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**ECONOMIC  
EFFECTS *of*  
MEDICAID  
EXPANSION  
IN MONTANA**

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REPORT COMPLETED BY

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# Table of Contents

|   |           |
|---|-----------|
| <b>I. Summary</b>   | <b>1</b>  |
| <b>II. How Do We Know The Effects Of Medicaid Expansion?</b>  | <b>4</b>  |
| <b>III. Medicaid Expansion Reduces Un-Insurance (And Reduces Enrollment In Traditional Medicaid And Private Insurance)</b>                    | <b>7</b>  |
| <b>IV. Medicaid Expansion Significantly Increases Health Care Access And Utilization</b>  | <b>9</b>  |
| <b>V. Medicaid Expansion Significantly Increases Total Health Care Spending In Montana</b>  | <b>11</b> |
| <b>VI. Medicaid Expansion Helps Create A More Robust Health Care Sector, Supporting More Jobs And Higher Earnings For Health Care Workers</b> | <b>13</b> |
| <b>VII. Medicaid Expansion Improves Households' (And Firms') Financial Health</b>   | <b>13</b> |
| <b>VIII. Medicaid Expansion Boosts Employment And Income Throughout Montana's Economy</b>   | <b>14</b> |
| <b>IX. Medicaid Expansion Does Not Reduce Labor-Force Participation Among Low-Income Montanans</b>  | <b>20</b> |
| <b>X. Medicaid Expansion Likely Does Not Impose A Net Fiscal Cost On Montana's State Budget</b>   | <b>21</b> |
| <b>XI. Has COVID-19 fundamentally changed the effects or costs of Medicaid expansion?</b>   | <b>26</b> |
| <b>XII. Conclusion</b>  | <b>27</b> |

# I. Summary

Two previous reports document that Medicaid expansion increases Montanans' economic opportunities, supporting thousands of jobs and millions in income with minimal cost to the state.<sup>1</sup> This report updates these prior reports using two additional years of information and reaches the same conclusion. Medicaid expansion increases health insurance coverage and health care access, improving individuals' health and households' financial health while creating thousands of jobs and millions in income for Montanans throughout the economy. Medicaid expansion also reduces state spending and boosts state revenues. Combined, these savings and revenues likely more than offset the "sticker price" of expansion (10 percent of costs). As such, Medicaid expansion generates health, well-being, and economic opportunity for Montanans at minimal (or no) cost to the state budget.

How does this happen? When Montana expanded Medicaid, it started a cascade of events. First, when states expand Medicaid, people enroll. In recent years, expansion enrollment in Montana ranged between 80,000 and 96,000, almost 10 percent of the state's population. While individuals misreporting their health insurance status on surveys makes it difficult to understand what insurance these people would have had without expansion, at least 41 percent (and likely more) would have been uninsured without expansion. At least 15 percent of expansion beneficiaries switch to Medicaid from private insurance and at least 8 percent transfer from traditional Medicaid. As a result of these switches, more people have health insurance, and more people have more comprehensive health insurance.

## Medicaid expansion changed Montana by:

- Providing insurance to 36,000-53,000 Montanans who would otherwise be uninsured;
- Reducing the number of low-income Montanans who skipped health care due to cost by over 13,000;
- Generating \$480 million in new health care consumption and \$650 million in new spending across Montana;
- Creating \$368 to \$393 million in earnings for Montanans working in the local sector (construction, retail, accommodation and food services, health care, etc.).

<sup>1</sup> Bryce Ward and Brandon Bridge, The Economic Impact of Medicaid Expansion in Montana: Updated Findings (Bureau of Business and Economic Research, January 2019), [https://mthcf.org/wp-content/uploads/2019/01/Economic-Impact-of-MedEx-in-MT\\_1.28.19-FINAL.pdf](https://mthcf.org/wp-content/uploads/2019/01/Economic-Impact-of-MedEx-in-MT_1.28.19-FINAL.pdf); Bryce Ward and Brandon Bridge, The Economic Impact of Medicaid Expansion in Montana (Bureau of Business and Economic Research, April 2018), [https://mthcf.org/wp-content/uploads/2018/04/BBER-MT-Medicaid-Expansion-Report\\_4.11.18.pdf](https://mthcf.org/wp-content/uploads/2018/04/BBER-MT-Medicaid-Expansion-Report_4.11.18.pdf).

More comprehensive health insurance leads to more (and better) health care. Medicaid expansion reduced the number of low-income Montanans who skipped health care due to cost by more than 33 percent and increased the number of low-income Montanans who had a checkup in the last year by 20 percent. Ultimately, better access to health care leads to better health. Multiple studies document that Medicaid expansion leads to better health. It boosts self-reported health, improves mental health, and reduces mortality.<sup>2</sup>

More health care means more health care spending. Medicaid expansion increased Montana's total personal health care consumption by approximately 6 percent (or \$480 million in 2019). More health care spending creates a more robust health care sector, supporting more jobs and higher earnings for health care workers. Medicaid expansion increased total earnings for Montana's health care workers by a similar percentage (or \$255 million in 2019). Multiple studies find that expansion also improves hospital financial health, including one study that found hospitals in expansion states were six times less likely to close than hospitals in non-expansion states.<sup>3</sup>

More health insurance also improves household financial health. Without Medicaid expansion, low-income Montanans largely finance their health care, paying out-of-pocket or paying health insurance premiums. With the expansion, the cost of this care largely shifts to the federal government. As a result, households' medical debts decline, their credit scores rise, and their odds of filing for bankruptcy fall.<sup>4</sup> Furthermore, these households can redirect the hundreds of millions of dollars they used to devote to paying for health care to other parts of Montana's economy.

Ultimately, approximately 80 percent of total spending on Medicaid expansion (or roughly \$650 million) is new money in Montana's economy. This new money ripples through the economy supporting employment and income outside the health care sector. In 2019, as a result of Medicaid expansion, total earnings in the industries most likely affected by Medicaid expansion (e.g., health care, retail trade, construction) were 2.8 percent higher. A 2.8 percentage point increase means that Medicaid expansion increased Montanans' earnings in these industries by \$368 million in 2019. Given that expansion also affects earnings in other industries, the total impact of expansion on Montana's workers likely exceeded \$400 million in 2019.

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<sup>2</sup> This evidence is summarized in Guth, M., Garfield, R., Rudowitz, R., (2020). The Effects of Medicaid Expansion under the ACA: Updated Findings from a Literature Review (Kaiser Family Foundation, March 2020). Buchmueller, T. C., Cliff, B. Q., & Levy, H. (2020, July). The Benefits of Medicaid Expansion. In *JAMA Health Forum* (Vol. 1, No. 7, pp. e200879-e200879). American Medical Association.

<sup>3</sup> Guth et al. (2020), Ward and Bridge (2019), Lindrooth, R. C., Perrailon, M. C., Hardy, R. Y., & Tung, G. J. (2018). Understanding the relationship between Medicaid expansions and hospital closures. *Health Affairs*, 37(1), 111-120;

<sup>4</sup> Guth et al. (2020); Caswell, K. J., & Waidmann, T. A. (2019). The Affordable Care Act Medicaid expansions and personal finance. *Medical Care Research and Review*, 76(5), 538-571; Brevoort, K., Grodzicki, D., & Hackmann, M. B. (2017). *Medicaid and financial health* (No. w24002). National Bureau of Economic Research; Hu, L., Kaestner, R., Mazumder, B., Miller, S., & Wong, A. (2018). The effect of the affordable care act Medicaid expansions on financial wellbeing. *Journal of public economics*, 163, 99-112.

Similar changes occurred in other expansion states, but not in non-expansion states. Therefore, it is likely that each of these changes stems from Montana's decision to expand Medicaid.

Medicaid expansion is not free. The state must weigh the value of these effects against expansion's costs. The two most discussed potential costs of expanding Medicaid are (1) job loss (some people who would otherwise participate in the labor force drop out or work fewer hours once they qualify for Medicaid coverage) and (2) fiscal cost (states must pay 10 percent of expansion's costs which may require states to cut spending on other programs or raise taxes). However, the evidence suggests that these costs are minimal.

**Medicaid expansion did not:**

- **Reduce labor force participation. Since expansion participation increased for both low- and high-income Montanans.**
- **Burden the state budget. Medicaid expansion reduces state spending on traditional Medicaid and other health programs. Medicaid expansion also generates additional revenues. Combined these effects likely more than offset the state's share of expansion's costs.**

Medicaid expansion has not led to a reduction in labor force participation. In Montana, the opposite occurred. Relative to non-expansion states, Montana's labor force participation increased by more than one percentage point after expansion.

Medicaid expansion also does not burden the state budget. While the state is responsible for ten percent of expansion's costs, the actual cost is much smaller. Medicaid expansion leads to reductions in state spending on traditional Medicaid and other health programs for low-income Montanans or inmates. These savings are large enough to offset at least 40 percent expansion costs (and potentially much

more). The expansion also generates significant revenues. The expansion increases health care utilization (and thus boosts revenues from health care utilization taxes), and it increases income and economic activity (and thus boost revenues from most other sources). These revenues likely more than offset the remaining costs to the state.

Thus, the state's decision to expand Medicaid provides significant benefits to beneficiaries, supports a more robust health care sector, and boosts economic opportunity at minimal cost to Montanans. While refusing to expand Medicaid may benefit the federal government (and taxpayers in other states), Montanans choosing to eliminate Medicaid expansion would not benefit Montana.

Below, I describe these results in more detail; however, before detailing these results, I briefly describe how we know that Medicaid expansion generates these effects.

## II. How Do We Know The Effects Of Medicaid Expansion?

Throughout the remainder of this report, I use the existing literature on Medicaid expansion and original analyses to describe the effects of Medicaid expansion. However, before proceeding, it is worth explaining how we know that Medicaid expansion generates these effects. That is, what methods support these claims?

To understand the effects of Medicaid expansion, we need two things. First, we need information about the relevant outcomes. The data for the outcomes examined in this report come from federal statistical agencies. Some outcomes (like health insurance coverage and health care utilization) come from Census Bureau surveys that include representative samples of each states' population. Other outcomes (like employment, earnings, and income) come from official accounts maintained by the Bureau of Economic Analysis or the Bureau of Labor Statistics based on a combination of administrative and survey data.

Second, we need a way to compare the outcomes in Montana with expansion to the outcomes that would have existed in Montana without expansion. While we observe Montana with expansion, we do not observe the Montana that would have existed without expansion. To observe Montana without expansion, we need a time machine or some other technology to observe the world in the parallel universe where Montana did not expand Medicaid. Of course, we do not have this technology. Fortunately, we have methods to combine logic, assumption, and data to construct a reasonable approximation of Montana without expansion. While these approaches are imperfect (e.g., they rely on imperfect data), they are sufficient to describe the approximate magnitude of Medicaid expansion's effects.

One simple approach assumes that Montana without expansion would have looked like Montana before expansion. It assumes that relevant outcomes would have remained at their pre-expansion levels (or followed their pre-expansion trends) without expansion. In this approach, if Montana after expansion looks different than Montana before expansion, then expansion may be responsible for the observed changes.

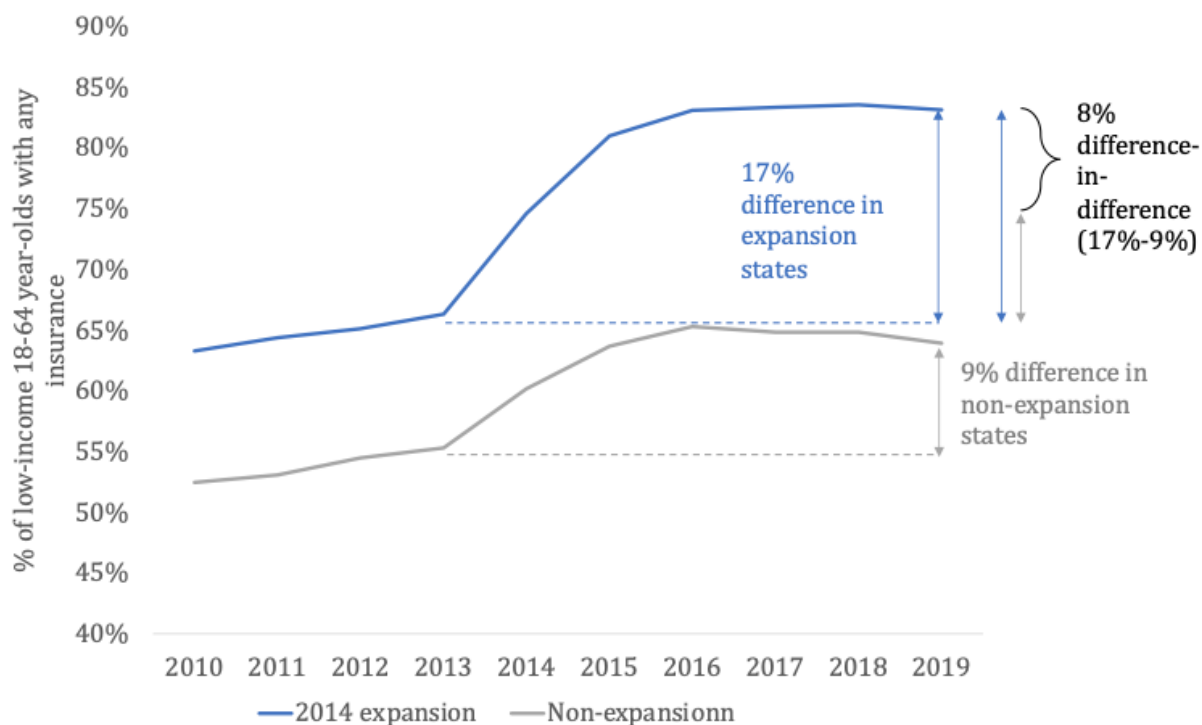
The main problem with the simple before-and-after approach is that something else may have changed at or around the time of expansion. If so, this other change may be responsible for some of the observed effects.

One way to account for the possibility that something else changed simultaneously to expansion entails using non-expansion states as a control group and looking at the changes in those states over the same before-and-after period. If insurance coverage, health care access, or health care earnings change in expansion states but not in non-expansion states, it is likely that Medicaid expansion is responsible for the observed change. This approach is known as a differences-in-differences analysis because it calculates the before-and-after

difference in expansion states and compares it to the difference in non-expansion states over the same period. This approach is the most common approach for estimating the effects of Medicaid expansion.

To make this more concrete, consider Figure 1. This figure provides a simple illustration of the difference-in-differences approach. This figure shows the share of people 18 to 64 with income below 139 percent of the Federal Poverty Line (FPL) who reported any health insurance coverage in the American Community Survey. For simplicity, I have limited the sample to include states that expanded in 2014 and states that had not expanded Medicaid by 2019. After expansion, insurance coverage rose substantially in the expansion states, from 66 percent in 2013 to 83 percent in 2019, a 17-percentage point increase. However, non-expansion states also experienced an increase in insurance coverage (likely due to other ACA provisions and an improving economy) from 55 percent in 2013 to 64 percent in 2019, a 9-percentage point increase. If one assumes the expansion states would have seen a similar increase without expansion, then the effect of Medicaid expansion on insurance coverage is not the full 17 percentage point increase but the 8-percentage point difference-in-difference (17 minus 9).

**Figure 1: Percent of low-income 18-64-year-olds with any health insurance in expansion and non-expansion states, 2010-2019.**



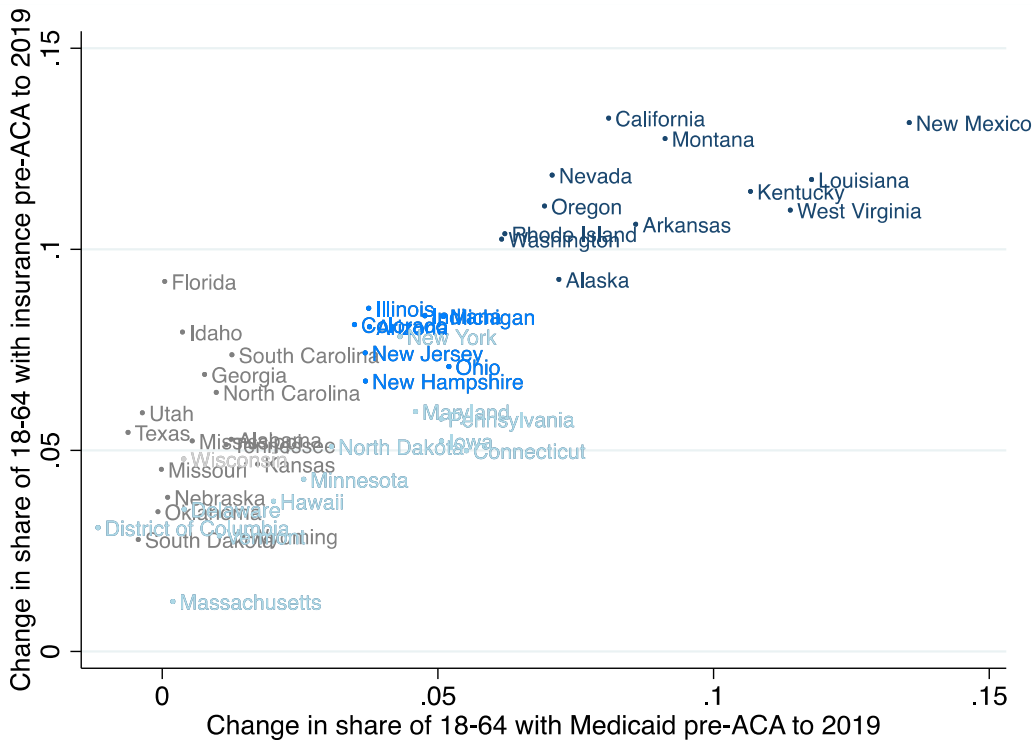
Notes: Analysis of American Community Survey public-use microdata obtained from IPUMS-USA

It is important to note Medicaid expansion’s effects vary across states. Figure 2 plots the change in the share of low-income 18-64-year-olds with Medicaid against the change in the



share with any insurance. Non-expansion states (grey states) saw little change in both Medicaid and any coverage. There are three types of expansion states. Some states (light blue states) had already implemented programs that extended health insurance to low-income adults before Medicaid expansion. As such, these states had high rates of insurance coverage (greater than 85 percent) or high rates of Medicaid coverage (greater than 15 percent) before the ACA. These states saw relatively little change in either Medicaid or overall insurance coverage as a result of the expansion. Other states (bright blue) experienced modest changes in both insurance coverage and Medicaid coverage. The remaining expansion states (dark blue) saw large changes in both Medicaid and any insurance coverage. Montana is among this group. Montana saw one of the largest changes in any insurance. To better understand the effects of Medicaid expansion in Montana, I compare the change in outcomes in this group (“high-impact” expansion states) to the change in non-expansion states. However, comparing both dark and bright blue states to the gray states yields similar results, although slightly smaller effects.

**Figure 2: Change in Medicaid and any insurance coverage among low-income 18-64-year-olds, 2019 vs. avg. 2012-2013.**



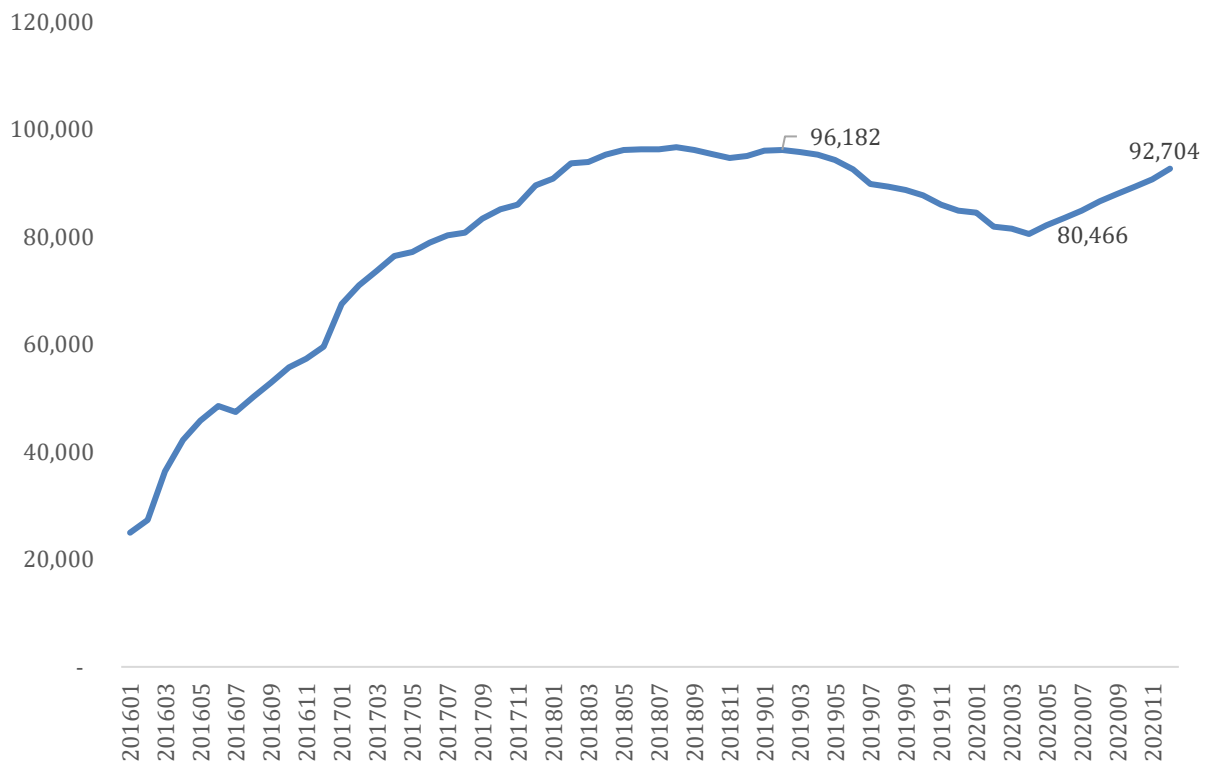
Notes: Analysis of American Community Survey public-use microdata obtained from IPUMS-USA. Pre-ACA is the average of 2012 and 2013.

Ultimately, the key assumption in a difference-in-difference analysis is that expansion and non-expansion states would have changed by similar amounts without expansion. Thus, to reject the findings, one must believe expansion states and non-expansion states would have evolved differently, even without expansion.

### III. Medicaid Expansion Reduces Un-Insurance (And Reduces Enrollment In Traditional Medicaid And Private Insurance)

Figure 3 shows total Medicaid expansion enrollment in Montana. Enrollment rose for the first few years, plateaued around 95,000, declined in the last half of 2019, before rising with the COVID-19 pandemic. In the absence of expansion, some of these people would have been uninsured, and some would have had a different type of insurance (e.g., private insurance or traditional Medicaid). Thus, expanding Medicaid changes whether people have insurance, and it changes the type of insurance they have. These changes matter. The effect of Medicaid expansion on individuals, the economy, and the state budget depends on the comprehensiveness of the insurance people would have had without expansion.

**Figure 3: Medicaid expansion enrollment in Montana.**



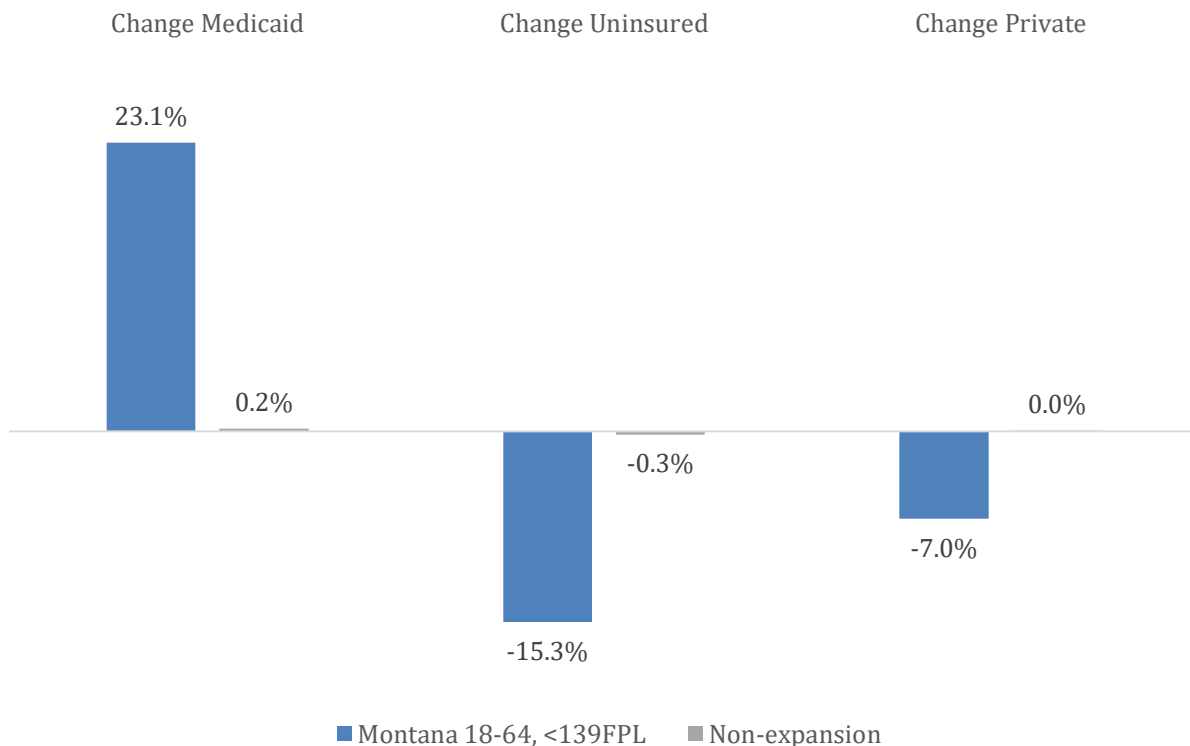
Notes: DPHHS Montana Medicaid Expansion Dashboard

Since Montana expanded Medicaid, insurance coverage in this population changed significantly. Figure 4 shows the change in insurance coverage among Medicaid expansion eligible people (ages 18 to 64, income less than 139 percent FPL) between 2015 and 2019.<sup>5</sup> Medicaid enrollment increased by 23.1 percent. According to these data, the rise in

<sup>5</sup> Specifically, the data analyzed come from the ACS public-use microdata maintained by IPUMS-USA. Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS, 2020. <https://doi.org/10.18128/D010.V10.0>

Medicaid enrollment was offset by a decline in un-insurance (15.3 percent) and a fall in private insurance (7 percent). Similar (though slightly smaller) shifts in insurance coverage occurred in other expansion states after expansion; however, non-expansion states saw almost no change in any of these measures between 2015 and 2019.<sup>6</sup> Thus, it is very likely that these changes are the result of Medicaid expansion.

**Figure 4: Change in insurance mix in Montana and non-expansion states 2015-2019.**



Notes: Analysis of American Community Survey public-use microdata obtained from IPUMS-USA

However, the ACS data do not entirely describe the shift in coverage since expansion. There are some limitations to these data. For instance, total Medicaid enrollment reported in the ACS is roughly 42,000 less than reported in administrative records.<sup>7</sup> This gap has grown since expansion, suggesting people may be particularly likely to underreport Medicaid expansion coverage on the ACS.<sup>8</sup>

Coupled with the fact that the ACS does not distinguish between traditional Medicaid coverage and expansion coverage, these missing Medicaid beneficiaries make it difficult to describe what insurance coverage Montanans would have without expansion. However,

<sup>6</sup> Analysis of ACS data and Guth et al. (2020).

<sup>7</sup> Data obtained from Kaiser Family Foundation State Health Facts <https://www.kff.org/health-reform/state-indicator/total-monthly-medicaid-and-chip-enrollment/>

<sup>8</sup> Boudreaux, M., Noon, J. M., Fried, B., & Pascale, J. (2019). Medicaid expansion and the Medicaid undercount in the American Community Survey. *Health services research, 54*(6), 1263-1272.

difference-in-difference analyses like those in Figure 4 suggest that at least 41 percent of expansion beneficiaries would have been uninsured without expansion and at least 15 percent would have had private insurance. A recent study by Manatt suggests that at least eight percent of Medicaid expansion beneficiaries would have traditional Medicaid without expansion.<sup>9</sup> However, as discussed in Section X, evidence suggests that the share of people who may have enrolled in traditional Medicaid in the absence of expansion may be much higher than eight percent, perhaps higher than 20 percent.

Ultimately, what insurance expansion beneficiaries would have had without expansion is unknown. Likely, at least some of those not allocated in the calculations above would have landed in each of the categories discussed. However, it is safe to conclude that expansion significantly increased total insurance coverage and significantly increased insurance coverage comprehensiveness.

## IV. Medicaid Expansion Significantly Increases Health Care Access And Utilization

When people gain access to health insurance or more comprehensive health insurance, they consume more care. Figure 1 shows the change in two health care access measures obtained from the Behavioral Risk Factor Surveillance System (BRFSS) for low-income, 18-64 year-olds in Montana and non-expansion states.<sup>10</sup>

The left-side shows the change in the share of this population who report that they needed to see a doctor but did not because of cost. In Montana, the share of this population skipping care fell by ten percentage points between 2015 and 2019, from 29 percent to 19 percent. A similar change occurred in other expansion states after expansion, but the share who reported skipping medical care due to cost remained unchanged in non-expansion states.

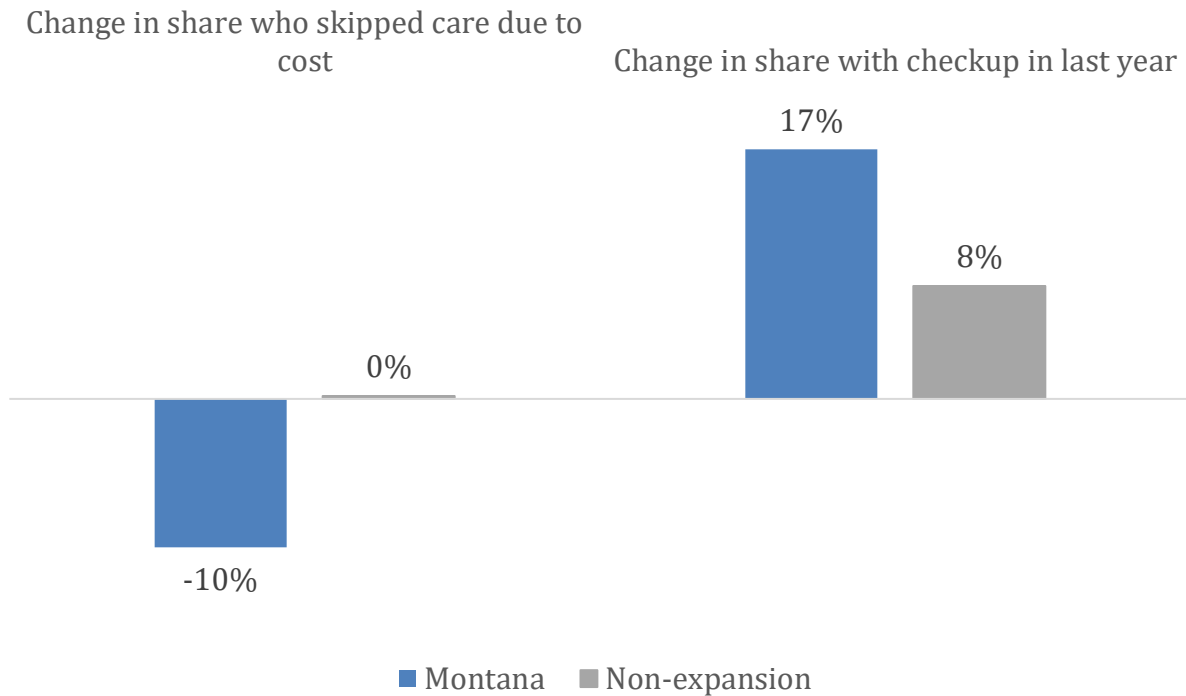
Similarly, the right-side shows the share of this population who report having seen a doctor for a routine checkup in the past 12 months. The share of low-income, 18-64-year-old Montanans completing a checkup in the last year increased by 17 percentage points, from 52 percent to 68 percent between 2015 and 2019. This share increased by eight percentage points in non-expansion states. As such, Medicaid expansion generated a nine-percentage point (or 17 percent) increase in the share of low-income Montanans who had a checkup in the last year.

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<sup>9</sup> Specifically, it reports savings to traditional Medicaid equal to eight percent of expansion spending. If one assumes that spending is proportional to enrollment, this translates to eight percent of enrollment.

<sup>10</sup> The BRFSS does not include a measure of poverty status and reports income in categories. I compute a crude measure of poverty status by comparing the midpoint of the reported income range to the official federal poverty line (FPL) for the size of their “household” (as determined by the number of adults and kids reported in the BRFSS). I include all respondents aged 18-64 whose poverty calculation puts them below 150 percent of the FPL.

**Figure 5: Change in health care access among low-income 18-64-year-olds in Montana and non-expansion states, 2015-2019.**



Notes: Analysis of Behavioral Risk Factor Surveillance System (BRFSS)

As documented in a host of other studies, more and better health care access attributable to Medicaid expansion leads to better health. For instance, studies have found that Medicaid expansion improves self-reported physical and mental health, reduces mortality, and improves health behaviors like diabetes management and smoking.<sup>11</sup>

Access to mental health treatment may generate important benefits that extend beyond individual beneficiaries. Several studies have documented a decline in crime associated with Medicaid expansion. A few studies explicitly link this decline in crime to improved access to mental health and substance abuse treatment attributable to Medicaid.<sup>12</sup>

<sup>11</sup> Guth et al. (2020); Graves, J. A., Hatfield, L. A., Blot, W., Keating, N. L., & McWilliams, J. M. (2020). Medicaid Expansion Slowed Rates Of Health Decline For Low-Income Adults In Southern States: An analysis of the impact of Medicaid expansion on the self-reported health of low-income older nonelderly adults living in the South. *Health Affairs*, 39(1), 67-76; Miller, S., Johnson, N., & Wherry, L. R. (2019). *Medicaid and mortality: new evidence from linked survey and administrative data* (No. w26081). National Bureau of Economic Research; Borgschulte, M., & Vogler, J. (2020). Did the ACA Medicaid expansion save lives?. *Journal of Health Economics*, 72, 102333; Lee, J., Callaghan, T., Ory, M., Zhao, H., & Bolin, J. N. (2020). The impact of Medicaid expansion on diabetes management. *Diabetes care*, 43(5), 1094-1101; Maclean, J. C., Pesko, M. F., & Hill, S. C. (2019). Public insurance expansions and smoking cessation medications. *Economic Inquiry*, 57(4), 1798-1820.

<sup>12</sup> He, Q., & Barkowski, S. (2020). The effect of health insurance on crime: Evidence from the Affordable Care Act Medicaid expansion. *Health economics*, 29(3), 261-277; Aslim, E. G., Mungan, M. C., Navarro, C., & Yu, H. (2020). The effect of public health insurance on criminal recidivism. *George Mason Law & Economics Research*

## V. Medicaid Expansion Significantly Increases Total Health Care Spending In Montana

More health care access means more spending. When people switch from uninsured to Medicaid or from private insurance to Medicaid, their spending increases (by approximately \$5,000/year and \$1,000/year, respectively).<sup>13</sup> If lots of people move from uninsured to Medicaid or from private insurance to Medicaid, total health care spending should increase. That is what happened in Montana.

Figure 6 shows the effect of Medicaid expansion on personal consumption expenditures for health care.<sup>14</sup> This measure, computed by the Bureau of Economic Analysis for each state, includes spending on outpatient services, hospital services, nursing services. It does not include spending on pharmaceuticals and some other parts of health care. Comparing the PCE data to a more comprehensive measure of personal health expenditures (PHE) created by the Centers for Medicare and Medicaid Services (but only updated at the state level every few years), the PCE data in Montana equal 75 percent of the most recent state-level PHE data.<sup>15</sup>

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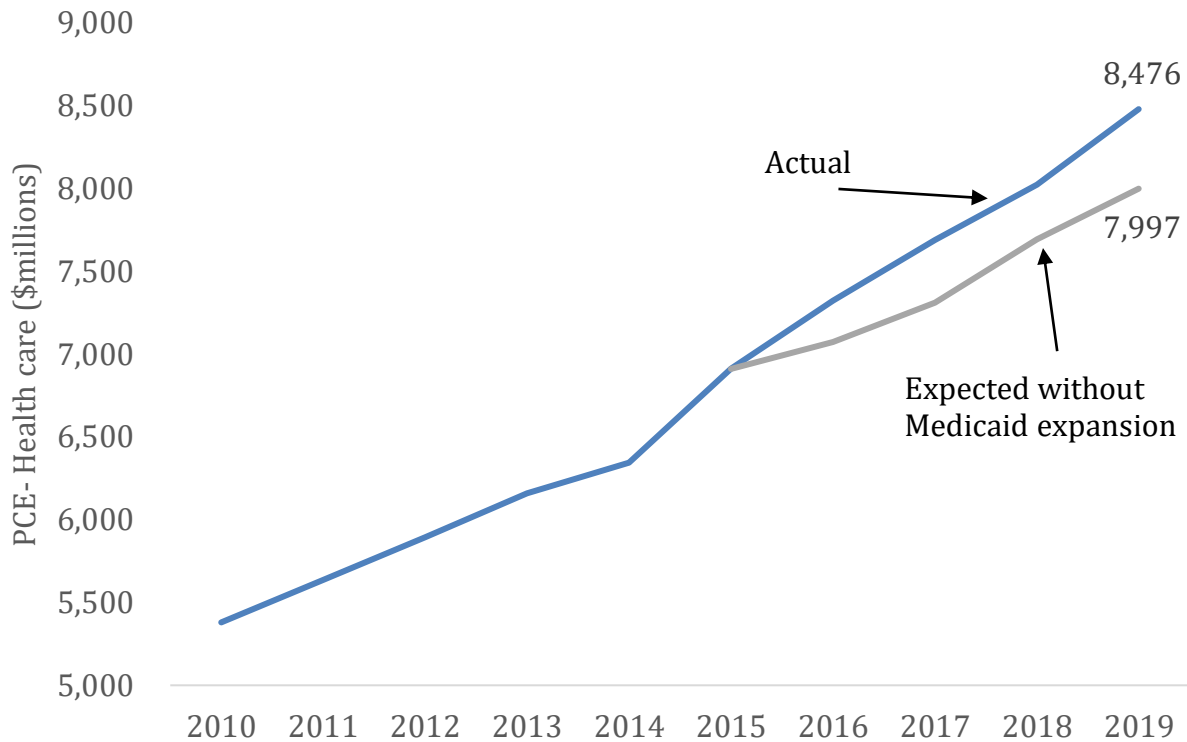
*Paper*, (19-19); Jácome, E. (2020). Mental Health and Criminal Involvement: Evidence from Losing Medicaid Eligibility.

<sup>13</sup> Ward and Bridge (2019).

<sup>14</sup> The values for the gray line come from a differences-in-differences analysis—specifically, a regression of  $\ln(\text{pce})$  on indicators equal to one in expansion states in each post-expansion year,  $\ln(\text{population})$ ,  $\ln(\text{traded sector earnings})$ ,  $\ln(\text{population over 65})$ ,  $\ln(\text{population with a disability})$ ,  $\ln(\text{population with a bachelor's degree})$ , and state and year fixed effects.

<sup>15</sup> The most recent PHE data are for 2014. In Montana, total PHE was \$8,409M in 2014. Health care PCE was \$6,342 million for that same year.

**Figure 6: Montana personal consumption expenditures – health care with and expected without Medicaid expansion, 2010-2019.**



Notes: Analysis of state-level personal consumption expenditure data for health care obtained from the Bureau of Economic Analysis. The projection for expenditures without expansion recovered from a differences-in-differences analysis comparing Montana to non-expansion states with controls for  $\ln(\text{population})$ ,  $\ln(\text{traded sector earnings})$ ,  $\ln(\text{population over 65})$ ,  $\ln(\text{population with a disability})$ ,  $\ln(\text{population with a college degree})$ , and state and year fixed effects.

Relative to the growth in non-expansion states (accounting for changes in population, population characteristics, and traded sector earnings), PCE health care spending in Montana was 6 percent higher in 2019 than expected based on the growth in non-expansion states.<sup>16</sup> Thus, Medicaid expansion increased Montanans health care consumption by approximately \$480 million in 2019. While this measure includes both the direct effects of expansion beneficiaries spending and the downstream ripple effects of this spending (see section VIII), it indicates that a substantial proportion (approximately half) of all Medicaid expansion spending represents new spending on health care.<sup>17</sup>

<sup>16</sup> Estimating an identical regression for high-impact expansion states yields similar, though slightly smaller, effects. The average high-impact expansion state’s increase was 3.5 percent in the fourth year after expansion and 4.2 percent in the sixth year after expansion ( $p < 0.05$ ). If the true increase in Montana’s health care consumption expenditures is closer to this average, then expansion increased health care consumption by approximately \$340 million in 2019.

<sup>17</sup> Precise expansion spending by year varies slightly by sources, but Montana’s total expansion spending was approximately \$800 million in 2019. \$480 million represents 60 percent of that amount. This number needs to be adjusted downward for ripple effects but upward for the share of health expenditures not included. I do not compute each of these adjustments, but the net effect likely leaves new spending at more than 50 percent of total spending.

## VI. Medicaid Expansion Helps Create A More Robust Health Care Sector, Supporting More Jobs And Higher Earnings For Health Care Workers

More health care spending leads to a more robust health care sector. More spending means existing workers and facilities get used more, and, as existing capacity is exhausted, more capacity gets built. As a result, total earnings for health care workers grow (due to more employment, more hours per worker, or higher wages), and providers' financial health improves. Evidence shows that both occur.

Medicaid expansion significantly increases health care earnings. Total earnings data combine employment, hours, and wages/benefits for all health care workers. In 2019, Montana's health care sector earnings were 6 percent higher than expected if Montana had not expanded Medicaid.<sup>18</sup> That represents an increase of roughly \$255 million.

Second, Medicaid expansion is associated with more robust health care providers. As discussed in several studies, Medicaid expansion boosts utilization and reduces uncompensated care.<sup>19</sup> These changes lead to significant improvements in hospital balance sheets—particularly for rural hospitals.<sup>20</sup> As a result, studies have found that hospitals are six times less likely to close in Medicaid expansion states.<sup>21</sup>

## VII. Medicaid Expansion Improves Households' (And Firms') Financial Health

Medicaid expansion not only improves people's physical health, but it also improves their financial health. Without expansion, most expansion beneficiaries pay for health care out-of-pocket or pay private health insurance premiums. While some of this money is paid by the government (e.g., exchange subsidies) and some employers (employer share of premiums), much of this cost falls on the beneficiaries.

Before Medicaid expansion (and the implementation of other major elements of the ACA), over 70 percent of low-income Americans indicated that they would not be able to pay for

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<sup>18</sup> Estimating an identical regress for all high-impact expansion states finds that expansion increased health care wages in the average high-impact expansion state by 4.5 percent in the sixth year after expansion. If the true increase in Montana's health care earnings is closer to this average, then expansion increased health care earnings by approximately \$197 million in 2019.

<sup>19</sup> Ward and Bridge (2020); Guth et al. (2020); Camilleri, S. (2018). The ACA Medicaid expansion, disproportionate share hospitals, and uncompensated care. *Health services research*, 53(3), 1562-1580.

<sup>20</sup> Rhodes, J. H., Buchmueller, T. C., Levy, H. G., & Nikpay, S. S. (2020). Heterogeneous effects of the ACA Medicaid expansion on hospital financial outcomes. *Contemporary Economic Policy*, 38(1), 81-93.

<sup>21</sup> Lindrooth et al. (2018).



an unexpected major health care expense out of pocket.<sup>22</sup> Yet, pre-ACA, 25 percent of these low-income Americans faced an unexpected health care expense that they had to pay for out of pocket. Ultimately, many low-income Americans incurred significant medical debt, which contributed to financial difficulties for these households. Fewer than 15 percent of low-income households had a rainy-day fund in 2013, and the vast majority (70 percent) indicated that they were just getting by or finding it difficult to get by.

Medicaid expansion helps to reduce these problems. What beneficiaries used to spend for health care gets mostly shifted to the federal government. This reduces financial strain on these households. Studies have found that Medicaid expansion reduces the share of people with medical debt, reduces the number of bills that go into collections, and improves credit scores.<sup>23</sup> It also improves food security, reduces the odds of eviction, and reduces poverty.<sup>24</sup>

Shifting the money used to pay for this health care to Medicaid means that Montana households have approximately \$200 to \$250 million more to spend in other parts of Montana's economy.

## VIII. Medicaid Expansion Boosts Employment And Income Throughout Montana's Economy

The federal government pays for roughly 90 percent of Medicaid expansion spending. As such, the federal government pays for 90 percent of new health care directly attributable to expansion. The federal government pays for 90 percent of the health care beneficiaries would have received even without expansion. This spending used to be paid by households, businesses, the state, or the federal government (through other programs). All told, slightly more than 80 percent of all Medicaid expansion spending—or \$650 million—represents new money in Montana's economy. Six-hundred and fifty million dollars equals more than one percent of Montana's total economy.<sup>25</sup>

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<sup>22</sup> Analysis of data from the 2013 Survey of Household Economics and Decision-making (SHED). I define low-income as 18-64-year-olds whose income category falls mostly below 140 of the 2013 Federal Poverty Levels given household size.

<sup>23</sup> Guth et al. (2020); Caswell & Waidmann (2019) Brevoort et al. (2017); Hu et al. (2018); Caswell, K. J., & Goddeeris, J. H. (2020). Does Medicare Reduce Medical Debt?. *American Journal of Health Economics*, 6(1), 72-103.

<sup>24</sup> Guth et al. (2020); Himmelstein, G. (2019). Effect of the Affordable Care Act's Medicaid Expansions on Food Security, 2010–2016. *American journal of public health*, 109(9), 1243-1248; Zewde, N., Eliason, E., Allen, H., & Gross, T. (2019). The effects of the ACA Medicaid expansion on nationwide home evictions and eviction-court initiations: United States, 2000–2016. *American journal of public health*, 109(10), 1379-1383; Miller, S., Hu, L., Kaestner, R., Mazumder, B., & Wong, A. (2018). The ACA Medicaid expansion in Michigan and financial health. *Journal of Policy Analysis and Management*.

<sup>25</sup> The share of new money from expansion spending is imprecisely estimated; however, if 80 percent of expansion spending represents new federal dollars, then that is equal 1.2 percent of Montana's GDP. Eighty-percent of FY2020 Medicaid expansion spending (\$823 million) is \$658 million. \$658 million/\$52,935 million equals 1.2 percent.

When money enters an economy from the outside, economic activity increases. New money becomes new revenue for Montana firms and additional wages for Montana workers. These firms and workers spend these earnings in other parts of the economy, which creates earnings for other firms and workers, and the cycle repeats. Multiple studies document that new spending introduced by Medicaid expansion supports thousands of jobs and millions in income throughout the economy.<sup>26</sup>

Typically, these studies rely on an economic impact model to support their conclusions. Economic impact models take the new spending introduced by a policy, allocate it where it is spent, and then use historical data on the relationships between different sectors of the economy to estimate the amount of total economic activity directly and indirectly linked to the new spending.

In Montana, applying this approach to the most recent data yields results nearly identical to those reported in the 2019 report on the economic impacts of Medicaid expansion in Montana.<sup>27</sup> That study found that Medicaid expansion supported roughly 6,000 jobs and roughly \$350 million in personal income. After adjusting dollar amounts for inflation, the amount of new spending attributable to Medicaid expansion (its direct impacts) is only slightly higher (less than five percent) than the amount assumed in the 2019 report. As such, the estimates in that report still provide a reasonable estimate for the economic impacts of Medicaid expansion derived from an economic impact model, at least before the pandemic.<sup>28</sup>

The pandemic has upended the regular operation of the economy. People have skipped some amount of health care, they have shifted the goods and services they consume, and savings have increased.<sup>29</sup> The historical relationships used to describe the economic impacts do not apply, and the economic impacts of expansion have likely shifted. However, the pandemic is temporary, and until data are available to describe post-pandemic shifts in economic spending patterns, these estimates likely provide a reasonable approximation of expansion's likely impacts.

Economic impact models are useful, but they are also mysterious. Numbers are fed in, and numbers come out, but the mechanics of the model are invisible to most people.

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<sup>26</sup> Ward and Bridge (2018); Ward and Bridge (2019); Guth et al. (2020); Ayanian, J. Z., Ehrlich, G. M., Grimes, D. R., & Levy, H. (2017). Economic effects of Medicaid expansion in Michigan. *Obstetrical & Gynecological Survey*, 72(6), 326-328; Levy, H., Ayanian, J. Z., Buchmueller, T. C., Grimes, D. R., & Ehrlich, G. (2020). Macroeconomic Feedback Effects of Medicaid Expansion: Evidence from Michigan. *Journal of health politics, policy and law*, 45(1), 5-48; Richardson, J. A., Llorens, J. J., & Heidelberg, R. L. (2018). Medicaid Expansion and the Louisiana Economy. *Public Administration Institute at Louisiana State University, prepared for the Louisiana Department of Health*.

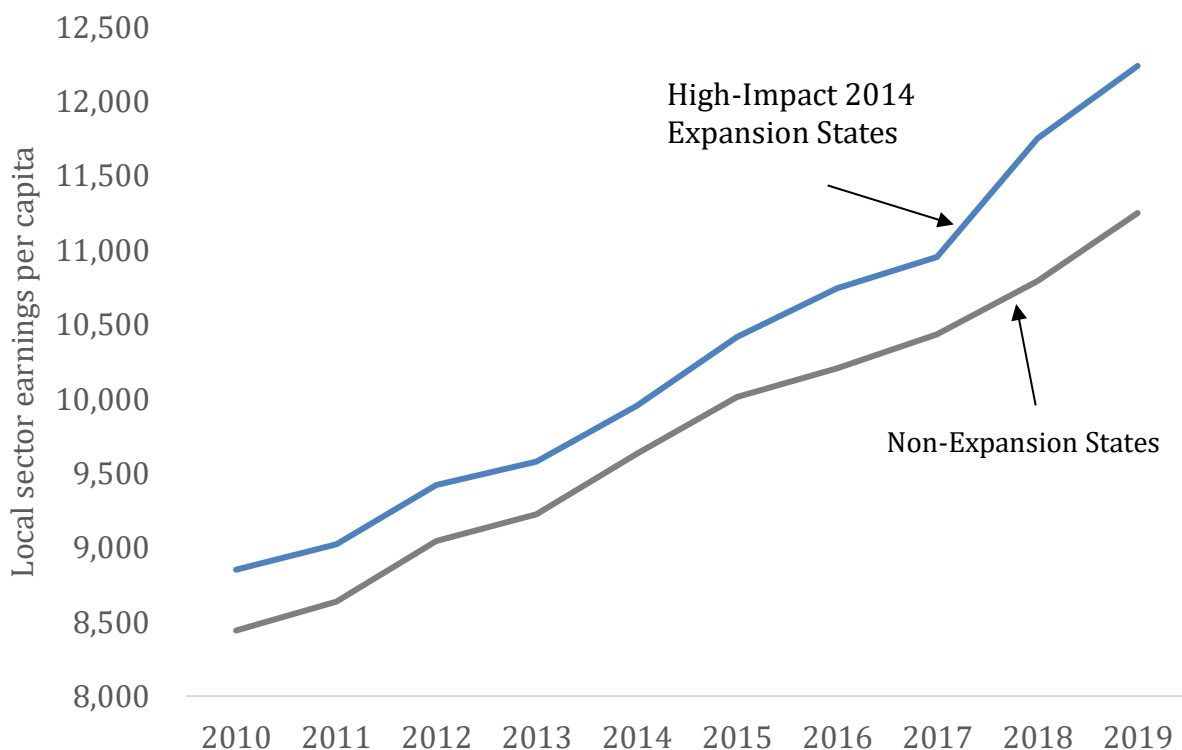
<sup>27</sup> Ward and Bridge (2019).

<sup>28</sup> Adjusting the estimate for inflation and modest growth suggests income impact equal to approximately \$380 million.

<sup>29</sup> Irwin, N. and Cai, W. (2021) "Why Markets Boomed in a Year of Human Misery." <https://www.nytimes.com/2021/01/01/upshot/why-markets-boomed-2020.html>

Fortunately, one does not need to rely on an economic impact model to estimate the impacts of Medicaid expansion. It is possible to use the difference-in-difference approach used above to obtain more intuitive results. It is often impossible to evaluate the impact of an event or policy on a state’s economy using this approach because the policy’s effects are too small to be reliably detected with only 50 states’ worth of data. However, the effects of Medicaid expansion are large, and, as such, one can also evaluate the economic impacts of Medicaid expansion using a difference-in-difference model.

**Figure 7: Local-sector earnings per capita in 2014 high-impact expansion states vs. non-expansion states, 2010-2019.**

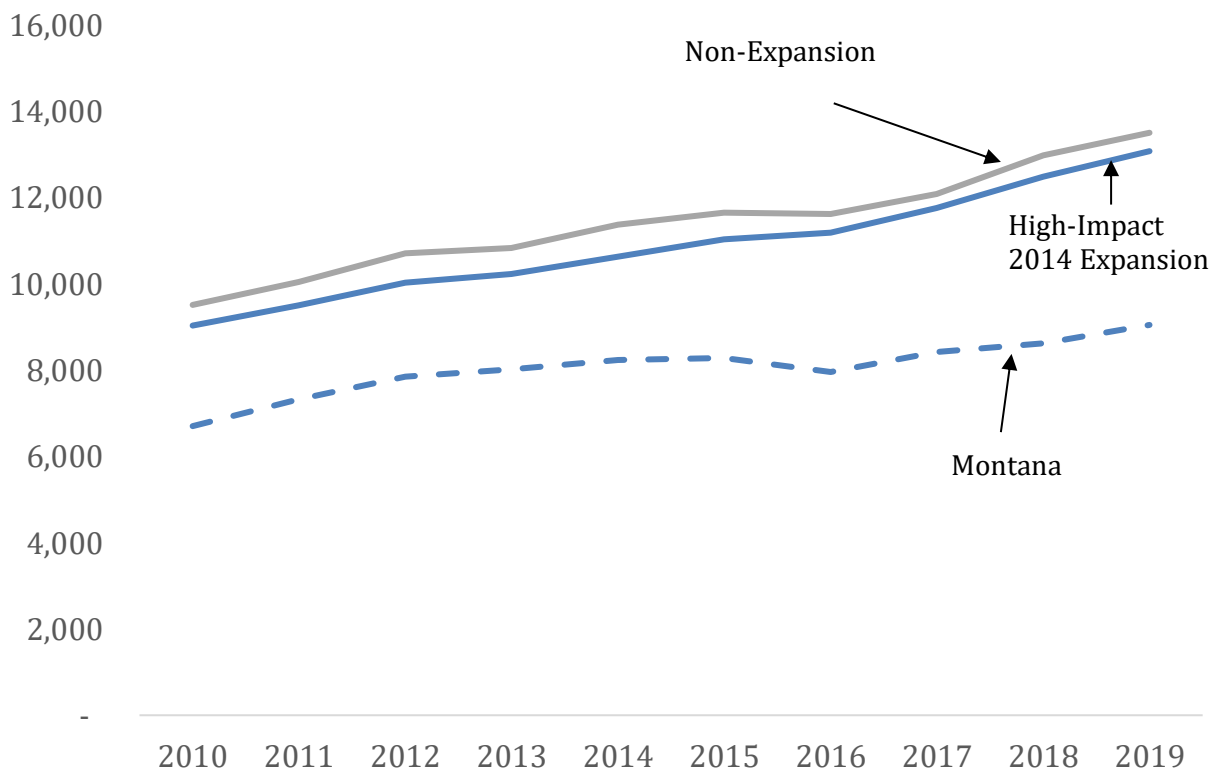


Notes: Analysis of Bureau of Economic Analysis data on total earnings for workers in health care, educational services, construction, retail trade, accommodation and food services, and other services divided by the total population. 2014 expansion states include states that expanded Medicaid in 2014.

Figure 7 illustrates the main economic impact of Medicaid expansion. This figure shows earnings per capita in the sectors most directly (and indirectly) affected by expansion—health care, retail trade, construction, accommodation, and food services, and other services—in high-impact expansion states that expanded in 2014 and non-expansion states. These industries predominantly serve local customers and, as such, comprise the bulk of the local (or non-traded) sector. According to the economic impact model results, over 85 percent of the impacts of Medicaid expansion fall in these sectors.

Before the expansion, the lines grow at roughly the same rate. However, since expansion, earnings per capita in these industries in the expansion states grew by 26 percent, but they grew by only 19 percent in non-expansion states.

**Figure 8: Traded-sector earnings per capita in 2014 high-impact expansion states, non-expansion states, and Montana, 2010-2019.**



Notes: Analysis of Bureau of Economic Analysis data on total earnings for workers in sectors that are mostly traded (farming/forestry/fishing, mining, manufacturing, transportation and warehousing, information, finance and insurance, professional/scientific/technical services, and management of companies and enterprises) divided by the total population. 2014 expansion states include states that expanded Medicaid in 2014.

The main concern with this simple result is that some other determinants of local-sector earnings changed in expansion states relative to non-expansion states over this same period. For instance, economic shocks to the traded sector (the set of industries that provide goods and services to customers in other areas) could increase (or decrease) income for workers in these sectors, which could also boost (shrink) earnings in the sectors most affected by the expansion. Figure 8 suggests that this is a minor concern when comparing expansion states to non-expansion states. Earnings per capita in traded industries grew at similar rates in high-impact 2014 expansion states and non-expansion states before expansion; however, growth rates deviated slightly since expansion. This deviation may reflect ripple effects attributable to expansion, or it may reflect some other local economic shock, but the effect is relatively small. The pattern in Montana is a more significant concern. Traded-sector earnings per capita in Montana grew more quickly than

other areas early in this period before slowing (and even contracting). Weakness in Montana’s traded sector could introduce weakness into Montana’s local-sector, which could obscure the effects of expansion. As such, I control for traded sector earnings in these analyses—alternative approaches to account for the same issue yield slightly different values but support similar conclusions.

Table 2 shows the change in Montana’s earnings and employment relative to the change observed in non-expansion states (accounting for exogenous local economic shocks). The left side of the table compares Montana to all states that had not expanded Medicaid through 2019. The right side shows the effect for all high-impact expansion states.

**Table 2: Difference-in-difference estimates of the effect of Medicaid expansion on earnings and employment.**

|        | Montana                     |                                      |                                  | High-Impact Expansion States |                                      |                                  |
|--------|-----------------------------|--------------------------------------|----------------------------------|------------------------------|--------------------------------------|----------------------------------|
|        | Local-sector earnings (BEA) | Private local-sector earnings (QCEW) | Private local-sector emp. (QCEW) | Local sector earnings (BEA)  | Private local-sector earnings (QCEW) | Private local-sector emp. (QCEW) |
| Year 1 | 0.013<br>(0.01)             | 0.034***<br>(0.004)                  | 0.006+<br>(0.003)                | 0.011<br>(0.009)             | 0.015*<br>(0.007)                    | 0.01*<br>(0.005)                 |
| Year 2 | 0.028**<br>(0.008)          | 0.06***<br>(0.004)                   | 0.012**<br>(0.003)               | 0.015<br>(0.011)             | 0.019*<br>(0.009)                    | 0.01<br>(0.006)                  |
| Year 3 | 0.034*<br>(0.012)           | 0.05***<br>(0.003)                   | 0.004<br>(0.005)                 | 0.027+<br>(0.016)            | 0.031*<br>(0.014)                    | 0.013<br>(0.008)                 |
| Year 4 | 0.028*<br>(0.011)           | 0.047***<br>(0.005)                  | -0.001<br>(0.006)                | 0.022<br>(0.026)             | 0.028<br>(0.021)                     | 0.01<br>(0.013)                  |
| Year 5 |                             |                                      |                                  | 0.056*<br>(0.029)            | 0.056*<br>(0.025)                    | 0.024*<br>(0.01)                 |
| Year 6 |                             |                                      |                                  | 0.055+<br>(0.029)            | 0.054+<br>(0.027)                    | 0.024+<br>(0.014)                |

Notes: Results from differences-in-difference regressions of the natural log of the specified outcome on indicators equal to one in expansion states for each year since expansion with state and year fixed effects and controls for ln(population), ln(traded sector earnings), ln(population over 65), ln(population with disabilities), ln(population with a BA). Standard errors clustered at the state-level in parentheses. \*\* indicates result significant with  $p < 0.01$ , \* indicates result significant with  $p < 0.05$ , + indicates result significant with  $p < 0.1$ .

The results show that in the fourth-year after expansion (in 2019), total earnings in the sectors most likely affected by Medicaid expansion were 2.8 percent (or \$368 million) higher than expected if Montana had not expanded Medicaid. Looking at different data, the increase in total wages paid to Montanans' private sector workers plausibly attributable to Medicaid expansion was 4.7 percent (or \$393 million). The results from other high-impact expansion states show the effects continuing to grow over time. By the sixth year after expansion, total earnings in the most affected sectors were 5.5 percent higher than without expansion. If effects evolve similarly in Montana, then Medicaid expansion will be associated with a \$700 million increase in earnings.

The impacts of expansion on total employment are smaller (and less precisely estimated for Montana). During the first two years after expansion, employment in the most affected sectors increased roughly in line with the other high-impact expansion states, growing by slightly more than 1 percent after two years. That represented an increase of 2,800 jobs. After that, the estimates for Montana are imprecise; however, the effects in high-impact expansion states continued to rise to 2.4 percent. An increase of 2.4 percent translates into 5,500 additional private-sector jobs in the most affected sectors (i.e., the local-sector).

Thus, the empirical results are roughly in-line with the results from the economic impact model. The empirical results suggest slightly more impact on earnings and slightly less impact on employment (however, the empirical approach may miss small effects in industries not included in the analysis). It is unclear what drives the discrepancies between these approaches. In part, it may reflect the mechanics of how the economy responded to the shock introduced by expansion. Economic impact models are relatively rigid. Spending increases translate into a specific number of jobs using "typical" relationships. However, in practice, increased spending may not lead to more workers. Instead, it might lead the same workers to work more hours or produce more per hour. Both of these would show up as more income. Furthermore, given low unemployment during this period, wage pressure may have exceeded the amount assumed in the impact model. Finally, spending multipliers for this particular program may be larger than assumed. Regardless, these empirical results raise the possibility that the impact of Medicaid expansion on income is slightly larger than reported in prior analyses based only on economic impact models.

In sum, Medicaid expansion generates a variety of positive impacts - more comprehensive health insurance coverage, access to more health care, better health, better financial health, a more robust health care sector, and more economic opportunity for Montanans throughout Montana's economy. However, when evaluating the effects of Medicaid expansion, one also wants to weigh these positive effects against the costs.

## IX. Medicaid Expansion Does Not Reduce Labor-Force Participation Among Low-Income Montanans

Some opponents of Medicaid expansion worry that expanding Medicaid will make people less likely to work. In 2019, Montana added a community-engagement requirement, in part, to address this concern. While Montana’s community-engagement requirement has not been implemented (and may not be approved), the available evidence suggests that such requirements keep people off Medicaid (and thus may reduce the impacts described above) but do not boost employment.<sup>30</sup>

Furthermore, such requirements do not appear necessary. The evidence to date does not support the hypothesis that Medicaid expansion reduced work among the Medicaid expansion-eligible population.<sup>31</sup> While different surveys describe the change in labor force participation slightly differently, labor force participation among low-income, non-disabled, 18-64-year-olds declined in both non-expansion and expansion states in recent years. While rates in Montana fluctuate some (in part due to small sample sizes), on average, low-income Montanans maintained or slightly increased their labor force participation in recent years. Thus, relative to non-expansion states, low-income labor force participation in Montana increased by more than two percentage points since expansion.<sup>32</sup>

It is important to note that the decline in labor force participation among low-income adults may be a mirage. Paradoxically, a strong labor-market may “reduce” labor force participation among low-income populations. This decline is not because people are less likely to work. Rather, it may reflect the fact low-income is not a fixed attribute—the set of people identified as low-income changes. As the economy improves, the people most likely to remain low-income are those not working. Thus, the observed decline in labor force participation may reflect who remains in the low-income population and not a decline in work propensity.

In total, labor force participation rose by more in Montana than in non-expansion states for both the low-income and higher-income populations after expansion. Thus, the evidence does not suggest that Medicaid expansion reduces labor force participation in Montana.

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<sup>30</sup> Sommers, B. D., Goldman, A. L., Blendon, R. J., Orav, E. J., & Epstein, A. M. (2019). Medicaid work requirements—results from the first year in Arkansas. *New England Journal of Medicine*, 381(11), 1073-1082.

<sup>31</sup> Guth et al. (2020); Buchmueller, T. C., Levy, H. G., & Valletta, R. G. (2019). *Medicaid expansion and the unemployed* (No. w26553). National Bureau of Economic Research.

<sup>32</sup> A differences-in-differences analysis on individual data with controls for age, age<sup>2</sup>, sex, race, kids in the household, and state and year fixed effects finds that labor force participation among all 18-64-year-olds increased by one percentage point in Montana (p<0.05). A similar analysis finds that labor force participation among low-income Montanans increased by 2.8 percentage points (p<0.05).

**Table 3: Change in labor force participation pre-(2012-2015) and post-expansion (2016-2019) among non-disabled 18-64-year-olds.**

|                               | Montana | Non-Expansion | Expansion (excl. MT) |
|-------------------------------|---------|---------------|----------------------|
| <139FPL Adjusted change (ACS) | 0.2%    | -1.7%***      | -2.7%***             |
| >139FPL Adjusted change (ACS) | 1.4%**  | 0.9%***       | 0.7%***              |

Notes: Analysis of American Community Survey public-use microdata obtained from IPUMS-USA

## X. Medicaid Expansion Likely Does Not Impose A Net Fiscal Cost On Montana’s State Budget

The state must pay for ten percent of expansion’s costs. At recent spending levels, this amounts to \$80 to \$85 million per year in Montana.<sup>33</sup> However, this “sticker price” does not reflect the actual cost of Medicaid expansion to the state budget. To understand the effect of Medicaid expansion on the state budget, one needs to account for the impact of expansion on state spending outside expansion and its impact on state revenues. Medicaid expansion has significant effects on both. Medicaid expansion allows the state to cut spending in some areas, and increased economic activity attributable to Medicaid expansion boosts state revenues. These effects likely more than offset the state’s share of expansion costs.<sup>34</sup>

### Savings

Medicaid expansion creates two types of state budget savings. First, the expansion allows states to reduce spending in other parts of their Medicaid programs. Second, it lets states cut spending outside of Medicaid — particularly on state-funded health services for the uninsured.

#### *Savings Within Medicaid*

Medicaid expansion offers states a much better deal than traditional Medicaid. While Montana must pay 35 percent of the cost of traditional Medicaid, it only has to pay 10

<sup>33</sup> Ten percent of the FY2020 costs of expansion amount to \$82.3 million (<https://leg.mt.gov/content/Publications/fiscal/Session-2021/SubCom-B/Section-B-print.pdf>). The actual cost may differ slightly from this amount due to various program details (e.g., administration costs, twelve-month eligibility, etc.); however, through federal fiscal year 2019, the state share of expansion spending was very close to the stated FMAP. As such, I use the stated FMAP as the benchmark in this analysis.

<sup>34</sup> For a more detailed discussion of these effects, see Ward, B. (2020). The Impact of Medicaid Expansion on States’ Budgets. [https://www.commonwealthfund.org/sites/default/files/2020-05/Ward\\_impact\\_Medicaid\\_expansion\\_state\\_budgets\\_ib\\_final.pdf](https://www.commonwealthfund.org/sites/default/files/2020-05/Ward_impact_Medicaid_expansion_state_budgets_ib_final.pdf); Gruber, J., & Sommers, B. D. (2020). *Fiscal federalism and the budget impacts of the Affordable Care Act’s Medicaid expansion* (No. w26862). National Bureau of Economic Research.



percent of the cost of expansion. As such, Montana saves 25 cents on every dollar of care that moves from traditional Medicaid to expansion.

Two types of expansion beneficiaries may have enrolled in Medicaid without expansion. First, some people would have enrolled in specific Medicaid programs that were allowed to transition to Medicaid expansion (e.g., Section 1115 waivers, the Breast and Cervical Treatment Program). In a recent study, Manatt estimates that Montana saved \$16.3 million from this group in fiscal year 2019.<sup>35</sup> That amounts to 2.3 percent of total Medicaid spending in that year (or 23 percent of the state share of expansion costs at the 10 percent sticker price).

Second, some people who used to make choices to qualify for traditional Medicaid no longer make these choices since they are eligible for Medicaid expansion. This group may include people who reduced their income or those who pursued disability designations so that they would qualify for traditional Medicaid. This group's size is harder to estimate directly; however, one study found evidence of these types of effects. Specifically, this study found that Medicaid expansion is associated with a 3-percentage point decline in Supplemental Security Income (SSI) enrollment.<sup>36</sup>

However, it is possible to estimate the total savings to traditional Medicaid by comparing actual spending on traditional Medicaid to what likely would have occurred without expansion. Figure 9 illustrates this approach. The data for this figure come from Medicaid Financial Management Reports. According to these data, Montana's Medicaid spending outside expansion fell in recent years. That is surprising. Spending on traditional Medicaid increased in non-expansion states.

While different approaches to estimating spending without expansion yield different estimates for the dashed line, the gap between expected and actual spending in federal fiscal year 2019 was likely between \$127 to \$197 million (or 18 to 27 percent of Medicaid expansion spending in these data). This gap has grown over time, so this effect may continue to grow.

The ACS data on insurance coverage discussed in section III are consistent with a transfer of this magnitude. The number of 18 to 64-year-old Montanans reporting Medicaid coverage in the ACS increased by approximately 49,000 between 2015 and 2019.<sup>37</sup> Actual

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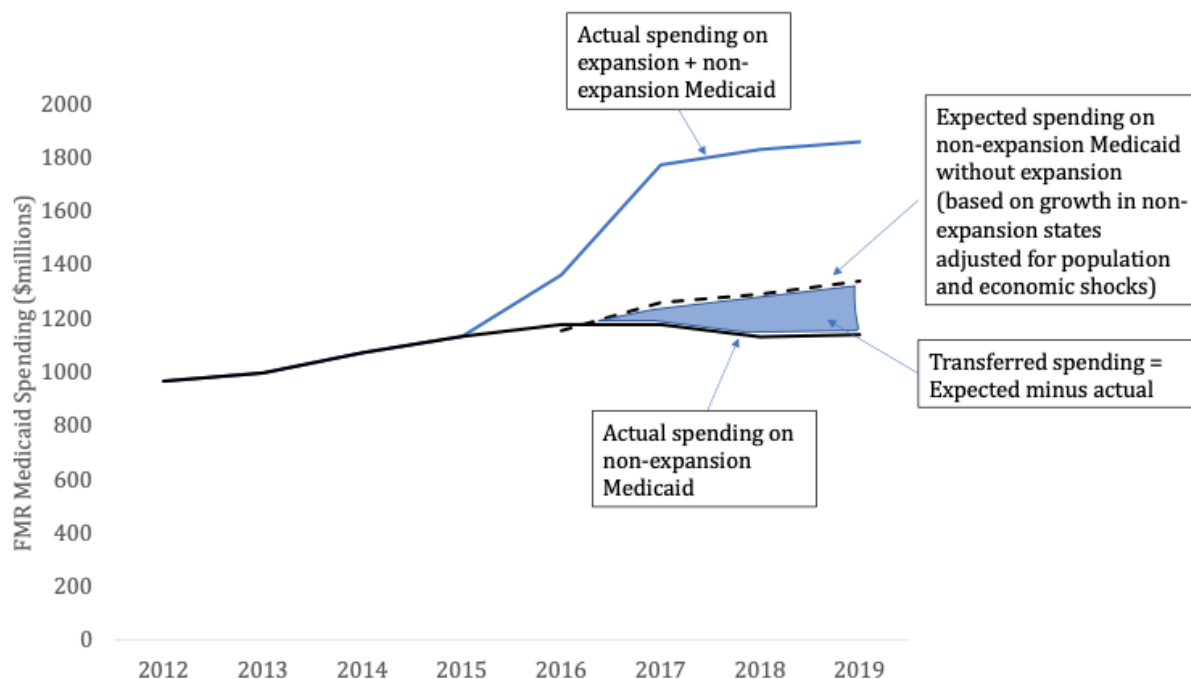
<sup>35</sup> Medicaid in Montana: How Medicaid Affects Montana's State Budget, Economy, and Health (Manatt Health, January 2021). <https://mthcf.org/resources/medicaid-in-montana/>

<sup>36</sup> Soni, A., Burns, M. E., Dague, L., & Simon, K. I. (2017). Medicaid expansion and state trends in Supplemental Security Income program participation. *Health Affairs*, 36(8), 1485-1488.

<sup>37</sup> This is the simple change. Calculating the change using the difference-in-difference framework yields a change of 52,000. This result comes from regressing Medicaid coverage on an interaction for Montana in years after expansion with controls for age, gender, race, Hispanic status, children in the household, income, employment status, and state and year fixed effects. Relative to non-expansion states, the probability of Montanans reporting Medicaid coverage in the ACS increased by 8.2 percentage points. This amount is equal to 52,000 people.

enrollment in 2019 was nearly 42,000 more than this amount. This large gap could mean two things. It could mean that more than 40 percent of expansion beneficiaries surveyed incorrectly reported their insurance status, or it could mean some expansion beneficiaries would have reported Medicaid coverage without expansion. While some expansion beneficiaries likely incorrectly reported their insurance, it seems unlikely that this many did.

**Figure 9: Illustration of potential savings from within Medicaid transfers in Montana.**



Note: Actual totals from Medicaid Financial Management Reports for federal fiscal years. The projection for spending without expansion is based on differences-in-differences regression with the same specification as used above.

In 2019, the ACS reported 42,000 fewer Montanans with Medicaid than administrative records. However, at least some of those who misreported their insurance likely had traditional Medicaid. In 2015, before expansion, the ACS underreported Medicaid enrollment relative to administrative data by 10 percent. If the same percentage of non-expansion enrollees underreported in 2019, then 18,000 of the 42,000 underreports came from outside of expansion. This is consistent with roughly 20 percent of expansion enrollees transferring within Medicaid.<sup>38</sup> This calculation further suggests that the range described above is reasonable.

As such, the transfer of spending between traditional Medicaid and Medicaid expansion may generate savings sufficient to cover between 23 and 68 percent of the state’s share of

<sup>38</sup> Total Medicaid expansion enrollment consists of 49,000 new Medicaid enrollees, 24,000 people who fail to report Medicaid on the ACS (42,000-18,000), and 18,000 Medicaid transfers.

expansion's costs.<sup>39</sup> This range is wide. The low end comes from the savings documented by Manatt. The high end comes from the empirical approach in Figure 9.

### *Savings Outside Of Medicaid*

When states expand Medicaid, they often reduce spending on programs that provide some form of care for low-income adults. The Manatt study referenced above also estimates these savings for Montana.<sup>40</sup> They find that Medicaid expansion allowed the state to reduce spending on substance abuse and mental health programs by \$2.1 million in fiscal year 2019. This amount is equal to three percent of the state's share of expansion cost at the 2020 FMAP.

Medicaid expansion also allows the state to shift the cost for inmate hospitalizations to Medicaid. Manatt estimates that these savings totaled \$10 million in fiscal year 2019. This amount is equal to 14 percent of the state's share of expansion costs at the 2020 FMAP.

The Manatt report documents direct savings attributable to Medicaid expansion. However, there may be other effects of Medicaid expansion that ripple through the state's budget. E.g., a reduction in SSI enrollment attributable to Medicaid expansion may generate savings by reducing Montana's supplemental payments to SSI beneficiaries, or reductions in crime (or other social problems) attributable to Medicaid expansion may reduce spending in other areas.

Combined, the documented savings within Medicaid plus these savings from outside of Medicaid amount to 40 to 85 percent of the expected state cost of Medicaid. As such, without including revenue effects, the expected state cost of Medicaid expansion is far less than 10 percent of expansion costs. They are only 1.5 to 6.0 percent of expansion costs.

## **Revenues**

As discussed in Sections V and VIII, Medicaid expansion increases spending on health care and increases total personal income. Given the taxes tied to health care and other economic activity, Medicaid expansion also increases state revenues.

First, the state has several taxes on health care activity. In particular, Montana has a hospital utilization fee. This fee was increased in 2019, in part, to fund the state portion of expansion costs. Given that expansion boosts health care consumption by 6 percent, it likely also increases health care tax revenues by a similar amount. Given tax revenues from the hospital utilization fee in FY2020 and assuming these fees increase in proportion to the increase in utilization due to expansion, Medicaid expansion increased these revenues by

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<sup>39</sup> Total savings as a share of total expansion costs equals savings per dollar transferred times share transferred. E.g.,  $.25 \cdot .18 = 0.045$  (or 4.5 percent of total expansion costs). Since the state share is 10 percent, at this level of transfer, the savings from transfers comprise 45 percent of the state share.

<sup>40</sup> Medicaid in Montana: How Medicaid Affects Montana's State Budget, Economy, and Health (Manatt Health, January 2021). <https://mthcf.org/resources/medicaid-in-montana/>

\$14.6 million in 2020.<sup>41</sup> This amount is equal to 18 percent of the state share of expansion costs.<sup>42</sup>

Second, as discussed above, Medicaid expansion also increases economic activity and income throughout the state. Accounting for the savings and revenue effects already calculated, at most, revenues on additional economic activity need to cover 40 percent of expansion's costs (or roughly \$33 million). The estimates described above suggest that expansion increased earnings in the local sector by \$368 to \$393 million. This likely understates the full effect because expansion likely has small effects in industries not included in the analysis above (e.g., professional services). Thus, the question becomes, "Is it likely that a roughly \$400 million increase in earnings would generate state revenues greater than \$33 million?"

This question is difficult to answer precisely. If the marginal increase in income attributable to Medicaid expansion generates state revenues at a rate similar to the average, then the answer is likely yes. In recent years, Montana's own-source revenues averaged 11.8 percent of personal income.<sup>43</sup> As such, the increase in income due to expansion may yield \$43 to 46 million in additional revenues (or 52 to 56 percent of the state share of expansion costs).<sup>44</sup> Thus, the total increase in own-source revenue combined with the savings and revenue effects outlined above is more than sufficient to cover the state share of expansion's costs. Of course, the marginal revenues on the marginal economic activity attributed to expansion may differ from the simple average (it could be higher or lower). However, it is safe to conclude that expansion generates sufficient activity that it is possible to generate sufficient revenues to offset the remaining costs.

Ultimately, tracking expansion's effects through the state budget is difficult. While some savings and revenue effects can be calculated with reasonable precision, some are more difficult to quantify. However, the information available suggests that Medicaid expansion generates budget savings and increased revenues sufficient to offset the state share of expansion's costs. Consistent with this conclusion, a recent study of the fiscal effects of expansion found that total state spending does not significantly increase in response to expansion, and spending in other areas of the budget (e.g., transportation, education) does not fall.<sup>45</sup> This is what we would expect if Medicaid expansion does not require states to significantly raise taxes or cut spending to afford expansion.

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<sup>41</sup> The hospital utilization fee raised \$258.3 million in FY2020

(<https://leg.mt.gov/content/Publications/fiscal/Session-2021/SubCom-B/Section-B-print.pdf>).

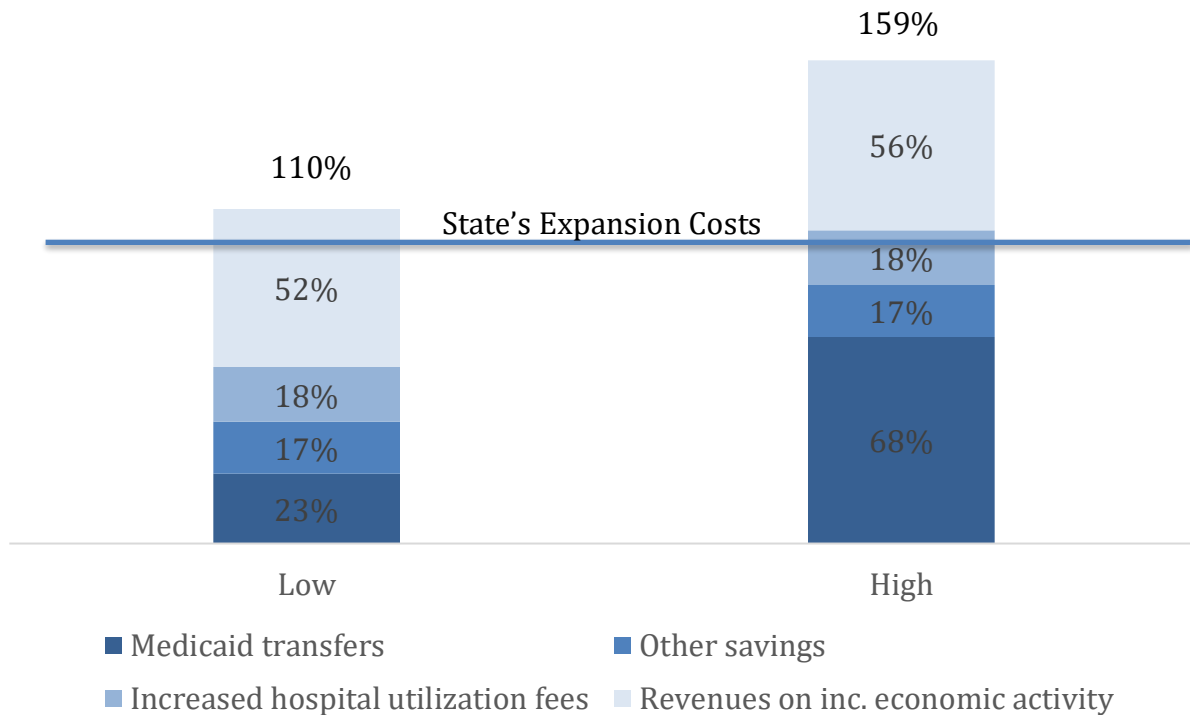
<sup>42</sup> This calculation assumes state costs of \$82.3 million based on total reported Medicaid expansion spending in FY2020. <https://leg.mt.gov/content/Publications/fiscal/Session-2021/SubCom-B/Section-B-print.pdf>

<sup>43</sup> Average of rates from 2014-2017 obtained from: US Census Bureau Annual Survey of State and Local Government Finances, 1977-2017 (compiled by the Urban Institute via State and Local Finance Data: Exploring the Census of Governments; accessed 25-Jan-2021 11:11), <https://state-local-finance-data.taxpolicycenter.org>.

<sup>44</sup> If I use general own-source revenue instead of all own-source revenue, the recent average was 8.1 percent. This amounts to \$30-\$32 million.

<sup>45</sup> Gruber and Sommers (2020).

**Figure 9: Savings and revenues as a share of the state’s expansion costs.**



## XI. Has COVID-19 fundamentally changed the effects or costs of Medicaid expansion?

Nearly all of the data examined in this report only covers through 2019. As such, it does not capture the effects of the coronavirus pandemic. It is worth asking whether COVID-19 will fundamentally change the story laid out above.

Certainly, the effects observed in 2020 (when those data are available) will likely differ from those that persisted through 2019. COVID-19 may affect the relationships between Medicaid expansion and Montana’s economy in a few ways.

First, COVID-19 affects enrollment and spending per beneficiary. Medicaid expansion enrollment declined through much of 2019; however, enrollment began growing again as the economic crisis started. While enrollment is growing and a pandemic is raging, health care spending is down. Different estimates suggest different numbers, but people certainly consumed less health care during the pandemic.<sup>46</sup> Presumably, this will also affect Medicaid spending. It may also affect spending in the future as some people “catch up” on delayed care or as people spend more to manage the adverse effects of delayed care. Thus, total spending is likely different than before the pandemic.

<sup>46</sup> Cox, C., Kamal, R., & McDermott, D. (2020). How have healthcare utilization and spending changed so far during the coronavirus pandemic. *Health System Tracker*.

Second, the pandemic disrupted some of the typical patterns in the economy. Normally, adding a certain amount of money to a local economy generates a certain amount of additional spending. However, due to COVID-19, many people have changed their spending patterns. Savings is way up, and people are spending more in some areas (e.g., durable goods) while severely cutting spending in others (e.g., face-to-face services). Thus, the amount of economic activity (jobs and incomes) linked to Medicaid expansion is likely different than existed pre-pandemic.

However, it is unclear whether COVID-19 has permanently disrupted these economic relationships. Some things may have permanently changed, so past spending relationships will no longer apply, and future analysis will find a different pattern of impacts. It is also possible things will settle back into pre-pandemic patterns after a period of disruption. Ultimately, only time will tell exactly how COVID-19 may change Medicaid expansion and its effects on the economy.

It is also worth noting that Medicaid expansion has helped cushion the blow of the pandemic. According to data from the Census Household Pulse Survey, over 35 percent of Montana households have experienced a loss of employment income since March, and 17 percent of Montanans have applied for unemployment insurance. Many people have also enrolled in Medicaid. Over 12,000 people have enrolled since the start of the pandemic. The research cited above and ample other research finds that insurance helps people weather economic storms, like the one precipitated by COVID-19.<sup>47</sup>

## XII. Conclusion

For Montana, Medicaid expansion offers a great deal. Expanding Medicaid provides insurance to thousands of Montanans who would otherwise lack it. It provides more comprehensive insurance to thousands more. Better insurance improves access to health care and improves health outcomes. It also leads to hundreds of millions in new health care spending. Medicaid expansion improves households' financial health and puts millions of dollars into Montanans' pockets that they spend throughout the economy. Ultimately, over 80 percent of Medicaid expansion spending is new money in Montana's economy. This new spending supports thousands of jobs and nearly \$400 million in additional earnings. While the state must pay for 10 percent of expansion's costs, these costs are likely more than offset by savings created by expansion and revenues from increased economic activity.

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<sup>47</sup> Finkelstein, A., Mahoney, N., & Notowidigdo, M. J. (2018). What does (formal) health insurance do, and for whom?. *Annual Review of Economics*, 10, 261-286.