constructing the comparison groups for Montana's demonstration involved two steps: (1) identifying the groups of states that would serve as the counterfactuals for Montana's demonstration, and (2) identifying the people in those groups of comparisons states who were most similar to people in Montana 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 Montana sample, reducing the potential for omitted variable bias in the impact estimates caused by unmeasured differences between residents of Montana and the comparison states.

# 1. 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, expanded Medicaid with a demonstration, as summarized in Table F.1 (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 for Montana (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 to 2013 (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 Medicaid and section 1115 demonstration coverage by state for January of a given year.<sup>1, 2, 3, 4</sup> When section 1115 demonstration coverage provided coverage equivalent to 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.<sup>5,6</sup> When still in doubt about the scope of benefits,

<sup>&</sup>lt;sup>1</sup> 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); <u>https://kaiserfamilyfoundation.files.wordpress.com/2013/05/8401.pdf</u>. <sup>2</sup>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);

 $<sup>\</sup>underline{https://kaiserfamilyfoundation.files.wordpress.com/2013/01/8130.pdf}\,.$ 

<sup>&</sup>lt;sup>3</sup> 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://kaiserfamilyfoundation.files.wordpress.com/2013/01/8272.pdf . <sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> "Medicaid Income Eligibility Limits for Other Non-Disabled Adults, 2011-2016," Kaiser Family Foundation, no date (accessed October 19, 2016), <u>http://kff.org/medicaid/state-indicator/medicaid-income-eligibility-limits-for-other-non-disabled-adults/</u>.

<sup>&</sup>lt;sup>6</sup> "Medicaid Income Eligibility Limits for Parents, 2002-2016," Kaiser Family Foundation, no date (accessed October 19, 2016), <u>http://kff.org/medicaid/state-indicator/medicaid-income-eligibility-limits-for-parents /</u>.

we turned to outside sources for Delaware,<sup>7</sup> Louisiana,<sup>8</sup> Missouri,<sup>9</sup> and Vermont.<sup>10, 11</sup> Information on the states included in the group of potential comparison states (Table F.1, column 4) is discussed below. Information on the states that were excluded from the group of potential comparison states is provided in Table F.2.

In addition to selecting comparison states based on Medicaid and section 1115 demonstration eligibility standards, we also selected states that were similar to Montana 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.<sup>12</sup>

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 Montana 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 Montana across almost all measures) are listed in Table F.1 (column 5). To select the single-best comparison states for adults in Montana, we identified the state most similar to Montana 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:

<sup>&</sup>lt;sup>7</sup> "Delaware Diamond State Health Plan Special Terms and Conditions," Centers for Medicare and Medicaid Services, amended as of April 1, 2012, <u>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</u>.

<sup>&</sup>lt;sup>8</sup> 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.medicaid.gov/medicaid-chip-program-information/by-topics/data-and-systems/downloads/2011national-summary-mc-report.pdf.

<sup>&</sup>lt;sup>9</sup> Missouri Department of Social Services, *Gateway to Better Health Demonstration Amendment Request* (Jefferson City, MO: Missouri Department of Social Services, 2015). <u>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.</u>

<sup>&</sup>lt;sup>10</sup> 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).

<sup>&</sup>lt;u>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</u>.

<sup>&</sup>lt;sup>11</sup> State of Vermont Agency of Human Services, "Global Commitment to Health Extension Request" (Montpelier, VT: State of Vermont Agency of Human Services, 2015. <u>https://www.medicaid.gov/Medicaid-CHIP-Program-</u>Information/By-Topics/Waivers/1115/downloads/vt/vt-global-commitment-to-health-pa.pdf.

<sup>&</sup>lt;sup>12</sup> 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.

the group of best comparison states (column 5) and the single-best comparison state from among the group of best comparison states (column 6).

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 Montana across all those dimensions. Thus, any differences identified in the comparisons between Montana 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 of the potential differences between Montana 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.

# 2. The Comparison States that did not Expand Medicaid.

The states that had not expanded Medicaid as of January 1, 2018, are listed in row 1 of Table F.1 (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 nonexpansion comparison state. 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 the ACA expanded coverage to.

From the set of potential comparison states, we sought to identify the subset of states that provided the best comparisons to Montana based on similar Medicaid and section 1115 eligibility standards in 2011 (within 10 percentage points of Montana for all categories) and relative stability in eligibility standards over the baseline period of 2011 to 2013 (changes of less than 10 percentage points for all categories) as summarized in Table F.3. Based on those comparisons, we find that Georgia, North Carolina, and Wyoming are similar to Montana on baseline Medicaid and section 1115 eligibility standards. The three states were generally similar to Montana on baseline health and health outcomes (Table F.4), although nonelderly adults in Georgia and North Carolina were more likely to have a routine check-up in the past year in 2011 (about 18 percentage points higher than the level for Montana). Wyoming provides the single best comparison state because it is most similar to Montana across the baseline Medicaid and section 1115 eligibility criteria, uninsurance, and the health and health outcomes.<sup>13</sup>

# 3. The Comparison States that Expanded Medicaid without a Demonstration.

The states that expanded Medicaid without a demonstration are shown in the second row of Table F.1 (column 3). In selecting the potential set of comparison states for Montana (column 4), we exclude 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

<sup>&</sup>lt;sup>13</sup> We define "most similar" as having the smallest total differences from Montana for the baseline Medicaid and section 1115 eligibility standards and the health and health outcomes.

(Massachusetts, New York, Rhode Island and Vermont), states that made other changes to Medicaid eligibility during the baseline period (Arizona, Hawaii, Illinois, Nevada, Oregon) and states that expanded Medicaid after the date of Montana's expansion (Louisiana). From the final set of comparison states, we sought to identify the subset of states that provided the best comparison to Montana based on similar Medicaid and section 1115 eligibility standards in 2011 (within 10 percentage points of Montana for all categories) and relative stability in eligibility standards over the baseline period of 2011 to 2013 (changes of less than 10 percentage points for all categories) as summarized in Table F.5. We find that Kentucky and North Dakota are similar to Montana on baseline Medicaid and section 1115 eligibility standards. Both states were generally similar to Montana on baseline health and health outcomes (Table F.6), although nonelderly adults in Kentucky were somewhat more likely than those in Montana in the baseline period to have a personal doctor and a routine check-up in the past year (both about 10 percentage points higher than in Montana). North Dakota provides the single best comparison state because it is most similar to Montana across the baseline Medicaid and section 1115 eligibility criteria, uninsurance, and the baseline health and health outcomes.

### 4. The 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 F.1 (column 3). In selecting the set of potential comparison states for Montana (column 4) no states were excluded since the states that expanded Medicaid with a different demonstration had implemented their demonstration before the date of Montana's expansion. We sought to identify the subset of states that provided the best comparison based on similar Medicaid and section 1115 eligibility standards in 2011 (within 10 percentage points of Montana for all categories) and relative stability in eligibility standards over the baseline period of 2011 to 2013 (changes of less than 10 percentage points for all categories) as summarized in Table F.7. We find that Michigan and New Hampshire are similar to Montana on baseline Medicaid and section 1115 eligibility standards. Both states were roughly similar to Montana on baseline health and health outcomes (Table F.8), although nonelderly adults in both states were more likely than those in Montana to have a personal doctor and a routine checkup in the past year (between about 11 and 17 percentage points higher than in Montana). Michigan provides the single best comparison state for childless adults because it is most similar to Montana across the baseline Medicaid and section 1115 eligibility criteria, uninsurance, and the baseline health and health outcomes.

#### 5. Identifying Residents in the Comparison States who are Similar to Montana 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 individual comparison state who were similar to residents of Montana on a range of individual and family characteristics.<sup>14</sup> The list of the explanatory variables included in the propensity score models for the ACS and BRFSS are summarized in Table F.9. The models varied for the ACS and BRFSS because the two surveys include different variables. Before estimating the

<sup>&</sup>lt;sup>14</sup> We had proposed including county characteristics in the analyses based on the ACS; however, the relatively small number of counties in Montana and some of the comparison states made matching on county characteristics problematic.

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 Montana sample were left unchanged.

Given the binary nature of the outcome (a person either lives in Montana or another state), we estimated logit regression models to derive propensity scores for each of the groups of best comparison states and the single-best comparison states. The estimation results for the group of best comparison states based on the ACS are reported in Tables F.10-F.12 for states that did not expand Medicaid, states that expanded Medicaid without a demonstration, and states that expanded Medicaid with a different demonstration, respectively. The comparable estimation results based on the BRFSS are reported in Tables F.13-F.15. Similar models were estimated to support estimates for the comparison states and for each of the income and education groups used in the sensitivity analyses and falsification tests.

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 individual comparison state, providing the predicted probability that the individual is from Montana. We then used these propensity scores to create inverse probability weights. For the individual 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 individual comparison states who were more similar to Montana residents received larger weights; those who were less similar to Montana residents received lower weights. This reweighting pulled the distribution of the characteristics of the weighted comparison groups closer to that of Montana residents, increasing the comparability between Montana and its comparison groups.

We assessed the resulting comparison groups by comparing the distribution of the propensity scores and of the covariates between Montana 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 Montana 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 Montana residents. We used Stata's "ebalance" command to implement entropy balancing. We used the same variables as in the propensity score models for the application of entropy balancing.

Tables F.16-18 report on the characteristics of adults in Montana and the group of best comparison states based on the different reweighting strategies for the ACS for states that did not expand Medicaid, states that expanded Medicaid without a demonstration, and states that expanded Medicaid with a different demonstration, respectively. The comparable tables for the comparison of the characteristics

of adults in Montana and the group of best comparison states based on the BRFSS are reported in Tables F.19-F.21. As shown, both propensity score reweighting and entropy balancing aligned the characteristics of the adults in the group of best comparison states with the characteristics of adults in Montana.

Appendix Table F.1: Selecting the Comparison States for Estimating the Impacts of Montana's Section 1115 Demonstration Based on Difference-in-Differences Models

Research Question	Comparison Group	States Sorted Based on Medicaid Expansion Status	Potential Comparison States	Group of Best Comparison States	Single-best Comparison State
(1)	(2)	(3)	(4)	(5)	(6)
What are the impacts of Montana's Medicaid demonstration as compared to not expanding Medicaid?	Similar persons in comparison states that have not expanded Medicaid	AL, FL, GA, ID, KS, MS, ME, MS, MO, NE, NC, OK, SC, SD, TN, TX, UT, VA, WY	AL, FL, GA, ID, KS, MS, NE, NC, OK, SC, SD, TN, TX, VA, WY	GA, NC, WY	WY
What are the impacts of Montana'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, ME, MD, MA, MN, MO, NV, NJ, NM, NY, ND, OH, OR, PA, RI, VT, WA, WV, WI	AK, CO, DE, KY, MD, NM, ND, OH, PA, WV	KY, ND	ND
What are the impacts of Montana'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, IN, IA, MI, NH	AR, IN, IA, MI, NH	MI, NH	MI

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

Appendix Table F.2: Comparison of Medicaid and Section 1115 Eligibility Standards for Adults Ages 19 to 64 for Montana and States that Did Not Meet Criteria for Inclusion in Potential Comparison States, Level in 2011 and Change Between 2011 and 2013

	Maintaina	Difference from Value for Montana									
	wontana	AZ	CA	СТ	DC	н	IL	LA	ME	MA	MN
<u>Level in 2011</u>											
Income eligibility for full benefits											
Nonworking parents	32%	68	68	153	168	68	153	-21	168	101	183
Working parents	56%	50	50	135	151	44	135	-31	144	77	159
Nonworking adults	0%	100	0	56	200	0	0	0	0	0	0
Working adults	0%	110	0	73	211	0	0	0	0	0	0
Income eligibility for limited benefits											
Nonworking parents	0%	0	200	0	0	200	0	200	0	300	275
Working parents	0%	0	200	0	0	200	0	200	0	300	275
Nonworking adults	0%	0	200	0	0	200	0	200	0	300	0
Working adults	0%	0	200	0	0	200	0	200	0	300	0
Change between 2011 and 2013											
Income eligibility for full benefits											
Nonworking parents	-1	1	-1	1	-1	34	-86	86	-86	86	-86
Working parents	-2	2	-2	2	-3	36	-88	87	-87	87	-87
Nonworking adults	0	-100	100	-101	101	32	-32	32	-32	32	43
Working adults	0	-110	110	-113	113	20	-20	20	-20	20	55
Income eligibility for limited benefits											
Nonworking parents	0	0	0	0	0	-200	200	-200	200	-200	200
Working parents	0	0	6	-6	6	-206	206	-206	206	-206	206
Nonworking adults	0	0	0	0	0	-200	200	-200	200	-200	400
Working adults	0	0	10	-10	10	-210	210	-210	210	-210	410

# Appendix Table F.2: (continued)

	Montors	Difference from Value for Montana											
	wontana	мо	NV	NJ	NY	OR	RI	UT	VT	WA	WI		
<u>Level in 2011</u>													
Income eligibility for full benefits													
Nonworking parents	32%	-13	15	-3	118	0	143	6	153	5	168		
Working parents	56%	-19	2	77	94	-16	125	-12	135	18	144		
Nonworking adults	0%	0	0	0	100	0	0	0	150	0	0		
Working adults	0%	0	0	0	100	0	0	0	160	0	0		
Income eligibility for limited benefits													
Nonworking parents	0%	0	0	0	0	201	0	0	300	0	0		
Working parents	0%	0	0	0	0	201	0	150	300	0	0		
Nonworking adults	0%	0	0	0	0	201	0	0	300	0	0		
Working adults	0%	0	0	0	0	201	0	150	300	0	0		
Change between 2011 and 2013													
Income eligibility for full benefits													
Nonworking parents	-1	85	-108	212	-212	210	-210	0	210	-212	212		
Working parents	-2	85	-59	59	-59	58	-58	0	58	-61	61		
Nonworking adults	0	-43	43	-43	43	-43	43	0	-43	43	-43		
Working adults	0	-55	55	-55	55	-55	55	0	-55	55	-55		
Income eligibility for limited benefits													
Nonworking parents	0	0	0	0	0	-201	201	0	-201	201	-201		
Working parents	0	-6	6	-6	6	-207	207	50	-207	207	-207		
Nonworking adults	0	-200	200	-177	177	-378	378	0	-378	378	-378		
Working adults	0	-210	210	-187	187	-388	388	50	-388	388	-388		

Source: Kaiser Family Foundation

Appendix Table F.3: Comparison of Medicaid and Section 1115 Eligibility Standards and Uninsurance Rate for Adults Ages 19 to 64 for Montana and Comparison States that Did Not Expand Medicaid, Level in 2011 and Change Between 2011 and 2013

		Difference from Value for Montana										
	Montana	AL	FL	GA	ID	KS	MS	NE	NC			
Level in 2011												
Income eligibility for full benefits												
Nonworking parents	32%	-21	-12	-4	-11	-6	-8	15	4			
Working parents	56%	-32	3	-6	-17	-24	-12	2	-7			
Nonworking adults	0%	0	0	0	0	0	0	0	0			
Working 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	0%	0	0	0	185	0	0	0	0			
Nonworking adults	0%	0	0	0	0	0	0	0	0			
Working adults	0%	0	0	0	185	0	0	0	0			
Uninsurance rate for nonelderly adults	20.4%	-1.5	5.0	2.9	1.8	-4.1	5.0	-4.6	0.7			
Change between 2011 and 2013												
Income eligibility for full benefits												
Nonworking parents	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	-1.0			
Working parents	-2.0	1.0	-1.0	0.0	0.0	1.0	-13.0	2.0	0.0			
Nonworking adults	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Working adults	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0			
Working parents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Nonworking adults	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Working adults	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Uninsurance rate for nonelderly adults	-1.1	-0.6	-0.4	-0.2	-2.5	1.2	-0.4	-1.0	0.0			

### Appendix Table F3: (continued)

	Montore	Difference from Value for Montana											
	wontana	ОК	SC	SD	TN	ТХ	VA	WY					
<u>Level in 2011</u>													
Income eligibility for full benefits													
Nonworking parents	32%	5	18	20	38	-20	-7	7					
Working parents	56%	-3	37	-4	71	-30	-25	-4					
Nonworking adults	0%	0	0	0	0	0	0	0					
Working adults	0%	0	0	0	0	0	0	0					
Income eligibility for limited benefits													
Nonworking parents	0%	200	0	0	0	0	0	0					
Working parents	0%	200	0	0	0	0	0	0					
Nonworking adults	0%	200	0	0	0	0	0	0					
Working adults	0%	200	0	0	0	0	0	0					
Uninsurance rate for nonelderly adults	20.4%	2.0	1.1	-7.4	-1.8	7.1	-6.7	0.1					
Change between 2011 and 2013													
Income eligibility for full benefits													
Nonworking parents	-1.0	0.0	1.0	-1.0	-2.0	1.0	1.0	-1.0					
Working parents	-2.0	0.0	-2.0	0.0	-3.0	1.0	1.0	0.0					
Nonworking adults	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Working adults	0.0	0.0	0.0	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	0.0	0.0	0.0					
Working parents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Nonworking adults	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Working adults	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Uninsurance rate for nonelderly adults	-1.1	-2.9	-0.9	0.6	-0.5	-0.4	0.9	-0.2					

**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.

APPENDIX TABLE F4: Comparison of Health and Health Care Outcomes for Adults Ages 19 to 64 for Montana and Comparison States that Did Not Expand Medicaid, Level in 2011 and Change Between 2011 and 2013

	Mantana	Difference from Value for Montana										
	wontana	AL	FL	GA	ID	KS	MS	NE	NC			
Level in 2011												
Share reporting fair/poor health	12.2%	5.2	3.5	1.6	0.4	-1.4	6.4	-1.6	2.4			
Share ever diagnosed with a chronic condition	53.5%	5.7	-1.9	-2.1	-2.2	-2.1	3.6	-2.9	-0.6			
Share with a health limitation	22.6%	3.4	0.2	-3.1	-0.9	-3.6	1.4	-4.6	-2.3			
Share with a personal doctor	69.3%	9.5	2.2	4.1	1.9	10.0	3.0	10.6	5.1			
Share with a routine checkup in the past 12 months	52.0%	17.2	12.2	18.5	1.3	13.3	12.0	2.5	18.9			
Change between 2011 and 2013												
Share reporting fair/poor health	0.2	-0.5	-1.3	0.3	-2.2	0.4	0.4	-1.3	-0.7			
Share ever diagnosed with a chronic condition	0.7	-0.4	0.2	2.9	0.3	0.3	-0.8	-0.5	-0.1			
Share with a health limitation	-3.2	1.2	-1.9	0.3	-0.4	0.0	0.9	-0.3	1.1			
Share with a personal doctor	-3.5	-0.3	2.0	1.5	2.1	2.1	6.5	1.6	0.3			
Share with a routine checkup in the past 12 months	5.2	-5.0	-3.9	-5.8	-2.2	-3.4	-1.2	-1.0	-5.2			

#### **APPENDIX TABLE F4. (continued)**

	Mantana	Difference from Value for Montana										
	Wontana	ОК	SC	SD	TN	тх	VA	WY				
Level in 2011												
Share reporting fair/poor health	12.2%	3.9	2.7	-1.5	2.7	2.7	0.2	-1.8				
Share ever diagnosed with a chronic condition	53.5%	3.2	2.1	-2.9	0.0	-2.5	-1.4	-0.4				
Share with a health limitation	22.6%	1.5	0.0	-2.1	-0.8	-4.2	-3.2	-2.8				
Share with a personal doctor	69.3%	5.5	7.3	3.9	9.2	-0.5	7.5	-2.4				
Share with a routine checkup in the past 12 months	52.0%	2.8	10.5	10.1	22.7	7.4	19.8	0.1				
Change between 2011 and 2013												
Share reporting fair/poor health	0.2	-1.0	-0.8	-1.7	1.9	-0.6	-1.5	-0.1				
Share ever diagnosed with a chronic condition	0.7	0.5	0.8	-0.2	-1.8	-1.6	-0.9	-1.4				
Share with a health limitation	-3.2	-0.7	0.4	-1.2	1.9	-2.1	-1.5	-0.6				
Share with a personal doctor	-3.5	1.1	0.5	2.9	0.2	1.7	2.0	3.0				
Share with a routine checkup in the past 12 months	5.2	-1.5	-5.0	-5.1	-6.8	2.2	-7.0	-1.1				

Sources: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS).

Notes: Shading indicates states included in the group of best comparison states.

Appendix Table F.5: Comparison of Medicaid and Section 1115 Eligibility Standards and Uninsurance Rate for Adults Ages 19 to 64 for Montana and Comparison States that Expanded Medicaid without a Demonstration, Level in 2011 and Change Between 2011 and 2013

Marchala	Manharra	Difference from Value for Montar									ana					
Variable	Montana	AK	со	DE	КҮ	MD	NM	ND	ОН	PA	wv					
Level in 2011																
Income eligibility for full benefits																
Nonworking parents	32%	45	68	68	4	84	-3	2	58	-6	-15					
Working parents	56%	25	50	64	6	60	11	3	34	-10	-23					
Nonworking adults	0%	0	0	100	0	0	0	0	0	0	0					
Working adults	0%	0	0	110	0	0	0	0	0	0	0					
Income eligibility for limited benefits																
Nonworking parents	0%	0	0	0	0	0	0	0	0	0	0					
Working parents	0%	0	0	0	0	0	0	0	0	0	0					
Nonworking adults	0%	0	0	0	0	116	0	0	0	0	0					
Working adults	0%	0	0	0	0	128	0	0	0	0	0					
Uninsurance rate for nonelderly adults	20.4%	-2.4	-3.6	-9.9	-1.0	-8.1	1.0	-7.0	-5.8	-7.2	0.6					
Change between 2011 and 2013																
Income eligibility for full benefits																
Nonworking parents	-1.0	-2.0	1.0	1.0	-2.0	1.0	0.0	0.0	1.0	0.0	0.0					
Working parents	-2.0	-1.0	2.0	2.0	-3.0	8.0	20.0	0.0	8.0	14.0	0.0					
Nonworking adults	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Working adults	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0					
Working parents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Nonworking adults	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Working adults	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Uninsurance rate for nonelderly adults	-1.1	-1.0	0.3	2.6	0.7	-0.1	1.1	-1.7	0.5	0.6	0.1					

**Sources:** Medicaid/Section 1115 eligibility: Kaiser Family Foundation; uninsurance rate: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS). <sup>a</sup> While adults were eligible for coverage, there was a cap on enrollment. Appendix Table F.6: Comparison of Health and Health Care Outcomes for Adults Ages 19 to 64 for Montana and Comparison States that Expanded Medicaid without a Demonstration, Level in 2011 and Change Between 2011 and 2013

	Mantana				Diff	erence f	rom Valu	ue for Mo	ontana	ntana			
	Montana	AK	со	DE	КҮ	MD	NM	ND	ОН	PA	wv		
Level in 2011													
Share reporting fair/poor health	12.2%	-0.9	-1.5	-1.5	5.5	-2.1	3.2	-2.0	1.2	-0.3	8.3		
Share ever diagnosed with a chronic condition	53.5%	-1.3	-2.9	3.3	4.7	-2.4	-0.3	-2.0	0.7	0.5	5.3		
Share with a health limitation	22.6%	0.0	-1.1	-3.1	4.5	-3.4	-0.2	-4.6	-1.6	-1.1	5.4		
Variable	69.3%	-3.3	6.6	18.3	9.2	13.4	-0.5	3.2	10.8	16.3	4.6		
Share with a routine checkup in the past 12 months	52.0%	6.0	4.6	24.6	10.6	21.5	3.0	5.7	14.2	12.7	20.7		
Change between 2011 and 2013													
Share reporting fair/poor health	0.2	-0.8	-0.7	2.7	0.2	-0.1	0.1	-0.3	-0.5	-0.3	-0.5		
Share ever diagnosed with a chronic condition	0.7	1.4	-0.3	0.1	0.0	0.6	-1.0	-0.5	0.5	0.2	2.0		
Share with a health limitation	-3.2	-2.8	-1.7	0.8	-0.4	-2.6	0.3	-1.8	-0.6	-1.9	0.6		
Share with a personal doctor	-3.5	2.8	2.8	0.9	1.0	-0.2	0.8	1.1	2.1	2.1	2.5		
Share with a routine checkup in the past 12 months	5.2	-6.6	-3.0	-9.0	-2.6	-6.2	-1.8	-2.9	-4.9	-2.8	-7.8		

Sources: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS).

Notes: Shading indicates states included in the group of best comparison states.
Appendix Table F.7: Comparison of Medicaid and Section 1115 Eligibility Standards and Uninsurance Rate for Adults 19 to 64 for Montana and Comparison States that Expanded Medicaid with a Different Demonstration, Level in 2011 and Change Between 2011 and 2013

	Montana	Difference from Value for Montana						
		AR	IN	IA	МІ	NH		
<u>Level in 2011</u>								
Income eligibility for full benefits								
Nonworking parents	32%	-19	-13	-4	5	7		
Working parents	56%	-39	-20	27	8	-7		
Nonworking adults	0%	0	0	0	0	0		
Working adults	0%	0	0	0	0	0		
Income eligibility for limited benefits								
Nonworking parents	0%	0	200	200	0	0		
Working parents	0%	200	200	250	0	0		
Nonworking adults	0%	0	0	200	0	0		
Working adults	0%	200	0	250	0	0		
Uninsurance rate for nonelderly adults	20.4%	1.9	-0.7	-8.1	-4.3	-7.8		
Change between 2011 and 2013								
Income eligibility for full benefits								
Nonworking parents	-1.0	1.0	0.0	0.0	1.0	0.0		
Working parents	-2.0	1.0	-10.0	-1.0	2.0	0.0		
Nonworking adults	0.0	0.0	0.0	0.0	0.0	0.0		
Working adults	0.0	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	0.0		
Working parents	0.0	0.0	6.0	0.0	0.0	0.0		
Nonworking adults	0.0	0.0	0.0	0.0	0.0	0.0		
Working adults	0.0	0.0	0.0	0.0	0.0	0.0		
Uninsurance rate for nonelderly adults	-1.1	1.3	-1.2	-0.9	-0.1	1.4		

**Sources:** Medicaid/Section 1115 eligibility: Kaiser Family Foundation; uninsurance rate: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS).

Appendix Table F.8: Comparison of Health and Health Care Outcomes for Adults Ages 19 to 64 for Montana and Comparison States that Expanded Medicaid with a Different Demonstration, Level in 2011 and Change Between 2011 and 2013

	Montana Difference from Value for				or Montana		
		AR	IN	IA	МІ	NH	
Level in 2011							
Share reporting fair/poor health	12.2%	6.3	2.1	-2.8	1.6	-2.6	
Share ever diagnosed with a chronic condition	53.5%	3.8	1.8	-5.1	5.7	1.4	
Share with a health limitation	22.6%	2.4	-1.7	-6.6	1.6	-1.7	
Share with a personal doctor	69.3%	7.6	10.5	9.8	13.7	17.0	
Share with a routine checkup in the past 12 months	52.0%	6.3	7.4	13.5	10.6	16.1	
Change between 2011 and 2013							
Share reporting fair/poor health	0.2	-0.6	-0.7	0.1	0.0	-0.9	
Share ever diagnosed with a chronic condition	0.7	1.9	-1.1	1.5	-1.6	-1.0	
Share with a health limitation	-3.2	1.3	0.0	2.5	-1.2	-1.6	
Share with a personal doctor	-3.5	2.8	2.9	2.4	1.1	2.5	
Share with a routine checkup in the past 12 months	5.2	-0.9	-2.9	-4.3	-2.1	-6.2	

Sources: 2011-13 Behavioral Risk Factor Surveillance System (BRFSS).

Notes: Shading indicates states included in the group of best comparison states.

	American Community Survey	Behavioral Risk Factor Surveillance System
Gender	х	х
Age	Х	X
Gender*Age interactions	Х	Х
Race/ethnicity	Х	Х
Educational attainment	Х	Х
Marital status	Х	x
Household size		X
Family size	Х	
Multiple family household	Х	x
Employment status	Х	X
Household income		X
Family income relative to federal poverty level	Х	
Family has investment income	Х	
Household owns home	Х	Х

Appendix Table F.9: Explanatory Variables Included in the Propensity Score Models based on the American Community Survey and Behavioral Risk Factor Surveillance System

Appendix Table F.10: Odds Ratios from Propensity Score Models for Adults Ages 19 to 64 for Montana and Group of Best Comparison States that Did Not Expand Medicaid, Based on the American Community Survey, 2011-13 (pre-period) and 2016-17 (post-period)

	20	2011		2012		2013	
Female	0.893		1.046		0.938		
Age 26-44	0.872		1.061		1.048		
Age 45-64	1.089		1.365	***	1.258	*	
Female*Age interactions							
Female*Age 26-44	1.038		0.866		0.987		
Female*Age 45-64	1.089		0.930		1.026		
Non-Hispanic white	3.353	***	3.553	***	3.652	***	
Educational attainment							
Some college	1.127	*	1.001		1.177	***	
College graduate or more	1.315	***	1.053		1.072		
Marital status							
Widowed/separated/divorced	1.148		1.105		1.010		
Never married	1.205	**	1.357	***	1.085		
Multiple family household	0.870	*	0.812	***	0.928		
Employment status							
Adult is employed	1.146	**	1.192	***	1.153	**	
Other family member is employed	1.212	***	1.402	***	1.163	**	
Family income relative to FPL							
50% FPL or less	1.000		1.000		1.000		
Above 50 to 138% FPL	1.280	**	0.962		0.889		
Above 138 to 200% FPL	1.316	**	1.033		0.755	**	
Above 200 to 300% FPL	1.024		0.803	**	0.715	***	
Above 300 to 400% FPL	0.961		0.742	***	0.676	***	
Above 400 to 500% FPL	0.848		0.691	***	0.614	***	
Above 500% FPL	0.599	***	0.451	***	0.418	***	
Family has investment income	1.246	***	1.280	***	1.491	***	
Household owns home	0.915		0.916		0.897		
Constant	0.016	***	0.016	***	0.019	***	
Sample Size	116	,580	118	,445	118	,500	

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** FPL = Federal poverty level. Best comparison states are GA, NC, and WY.

#### Appendix Table F.10: (continued)

	20	16	2017		
Female	1.021		0.910		
Age 26-44	0.985		0.921		
Age 45-64	1.086		0.955		
Female*Age interactions					
Female*Age 26-44	0.915		1.089		
Female*Age 45-64	1.009		1.119		
Non-Hispanic white	3.495	***	3.467	***	
Educational attainment					
Some college	0.958		1.031		
College graduate or more	1.014		0.990		
Marital status					
Widowed/separated/divorced	1.112		1.049		
Never married	1.231	**	1.206	**	
Multiple family household	0.876	*	0.897		
Employment status					
Adult is employed	1.204	***	1.263	***	
Other family member is employed	1.178	**	1.173	**	
Family income relative to FPL					
50% FPL or less	1.000		1.000		
Above 50 to 138% FPL	1.151		0.976		
Above 138 to 200% FPL	1.191		0.929		
Above 200 to 300% FPL	0.943		0.864		
Above 300 to 400% FPL	0.862		0.714	***	
Above 400 to 500% FPL	0.839		0.734	**	
Above 500% FPL	0.634	***	0.593	***	
Family has investment income	1.513	***	1.617	***	
Household owns home	0.997		1.006		
Constant	0.015	***	0.018	***	
Sample Size	118,325		120,	419	

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** FPL = Federal poverty level. Best comparison states are GA, NC, and WY.

	2011		2012			2013	
Female	0.925		1.088		0.947		
Age 26-44	1.053		1.277	*	1.239		
Age 45-64	1.331	**	1.591	***	1.516	***	
Female*Age interactions							
Female*Age 26-44	1.048		0.826		1.047		
Female*Age 45-64	1.052		0.910		1.017		
Non-Hispanic white	0.947		1.078		1.134		
Educational attainment							
Some college	1.138	**	1.083		1.244	***	
College graduate or more	1.572	***	1.345	***	1.319	***	
Marital status							
Widowed/separated/divorced	1.029		1.037		0.986		
Never married	1.002		1.061		1.012		
Multiple family household	1.056		1.006		1.095		
Employment status							
Adult is employed	1.008		1.091		0.962		
Other family member is employed	0.997		1.299	***	1.054		
Family income relative to FPL							
50% FPL or less	1.000		1.000		1.000		
Above 50 to 138% FPL	1.247	**	1.050		0.927		
Above 138 to 200% FPL	1.349	**	0.985		0.811	*	
Above 200 to 300% FPL	1.041		0.772	**	0.756	**	
Above 300 to 400% FPL	0.965		0.683	* * *	0.814	*	
Above 400 to 500% FPL	0.973		0.536	***	0.624	***	
Above 500% FPL	0.746	**	0.451	***	0.546	***	
Family has investment income	1.155	*	1.250	***	1.470	***	
Household owns home	0.910		0.962		0.932		
Constant	0.154	***	0.136	***	0.144	***	
Sample Size	34.	226	34.	724	34.	920	

Appendix Table F.11: Odds Ratios from Propensity Score Models for Adults Ages 19 to 64 for Montana and Group of Best Comparison States that Expanded Medicaid without a Demonstration, Based on the American Community Survey, 2011-13 (pre-period) and 2016-17 (post-period)

Source: 2011-13 and 2016-17 American Community Survey (ACS).

Notes: FPL = Federal poverty level. Best comparison states are KY and ND.

Appendix Table F.11: (continued)
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	2016		2017		
Female	0.982		0.900		
Age 26-44	1.124		0.992		
Age 45-64	1.330	**	1.095		
Female*Age interactions					
Female*Age 26-44	0.992		1.146		
Female*Age 45-64	1.037		1.140		
Non-Hispanic white	1.226	**	1.184	*	
Educational attainment					
Some college	1.053		1.105	*	
College graduate or more	1.284	***	1.205	***	
Marital status					
Widowed/separated/divorced	0.959		1.032		
Never married	1.020		1.053		
Multiple family household	1.111		1.025		
Employment status					
Adult is employed	1.125	*	1.218	***	
Other family member is employed	1.040		1.005		
Family income relative to FPL					
50% FPL or less	1.000		1.000		
Above 50 to 138% FPL	1.202	*	0.986		
Above 138 to 200% FPL	1.252	*	0.964		
Above 200 to 300% FPL	0.910		0.852		
Above 300 to 400% FPL	0.780	**	0.660	***	
Above 400 to 500% FPL	0.763	**	0.694	***	
Above 500% FPL	0.595	***	0.600	***	
Family has investment income	1.638	***	1.746	***	
Household owns home	1.078		1.151	*	
Constant	0.112	***	0.135	***	
Sample Size	34.3	34,371		34,524	

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** FPL = Federal poverty level. Best comparison states are KY and ND. \*/\*\*/\*\*\* Significantly different from one at the .10/.05/.01 levels, using two-tailed tests.

	20	2011		2012		2013	
Female	0.902		0.982		0.919		
Age 26-44	0.847		0.910		0.910		
Age 45-64	0.909		0.945		0.874		
Female*Age interactions							
Female*Age 26-44	0.987		0.871		0.971		
Female*Age 45-64	1.047		0.970		1.049		
Non-Hispanic white	1.346	***	1.423	***	1.500	***	
Educational attainment							
Some college	1.145	**	1.061		1.207	***	
College graduate or more	1.205	***	1.012		0.990		
Marital status							
Widowed/separated/divorced	1.168	*	1.061		0.991		
Never married	0.940		0.874		0.796	***	
Multiple family household	0.758	***	0.689	***	0.791	***	
Employment status							
Adult is employed	1.189	***	1.168	***	1.114	**	
Other family member is employed	1.173	**	1.290	***	1.111	*	
Family income relative to FPL							
50% FPL or less	1.000		1.000		1.000		
Above 50 to 138% FPL	1.412	***	1.060		0.957		
Above 138 to 200% FPL	1.356	***	1.107		0.754	***	
Above 200 to 300% FPL	1.050		0.876		0.735	***	
Above 300 to 400% FPL	0.968		0.734	***	0.750	***	
Above 400 to 500% FPL	0.818		0.655	***	0.618	***	
Above 500% FPL	0.582	***	0.413	***	0.442	***	
Family has investment income	1.267	***	1.382	***	1.529	***	
Household owns home	0.773	***	0.764	***	0.755	***	
Constant	0.082	***	0.105	***	0.112	***	
Sample Size	69,	790	69,	112	69,	683	

Appendix Table F.12: Odds Ratios from Propensity Score Models for Adults Ages 19 to 64 for Montana and Group of Best Comparison States that Expanded Medicaid with a Different Demonstration, Based on the American Community Survey, 2011-13 (pre-period) and 2016-17 (post-period)

	Appendix	Table	F.12:	(continued)
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	20	2016		2017		
Female	0.907		0.830			
Age 26-44	0.844		0.808	*		
Age 45-64	0.750	**	0.686	***		
Female*Age interactions						
Female*Age 26-44	1.013		1.152			
Female*Age 45-64	1.105		1.194			
Non-Hispanic white	1.492	***	1.445	***		
Educational attainment						
Some college	0.974		1.047			
College graduate or more	0.952		0.935			
Marital status						
Widowed/separated/divorced	1.009		1.013			
Never married	0.775	***	0.800	***		
Multiple family household	0.682	***	0.723	***		
Employment status						
Adult is employed	1.128	**	1.272	***		
Other family member is employed	1.028		1.114	*		
Family income relative to FPL						
50% FPL or less	1.000		1.000			
Above 50 to 138% FPL	1.154		0.899			
Above 138 to 200% FPL	1.088		0.851			
Above 200 to 300% FPL	0.839	*	0.718	***		
Above 300 to 400% FPL	0.719	***	0.602	***		
Above 400 to 500% FPL	0.667	***	0.576	***		
Above 500% FPL	0.478	***	0.433	***		
Family has investment income	1.699	***	1.731	***		
Household owns home	0.860	**	0.886	*		
Constant	0.125	***	0.132	***		
Sample Size	68.	128	68,372			

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** FPL = Federal poverty level. Best comparison states are MI and NH.

	2011		2012		2013	3
Female	0.825		1.059		0.976	
Age 26-44	0.818	*	1.062		0.990	
Age 45-64	0.963		1.295	**	1.236	
Female*Age interactions						*
Female*Age 26-44	1.121		0.896		1.040	
Female*Age 45-64	1.159		0.914		0.919	
Non-Hispanic white	3.499	***	3.746	***	3.921	
Educational attainment						***
Some college	1.087		1.056		1.003	
College graduate or more	1.381	***	1.175	***	1.080	
Marital status						
Widowed/separated/divorced	0.960		0.845	***	0.877	
Never married	1.017		0.969		0.911	**
Multiple family household	0.740	***	0.831	***	0.959	
Employed	1.186	***	1.178	***	1.063	
Household income						
\$15,000-\$19,999	0.930		1.039		1.014	
\$20,000-\$24,999	0.842	*	1.016		0.931	
\$25,000-\$34,999	0.857		0.916		0.920	
\$35,000-\$49,999	0.720	***	0.740	***	0.730	
\$50,000-\$74,999	0.573	***	0.620	***	0.641	**:
\$75,000 or more	0.452	***	0.484	***	0.483	**:
Household owns home	0.914		0.869	**	0.906	**:
Constant	0.227	***	0.171	***	0.211	*
Sample Size	25,88	5	21,71	7	21,92	9

Appendix Table F.13: Odds Ratios from Propensity Score Models for Adults Ages 19 to 64 for Montana and Group of Best Comparison States that Did Not Expand Medicaid, Based on the Behavioral Risk Factor Surveillance System, 2011-13 (pre-period) and 2016-17 (post-period)

# Appendix Table F.13: (continued)

	2016	2016			
Female	0.860		0.922		
Age 26-44	0.831		0.831		
Age 45-64	0.948		0.869		
Female*Age interactions					
Female*Age 26-44	1.166		1.079		
Female*Age 45-64	1.192		1.102		
Non-Hispanic white	3.709	***	3.616	***	
Educational attainment					
Some college	0.996		0.999		
College graduate or more	1.130		1.068		
Marital status					
Widowed/separated/divorced	0.994		0.994		
Never married	1.073		1.184	**	
Multiple family household	0.829	***	0.673	***	
Employed	1.187	**	1.245	***	
Household income					
\$15,000-\$19,999	0.999		1.034		
\$20,000-\$24,999	0.828		0.759	**	
\$25,000-\$34,999	0.934		0.924		
\$35,000-\$49,999	0.774	*	0.675	***	
\$50,000-\$74,999	0.710	***	0.607	***	
\$75,000 or more	0.554	***	0.575	***	
Household owns home	0.925		0.923		
Constant	0.187	***	0.229	***	
Sample Size	14,12	14,121		13,765	

Source: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS).

Notes: Best comparison states are GA, NC, and WY.

Appendix Table F.14: Odds Ratios from Propensity Score Models for Adults Ages 19 to 64 for Montana and Group of Best Comparison States that Expanded Medicaid without a Demonstration, Based on the Behavioral Risk Factor Surveillance System, 2011-13 (pre-period) and 2016-17 (post-period)

	2011	2011		2	2013	
Female	0.761	*	0.922		0.888	
Age 26-44	0.708	***	0.857		0.812	*
Age 45-64	0.694	***	0.851		0.816	*
Female*Age interactions						
Female*Age 26-44	1.168		0.959		1.120	
Female*Age 45-64	1.306	*	1.013		1.047	
Non-Hispanic white	1.461	***	1.516	***	1.554	***
Educational attainment						
Some college	1.135	**	1.106	*	1.028	
College graduate or more	1.283	***	1.127	**	1.007	
Marital status						
Widowed/separated/divorced	0.940		0.750	***	0.814	***
Never married	0.791	***	0.624	***	0.658	***
Multiple family household	0.650	***	0.733	***	0.835	***
Employed	1.336	***	1.217	***	1.116	**
Household income						
\$15,000-\$19,999	1.055		0.927		1.031	
\$20,000-\$24,999	0.810	**	0.941		0.899	
\$25,000-\$34,999	0.724	***	0.772	**	0.787	**
\$35,000-\$49,999	0.675	***	0.676	***	0.713	***
\$50,000-\$74,999	0.514	***	0.578	***	0.578	***
\$75,000 or more	0.354	***	0.348	***	0.428	***
Household owns home	0.863	**	0.755	***	0.768	***
Constant	1.137		1.032		0.996	
Sample Size	18,53	3	17,34	4	19,07	'5

# Appendix Table F.14: (continued)

	2016		2017		
Female	0.782		0.856		
Age 26-44	0.744	**	0.763	*	
Age 45-64	0.718	**	0.671	***	
Female*Age interactions					
Female*Age 26-44	1.203		1.128		
Female*Age 45-64	1.231		1.174		
Non-Hispanic white	1.445	***	1.527	***	
Educational attainment					
Some college	1.068		1.097		
College graduate or more	1.093		1.036		
Marital status					
Widowed/separated/divorced	0.885		0.895		
Never married	0.710	***	0.739	***	
Multiple family household	0.629	***	0.629	***	
Employed	1.133	*	1.215	***	
Household income					
\$15,000-\$19,999	1.472	***	1.195		
\$20,000-\$24,999	0.970		0.926		
\$25,000-\$34,999	1.020		1.012		
\$35,000-\$49,999	0.878		0.779	**	
\$50,000-\$74,999	0.895		0.662	***	
\$75,000 or more	0.507	***	0.504	***	
Household owns home	0.749	***	0.775	***	
Constant	0.636	**	0.704	*	
Sample Size	15,442	15,442		13,985	

Source: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS).

Notes: Best comparison states are KY and ND.

Appendix Table F.15: Odds Ratios from Propensity Score Models for Adults Ages 19 to 64 for Montana and Group of Best Comparison States that Expanded Medicaid with a Different Demonstration, Based on the Behavioral Risk Factor Surveillance System, 2011-13 (pre-period) and 2016-17 (post-period)

	2011	2011		2	2013	
Female	0.795		0.836		0.981	
Age 26-44	0.905		0.993		1.214	*
Age 45-64	1.016		1.229	*	1.468	***
Female*Age interactions						
Female*Age 26-44	1.206		1.252		1.055	
Female*Age 45-64	1.311	*	1.192		0.964	
Non-Hispanic white	0.945		1.083		1.164	**
Educational attainment						
Some college	1.095		1.071		1.079	
College graduate or more	1.550	***	1.294	***	1.240	***
Marital status						
Widowed/separated/divorced	1.073		0.856	**	0.937	
Never married	1.092		0.860	**	0.974	
Multiple family household	0.804	***	0.994		1.110	**
Employed	1.036		1.017		0.900	*
Household income						
\$15,000-\$19,999	1.305	**	1.094		1.356	***
\$20,000-\$24,999	1.096		1.313	**	1.249	**
\$25,000-\$34,999	0.898		0.968		0.953	
\$35,000-\$49,999	0.992		0.888		1.143	
\$50,000-\$74,999	0.832	*	0.809	**	0.891	
\$75,000 or more	0.679	***	0.625	***	0.780	**
Household owns home	1.075		0.898	*	0.986	
Constant	0.679	**	0.577	***	0.359	***
Sample Size	17,72	0	16,646		19,171	

# Appendix Table F.15: (continued)

	2016	2016		
Female	0.904		0.950	
Age 26-44	1.044		0.997	
Age 45-64	1.257		1.125	
Female*Age interactions				
Female*Age 26-44	1.104		1.072	
Female*Age 45-64	1.121		1.048	
Non-Hispanic white	1.240	**	1.265	***
Educational attainment				
Some college	1.050		1.034	
College graduate or more	1.280	***	1.212	**
Marital status				
Widowed/separated/divorced	0.914		0.982	
Never married	0.985		1.020	
Multiple family household	1.064		1.032	
Employed	1.026		1.111	
Household income				
\$15,000-\$19,999	1.330	**	1.411	**
\$20,000-\$24,999	1.055		1.142	
\$25,000-\$34,999	1.017		1.112	
\$35,000-\$49,999	1.076		1.041	
\$50,000-\$74,999	1.095		0.897	
\$75,000 or more	0.867		0.850	
Household owns home	0.881	*	0.968	
Constant	0.253	***	0.258	***
Sample Size	14,10	14,106		4

Source: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS).

Notes: Best comparison states are MI and NH.

		Group of Best Comparison States				
	Montana	Using ACS Weight	Using Propensity Score Weight	Using ebalance Weight		
Female (%)	50.0	51.8	50.0	50.0		
Age (%)						
21-25	15.1	15.0	15.1	15.1		
26-44	37.8	41.9	37.8	37.8		
45-64	47.1	43.2	47.1	47.1		
Non-Hispanic white (%)	87.9	60.5	87.9	87.9		
Educational attainment (%)						
High school graduate/GED or less	34.8	38.6	34.8	34.8		
Some college	36.6	33.0	36.6	36.6		
College graduate or more	28.6	28.4	28.5	28.6		
Marital status (%)						
Married	55.1	51.8	55.1	55.1		
Widowed/separated/divorced	17.0	17.1	17.1	17.0		
Never married	27.8	31.1	27.8	27.8		
Multiple family household (%)	38.8	45.7	38.8	38.8		
Employment status (%)						
Adult is employed	74.5	70.8	74.5	74.5		
Other family member is employed	40.8	36.6	40.8	40.8		
Family income relative to FPL						
At or below 138%	29.5	33.4	29.6	29.5		
Above 138% to less than 200%	11.3	10.3	11.2	11.3		
200% to less than 500%	38.4	34.5	38.3	38.4		
500% or more	20.8	21.9	20.8	20.8		
Family has investment income (%)	17.9	11.1	17.9	17.9		
Household owns home (%)	67.5	64.0	67.6	67.5		
Sample size	27,507	564,762	564,581	564,762		

Appendix Table F.16: Selected Characteristics of Adults Ages 19 to 64 in Montana and Group of Best Comparison States that Did Not Expand Medicaid, After Reweighting Using the American Community Survey, 2011-13 (pre-period) and 2016-17 (post-period)

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** FPL = Federal poverty level. Best comparison states are GA, NC, and WY.

Appendix Table F.17: Selected Characteristics of Adults Ages 19 to 64 in Montana and Group of Best Comparison States that Expanded Medicaid without a Demonstration, After Reweighting Using the American Community Survey, 2011-13 (pre-period) and 2016-17 (post-period)

		Group of Best Comparison States				
	Montana	Using ACS Weight	Using Propensity Score Weight	Using ebalance Weight		
Female (%)	50.0	50.5	50.0	50.0		
Age (%)						
21-25	15.1	15.2	15.1	15.1		
26-44	37.8	40.0	37.8	37.8		
45-64	47.1	44.8	47.1	47.1		
Non-Hispanic white (%)	87.9	86.5	87.9	87.9		
Educational attainment (%)						
High school graduate/GED or less	34.8	42.6	34.9	34.8		
Some college	36.6	33.9	36.6	36.6		
College graduate or more	28.6	23.5	28.5	28.6		
Marital status (%)						
Married	55.1	54.3	55.1	55.1		
Widowed/separated/divorced	17.0	18.5	17.1	17.0		
Never married	27.8	27.2	27.8	27.8		
Multiple family household (%)	38.8	41.6	38.8	38.8		
Employment status (%)						
Adult is employed	74.5	70.0	74.5	74.5		
Other family member is employed	40.8	38.7	40.8	40.8		
Family income relative to FPL						
At or below 138%	29.5	32.6	29.3	29.3		
Above 138% to less than 200%	11.3	10.0	11.5	11.5		
200% to less than 500%	38.4	36.8	38.3	38.4		
500% or more	20.8	20.5	20.9	20.8		
Family has investment income (%)	17.9	11.2	17.9	17.9		
Household owns home (%)	67.5	67.6	67.6	67.5		
Sample size	27,507	145,258	145,219	145,258		

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** FPL = Federal poverty level. Best comparison states are KY and ND.

Appendix Table F.18: Selected Characteristics of Adults Ages 19 to 64 in Montana and Group of Best Comparison States that Expanded Medicaid with a Different Demonstration, After Reweighting Using the American Community Survey, 2011-13 (pre-period) and 2016-17 (post-period)

		Group of Best Comparison States				
	Montana	Using ACS Weight	Using Propensity Score Weight	Using ebalance Weight		
Female (%)	50.0	50.9	50.0	50.0		
Age (%)						
21-25	15.1	15.2	15.1	15.1		
26-44	37.8	37.9	37.8	37.8		
45-64	47.1	46.9	47.1	47.1		
Non-Hispanic white (%)	87.9	78.6	87.9	87.9		
Educational attainment (%)						
High school graduate/GED or less	34.8	36.0	34.9	34.8		
Some college	36.6	36.3	36.6	36.6		
College graduate or more	28.6	27.8	28.5	28.6		
Marital status (%)						
Married	55.1	51.9	55.0	55.1		
Widowed/separated/divorced	17.0	15.8	17.1	17.0		
Never married	27.8	32.3	27.8	27.8		
Multiple family household (%)	38.8	46.1	38.8	38.8		
Employment status (%)						
Adult is employed	74.5	70.7	74.5	74.5		
Other family member is employed	40.8	37.4	40.8	40.8		
Family income relative to FPL						
At or below 138%	29.5	31.2	29.3	29.3		
Above 138% to less than 200%	11.3	9.3	11.5	11.5		
200% to less than 500%	38.4	35.3	38.3	38.4		
500% or more	20.8	24.1	20.9	20.8		
Family has investment income (%)	17.9	13.2	17.9	17.9		
Household owns home (%)	67.5	72.0	67.6	67.5		
Sample size	27,507	317,578	317,430	317,578		

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** FPL = Federal poverty level. Best comparison states are MI and NH.

Appendix Table F.19: Selected Characteristics of Adults Ages 19 to 64 in Montana and Group of Best Comparison States that Did Not Expand Medicaid, After Reweighting Using the Behavioral Risk Factor Surveillance System, 2011-13 (pre-period) and 2016-17 (post-period)

		Group of Best Comparison States				
	Montana	Using Revised BRFSS Weight	Using Propensity Score Weight	Using ebalance Weight		
Female (%)	50.0	51.1	49.8	50.0		
Age (%)						
21-25	15.1	15.0	15.2	15.1		
26-44	37.6	41.6	37.6	37.6		
45-64	47.3	43.4	47.2	47.3		
Non-Hispanic white (%)	88.0	67.0	88.0	88.0		
Educational attainment (%)						
High school graduate/GED or less	35.0	36.5	35.2	35.0		
Some college	36.7	36.3	36.7	36.7		
College graduate or more	28.3	27.2	28.1	28.3		
Marital status (%)						
Married	55.2	53.2	55.3	55.2		
Widowed/separated/divorced	17.3	17.2	17.3	17.3		
Never married	27.6	29.6	27.5	27.6		
Multiple family household (%)	42.6	48.9	42.8	42.6		
Employed (%)	74.1	71.9	73.8	74.1		
Household income (%)						
Less than \$25,000	21.9	21.0	21.9	21.9		
\$25,000-\$49,999	25.2	23.0	25.0	25.2		
\$50,000-\$74,999	17.1	16.8	17.1	17.1		
\$75,000 or more	35.8	39.2	36.0	35.8		
Household owns home (%)	69.8	69.4	69.8	69.8		
Sample size	26,268	71,149	71,106	71,149		

**Source:** 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS).

Notes: Best comparison states are GA, NC, and WY.

Appendix Table F.20: Selected Characteristics of Adults Ages 19 to 64 in Montana and Group of Best Comparison States that Expanded Medicaid without a Demonstration, After Reweighting Using the Behavioral Risk Factor Surveillance System, 2011-13 (pre-period) and 2016-17 (post-period)

		Group of Best Comparison States				
	Montana	Using Revised BRFSS Weight	Using Propensity Score Weight	Using ebalance Weight		
Female (%)	50.0	49.9	49.9	50.0		
Age (%)						
21-25	15.1	16.1	15.1	15.1		
26-44	37.6	40.0	37.6	37.6		
45-64	47.3	44.0	47.3	47.3		
Non-Hispanic white (%)	88.0	86.7	88.0	88.0		
Educational attainment (%)						
High school graduate/GED or less	35.0	38.4	35.3	35.0		
Some college	36.7	36.8	36.5	36.7		
College graduate or more	28.3	24.8	28.3	28.3		
Marital status (%)						
Married	55.2	55.1	55.2	55.2		
Widowed/separated/divorced	17.3	17.0	17.3	17.3		
Never married	27.6	27.9	27.6	27.6		
Multiple family household (%)	42.6	44.5	42.7	42.6		
Employed (%)	74.1	73.2	74.0	74.1		
Household income (%)						
Less than \$25,000	21.9	20.1	21.9	21.8		
\$25,000-\$49,999	25.2	23.1	25.1	25.2		
\$50,000-\$74,999	17.1	17.1	17.1	17.1		
\$75,000 or more	35.8	39.7	35.8	35.8		
Household owns home (%)	69.8	70.5	69.7	69.8		
Sample size	26,268	55,119	55,091	55,119		

**Source:** 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Best comparison states are KY and ND.

Appendix Table F.21: Selected Characteristics of Adults Ages 19 to 64 in Montana and Group of Best Comparison States that Expanded Medicaid with a Different Demonstration, After Reweighting Using the Behavioral Risk Factor Surveillance System, 2011-13 (pre-period) and 2016-17 (post-period)

		Group of Best Comparison States				
	Montana	Using Revised BRFSS Weight	Using Propensity Score Weight	Using ebalance Weight		
Female (%)	50.0	50.8	49.9	50.0		
Age (%)						
21-25	15.1	14.6	14.9	15.1		
26-44	37.6	37.5	37.9	37.6		
45-64	47.3	47.9	47.2	47.3		
Non-Hispanic white (%)	88.0	82.2	87.9	88.0		
Educational attainment (%)						
High school graduate/GED or less	35.0	33.7	35.5	35.0		
Some college	36.7	36.6	36.4	36.7		
College graduate or more	28.3	29.7	28.1	28.3		
Marital status (%)						
Married	55.2	53.1	55.2	55.2		
Widowed/separated/divorced	17.3	15.9	17.3	17.3		
Never married	27.6	31.1	27.5	27.6		
Multiple family household (%)	42.6	51.1	42.6	42.6		
Employed (%)	74.1	72.9	73.8	74.1		
Household income (%)						
Less than \$25,000	21.9	16.8	21.9	21.8		
\$25,000-\$49,999	25.2	21.0	25.0	25.2		
\$50,000-\$74,999	17.1	16.3	17.1	17.1		
\$75,000 or more	35.8	45.8	36.0	35.8		
Household owns home (%)	69.8	74.8	69.8	69.8		
Sample size	26,268	58,111	58,099	58,111		

**Source:** 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** Best comparison states are MI and NH.

Appendix G: Supplemental Tables for the Impact Analysis

Appendix Table G.1: Difference-in-Differences Coefficient Estimates for Models of Change in Health Insurance Coverage for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Compared to Not Expanding Medicaid Using Group of Best Comparison States, Based on American Community Survey and Behavioral Risk Factor Surveillance System

Explanatory Variable	ACS			BRFSS			
	Coeffic estim		Standard error	Coefficient estimate		Standard error	
Montana	-0.032	***	0.006	0.006		0.005	
Year is 2016	0.058	***	0.004	0.049	***	0.005	
Montana*Year is 2016	0.061	***	0.008	0.029	***	0.008	
Female	0.028	***	0.003	0.021	***	0.004	
Age 26-44	-0.119	***	0.008	-0.088	***	0.009	
Age 45-64	-0.088	***	0.008	-0.050	***	0.009	
Non-Hispanic white	0.094	***	0.007	-0.001		0.006	
Educational attainment							
Some college	0.083	***	0.005	0.083	***	0.005	
College graduate or more	0.128	***	0.005	0.127	***	0.005	
Marital status							
Widowed/separated/divorced	-0.034	***	0.007	-0.035	***	0.006	
Never married	-0.026	***	0.008	-0.043	***	0.007	
Multiple family household	-0.060	***	0.006	-0.030	***	0.004	
Employment status							
Adult is employed	0.005		0.005	-0.020	***	0.005	
Other family member is employed	0.002		0.005				
Family income relative to FPL							
Above 138% to less than 200%	0.031	***	0.009				
200% to less than 500%	0.152	***	0.007				
500% or more	0.192	***	0.008				
Household income							
\$25,000-\$49,999				0.148	***	0.007	
\$50,000-\$74,999				0.223	***	0.008	
\$75,000 or more				0.245	***	0.008	
Family has investment income	0.001		0.005				
Household owns home	0.060	***	0.005	0.051	***	0.006	
Cell-phone sample				-0.013	***	0.004	

(continued)

Explanatory Variable		ACS			BRFSS			
	Coefficient Standard estimate error		Standard error	Coefficient estimate				Standard error
Month of survey								
February				0.018	*	0.010		
March				0.029	***	0.009		
April				0.022	**	0.009		
Мау				0.022	**	0.010		
June				0.016	*	0.010		
July				0.003		0.010		
August				0.020	**	0.010		
September				0.008		0.010		
October				0.020	**	0.009		
November				0.004		0.010		
December				0.015		0.010		
Constant	0.601	***	0.012	0.617	***	0.013		
Sample size	592,08 8			97,023				
R <sup>2</sup>	0.143			0.146				

Source: 2011-13 and 2016-17 American Community Survey (ACS) and Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** FPL = Federal poverty level. \*/\*\*/\*\*\* Estimate differs significantly from zero at the .10/.05/.01 levels, using two-tailed tests

Appendix Table G.2: Difference-in-Differences Estimates of Changes in Selected Outcome Measures for Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, Based on Alternate Estimation Methods and Weights

	Compared to Not Expanding Medicaid		Compared to Expanding Medicaid without a Demonstration		Compared to Expanding Medicaid with Different Demonstratio	
Had health insurance coverage at the time of the survey						
Core model	6.1	***	3.0	***	3.3	***
Switch to logit estimation	6.2	***	2.9	***	3.2	***
Switch to probit estimation	5.9	***	2.9	***	3.1	***
Switch to ebalance weights	6.1	***	3.0	***	3.2	***
Had a routine checkup in the past 12 months						
Core model	4.7	***	4.6	***	2.6	**
Switch to logit estimation	4.7	***	4.6	***	2.6	**
Switch to probit estimation	4.7	***	4.6	***	2.6	**
Switch to ebalance weights	4.7	***	4.6	***	2.6	**
Received flu vaccine in past 12 months						
Core model	2.9	***	3.6	***	1.8	*
Switch to logit estimation	2.9	***	3.6	***	1.8	
Switch to probit estimation	2.9	***	3.6	***	1.8	
Switch to ebalance weights	2.9	***	3.6	***	1.8	*
No unmet need for doctor care due to costs in the past 12 months						
Core model	1.3	*	-0.5		-1.0	
Switch to logit estimation	1.6	**	-0.6		-1.0	
Switch to probit estimation	1.3	*	-0.5		-1.1	
Switch to ebalance weights	1.3	*	-0.5		-1.0	

	Not E	pared to kpanding dicaid	Compared to Expanding Medicaid without a Demonstration		Compared to Expanding Medicaid with Different Demonstration	
Smoker at the time of the survey						
Core model	0.1		0.4		-1.2	
Switch to logit estimation	0.1		0.3		-1.2	
Switch to probit estimation	0.2		0.4		-1.2	
Switch to ebalance weights	0.1		0.4		-1.2	
Health status was fair or poor at the time of the survey						
Core model	-0.2		-0.9		-0.8	
Switch to logit estimation	-0.2		-1.1		-0.8	
Switch to probit estimation	-0.3		-1.2	*	-0.8	
Switch to ebalance weights	-0.2		-0.9		-0.9	

**Source:** Health insurance: 2011-13 and 2016-17 American Community Survey (ACS); Health care access and affordability, health behaviors, and health: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS).

**Notes:** FPL = Federal poverty level. Family income relative to FPL is imputed in the BRFSS (See Appendix E). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

\*/\*\*/\*\*\* Estimate differs significantly from zero at the .10/.05/.01 levels, using two-tailed tests.

Appendix Table G.3: Difference-in-Differences Estimates of Changes in Selected Outcome Measures for Adults Ages 19 to 64 in Montana between Alternate Pre-periods and 2016-17 (post-period) Using Group of Best Comparison States

	Compared to Not Expanding Medicaid		Compared to Expanding Medicaid without a Demonstration		Compared to Expanding Medicaid with Different Demonstration	
Had health insurance coverage at the time of the survey						
Core model	6.1	***	3.0	***	3.3	***
Compared to 2011-12	6.4	***	3.7	***	3.8	***
Compared to 2012-13	5.9	***	2.4	***	2.7	***
Had a routine checkup in the past 12 months						
Core model	4.7	***	4.6	***	2.6	**
Compared to 2011-12	6.1	***	5.7	***	3.8	***
Compared to 2012-13	3.9	***	3.9	***	1.2	
Received flu vaccine in past 12 months						
Core model	2.9	***	3.6	***	1.8	*
Compared to 2011-12	3.9	***	4.6	***	3.0	***
Compared to 2012-13	1.7		2.6	**	0.9	
No unmet need for doctor care due to costs in the past 12 months						
Core model	1.3	*	-0.5		-1.0	
Compared to 2011-12	1.6	*	0.1		-0.8	
Compared to 2012-13	1.3		-0.7		-1.0	
Smoker at the time of the survey						
Core model	0.1		0.4		-1.2	
Compared to 2011-12	-0.3		-0.3		-1.6	*
Compared to 2012-13	0.7		1.1		-0.5	
Health status was fair or poor at the time of the survey						
Core model	-0.2		-0.9		-0.8	
Compared to 2011-12	-0.2		-1.0		-0.8	
Compared to 2012-13	-0.1		-0.5		-0.6	

**Source:** Health insurance: 2011-13 and 2016-17 American Community Survey (ACS); Health care access and affordability, health behaviors, and health: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS). Family income relative to FPL is imputed in the BRFSS (See Appendix E). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states). \*/\*\*/\*\*\* Estimate differs significantly from zero at the .10/.05/.01 levels, using two-tailed tests.

Appendix Table G.4: Difference-in-Differences Estimates of Changes in Selected Outcome Measures for Lower-income Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, Based on Alternate Measures of Lower Income

	Compared to Not Expanding Medicaid		Compared to Expanding Medicaid without a Demonstration		Compared to Expanding Medicaid with a Different Demonstration	
Had health insurance coverage at the time of the survey						
Core model	6.1	***	3.0	***	3.3	***
With family income at or below 50% FPL	12.3	***	-0.8		4.9	**
With family income at or below 100% FPL	12.4	***	1.9		5.3	***
With family income at or below 138% FPL	10.9	***	2.1		4.1	**
With household income below \$25K	10.1	***	1.9		4.0	*
With household income below \$50K	9.9	***	3.3	**	3.9	***
High school graduate/GED or less	11.4	***	3.5	**	6.1	***
Had a routine checkup in the past 12 months						
Core model	4.7	***	4.6	***	2.6	**
With family income at or below 50% FPL	4.7		-0.9		-2.1	
With family income at or below 100% FPL	6.2	**	0.3		-0.3	
With family income at or below 138% FPL	4.7	**	-0.4		-0.3	
With household income below \$25K	4.3	*	0.0		-0.8	
With household income below \$50K	4.1	**	1.9		0.9	
High school graduate/GED or less	4.6	**	0.8		1.2	
Received flu vaccine in past 12 months						
Core model	2.9	***	3.6	***	1.8	*
With family income at or below 50% FPL	1.4		0.3		0.4	
With family income at or below 100% FPL	1.7		0.2		0.0	
With family income at or below 138% FPL	2.4		-0.2		0.5	
With household income below \$25K	3.4		1.6		2.4	
With household income below \$50K	2.7	*	0.9		0.6	
High school graduate/GED or less	2.8		3.1	*	1.6	

	Not Ex	ared to banding licaid	Compared to Expanding Medicaid without a Demonstration		Compared to Expanding Medicaid with Different Demonstratic	
No unmet need for doctor care due to costs in the past 12 months						
Core model	1.3	*	-0.5		-1.0	
With family income at or below 50% FPL	3.2		-3.1		-2.4	
With family income at or below 100% FPL	5.0	**	-2.2		-0.7	
With family income at or below 138% FPL	4.5	*	-1.7		-1.5	
With household income below \$25K	5.6	***	-2.4		-1.6	
With household income below \$50K	3.3	**	-1.3		-1.6	
High school graduate/GED or less	2.1		-2.0		-0.5	
Smoker at the time of the survey						
Core model	0.1		0.4		-1.2	
With family income at or below 50% FPL	-1.3		1.0		-2.0	
With family income at or below 100% FPL	0.7		0.5		-0.9	
With family income at or below 138% FPL	0.6		0.7		-0.9	
With household income below \$25K	1.2		0.1		1.1	
With household income below \$50K	1.0		2.0		-0.5	
High school graduate/GED or less	0.1		1.1		-1.2	
Health status was fair or poor at the time of the survey						
Core model	-0.2		-0.9		-0.8	
With family income at or below 50% FPL	1.7		0.5		-0.2	
With family income at or below 100% FPL	0.0		-1.3		-2.1	
With family income at or below 138% FPL	-0.5		-1.4		-1.9	
With household income below \$25K	-0.8		-0.9		-2.3	
With household income below \$50K	-0.9		-2.1	*	-2.2	*
High school graduate/GED or less	-0.3		-0.3		-0.6	

**Source:** Health insurance: 2011-13 and 2016-17 American Community Survey (ACS); Health care access and affordability, health behaviors, and health: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS).

**Notes:** FPL = Federal poverty level. Family income relative to FPL is imputed in the BRFSS (See Appendix E). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

\*/\*\*/\*\*\* Estimate differs significantly from zero at the .10/.05/.01 levels, using two-tailed tests.

Appendix Table G.5: Difference-in-Differences Estimates of Changes in Selected Outcome Measures for Higher-income Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using Group of Best Comparison States, Based on Alternate Measures of Higher Income

	Compared to Not Expanding Medicaid		Compared to Expanding Medicaid without a Demonstration		Compared to Expanding Medicaid with a Different Demonstration	
Had health insurance coverage at the time of the survey						
Core model	6.1	***	3.0	***	3.3	***
With family income above 500% FPL	1.5		1.4		1.1	
With household income at or above \$75K	2.4	**	2.5	**	2.0	**
College graduate or more	2.3	**	2.5	**	1.5	
Had a routine checkup in the past 12 months						
Core model	4.7	***	4.6	***	2.6	**
With family income above 500% FPL	6.0	**	6.4	***	4.4	*
With household income at or above \$75K	5.9	***	6.1	***	3.9	**
College graduate or more	5.9	***	7.2	***	2.8	
Received flu vaccine in past 12 months						
Core model	2.9	***	3.6	***	1.8	*
With family income above 500% FPL	1.4		5.1	*	1.4	
With household income at or above \$75K	2.7		4.6	**	2.5	
College graduate or more	2.8		4.3	**	1.4	
No unmet need for doctor care due to costs in the past 12 months						
Core model	1.3	*	-0.5		-1.0	
With family income above 500% FPL	-0.4		-0.6		-1.3	
With household income at or above \$75K	0.3		0.1		-0.7	
College graduate or more	-0.5		-0.8		-2.0	**
Smoker at the time of the survey						
Core model	0.1		0.4		-1.2	
With family income above 500% FPL	0.7		0.1		-1.2	
With household income at or above \$75K	-1.1		-1.3		-2.1	
College graduate or more	2.4	**	1.7		0.4	
Health status was fair or poor at the time of the survey						
Core model	-0.2		-0.9		-0.8	
With family income above 500% FPL	1.0		0.3		1.2	
With household income at or above \$75K	0.2		-0.4		0.3	
College graduate or more	1.1		0.8		1.3	

**Source:** Health insurance: 2011-13 and 2016 American Community Survey (ACS); Health care access and affordability, health behaviors, and health: 2011-13 and 2016-17 Behavioral Risk Factor Surveillance System (BRFSS).

**Notes:** FPL = Federal poverty level. Family income relative to FPL is imputed in the BRFSS (See Appendix E). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

\*/\*\*/\*\*\* Estimate differs significantly from zero at the .10/.05/.01 levels, using two-tailed tests.

	American Community Survey	Behavioral Risk Factor Surveillance System
All adults	27,507	26,268
Lower income adults	27,507	20,208
	2.251	2 102
With family income at or below 50% FPL	3,251	3,192
With family income at or below 100% FPL	5,380	5,703
With family income at or below 138% FPL	7,226	8,165
With household income below \$25K	4,797	7,768
With household income below \$50K	11,246	15,134
High school graduate/GED or less	9,601	9,177
Higher income adults		
With family income above 500% FPL	6,292	4,889
With household income at or above \$75K	10,445	6,540
College graduate or more	7,886	8,939
Adults by demographic groups		
Men	13,517	12,072
Women	13,990	14,196
Adults younger than age 45	12,611	10,393
Adults age 45 and older	14,896	15,875
Parents	9,113	9,635
Childless adults	18,394	16,633
Alternate post-period		
2017	5,493	3,648
Alternate pre-period		
2011-12	11,017	12,587
2012-13	11,105	12,162

# Appendix Table G.6: Sample Sizes for Montana Adults Ages 19 to 64

Source: 2011-13 and 2016-17 American Community Survey (ACS) and Behavioral Risk Factor Surveillance System (BRFSS). Notes: FPL = Federal poverty level.

# Table G.7: Sample Sizes for Montana's Comparison Group Adults Ages 19 to 64 Based on Group of Best Comparison States

	ACS	BRFSS
Compared to Not Expanding Medicaid		
All adults	564,762	71,149
Lower income adults		
With family income at or below 50% FPL	86,877	3,192
With family income at or below 100% FPL	133,186	5,703
With family income at or below 138% FPL	170,327	8,165
With household income below \$25K	105,193	20,790
With household income below \$50K	230,767	38,146
High school graduate/GED or less	208,356	25,175
Higher income adults		
With family income above 500% FPL	139,515	4,889
With household income at or above \$75K	224,701	21,560
College graduate or more	172,889	25,558
Adults by demographic groups		
Men	266,826	29,856
Women	297,936	41,293
Adults younger than age 45	288,361	28,950
Adults age 45 and older	276,401	42,199
Parents	195,061	26,229
Childless adults	369,701	44,920
Alternate post-period 2017	114,926	10,117
Alternate pre-period		
2011-12	224,008	35,015
2012-13	225,840	31,484
Each comparison state		
GA	274,411	23,788
NC	273,726	29,457
WY	16,444	17,861

	Group of Best Comparison States				
	ACS	BRFSS			
Compared to Expanding Medicaid without a					
Demonstration					
All adults	145,258	55,119			
Lower income adults					
With family income at or below 50% FPL	21,367	3,192			
With family income at or below 100% FPL	33,601	5,703			
With family income at or below 138% FPL	42,604	8,165			
With household income below \$25K	28,062	14,301			
With household income below \$50K	59,969	28,014			
High school graduate/GED or less	60,726	20,370			
Higher income adults					
With family income above 500% FPL	33,709	4,889			
With household income at or above \$75K	56,759	17,240			
College graduate or more	36,788	17,743			
Adults by demographic groups					
Men	70,685	23,578			
Women	74,573	31,541			
Adults younger than age 45	71,671	21,326			
Adults age 45 and older	73,587	33,793			
Parents	50,127	19,558			
Childless adults	95,131	35,561			
Alternate post-period 2017	29,031	10,096			
Alternate pre-period					
2011-12	57,933	21,779			
2012-13	58,539	23,655			
Each comparison state					
КҮ	124,831	35,025			
ND	20,388	20,066			

	ACS	BRFSS
Compared to Expanding Medicaid with a		
Different Demonstration	247 570	F0 444
All adults	317,578	58,111
Lower income adults		
With family income at or below 50% FPL	45,027	3,192
With family income at or below 100% FPL	69,361	5,703
With family income at or below 138% FPL	88,256	8,165
With household income below \$25K	50,984	14,230
With household income below \$50K	117,535	27,933
High school graduate/GED or less	115,165	17,896
Higher income adults		
With family income above 500% FPL	81,177	4,889
With household income at or above \$75K	136,565	20,297
College graduate or more	88,911	23,151
Adults by demographic groups		
Men	155,076	25,290
Women	162,502	32,821
Adults younger than age 45	150,141	21,933
Adults age 45 and older	167,437	36,178
Parents	103,003	20,920
Childless Adults	214,575	37,191
Alternate post-period 2017	62,879	10,337
Alternate pre-period		
2011-12	127,885	23,290
2012-13	127,690	24,257
Each comparison state		
MI	278,623	37,371
NH	38,807	20,728

**Source:** 2011-13 and 2016-17 American Community Survey (ACS) and Behavioral Risk Factor Surveillance System (BRFSS). **Notes:** FPL = Federal poverty level. Best comparison states for expanding Medicaid without a demonstration are GA, NC, and WY; single-best comparison state is WY. Best comparison states for expanding without a demonstration are KY and ND; single-best comparison state is ND. Best comparison states for expanding with a different demonstration are MI and NH; single-best comparison state is MI. Sample size for individual regressions may vary due to item nonresponse for outcome measures. Appendix Table G.8: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults and Low-income Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2017 (post-period) Using the Group of Best Comparison States

		All Ad	ults	Low-incom		ne Adults						
	Estimate		Estimate				95% confidence Interval	Estimate		Estimate		95% confidence Interval
Compared to Not Expanding Medicaid												
Had health insurance coverage at the time of the survey	6.1	***	4.2, 8.1	13.1	***	9.1,17.1						
Type of coverage												
Medicaid or other public coverage	6.2	***	4.6, 7.9	13.9	***	9.5,18.3						
Employer-sponsored insurance	-0.2		-2.7, 2.3	1.0		-3.4, 5.5						
Direct purchase or other coverage	0.1		-1.6, 1.8	-1.8		-4.9, 1.2						
Compared to Expanding Medicaid without a Demonstration												
Had health insurance coverage at the time of the survey	2.8	***	0.8, 4.8	4.1	**	0.0, 8.1						
Type of coverage												
Medicaid or other public coverage	0.8		-1.0, 2.6	0.7		-3.8, 5.3						
Employer-sponsored insurance	-0.2		-2.8, 2.4	2.0		-2.7, 6.7						
Direct purchase or other coverage	2.2	**	0.4, 4.0	1.3		-2.0, 4.6						
Compared to Expanding Medicaid with a Different Demonstration												
Had health insurance coverage at the time of the survey	2.5	***	0.7, 4.3	3.9	**	0.2, 7.7						
Type of coverage												
Medicaid or other public coverage	1.6	*	-0.0, 3.3	2.6		-1.7, 7.0						
Employer-sponsored insurance	0.6		-1.7, 3.0	2.0		-2.3, 6.4						
Direct purchase or other coverage	0.2		-1.4, 1.8	-0.7		-3.6, 2.2						

Source: 2011-13 and 2017 American Community Survey (ACS).

**Notes:** Low-income is defined as family income at or below 138% of the federal poverty level (FPL). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

\*/\*\*/\*\*\* Estimate differs significantly from zero at the .10/.05/.01 levels, using two-tailed tests.

Appendix Table G.9: Difference-in-Differences Estimates for Changes in Health Care Access and Affordability for Adults and Low-income Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2017 (post-period) Using the Group of Best Comparison States

	All Adults			Low-income Adults		
	Estim	ate	95% confidence Interval	Estimate		95% confidence Interval
Compared to Not Expanding Medicaid						
Had a personal doctor at the time of the survey	0.6		-2.1, 3.2	-0.2		-5.7, 5.4
Had a routine checkup in past 12 months	6.4	**	3.5, 9.3	6.1	*	0.3,11.9
Received flu vaccine in past 12 months	2.5	*	-0.4, 5.3	3.2		-2.9, 9.3
No unmet need for doctor care due to costs in past 12 months	1.2		-0.8, 3.2	4.0		-2.4,10.3
Compared to Expanding Medicaid without a Demonstration						
Had a personal doctor at the time of the survey	1.1		-1.5, 3.8	-1.7		-7.3, 3.8
Had a routine checkup in past 12 months	6.2	**	3.3, 9.1	0.8		-5.6, 7.2
Received flu vaccine in past 12 months	2.2		-0.6, 5.0	-0.8		-6.5, 4.9
No unmet need for doctor care due to costs in past 12 months	-0.7		-2.7, 1.2	-1.9		-6.9, 3.1
<u>Compared to Expanding Medicaid with a</u> Different Demonstration						
Had a personal doctor at the time of the survey	-0.2		-2.8, 2.4	-2.0		-7.9, 4.0
Had a routine checkup in past 12 months	3.2	**	0.3, 6.1	-0.2		-6.4, 6.0
Received flu vaccine in past 12 months	0.6		-2.2, 3.5	0.6		-5.2, 6.4
No unmet need for doctor care due to costs in past 12 months	-1.7	*	-3.6, 0.3	-2.9		-8.0, 2.2

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

**Notes:** Low-income is defined as family income at or below 138% of the federal poverty level (FPL). Family income relative to FPL is imputed in the BRFSS (see Appendix E). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states). \*/\*\*/\*\*\* Significantly different from zero at the .10/.05/.01 levels, using two-tailed tests.

Appendix Table G.10: Difference-in-Differences Estimates for Changes in Health Behaviors and Health Status for Adults and Low-income Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2017 (post-period) Using the Group of Best Comparison States

	All Adults			Low-income Adults			
	Estimate		95% confidence Interval	Estimate		95% confidence Interval	
Compared to Not Expanding Medicaid							
Smoker at the time of the survey	-0.6		-2.8, 1.6	0.9		-4.4, 6.2	
Smoker who did not try to quit in past 12 months	-0.4		-2.0, 1.3	0.6		-3.7, 4.9	
Health status was fair or poor at the time of the survey	0.1		-1.7, 1.9	0.7		-4.1, 5.5	
Physical health was not good in past 30 days	-2.6	*	-5.3, 0.2	-2.1		-7.7, 3.6	
Mental health was not good in past 30 days	-1.1		-3.9, 1.7	-1.8		-7.7, 4.0	
Had an activity limitation due to health at the time of the survey	-0.4		-2.8, 1.9	-1.3		-6.9, 4.2	
Compared to Expanding Medicaid without a							
Demonstration	0.4		2.2.2.4				
Smoker at the time of the survey	-0.1		-2.3, 2.1	2.3		-2.7, 7.2	
Smoker who did not try to quit in past 12 months	0.8		-0.8, 2.5	3.5		-0.8, 7.7	
Health status was fair or poor at the time of the survey	-1.3		-3.1, 0.6	-1.7		-6.5, 3.2	
Physical health was not good in past 30 days	-3.0	**	-5.8,-0.3	-3.6		-9.2, 2.0	
Mental health was not good in past 30 days	-2.0		-4.8, 0.8	-3.3		-9.4, 2.9	
Had an activity limitation due to health at the time of the survey	-0.7		-3.1, 1.6	-0.5		-5.9, 4.8	
Compared to Expanding Medicaid with a Different							
<u>Demonstration</u>							
Smoker at the time of the survey	-1.2		-3.4, 1.1	0.7		-4.5, 5.8	
Smoker who did not try to quit in past 12 months	-0.9		-2.5, 0.8	0.4		-3.5, 4.3	
Health status was fair or poor at the time of the survey	-0.4		-2.2, 1.4	-1.3		-6.2, 3.5	
Physical health was not good in past 30 days	-4.6	***	-7.4,-1.9	-6.0	*	-12.1, 0.0	
Mental health was not good in past 30 days	-2.3		-5.2, 0.5	-2.9		-9.4, 3.7	
Had an activity limitation due to health at the time of the survey	-2.2	*	-4.6, 0.2	-2.3		-7.7, 3.2	

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

**Notes:** Low-income is defined as family income at or below 138% of the federal poverty level (FPL). Family income relative to FPL is imputed in the BRFSS (see Appendix E). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states). \*/\*\*/\*\*\* Significantly different from zero at the .10/.05/.01 levels, using two-tailed tests.

Appendix Table G.11: Difference-in-Differences Estimates of Changes in Health Insurance Coverage for Adults and Low-income Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2017 for Montana/2015 for Comparison States (post-period) Using the Group of Best Comparison States

	All Adults			Low	Adults		
	Estimate		95% confidence Interval	Estimate		95% confidence Interval	
Compared to Not Expanding Medicaid							
Had health insurance coverage at the time of the survey	5.4	***	3.5, 7.3	13.5	***	9.6,17.4	
Type of coverage							
Medicaid or other public coverage	7.1	***	5.5, 8.8	15.5	***	11.2,19.9	
Employer-sponsored insurance	-0.5		-3.0, 1.9	1.1		-3.4, 5.6	
Direct purchase or other coverage	-1.2		-2.9, 0.5	-3.1	**	-6.1,-0.0	
Compared to Expanding Medicaid without a Demonstration							
Had health insurance coverage at the time of the survey	3.3	***	1.4, 5.3	5.5	***	1.4, 9.6	
Type of coverage							
Medicaid or other public coverage	1.9	**	0.2, 3.7	2.0		-2.7, 6.7	
Employer-sponsored insurance	0.2		-2.4, 2.7	3.3		-1.4, 8.0	
Direct purchase or other coverage	1.3		-0.5, 3.0	0.2		-3.2, 3.5	
Compared to Expanding Medicaid with a Different Demonstration							
Had health insurance coverage at the time of the survey	4.0	***	2.2, 5.9	7.5	***	3.7,11.3	
Type of coverage							
Medicaid or other public coverage	3.7	***	2.1, 5.4	7.1	***	2.8,11.4	
Employer-sponsored insurance	0.4		-2.0, 2.7	1.5		-2.9, 5.9	
Direct purchase or other coverage	-0.1		-1.6, 1.6	-1.1		-4.0, 1.8	

Source: 2011-13, 2015 and 2017 American Community Survey (ACS).

**Notes:** Low-income is defined as family income at or below 138% of the federal poverty level (FPL). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

\*/\*\*/\*\*\* Estimate differs significantly from zero at the .10/.05/.01 levels, using two-tailed tests.

Appendix Table G.12: Difference-in-Differences Estimates for Changes in Health Care Access and Affordability for Adults and Low-income Adults Ages 19 to 64 in Montana between 2011-13 (preperiod) and 2017 for Montana/2015 for Comparison States (post-period) Using the Group of Best Comparison States

	All Adults			Low-income Adults		
	Estimate		95% confidence Interval	Estim	ate	95% confidence Interval
Compared to Not Expanding Medicaid						
Had a personal doctor at the time of the survey	0.2		-2.5, 2.9	-1.3		-7.1, 4.5
Had a routine checkup in past 12 months	7.9	***	5.0,10.8	8.3	***	2.6,14.0
Received flu vaccine in past 12 months	1.5		-1.3, 4.3	0.0		-5.7, 5.7
No unmet need for doctor care due to costs in past 12 months	-1.6		-3.5, 0.3	1.3		-3.3, 5.9
Compared to Expanding Medicaid without a Demonstration						
Had a personal doctor at the time of the survey	0.4		-2.4, 3.0	-2.3		-8.8, 4.2
Had a routine checkup in past 12 months	4.9	***	2.0, 7.9	1.6		-4.8, 8.0
Received flu vaccine in past 12 months	-0.3		-3.3, 2.6	-1.6		-7.8, 4.5
No unmet need for doctor care due to costs in past 12 months	-0.8		-2.8, 1.1	-1.3		-6.3, 3.7
Compared to Expanding Medicaid with a Different Demonstration						
Had a personal doctor at the time of the survey	-1.2		-3.7, 1.4	-3.2		-9.2, 2.9
Had a routine checkup in past 12 months	4.4	***	1.5, 7.2	0.0		-6.2, 6.3
Received flu vaccine in past 12 months	0.8		-2.0, 3.6	3.5		-2.5, 9.4
No unmet need for doctor care due to costs in past 12 months	-1.5		-3.4, 0.5	-0.7		-5.8, 4.3

Source: 2011-13, 2015 and 2017 Behavioral Risk Factor Surveillance System (BRFSS).

**Notes:** Low-income is defined as family income at or below 138% of the federal poverty level (FPL). Family income relative to FPL is imputed in the BRFSS (see Appendix E). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states). \*/\*\*/\*\*\* Significantly different from zero at the .10/.05/.01 levels, using two-tailed tests.

Appendix Table G.13: Difference-in-Differences Estimates for Changes in Health Behaviors and Health Status for Adults and Low-income Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2017 for Montana/2015 for Comparison States (post-period) Using the Group of Best Comparison States

	All Adults			Low-income Adults			
	Estimate		95% confidence Interval	Estimate		95% confidence Interval	
Compared to Not Expanding Medicaid							
Smoker at the time of the survey	-1.0		-3.3, 1.2	1.4		-4.3, 7.2	
Smoker who did not try to quit in past 12 months	0.0		-1.7, 1.6	2.6		-1.8, 7.0	
Health status was fair or poor at the time of the survey	1.1		-0.7, 2.8	0.7		-4.2, 5.6	
Physical health was not good in past 30 days	-2.4	*	-5.2 <i>,</i> 0.3	-3.0		-8.8, 2.9	
Mental health was not good in past 30 days	1.2		-1.6 <i>,</i> 4.0	0.6		-5.2, 6.3	
Had an activity limitation due to health at the time of the survey	0.8		-1.6, 3.1	1.8		-3.9, 7.5	
Compared to Expanding Medicaid without a Demonstration							
Smoker at the time of the survey	-1.5		-3.8, 0.8	0.2		-5.3, 5.7	
Smoker who did not try to quit in past 12 months	0.0		-1.8, 1.7	1.9		-2.5, 6.4	
Health status was fair or poor at the time of the survey	1.1		-0.7, 3.0	2.2		-2.6, 7.0	
Physical health was not good in past 30 days	-2.1		-4.9 <i>,</i> 0.7	-1.8		-7.5, 3.9	
Mental health was not good in past 30 days	0.0		-2.8, 2.9	0.9		-5.0, 6.8	
Had an activity limitation due to health at the time of the survey	0.9		-1.5, 3.3	2.6		-2.8, 8.1	
Compared to Expanding Medicaid with a Different							
<u>Demonstration</u>							
Smoker at the time of the survey	-1.8		-4.0, 0.4	-0.2		-5.5, 5.1	
Smoker who did not try to quit in past 12 months	-0.8		-2.4, 0.8	1.1		-2.8, 5.0	
Health status was fair or poor at the time of the survey	1.1		-0.7, 2.8	1.9		-2.3, 6.0	
Physical health was not good in past 30 days	0.2		-2.5, 2.9	0.4		-5.2, 5.9	
Mental health was not good in past 30 days	1.4		-1.4, 4.2	2.1		-4.7, 9.0	
Had an activity limitation due to health at the time of the survey	1.9	*	-0.3, 4.2	3.3		-1.9, 8.5	

Source: 2011-13, 2015 and 2017 Behavioral Risk Factor Surveillance System (BRFSS).

**Notes:** Low-income is defined as family income at or below 138% of the federal poverty level (FPL). Family income relative to FPL is imputed in the BRFSS (see Appendix E). Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states). \*/\*\*/\*\*\* Significantly different from zero at the .10/.05/.01 levels, using two-tailed tests.

Appendix Table G.14: Difference-in-Differences Estimates of Changes in Employment for All Adults and Low-income Adults Ages 19 to 64 in Montana between 2011-13 (pre-period) and 2016-17 (post-period) Using the Group of Best Comparison States

	All A	dults	Low-income Adult		
Compared to Not Expanding Medicaid					
Employed at the time of the survey	0.0		0.6		
Compared to Expanding Medicaid without a Demonstration					
Employed at the time of the survey	0.1		2.1		
Compared to Expanding Medicaid with a Different Demonstration					
Employed at the time of the survey	0.0		0.2		

Source: 2011-13 and 2016-17 American Community Survey (ACS).

**Notes:** FPL = Federal poverty level. Low-income is defined as family income at or below 138% FPL. Best comparison states for not expanding Medicaid are GA, NC, and WY. Best comparison states for expanding without a demonstration are KY and ND. Best comparison states for expanding with a different demonstration are MI and NH. For sample sizes, see Tables G.6 (Montana) and G.7 (Montana's comparison states).

\*/\*\*/\*\*\* Estimate differs significantly from zero at the .10/.05/.01 levels, using two-tailed tests.