

The effect of Medicaid expansion on healthcare coverage, labor market activity, and government assistance among those with disabilities

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Abstract

In 2010, The Affordable Care Act (ACA) was passed in the United States (U.S.). The ACA overhauled the U.S. healthcare system and expanded Medicaid coverage to those with income below 138% of the federal poverty line. However, in 2012 the Supreme Court decided that Medicaid expansion should be voluntary. In 2014 24 states expanded Medicaid creating the opportunity for a natural experiment. This study exploits this natural experiment to evaluate the effect of Medicaid expansion on labor market activity, health insurance coverage, and public assistance receipt among those with disabilities. By employing a difference-in-difference regression model and using the repeated cross-sectional nature of data collected through the American Community Survey, I found that Medicaid expansion has no independent significant effects on labor market activity but is associated with increased health insurance coverage and decreased public assistance for those with disabilities.

Key words: Medicaid expansion, disability, health insurance, employment

How has Medicaid expansion affected healthcare coverage, labor market activity, and government assistance among those with disabilities?

The Patient Protection and Affordable Care Act (ACA) was passed in the United States (U.S.) in 2010. This landmark legislation overhauled the healthcare system and mandated the expansion of the Medicaid program to all those with incomes below a 138% of the federal poverty line (*Status of state action on the Medicaid expansion decision*). In June of 2012, the Supreme Court ruled in *NFIB v. Sebelius* that penalizing states for not expanding Medicaid was unconstitutional—making the decision to expand Medicaid optional for states (Kaiser, 2012). In January of 2014 only 24 states adopted Medicaid expansion, and as of January of 2017 33 states in total (including D.C.) have adopted Medicaid expansion (*Status of state action on the Medicaid expansion decision*). In this project I exploit the natural experiment presented by voluntary Medicaid expansion to evaluate the effect of increased access to health insurance on labor force activity, health insurance coverage, and government assistance among those with disabilities.

More than 20% of Americans report having a disability (Courtney-Long et al., 2015), yet the employment rate and labor force participation rate among those with disabilities is strikingly low (Statistics, 2017). In 2016 only 17.9% of those with disabilities were employed, and a larger share of those with disabilities were employed in part-time rather than full time positions compared to those without disabilities (Statistics, 2017). Eight in ten people with disabilities were not in the labor force in 2016, compared to three in ten among those without disabilities (Statistics, 2017). The employment rate of those with disabilities has been in steady decline while there has a been a rise of disability insurance program receipt (Autor & Duggan, 2010;

Mann & Stapleton, 2011). This increasing reliance on government programs has given rise to debate and concern over federal disability policy (Bailey & Weathers, 2014).

In addition to the decreased levels of labor force participation and employment, the employment pattern among those with disabilities is different than those without. Of those with disabilities who are not in the labor force three percent reported wanting a job. Among the employed, those with disabilities are more concentrated in service occupations than those without disabilities (Statistics, 2017). This is of particular importance due to the relationship between service industry employment and healthcare—of the uninsured population in the U.S. one in three were employed in service occupations compared to one in five in the U.S. overall (Berchick, 2017).

Medicaid expansion may also have implications for Supplemental Security Income (SSI) and public assistance income receipt. SSI provides financial assistance to individuals with disabilities who have low incomes and few assets. Medicaid expansion to childless adults between 2001 and 2013 was associated with a seven percent relative decrease in SSI participation, indicating a small efficiency gain from separating SSI and Medicaid eligibility (Burns & Dague, 2017). The authors argued that restrictions on income and assets, as well as the complex disability determination process, may encourage those with disabilities to pursue coverage through Medicaid expansion instead of the Social Security Administration's disability benefit programs (Burns & Dague, 2017). However, another study examining the effect of health insurance reform in Massachusetts found no effect of expanded access to healthcare on SSI enrollments and slight increase in SSDI enrollments in only one year (Maestas, Mullen, & Strand, 2014). The authors argued that there had been a "pent up demand" for SSDI applications, but no persistent effect on either when examining all counties (Maestas et al., 2014). This study

will provide another test, looking specifically at those with disabilities, to see if expanded access to healthcare through Medicaid expansion effects SSI program participation.

This research can inform political debates and policy reforms in regard to healthcare and government assistance programs which a particular attention on those with disabilities—who are often under-emphasized in these broader conversations. Additionally, as states continue to consider expanding Medicaid the findings of this study may help inform those decisions. Last, a better understanding of healthcare receipt and access to healthcare through Medicaid expansion among those with disabilities is particularly important in a country with such high healthcare costs. Healthcare spending in the U.S. in 2016 accounted for 17.9% of the gross domestic product, with spending reached \$3.3 trillion dollars (or \$10,348 dollars per person) (*National Health Expenditures 2016 Highlights*, 2017).

Several studies have explored the influence of expanded health insurance coverage similar to Medicaid in the general population. A study exploring Medicaid expansion in Ohio found that those who were unemployed (but in the labor force) reported that seeking employment was more feasible after Medicaid enrollment (Antonisse, Garfield, Rudowitz, & Artiga, 2017). A study by Dague et al. found a small negative effect on employment following a freeze in enrollment of the Wisconsin public insurance program in 2009 (Dague, DeLeire, & Leininger, 2014). On the other hand, Leung and Mas (2016) found no significant change in employment following recent Medicaid expansion looking at childless adults (Leung & Mas, Forthcoming). Previous researchers looking more specifically at those with disabilities have suggested that health insurance coverage has a positive short-term effect on labor market activity, but that those effects may fade over time (Bailey & Weathers, 2014). Others have found that access to health insurance increased use of job preparation and vocational rehabilitative services and has

increased the likelihood of searching for employment (Michalopoulos et al., 2011). While immediate increases in labor market activity were not found, the researchers hypothesized that perhaps long term effects could be found due to increased skills through training (Michalopoulos et al., 2011).

Although the direct effects on labor market activity remain unclear, some have argued that creating greater ease of access to health insurance among those with disabilities could lead to decreases in future reliance on and cost of government provided health insurance programs by limiting significant declines in health (Bailey & Weathers, 2014). One reason for the uncertainty in the literature as the effect of health insurance on employment among those with disabilities is the inability of researchers to design an experiment to support causal findings—however, the expansion of Medicaid among 24 states in 2014 has allowed a unique opportunity to exploit a natural experiment to test the effect of increased access to health insurance. By employing a difference-in-difference regression model and using the repeated cross-sectional nature of data collected by the Bureau of Labor Statistics I assessed the implications of increased access to health insurance through Medicaid expansion on labor market participation, health insurance coverage, and government assistance among those with disabilities.

Research Objectives

1. How has Medicaid expansion affected the percentage of people with disabilities who have health insurance?
2. How has Medicaid expansion affected the percentage of people with disabilities who participate in the labor force?
3. How has Medicaid expansion affected the percentage of people with disabilities who are employed?

4. How has Medicaid expansion affected the amount of government assistance received by those with disabilities?

Research Design

To accomplish these research objectives, this study uses existing data from the American Community Survey and a difference-in-difference regression model to explore the relationship between Medicaid expansion and both health insurance coverage and labor market activity for those with disabilities. The difference-in-difference approach compares the change in labor force participation, employment, health care, and public assistance in reform states, to the change in control states.

Data Collection

I used the 2010 through 2016 American Community Survey (ACS) data to complete this research project. The data can be publicly accessed through www.ipums.org. The dataset is measured at the household level, with questions about each individual in the home. The ACS is collected by the United States Census Bureau annually and is used by government agencies to make decisions regarding the allocation of more than \$400 billion dollars. The ACS is also used by social science researchers, businesses, and policy analysts. This is a good dataset to use because it includes my variables of interest, has a large enough sample size to look specifically at those with disabilities, and is nationally representative. I combined this data with knowledge about which states adopted the 2014 implementation of Medicaid expansion (Foundation, 2018).

Focal variables for this project are disability, employment, labor force participation, health insurance, public assistance receipt and the adoption of policies which expanded Medicaid. I collapse the microdata available in the ACS for those with disabilities, so my analyses rely on aggregated data on my outcome variables exclusively for those with disabilities.

There are six questions that are used to determine if the respondent has a disability, which are reported at the individual level. If the respondent affirms that they have one of the six disability types, they will be considered disabled for the purposes of this study. The disability type questions are 17a (hearing difficulty), 17b (vision difficulty), 18a (cognitive difficulty), 18b (ambulatory difficulty), 18c (self-care difficulty), and 19 (independent living difficulty). Someone is considered to have a disability if they answer yes to any of the six questions.

Dependent Variables

The ACS survey seeks to determine if participants are employed, unemployed, or not in the labor force. My sample focuses on adults of typically working age only, so I dropped any respondents under the age of 18 or over the age of 65. Employed refers to people who have worked in the last week (or who generally are employed if they did not work in the past week due to a leave—such as vacation or maternity leave). Unemployed refers to people who are in the labor market but are not currently employed. People who are not working or looking for work are considered to be not in the labor force—such as people who are in institutions. Question 29 asks about work in the last week. If participants respond in the affirmative, they are considered employed. Question 35 asks if the participant has been laid off, temporarily absent from work, or will be returning to work in the next 6-months; if the answer is laid off or returning to work in the next six months, they are considered unemployed. Question 36 asks if the participant has been actively looking for work. If the participant answers yes, they are considered unemployed, and if they answer no they are considered not in the labor force. Data from 2000 through 2016 is used for labor market activity outcomes.

This study includes two outcomes that examine health insurance coverage—overall percent of the population that has health insurance and the percent of the population that has

public health insurance. Questions 16a through 16f assess health insurance. If someone answers “yes” to questions 16a through 16f they are considered to be insured. The Census Bureau classifies coverage as private or public—with private being through employment, union, military healthcare, TRICARE, or insurance purchased by an individual through a private insurance company. Health insurance outcomes use data from 2008 until 2016, as those are the years where health insurance information was collected by ACS.

Last, I will look at public assistance income receipt and Supplemental Security Income. Questions 47 and 48 address income—where participants report income in eight categories including public assistance income which includes the money value of any government assistance (such as Temporary Assistance to Needy Families—formerly known as welfare). Both public assistance income and Supplemental Security Income will be measured in dollars and include income from the 12 months prior to assessment, and data from 2000 until 2016 is used. I create binary variables indicating if the participants report any income through the Supplemental Security Income or Public Assistance Income programs, where 1 indicates they receive income and 0 indicates they do not. I then collapse the outcomes by state and year, so these indicators reflect the percent of those with disabilities that are enrolled and are earning income from the programs in each state each year. Supplemental Security Income is a program by the Social Security Administration that provides minimum income for those who are elderly, blind, or disabled. Public assistance income is general cash income assistance but does not include Supplemental Security Income or benefits that are cash, such as food programs. The census webpage provides more information about disability type (page 60), more information about ability to work (page 66), healthcare coverage (page 73), and income (83)

https://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2017_ACSSubjectDefinitions.pdf?#).

Data Analysis

This study uses a difference-in-difference identification strategy to estimate the effect of adopting policies that expand Medicaid on labor market activity, health insurance, and public assistance income. The difference-in-difference model compares the change in the outcomes pre- and post-treatment for reform states to the change in the outcomes pre- and post-treatment for the control states, instead of comparing the outcomes themselves between control and reform states (Stock & Watson, 2015). Difference-in-difference models use time dimensions to control for unobserved omitted variables that are fixed over time, and at the cohort level this can be achieved using repeated cross-sectional data collection (Angrist & Pischke, 2009). Essentially, a difference-in-difference model is a fixed-effect model that uses aggregate data (Angrist & Pischke, 2009).

Difference-in-difference models are particularly adept at policy analysis (Angrist & Pischke, 2009; Stock & Watson, 2015). However, to be effective a difference-in-difference model must uphold the common trends assumption—the assumption that the trends in both control and reform states would be the same in the absence of treatment (Angrist & Pischke, 2009). This can be accomplished by examining the average trends in labor market activity, health insurance, and public assistance income in the time before policy change was enacted. Figure 1 demonstrates evidence to support the common trends assumption, meaning a difference-in-difference model is an appropriate method to answer these questions. While the *levels* are different before Medicaid expansion in reform and control states (for example the percent with

health insurance is higher among control states than reform states) the *trend* is similar enough to uphold the assumption (there is a slight positive slope for both reform and control states).

For each outcome I will examine four models, two with a static indicator for Medicaid expansion and two with a dynamic indicator for Medicaid expansion. The static indicator is one dichotomous variable that indicates pre or post policy change. A dynamic indicator is a series of dichotomous variables that indicate pre or year post policy change, allowing the effect of the policy change to vary over time. A dynamic indicator is an appropriate model specification if the effect of the policy shock is not immediate and constant (Wolfers, 2006). While there is little work examining the pattern of the effect of expanding health insurance access on employment, health insurance, and public assistance to support a dynamic or static indicator (in other words an immediate and constant effect of the policy change or a dynamic and complex effect), there is evidence to suggest that the effect of health insurance on employment and public assistance may be complex and dynamic. As discussed earlier, some scholars have argued that gaining health insurance is associated with increased enrollment in job preparation courses and increased likelihood of job searching for those with disabilities (Michalopoulos et al., 2011). Additionally, it is possible that increased access to health insurance may delay the worsening of symptoms that make employment more difficult through increased preventative care (Bailey & Weathers, 2014). These delayed effects and changing dynamics of the relationships between health insurance access and labor force participation and health insurance access and public assistance reliance imply that a dynamic indicator of policy change may be a more appropriate model specification.

For both the static and dynamic indicator of policy shock, I will conduct one analysis with year and state fixed effects, and another including a state time trend. The first two equations use a static indicator of policy change:

1. $Outcome = \beta_{Medicaid\ expansion} + \sum state\ fixed\ effects + \sum Time\ fixed\ effects$
2. $Outcome = \beta_{Medicaid\ expansion} + \sum state\ fixed\ effects + \sum Time\ fixed\ effects + \sum state * time$

The Medicaid expansion variable in these equations is a dummy variable, which is equal to one when the state has Medicaid expanded and zero when the state has Medicaid that is not expanded. The coefficient β is interpreted as the average rise in the outcome (for example labor force participation) that is attributable to Medicaid expansion. Equation one uses population-weighted least squares and equation two uses a state-specific linear time trend to capture slow-changing social and demographic trends in each state. The second two equations replicate the specification of the first two, but with a dynamic indicator of policy change:

3. $Outcome = \sum \beta_k Medicaid\ expansion\ has\ been\ in\ effect\ for\ K\ years + \sum state\ fixed\ effects + \sum Time\ fixed\ effects$
4. $Outcome = \sum \beta_k Medicaid\ expansion\ has\ been\ in\ effect\ for\ K\ years + \sum state\ fixed\ effects + \sum Time\ fixed\ effects + \sum state * time$

The interpretations are the same as above, but there are three coefficients that capture Medicaid expansion: one year, two years, and three years following policy adoption. These coefficients are interpreted as the average risk in the outcome attributable to Medicaid expansion in the first, second, and third year after policy adoption.

Results

Descriptive analyses, shown in Table 1, demonstrate that control and reform states have near identical labor force participation ($b_{control} = 43.26\%$, $b_{reform} = 43.35\%$) and employment ($b_{control} = 38.19\%$, $b_{reform} = 38\%$). Reform states have a higher percent of health insurance coverage, public health insurance coverage, total income, Supplemental Security Income, and public assistance income for those with disabilities.

Medicaid expansion has little independent and significant effects on labor market activity, as seen in Table 2. Using the static specification (Model 1 and Model 2) Medicaid has no significant effects on the percent of those with disabilities who are employed and using the dynamic specification (Model 3 and Model 4) there are no or limited effects. In Model 4, the dynamic specification which includes a state time trend, Medicaid expansion at year three is associated with a 1.135% decrease in the percent of those with disabilities who are employed with 90% significance. Medicaid expansion has no significant effect on the percent of those with disabilities who are in the labor force using any model specification.

Medicaid expansion increases the percent of those with disabilities who have health insurance and who have public health insurance using any model specification, as seen in Table 3. Using a static specification of Medicaid expansion (Model 1 and Model 2), it is associated with an increase of between two and two and a half percent in health insurance coverage among those with disabilities. In Model 4, the percent increase in health insurance coverage for those with disabilities attributable to Medicaid expansion increases over time, with larger increases three years after adoption ($b = 2.720$) compared to one ($b = 1.964$) or two years ($b = 2.555$). Medicaid expansion is associated with an increase of between three and half to four and a half percent increase in public health insurance among those with disabilities. In Model 3 and Model 4, similar to the trend we see in health insurance coverage generally, the increase in the percent

of those with disabilities who have public health insurance increases over time. Three years after Medicaid expansion there is an increase in those with disabilities who have public health insurance of more than five percent.

In Table 4, there is evidence that Medicaid expansion is associated with decreased reliance on Supplemental Security Income and has no effect on public assistance income. Medicaid is associated with about a 1% decrease in SSI program participation across most model specifications. While this is a limited effect in size, it is rather robust to specification. The association persists with both a static and dynamic indicator, and with and without state specific time trends. This suggests that there may be a delayed effect of healthcare expansion on SSI enrollment for those with disabilities. For public assistance income, there is no effect on the participation of those with disabilities.

Discussion

The expansion of Medicaid has little effect on employment and labor force participation among those with disabilities. In Model 4 of Table 2 for employment, there is a slight decrease in the percentage of the population with disabilities who are employed that emerges three years after policy implementation. This suggests that there *may* be a delayed effect, but additional years of data would be required to test this. For healthcare coverage, on the other hand, there is robust evidence to support that Medicaid expansion is associated with an increase of a little more than two and a half percent in the insured rate for those with disabilities. In looking at those who receive public health insurance coverage, the increase is even larger, around five and half percent. For both health insurance and public health insurance the dynamic specification for the policy shock shows a trend of increasing effect size over time. When state-specific time trends are included, Medicaid is associated with a decrease in Supplemental Security Income. For

public assistance income, there is some evidence that three years after Medicaid expansion there is a decrease in the public assistance income among those with disabilities. In sum, Medicaid expansion had no effect on labor market activity, increased the percent with health insurance, and may reduce SSI receipt and public assistance income for those with disabilities.

This study has two primary contributions to the literature—it expands the conversation on the effects of Medicaid to include those with disabilities and demonstrates the broader effect of Medicaid expansion and increased access to health insurance on government funded assistance. While many scholars have taken advantage of the natural experiment presented by Medicaid expansion, none to my knowledge have looked specifically at the effects for those with disabilities. As an especially vulnerable population, with explicit vulnerabilities regarding health and well-being with higher than average reliance on assistance programs funded by the government, the results of Medicaid expansion hold particular importance. Increased independence and access to health insurance may delay health deterioration (Krahn, Hammond, & Turner, 2006). Furthermore, Medicaid expansion and increased access to healthcare increases the percentage with health insurance and decreases reliance on Supplemental Security Income.

The results of this study suggest that the expansion of Medicaid reduces reliance on Supplemental Security Income, which has policy implications on the state and federal level. This reduction of reliance on Supplemental Security Income is of importance to the Social Security Administration for two reasons. First, as enrollment in disability benefit programs increases over time evidence of alternative programs to reduce reliance on SSA programs is beneficial. Second, in thinking through why the expansion of Medicaid may lead to reduced reliance on the Supplemental Security Income program, we may learn important lessons about the disability

determination process and why people with disabilities may prefer Medicaid enrollment to Supplemental Security Income.

Future research should examine if expanding Medicaid is associated with a long-term decline in Medicaid and SSI/SSDI enrollment as a result of limiting declines in health through increased access to health insurance, along the lines of the hypothesis of Baily and Weathers (2014). Furthermore, there is some preliminary evidence which suggests that perhaps Medicaid expansion has a delayed effect on employment—in the future researchers should explore if there is a delayed effect where Medicaid expansion leads to lower levels of labor market activity.

Limitations

The results of this study need to be interpreted in light of their limitations. Although a difference-in-difference model can effectively control for many omitted variables and make a compelling case for causation, like all methods it has several drawbacks. Any fixed-effects model is susceptible to attenuation bias from measurement error, which may lead to smaller estimates (Angrist & Pischke, 2009). Additionally, we have to assume that there are no other policy changes which might differentially affect the outcomes variables across states. While using a difference-in-difference model allows me to control for national changes which affect control *and* reform states, the results are susceptible to policy changes that only affect control *or* reform states. Other researchers have argued that there are no differential policy changes that may relate to health care coverage or labor market activity, and have used a difference-in-difference model to explore the effects of Medicaid expansion in 2014 on related variables among different populations (Dague et al., 2014). Last, this study has a small post implementation observation time. While I can speak to the immediate implications of adopting Medicaid expansion for those with disabilities, the lasting pattern of those effects is currently

unknown. Perhaps, the insignificant effect of Medicaid expansion on labor market participation and employment may increase over time. Aligned with the hypothesis of Michalopoulos et al. (2011), perhaps the increase in the likelihood of seeking employment after completing job preparation and vocation classes leads to a delay in the effect. This study should be replicated when more time has passed to examine the persisting effects.

Conclusion

The expansion of Medicaid in 24 states on January 1st, 2014 provided a unique opportunity to causally evaluate the effect of Medicaid expansion on labor market activity, health insurance, and public assistance for those with disabilities. The findings of this study provide evidence that the expansion of Medicaid is associated with an increase in the probability of having insurance for those with disabilities, no effect on the probability of labor force participation, and no effect on public assistance program participation. However, this study does provide evidence that there may be a delayed effect of Medicaid expansion on employment which future research should explore and found that Medicaid expansion does decrease reliance on SSI program participation. While this study was only able to assess the outcomes of expanding Medicaid in the first three years following expansion, it does provide promising evidence of increased health insurance coverage which may have long term effects on health and government assistance.

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Tables

Table 1. Demographics table.

| | Control States | Reform States |
|---------------------------------------------------------|----------------|---------------|
| % Labor force participation | 43.26 | 43.35 |
| % Employment | 38.19 | 38.00 |
| % Health insurance | 82.04 | 87.85 |
| % Public health insurance | 50.63 | 56.05 |
| Total income | 20953.01 | 22743.40 |
| % Supplemental Security Income Program Participation | 17.07 | 18.04 |
| % Public Assistance Income Program Participation | 8.79 | 9.52 |
| Supplemental Security Income | 1084.51 | 1299.84 |
| Public assistance income | 79.92 | 156.49 |

Table 2. Labor market activity outcomes.

| | Employment | | | | Labor Force Participation | | | |
|--------------------|------------------|-------------------|-------------------|----------------------------------|---------------------------|-------------------|-------------------|-------------------|
| | Static | | Dynamic | | Static | | Dynamic | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 1 | Model 2 | Model 3 | Model 4 |
| Medicaid Expansion | 0.124 (0.351) | -0.419 (0.430) | | | 0.293 (0.357) | -0.406 (0.444) | | |
| Year 1 | | | 0.818 (0.567) | 0.333 (0.577) | | | 0.929 (0.578) | 0.296 (0.596) |
| Year 2 | | | -0.065 (0.564) | -0.665 (0.590) | | | 0.099 (0.574) | -0.651 (0.610) |
| Year 3 | | | -0.404 (0.580) | -1.135+ (0.622) | | | -0.171 (0.591) | -1.054 (0.643) |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| State * Time | No | Yes | No | Yes | No | Yes | No | Yes |
| Adjusted R^2 | 0.924 | 0.936 | 0.924 | 0.936 | 0.918 | 0.929 | 0.918 | 0.929 |

Notes. + p<0.10, * p<0.05, ** p<0.01, *** p<0.001. Standard errors in parenthesis. N= 697. . Data from 2000-2016 reporting of ACS.

Table 3. Health insurance outcomes.

| | Health Insurance Coverage | | | | Public Health Insurance Coverage | | | |
|--------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------------|----------------------------|----------------------------|----------------------------|
| | Static | | Dynamic | | Static | | Dynamic | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 1 | Model 2 | Model 3 | Model 4 |
| Medicaid Expansion | 2.517*** (0.370) | 2.236*** (0.521) | | | 4.786*** (0.413) | 3.604*** (0.639) | | |
| Year 1 | | | 2.054*** (0.562) | 1.964*** (0.574) | | | 3.013*** (0.614) | 2.533*** (0.687) |
| Year 2 | | | 2.658*** (0.560) | 2.555*** (0.639) | | | 5.463*** (0.611) | 4.916*** (0.765) |
| Year 3 | | | 2.860*** (0.575) | 2.720*** (0.724) | | | 5.947*** (0.629) | 5.334*** (0.867) |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| State * Time | No | Yes | No | Yes | No | Yes | No | Yes |
| Adjusted R^2 | | | | | 0.913 | 0.913 | 0.917 | 0.935 |

Notes. + p<0.10, * p<0.05, ** p<0.01, *** p<0.001. Standard errors in parenthesis. N=369. Data from 2008-2016.

Table 4. Public assistance outcomes.

| | Supplemental Security Income | | | | Public Assistance Income | | | |
|--------------------|------------------------------|-----------------------------|---------------------------|-----------------------------|--------------------------|-------------------|-------------------|-------------------|
| | Static | | Dynamic | | Static | | Dynamic | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 1 | Model 2 | Model 3 | Model 4 |
| Medicaid Expansion | -0.472** (0.161) | -0.854*** (0.197) | | | -0.190 (0.118) | -0.264 (0.151) | | |
| Year 1 | | | 0.410 (0.262) | -0.752** (0.265) | | | -0.163 (0.192) | -0.231 (0.203) |
| Year 2 | | | -0.599* (0.261) | -0.984*** (0.272) | | | -0.190 (0.191) | -0.267 (0.208) |
| Year 3 | | | -0.406 (0.260) | -0.833** (0.279) | | | -0.216 (0.191) | -0.302 (0.214) |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| State * Time | No | Yes | No | Yes | No | Yes | No | Yes |
| Adjusted R^2 | | | | | 0.913 | 0.913 | 0.917 | 0.935 |

Notes. + p<0.10, * p<0.05, ** p<0.01, *** p<0.001. Standard errors in parenthesis. N=697. Data from 2000-2016.

Figures

Figure 1. Labor market activity.

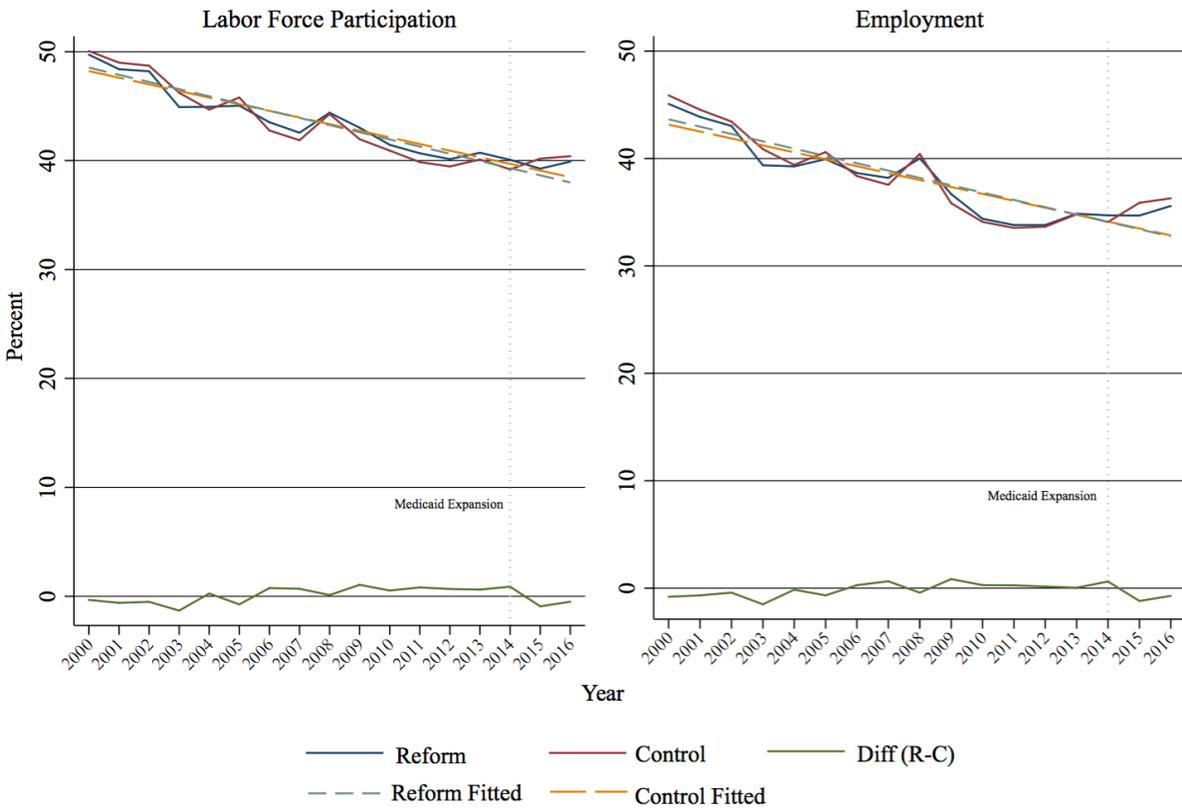


Figure 2. Health insurance.

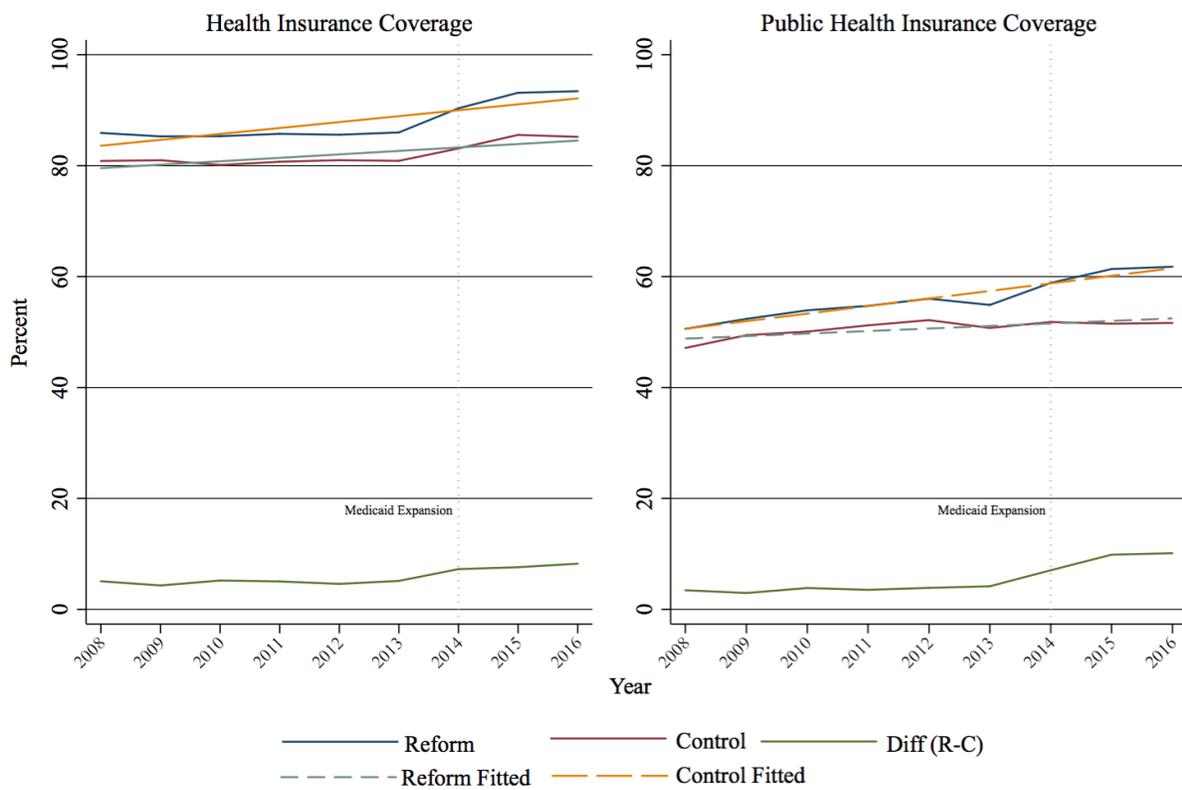


Figure 3. Public assistance.

