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Healthy and Working

Benefits of Work Requirements for Medicaid Recipients

December 3, 2018

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Executive Summary

Created in 1965, Medicaid was originally designed to serve the neediest among us: the blind or disabled adults as well as children of parents with very low incomes. Congress enacted the Patient Protection and Affordable Care Act (ACA) in 2010 and changed the health care system in the United States by writing new rules for the private health insurance market and expanding the eligible population for Medicaid.

The Medicaid expansion that occurred subsequently in some states has not only increased Medicaid's enrollment, but has also had the unintended and lesser-known consequence of causing healthy, single adults to leave the labor force or reduce their hours of work in order to qualify for Medicaid benefits. By exiting the work force prematurely, workers risk permanently reducing their lifetime earnings and income.

Extending Medicaid benefits to individuals who are able to work may reduce their lifetime earnings over the long-term and adversely affect their consumption patterns in the short-term. Although households may benefit in the short-term from Medicaid coverage through little- or no-cost health care, the ACA's Medicaid expansion does not promote individual long-term earnings growth or wealth accumulation. Workers have less incentive to invest in their human capital than if they were required to work in order to receive benefits.

To address this concern, states that have participated in the ACA's Medicaid expansion are now considering—or have already begun to impose—work requirements for some new Medicaid enrollees. Work and “community engagement” requirements, such as education and job training, tend to keep benefits recipients participating in the work force, helping them to gain valuable work experience and generate higher earnings and income over the long-term.

Using publicly available economic data, this report reveals the potential impact of imposing work requirements on healthy, single individuals with no children. We study how eligibility work requirements may affect the lifetime earnings of some Medicaid enrollees and find that Medicaid work requirements could:

- Increase lifetime earnings by \$212,694 for women and \$323,539 for men—even assuming that the individual remains on Medicaid for their entire working life; and
- Raise the hours worked per week by 22 hours for women (from 12 hours to 34 hours per week), and by 25 hours for men (from 13 hours to 38 hours per week), bringing Medicaid recipients well above the typical 20 hours per week requirement.

We also find that the financial prospects look even brighter for individuals who transition off of Medicaid; they may earn close to \$1 million more over the course of their working years.

Requiring labor force participation for benefits eligibility creates an incentive for individuals to increase human capital investment through the labor market. We show that there is a significant potential economic benefit for those able-bodied adults who would change their work effort in response to a work requirement for Medicaid eligibility.

Implementing work requirements will not be without its political and administrative difficulties. But some foreseeable difficulties, such as the unplanned program dropouts and the increased costs of authenticating new eligibility requirements, can be managed with some relatively simple steps.

State and federal Medicaid departments will need to plan ahead and train their case workers adequately in order to ensure effective communication about and administration of the new policy. Medicaid departments should also conduct an information campaign to educate current Medicaid recipients regarding the changes to eligibility requirements, how they will be affected, and what new steps may be required for maintaining eligibility.

Linking recipients to work programs, apprenticeships, training programs, and recruiting and employment agencies will help ensure that eligible recipients fulfill the requirement and avoid unnecessary lapses in Medicaid coverage. And policymakers could require all employers to report employee hours to their state Medicaid agencies, lowering the compliance cost for individual recipients at a minimal cost to employers.

These suggested remedies may help ensure that all eligible individuals maintain Medicaid coverage, minimize program disenrollment due to inadvertent non-compliance, and expand opportunities for Medicaid recipients to increase their earnings and live independent of Medicaid.

Introduction

Created in 1965, Medicaid was designed to serve the neediest among us—initially, the blind or disabled adults as well as children of parents with very low incomes. Congress enacted the ACA in 2010 and changed the health care system in the United States by writing new rules for the private health insurance market and expanding the eligible population for Medicaid. The Medicaid expansion that occurred subsequently in some states has not only increased Medicaid’s enrollment, but has also had the unintended and lesser-known consequence of causing healthy, single adults to leave the labor force or reduce their hours of work in order to qualify for Medicaid benefits. By exiting the work force prematurely, workers risk permanently reducing their lifetime earnings and income.

States that have participated in the ACA’s Medicaid expansion are now considering—or have already begun to impose—work requirements for some new Medicaid enrollees. Work and “community engagement” requirements, such as education and job training, tend to keep benefits recipients participating in the work force, helping them to gain valuable work experience and generate higher earnings and income over the long-term. Using publicly available economic data, we use an economic model to estimate how such work requirements will affect the lifetime earnings of some Medicaid enrollees.

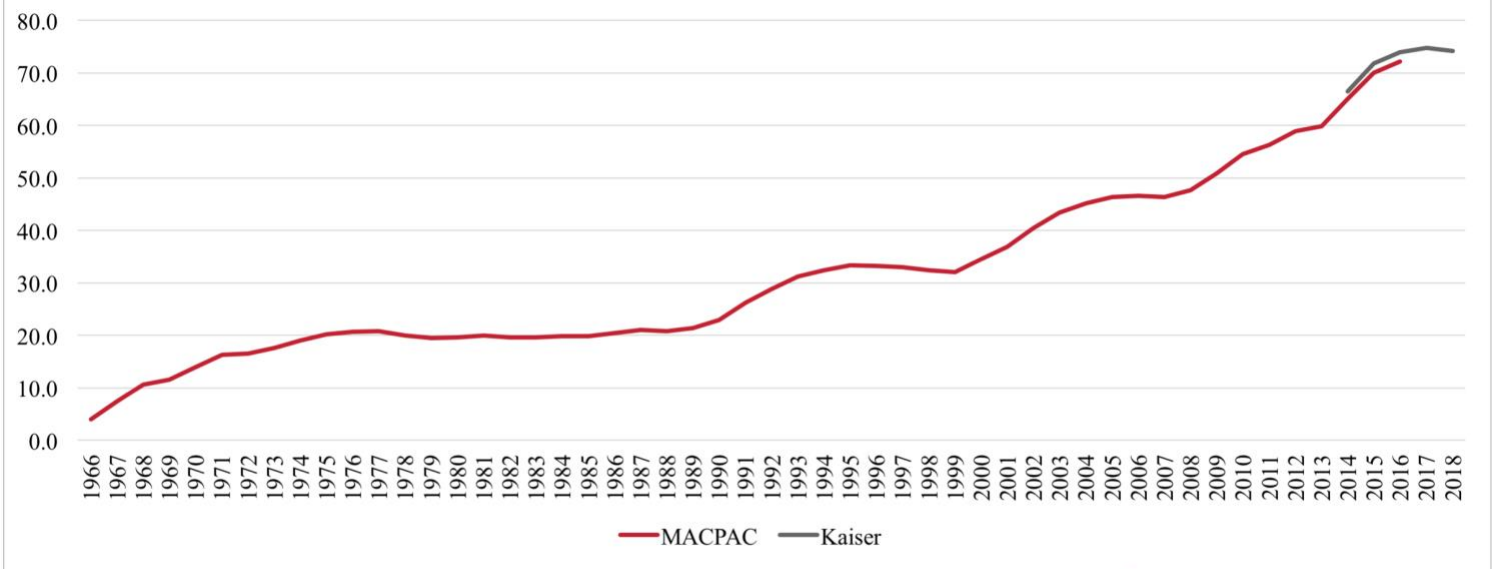
Medicaid: 1965-Today

Medicaid is a means-tested, joint federal-state program intended to provide health care insurance coverage to low-income individuals and families. The program initially covered a relatively small group of recipients, generally limited to blind or disabled adults, and children of parents with very low incomes (usually well below the federal poverty level (FPL)).

Since its creation, however, the Medicaid-eligible population has steadily climbed to include roughly one-fifth of the US population and half of all childbirths.¹ The growing size of the population now covered by Medicaid corresponds to expansions in the Medicaid eligible population. For example, prior to 1997, children of families whose incomes were too high for traditional Medicaid and were unable to afford private insurance coverage were ineligible for Medicaid coverage, but, in 1997, the Children’s Health Insurance Program, commonly known as CHIP, was created as a part of Medicaid and began offering health insurance to children of such families. This led to a growth in enrollment of more than six million newly insured in less than seven years and statistically significant increase in Medicaid and CHIP enrollment following enactment.²

¹ Robin Rudowitz and Rachel Garfield, *10 Things to Know about Medicaid: Setting the Facts Straight*, The Kaiser Family Foundation, April 12, 2018.

² Sheila Hoag, Mary Harrington, Cara Orfield, Victoria Peebles, Kimberly Smith, Adam Swinburn, Matthew Hodges, Kenneth Finnegold, Sean Orzol, Wilma Robinson, *Children’s Health Insurance Program: An Evaluation (1997-2010): Interim Report to Congress*, Mathematica Policy Research, December 21, 2011; Embry M. Howell and Genevieve M. Kenney, “**The Impact of the Medicaid/CHIP Expansions on Children: A Synthesis of the Evidence**,” *Medical Care Research and Review*, Volume 69, Issue 4 (August 2012) p. 372-396.

Graph 1: Medicaid Enrollment, in Millions, 1966-2018, FYE*

*Full-year equivalent (FYE) is equal to average monthly enrollment.

Source: MACPAC data for 2012-2016 are projections. MACPAC data are for fiscal year and include Puerto Rico and Virgin Islands for 1999-2016. Kaiser figures are derived from monthly enrollment figures. 2018 FYE based on data from January-June only. Kaiser data includes CHIP enrollees.



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As part of a cooperative federal-state program, states have some flexibility in determining the eligibility requirements for and range of benefits provided by Medicaid. For example, Medicaid recipients typically become ineligible for the program when they earn a certain level of income, but that precise level is determined by each state. And although offering Medicaid coverage is mandatory under federal law for some groups, such as pregnant women with incomes below 133 percent of the FPL, states still maintain some discretion for providing benefits to other, non-mandatory groups, e.g. single, non-elderly, and non-disabled adults; and for determining which benefits, such as vision or dental coverage, will be provided.

Under the arrangement between federal and state governments for program administration, states cover the initial amount of health care spending for Medicaid recipients and the federal government reimburses them for a portion of that spending. The amount of federal reimbursement is based on the federal medical assistance percentage (FMAP), a formula based on a state's per capita income compared to the national average. For traditional Medicaid, FMAP ranges from a minimum federal reimbursement of 50 percent to more than 75 percent, with the lower FMAP rate for states with higher per capita incomes, and a higher FMAP rate for those with lower per capita incomes. Richer states receive a lower federal reimbursement rate, while poorer states have more of their Medicaid costs subsidized by the federal government.

Given the rising costs of medical care and Medicaid's expanding eligibility, it is not surprising that Medicaid spending is substantial. In 2016, Medicaid spending accounted for 17 percent of total health care spending in the country at \$565.5 billion. Continuing its growth trend from 2015 to 2016, Medicaid spending is expected to surpass \$1 trillion by 2031.³ Thus, it is imperative for state

³ **National Health Expenditure Fact Sheet**, Centers for Medicare and Medicaid Services (Last visited October 2, 2018).

and federal policymakers to better understand why Medicaid spending is increasing and how to ensure the program is sustainable.

Medicaid After the ACA

The ACA significantly changed the size and scope of the Medicaid program. After the Supreme Court’s landmark decision in *NFIB v. Sebelius* held that Congress could not unilaterally and fundamentally change Medicaid’s income eligibility requirements,⁴ the law now gives states the option of expanding Medicaid’s income eligibility to include individuals earning 138 percent of the FPL.⁵ After *NFIB*, states that chose to expand Medicaid now have an effective income eligibility of 138 percent of the FPL, while the non-expansion states can still limit eligibility to below the FPL for some individuals.⁶

With the increased cost of covering more recipients under the ACA-expanded Medicaid, the Medicaid expansion population was initially covered at a 100 percent FMAP rate. That meant that the federal government reimbursed states for almost all of the costs of covering the additional “expansion” recipients.⁷ The FMAP rate will gradually fall to 90 percent in 2020, however, which, although less than the current 100 percent rate, is still a higher reimbursement rate than the traditional Medicaid population.

The rising costs of Medicaid coverage continue to raise two important—and related—policy questions: how does Medicaid eligibility affect individual behaviors; and what benefits accrue to recipients from policies that create incentives to leave the Medicaid program?

This study explores how implementing a “work requirement” for Medicaid eligibility would benefit current Medicaid recipients.

⁴ *National Federation of Independent Business v. Sebelius* (2012).

⁵ While the law established Medicaid eligibility at 133 percent of the federal poverty level, five percent of income is disregarded making the effective eligibility rate 138 percent of poverty.

⁶ **Medicaid Income Eligibility Limits for Adults as a Percent of the Federal Poverty Level**, The Kaiser Family Foundation (Last visited October 2, 2018).

⁷ Administrative costs did not receive the enhanced FMAP rate.

Medicaid and Work

As a means-tested program, Medicaid eligibility is tied to income. Program benefits can be denied or withheld when a recipient's income surpasses a specified threshold. The potential for elimination of benefits places a large implicit marginal tax on income over the designated Medicaid threshold.⁸ Mainstream economic theory posits that any policy that creates an implicit tax on work will reduce work effort.⁹ An income eligibility limit places an implicit "tax" on work insofar as Medicaid benefits may be removed once a certain income level is attained. Thus, Medicaid income-eligibility creates an incentive to reduce work in order to remain eligible for Medicaid.

Medicaid Expansion's Negative Impact on Employment

Economists at the Congressional Budget Office (CBO) analyzed the ACA in 2010 and predicted that the ACA would reduce labor compensation by about 0.5 percent, primarily due to the reduction in labor supply. The primary reason for the projected decline in the labor supply was the ACA's Medicaid expansion.¹⁰ The CBO believed that some people work only to obtain health insurance and would reduce work effort if they could receive Medicaid benefits without having to be employed.

In 2014, another CBO study showed that most effects from the ACA's Medicaid expansion would occur sometime after 2016.¹¹ According to the CBO, the Medicaid expansion would affect both market demand and supply for labor, with the supply side being more heavily affected—a prediction affirmed by subsequent studies. They estimated that hours worked would decline on net by approximately 1.5 to two percent—equal to two million full-time-equivalents (FTE), with an additional 500,000 people leaving the workforce sometime after 2017. The CBO predicted that most of those leaving the workforce would be low-wage earners; and that the reduction in hours worked would be mostly from subsidies given for health insurance purchased through the ACA-mandated insurance exchanges, Medicaid expansion, penalties on employers who declined to offer their employees insurance, and newly imposed taxes.

⁸ The impact of Medicaid enrollment is likely compounded as many enrollees receive other government benefits. Data from the U.S. Census Bureau find that Medicaid enrollment is also tied with enrollment in other government programs. Almost all TANF recipients are also enrolled in Medicaid, 86.4 percent of food stamp recipients are enrolled in Medicaid, and 96.4 percent of recipients of Supplemental Security Income (SSI) are also enrolled in Medicaid. For those that receive Medicaid, seven percent participate in TANF, about a third are enrolled in SNAP and a third are receiving SSI. Since other programs can be means-tested, the implicit tax on benefit enrollees is higher than Medicaid alone.

Kanin L. Reese, *An Analysis of the Characteristics of Multiple Program Participation Using the Survey of Income and Program Participation (SIPP)*, U.S. Department of Commerce, U.S. Census Bureau, June 2006.

⁹ See, e.g., Bruce D. Meyer and Dan T. Rosenbaum, "Making Single Mothers Work: Recent Tax and Welfare Policy and its Effects," *National Tax Journal*, Volume 53, No. 4, Part 2: The Earned Income Tax Credit (December 2000) p. 1027-1061; Barbara A. Butrica, Richard W. Johnson, Karen E. Smith, and C. Eugene Steuerle, "The Implicit Tax on Work at Older Ages," *National Tax Journal*, Volume 59, No. 2 (June 2006), p. 211-234.

¹⁰ Congressional Budget Office, *The Budget and Economic Outlook: An Update*, August 2010.

¹¹ Congressional Budget Office, *The Budget and Economic Outlook: 2014 To 2024, Labor Market Effects of the Affordable Care Act: Updated Estimate; Appendix C*, February 2014.

Economic studies have demonstrated how changes to health insurance markets can, in turn, affect the nation's broader labor market. Mulligan and Gallen (2013) utilized a multi-sector trade model to study how the ACA changes would affect labor through an increase in the implicit tax. They found a three percent decline in hours of work, due primarily to lower-wage workers changing their behavior.¹²

Individual state analyses have shown somewhat mixed results. Garthwaite, et al. (2014) used a natural experiment of large disenrollment from Medicaid in Tennessee (TennCare) to estimate the labor supply impact of Medicaid. They found that for childless adults in their working years with a strong preference for health insurance, a lack of public health options greatly increased their propensity to work. They also estimated that the Medicaid expansion of the ACA would result in a decrease in the employment rate between 0.3 and 0.6 percentage points.¹³ Dague, et al. (2017) recently examined a policy change in Wisconsin that expanded Medicaid to non-elderly, non-disabled adults without dependent children. They found that enrollment in public insurance lowered the employment rate by 5.2 percentage points for these childless adults.¹⁴ A study comparing counties in neighboring states in which one state expanded Medicaid and the other had not, found that Medicaid reduced employment by 1.3 percent after expansion, with the effects dissipating over time.¹⁵ Research examining the Oregon Health Insurance Experiment, by contrast, found insignificant results in terms of Medicaid expansion's impact on recipients' employment rate.¹⁶

The literature on Temporary Assistance for Needy Families (TANF) shows similar patterns of reduced work effort due to disincentives from transfer benefits, but increased labor supply when work requirements were instituted.¹⁷ Research on the Earned Income Tax Credits (EITC) also shows a decrease in labor supply in terms of average hours worked, but an increase in the propensity to be employed. Among families that receive the benefit, spouses of the head of the household reduce their work amount (and therefore labor supply) because doing so leads to a higher benefit for the family due to how the benefit is determined for married couples.¹⁸ The EITC,

¹² Casey Mulligan and Trevor Gallen, **Wedges, Wages, and Productivity under the Affordable Care Act**, working paper, National Bureau of Economic Research, December, 2013.

¹³ Craig Garthwaite, Tal Gross, and Matthew J. Notowidigdo, **"Public Health Insurance, Labor Supply, and Employment Lock,"** *The Quarterly Journal of Economics*, Volume 129, Issue 2 (May 2014) p. 653-696.

¹⁴ Laura Dague, Thomas DeLeire, and Lindsey Leininger, **"The Effect of Public Insurance Coverage for Childless Adults on Labor Supply,"** *American Economic Journal: Economic Policy*, Volume 9, No. 2 (May 2017) p. 124-154.

¹⁵ Lizhong Peng, Xiaohui Guo, and Chad D. Meyerhoefer, **The Effects of Medicaid Expansion on Labor Market Outcomes: Evidence from Border Counties**, working paper, National Bureau of Economic Research, September 2018.

¹⁶ Katherine Baicker, Amy Finkelstein, Jae Song, and Sarah Taubman, **"The Impact of Medicaid on Labor Market Activity and Program Participation: Evidence from the Oregon Health Insurance Experiment,"** *American Economic Review*, Volume 104, No. 5 (May 2014) p. 322-328.

¹⁷ Marianne P. Bitler, Jonah B. Gelbach, and Hilary W. Hoynes, **"What Mean Impacts Miss: Distributional Effects of Welfare Reform Experiments,"** *American Economic Review*, Volume 96, No. 4 (September 2006) p. 988-1012. Robert A. Moffitt, **"Welfare Programs and Labor Supply,"** *Handbook of Public Economics*, Volume 4 ed. by A.J. Auerbach and M. Feldstein (2002) p. 2393-2430.

Bruce Meyer and Dan T. Rosenbaum, **"Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers,"** *The Quarterly Journal of Economics*, Volume 116, Issue 3 (August 2001) p. 1063-1114.

¹⁸ Nada Eissa and Hilary W. Hoynes, **"Taxes and the Labor Market Participation of Married Couples: The Earned Income Tax Credit,"** *Journal of Public Economics*, Volume 88, No. 9-10 (August 2004) p. 1931-1958.

however, increased the total household income and brought new workers into the labor force because qualifying for the EITC requires an earned income.¹⁹

Other studies have claimed that the ACA's expansion of Medicaid causes the labor supply to remain neutral or slightly increase. The Kaiser Family Foundation reviewed multiple studies, claiming to find varying and potentially positive effects of the Medicaid expansion on certain labor supply outcomes.²⁰ Many of these reviewed studies, however, provide an incomplete picture of the effect of the Medicaid expansion.

The Council of Economic Advisers (CEA) has detailed some of the possible effects that work requirements could have on non-cash programs, including Medicaid. The CEA report suggests that imposing work requirements on Medicaid recipients would increase the country's adult labor supply.²¹ They caution, however, that such requirements must be carefully implemented and executed in order to be effective.

Medicaid: Diminishing Work Experience and Earnings

Education, training, and good health are typical examples of human capital that people attain to increase their lifetime earnings and thus increase consumption. As with physical capital, a larger stock of human capital will lead to faster economic growth for the individual and economy as a whole. The 20th century has been called the "human capital century" because educational attainment increased dramatically in the United States and elsewhere, which translated into higher skills and substantial economic growth for more educated societies.²² Extending Medicaid benefits to able-bodied, working-age individuals, however, may reduce investments in human capital by removing an incentive to work or work more hours, thus lowering long-term earnings and adversely affecting their lifetime consumption patterns. For example, although Medicaid provides little- or no-cost health care coverage, that coverage disappears when a worker reaches a threshold income, which means that a Medicaid recipient who otherwise may want to work more hours per week in order to secure a raise or promotion, may choose not to work if doing so would threaten his or her Medicaid benefits. In such circumstances, the Medicaid recipient may feel compelled to sacrifice long-term earnings growth and lifetime consumption in order to not risk losing Medicaid benefits. The disincentive to work, as observed in the literature,²³ lowers available resources for the individual to maintain their level of consumption over their lifetime.²⁴

¹⁹ Here the substitution effect is dominating the income effect, causing the employment rate to increase.

²⁰ Antonisse, Larisa, Rachel Garfield, Robin Rudowitz, and Samantha Artiga. "**The Effects of Medicaid Expansion under the ACA: Updated Findings from a Literature Review**," The Kaiser Family Foundation, May 16, 2018.

²¹ The Council of Economic Advisers, *Expanding Work Requirements in Non-Cash Welfare Programs*, July 2018.

²² Claudia Goldin, "**The Human-Capital Century and American Leadership: Virtues of the Past**," *Journal of Economic History*, Volume 61, Issue 2 (June 2001) p. 263-292.

²³ Laura Dague, Thomas DeLeire, and Lindsey Leininger, "**The Effect of Public Insurance Coverage for Childless Adults on Labor Supply**," *American Economic Journal: Economic Policy*, Volume 9, No. 2 (May 2017) p. 124-154. Casey Mulligan and Trevor Gallen, **Wedges, Wages, and Productivity under the Affordable Care Act**, working paper, National Bureau of Economic Research, December, 2013.

²⁴ According to the permanent income hypothesis, individuals and households make economic decisions based on their expected earnings over the course of their lifetime. To maintain Medicaid eligibility, the ACA expansion group would be forced to work less and thus reduce lifetime earnings and lower their level of consumption.

Time and experience in the workforce affect wages, even among recipients of government aid. Studies have shown that more work experience translates into higher wages over time.²⁵ Loeb and Corcoran (2001), for example, compared the effect of work experience on wage growth for recipients and non-recipients of the Aid to Families with Dependent Children (AFDC) program (abolished in 1996 and replaced with TANF). Although they found that the wage growth associated with more experience was higher for non-recipients than recipients, they showed positive and large returns to experience for both groups. They found that years spent not working had a negative effect on earnings and earnings growth. AFDC recipients had inconsistent labor force participation prior to TANF reform, and their lifetime earnings were estimated to be much lower than those of non-recipients. Loeb and Corcoran's study of earnings and wage growth among AFDC recipients stressed the importance of continuous, uninterrupted work histories on wage growth, and advised using work incentives to balance out the disincentives inherent in such programs. Similarly, insofar as Medicaid is a means-tested program with no direct incentives to work, we demonstrate here that Medicaid recipients also may suffer from inconsistent work patterns that will negatively affect their lifetime earnings.

Time spent out of the work force not only negatively affects earnings directly, due to depreciation of human capital, but also can convey a negative economic "signal" to potential employers and thus limit the possibility for future employment. Spence (1973) characterized a potential employer's decision to hire a new worker as an investment under uncertainty.²⁶ The employer does not know how productive an employee will be in advance. Thus, it is important for job applicants to invest in "signals" that employers value, such as education, work experience, and a demonstrated capacity to remain employed and "on the job." Given two job applicants who differ only in workforce attachment, an employer may interpret an applicant's employment gaps as a sign that he or she is less likely to stay at the company long-term. The longer it takes an employee to find a new job, the more his or her stock of human capital will depreciate, further undermining long-term wage growth potential. Medicaid recipients who take time out of the labor force may send a negative signal to potential employers that further reduce their lifetime earnings. Therefore, encouraging labor force attachment through a work requirement—and thus preventing depreciation of human capital—can send a positive signal to employers. This could lead to better employment opportunities with higher potential wages for Medicaid recipients.

Medicaid's income-eligibility requirement negatively affects labor force participation by creating a disincentive for Medicaid recipients to maintain meaningful employment. Data and theory show that this disincentive, in turn, reduces human capital in the long-term as Medicaid recipients drop out of or never join the labor force. The analysis in the next section quantifies this loss of human capital.

²⁵ Susanna Loeb and Mary Corcoran, "**Welfare, Work Experience, and Economic Self-Sufficiency**," *Journal of Policy Analysis and Management*, Volume 20, No. 1 (Winter 2001) p. 1-20.

²⁶ Michael Spence, "**Job Market Signaling**," *The Quarterly Journal of Economics*, Volume 87, No. 3 (August 1973) p. 355-374.

Analyzing the Benefits of Work Requirements: Methods and Results

Imposing a work requirement on Medicaid eligibility may change the work behaviors of single, able-bodied adults with no children. Using publicly available data, we develop an empirical framework for estimating the effect of Medicaid work requirements on the lifetime income gains of Medicaid recipients who change their behavior to satisfy those requirements.

Data for Analyzing Work Behaviors and Earnings

We use publicly-available, individual-level data to analyze the effect of a work requirement for Medicaid eligibility. This data come from the American Community Survey (ACS) from 2008 to 2016. The ACS is an annual survey conducted by the U.S. Census Bureau to gather information on the United States population at the individual level. The survey includes information on demographics, educational attainment, work-related outcomes and choice, migration information, and disability-related data. The ACS information on wage income and work decisions are used to study what effect a work requirement could have on single, able-bodied adults with no dependent children. We partition the data in order to focus on individuals affected by the ACA's Medicaid expansion (single, able-bodied adults with no child dependents) and who report having Medicaid coverage.²⁷ Individuals in the military or enrolled in school are excluded. The analysis that follows includes only individuals in their working years, ages 18 to 65.²⁸

Approach to Evaluating the Effect of Work Requirements

Eligibility work requirements will be binding for those who will need to change their behavior to fulfill the requirements. Table 1 presents the states that have adopted the Medicaid expansion and have applied for the Section 1115 demonstration waivers to implement work requirements.

²⁷ The sample is limited to those who are only covered on Medicaid. There are individuals who report Medicaid coverage along with an additional form of health coverage, e.g. private insurance. Since individuals with other types of coverage as well as Medicaid will be able to rely on the alternative coverage even if they are not fulfilling work requirements, this analysis is limited to only those reported to have Medicaid insurance.

²⁸ Although the Social Security full retirement age is increasing to age 67, the analysis is focused on a period of time when individuals who are age 65 can still claim full retirement benefits from Social Security.

Table 1: Work Requirements of States That Have Applied for 1115 Waivers

State	Hours Requirement	Application Status
Arkansas	80/month	Approved
Arizona	20/week	Pending
Indiana	Up to 20/week	Approved
Kentucky	80/month	Approved*
Michigan	80/month	Pending
New Hampshire	100/month	Approved
Ohio	80/month	Pending

Source: Approved and Pending Work Requirement Waivers – Covered Populations, Age Exemptions, and Hours Required, as of September 28, 2018, The Kaiser Family Foundation (Last visited October 3, 2018).

*In June 2018, the DC federal district court invalidated the waiver approval for Kentucky and sent it back to HHS for consideration of the work requirement and several other aspects of the waiver.



States that have introduced Medicaid work requirements typically require eligible individuals to work approximately 20 hours per week.²⁹ Some exemptions are granted to those who are disabled or unable to work due to medical conditions, those who are responsible for dependents (both children and elderly or disabled individuals), and pregnant women. Although many Medicaid recipients may already be working enough to maintain Medicaid eligibility, others are not and will need to modify their behavior.

We estimate the effect of imposing work requirements on individuals who would need to change their behavior to satisfy those requirements and maintain Medicaid eligibility, by comparing individuals who must increase their working hours to meet the requirements (treatment group) to those individuals already working enough to maintain eligibility (control group). We study those already receiving Medicaid who became eligible as a result of the ACA's Medicaid expansion and would need to satisfy the work requirement, i.e., single, able-bodied adults with no dependents. The estimated effect assumes that the treatment group changes their behavior to match that of the control group. We assume that all enrollees would satisfy the work requirement.³⁰

The outcomes of interest include the decision to work, hours worked (conditional on working), and lifetime earnings. Two descriptive empirical frameworks demonstrate the work requirement's effect. The first explains the difference in outcomes across all ages between those who already satisfy the requirement and those who would need to modify their behavior in order to satisfy it. The first empirical framework takes the following form:

$$Y_i = \beta T_i + X_i' \beta_X + v_i$$

²⁹ In some states, the requirement can be satisfied with activities outside of strictly working, such as job searching, training programs, and education. The analysis assumes that the requirement is satisfied strictly through increased work activity and not through some of these alternative activities.

³⁰ This analysis does not estimate the effect of potential Medicaid dropouts as a result of work requirements. This is a topic meant for further research.

where the treatment T for individual i is equal to one if the individual needs to modify their behavior in order to maintain eligibility for Medicaid and zero if the individual already meets the work requirements. This model is used for analyzing how average hours worked per week and employment rates would change if the work requirement is implemented. The effect is estimated separately for males and females.

The second framework helps estimate the difference for each age between the two groups to generate the effect of work requirements on lifecycle earnings. First, the earnings profiles for each group, controlling for normal factors, are estimated. The difference between the two profiles is assumed to be the effect of implementing the work requirements. This second model takes the following form:

$$Y_i = \alpha_1 age_i + \alpha_2 age_i^2 + \alpha_3 age_i^3 + \alpha_4 age_i^4 + X_i' \alpha_X + \mu_i \text{ if } T = T_i$$

where the outcome is log real (2009 dollars) wage income,³¹ and the profile of the lifecycle earnings is quantified using α_1 through α_4 and the age quartic. Here, the interpretation of the α_1 through α_4 terms is the change in earnings as result of experience. Age is used as a proxy for experience. Since individuals in the treatment group are less likely to accumulate earnings as quickly as those in the control group, the profiles are run separately for each group to capture the differences in earnings growth over the individual's lifetime. The difference between the two profiles represents the effect of the work requirement. Using ACS data, the controls in X , for both regression analyses, include an age quartic, race, race and age interactions, education indicators, year fixed effects, and state fixed effects. Similar to the first model, the profiles are estimated separately for men and women.

Some individuals will be exempt from the work requirement even if they work less than the mandatory hours of work needed to maintain eligibility because of certain exemption conditions, e.g., a pregnant woman or an individual that needs to care for dependents. Therefore, the sample is defined to estimate the effect of the work requirement by only analyzing those who are on Medicaid, single, able-bodied, and with no child dependents younger than the age of 18.

Findings: The Effect of Work Requirements

Table 2 shows the potential effect of the work requirement on the extensive margin to work and hours worked, conditioned already on working, where the effect is averaged over all ages. As the treatment group works less than 20 hours per week, the interpretation of the effect of work requirements on the decision to work for those in the treatment group would be full employment of that group to maintain eligibility. The estimated effect is the proportion of the group who would become employed to reach full employment.

³¹ Comparing dollar figures across time is difficult due to inflation. In order to compare wage income over time, the Consumer Price Index, maintained by the Bureau of Labor Statistics and a common source for inflation from year-to-year, was used to set all wage income into real dollars from the same year, 2009. This ensured that the analysis was not affected by potential shifts in inflation from one year to another and could capture the effect of the age quartic on wage income for each group.

Table 2: Estimated Effect of Work Requirements in Employment and Hours Worked

	Women On Medicaid Only	Men On Medicaid Only	Women On Medicaid & Other Insurance	Men On Medicaid & Other Insurance
Percentage Point Increase in Employed				
Effect of Work Requirements	+0.8544 (0.0022)	+0.9111 (0.0017)	+0.8481 (0.0024)	+0.9135 (0.0018)
Sample Size	52,912	65,784	43,588	55,206
Increase in Hours Worked Per Week*				
Effect of Work Requirements	+22.33 (0.17)	+25.53 (0.19)	+22.05 (0.18)	+25.35 (0.22)
Sample Size	27,675	28,000	23,981	24,019

Source: Analysis of American Community Survey Data (2008-2016) by Buckeye's Economic Research Center.

Note: Standard errors are reported in parentheses.

*Conditional on person already being employed.



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Of those who would not be able to find work, there are certain exemptions in most work requirements that still grant Medicaid eligibility despite not working.³² Similar exemptions exist in other federal benefit programs such as SNAP. But individuals who are not exempt must be engaged in an activity geared towards finding employment, e.g. education, training, or job searching. Therefore, a policy that encourages individuals to work at least 20 hours per week will tend to induce their full employment over time.

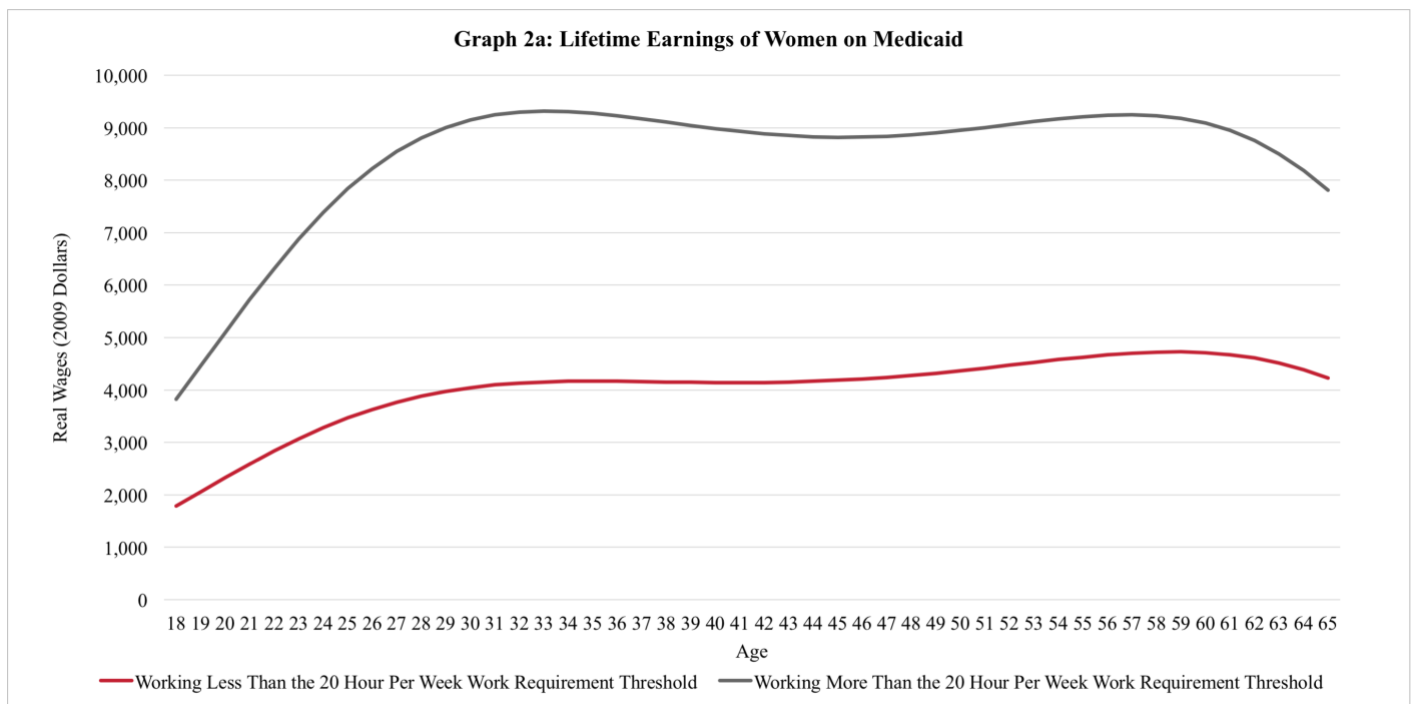
For those already working, the number of hours worked would also be expected to increase. We find that if women on Medicaid working less than 20 hours per week changed their behavior to match that of women who already satisfy the work requirement, they would increase their hours worked per week by 22.1 hours. Similarly, comparable men would increase their weekly hours worked by 25.4. This may appear to slightly overstate the increase in hours worked since individuals on average would only need to increase their work time to 20 hours per week. As individuals increase their work hours, however, they gain human capital through experience, which can lead to higher wages and increased labor supply. Therefore, we assume that the overall effect of work requirements would draw workers above 20 hours per week over time, which implies that the results are consistent with the theory.

The work requirement's effect on lifetime earnings stems from two sources: 1) an increase in hours worked; and 2) an increase in the hourly wage. With more experience through increased labor supply, individuals would see their hourly wage rise as well. Therefore, the effect on lifetime income would be more than just the proportional increase in hours worked. The effect is measured through the difference in lifecycle earnings for the two groups, controlling for normal factors. Graphs 2a and 2b present the two wage profiles of the treatment and control groups from the

³² A partial list of exemptions includes full time students, pregnant mothers, disability and primary caretakers of a dependent.

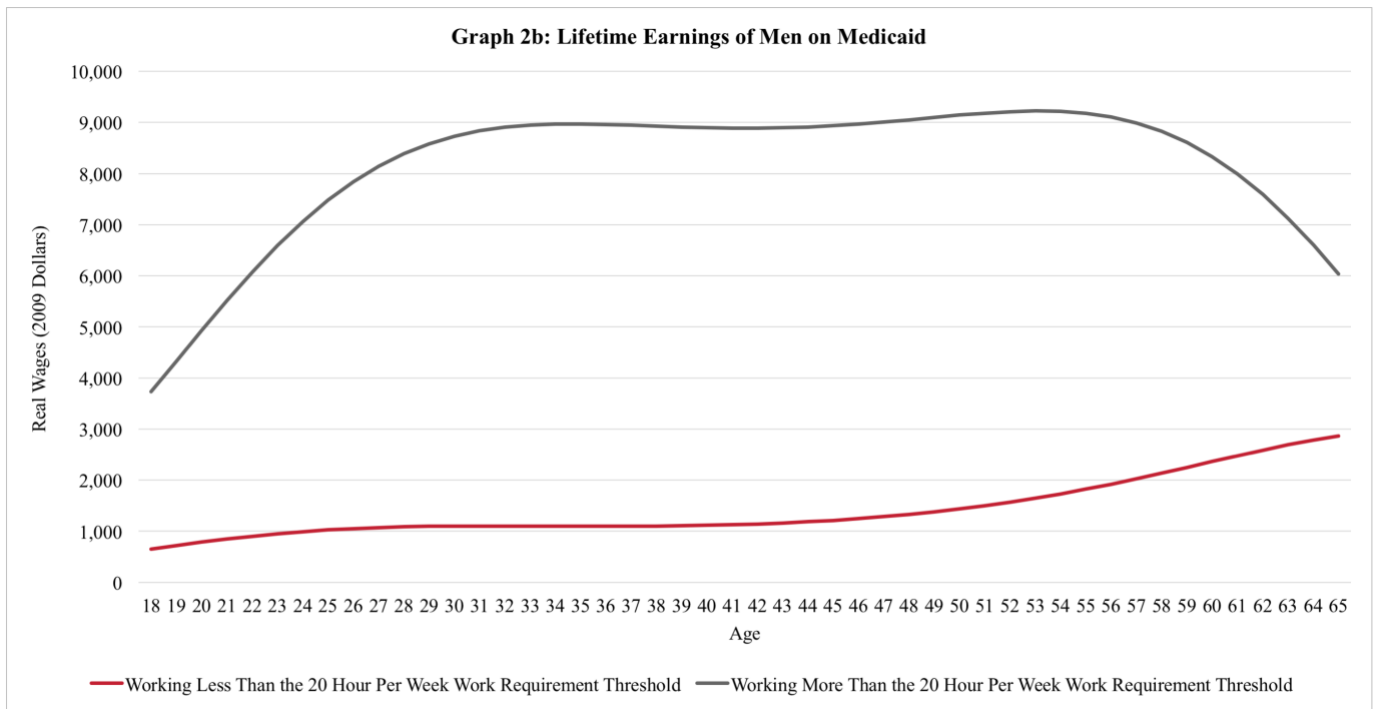
empirical analyses for men and women, separately. Holding all else equal, the coefficients on the age quartic generate the profiles.

According to the framework, the work requirement leads to much higher real lifetime earnings. The lifetime, real, undiscounted difference in earnings is \$212,694 for women with Medicaid coverage, and \$323,539 for men with Medicaid coverage.³³ Assuming the work requirement shifts the behavior of the treatment group to match that of the control group, these effects represent the lifetime effect of work requirements on earnings for an individual in the sample who maintains Medicaid throughout their working life. This effect is the sum of the difference in earnings across working years for those in the sample, but likely understates the value of a work requirement for the average person because theory suggests that as individuals work more their wages increase with their experience, increasing their work up to fulltime work.



Source: Analysis of American Community Survey Data (2008-2016) by Buckeye's Economic Research Center. Sample size of analysis: 25,316.

³³ For robustness, limiting the sample to those with Medicaid coverage and another type of coverage, the lifetime earnings for women falls to \$121,327 and rises to \$365,658 for men.



Source: Analysis of American Community Survey Data (2008-2016) by Buckeye's Economic Research Center. Sample size of analysis: 25,316.

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The relatively flat growth in earnings for the control group implies that the group is not retaining enough human capital to experience substantial wage growth or is penalized for being out of the labor force for extended periods. The difference in the two profiles captures increased hours worked and experience. Illustrating the gains in lifetime earnings due to work requirements for a given age, Tables 3a and 3b present the lifetime earnings increase for an individual at a given age in the treatment group due to the work requirements.³⁴ For example, a 30-year-old male who must change his behavior to maintain Medicaid eligibility due to work requirements is estimated to experience a lifetime increase in real earnings of \$237,114.

³⁴ This table is constructed by shifting the profile of the control group to start at the given age of an individual in the treatment group and taking the difference in earnings at each age up to age 65 of the treatment group. That is, for a 30-year-old male in the treatment group, their earnings would be expected to increase to that of an 18-year-old in the control group in the first year of the work requirement. Then when they are age 31, the increase in earnings is represented by the difference between a 19-year-old in the control group and their expected 31-year-old earnings if they would not need to satisfy a work requirement. The estimated effect at each age continues up to when the individual in the treatment group would be age 65, compared to the earnings of an individual in the control group at age 53. The lifetime earnings gains are then represented by the sum of the differences across those ages and profiles. The increases in the impact on earnings at age 55 and beyond are a result of the horizontal shift in the profile for those already working enough to satisfy the work requirement. The shift in the profile for the control group starts at age 25 for those 55 and older as it is assumed those near the end of their prime-age working years would be similar to those at the start of their prime-age working years in terms of experience and human capital.

Table 3: Real Lifetime Earnings Increase in 2009 Dollars by Age at Which Medicaid Recipient Began Meeting the 20 Hour Per Week Work Requirement

Age	Men	Women	Age	Men	Women
18	\$323,539	\$212,694	42	\$141,856	\$85,512
19	\$318,146	\$206,671	43	\$134,111	\$80,725
20	\$312,257	\$200,539	44	\$126,375	\$75,893
21	\$305,917	\$194,362	45	\$118,649	\$71,014
22	\$299,176	\$188,195	46	\$110,933	\$66,092
23	\$292,088	\$182,083	47	\$103,232	\$61,134
24	\$284,709	\$176,064	48	\$95,553	\$56,149
25	\$277,094	\$170,163	49	\$87,909	\$51,153
26	\$269,294	\$164,399	50	\$80,318	\$46,168
27	\$261,356	\$158,779	51	\$72,803	\$41,220
28	\$253,324	\$153,307	52	\$65,394	\$36,339
29	\$245,233	\$147,979	53	\$58,126	\$31,564
30	\$237,114	\$142,785	54	\$51,042	\$26,938
31	\$228,991	\$137,713	55	\$67,898	\$47,433
32	\$220,884	\$132,750	56	\$60,749	\$42,786
33	\$212,805	\$127,879	57	\$53,702	\$38,150
34	\$204,764	\$123,083	58	\$46,778	\$33,537
35	\$196,765	\$118,345	59	\$40,004	\$28,962
36	\$188,812	\$113,648	60	\$33,414	\$24,444
37	\$180,902	\$108,976	61	\$27,044	\$20,007
38	\$173,032	\$104,314	62	\$20,935	\$15,676
39	\$165,198	\$99,648	63	\$15,131	\$11,480
40	\$157,395	\$94,966	64	\$9,678	\$7,448
41	\$149,616	\$90,256	65	\$4,620	\$3,611

Source: Analysis of American Community Survey Data (2008-2016) by Buckeye's Economic Research Center.

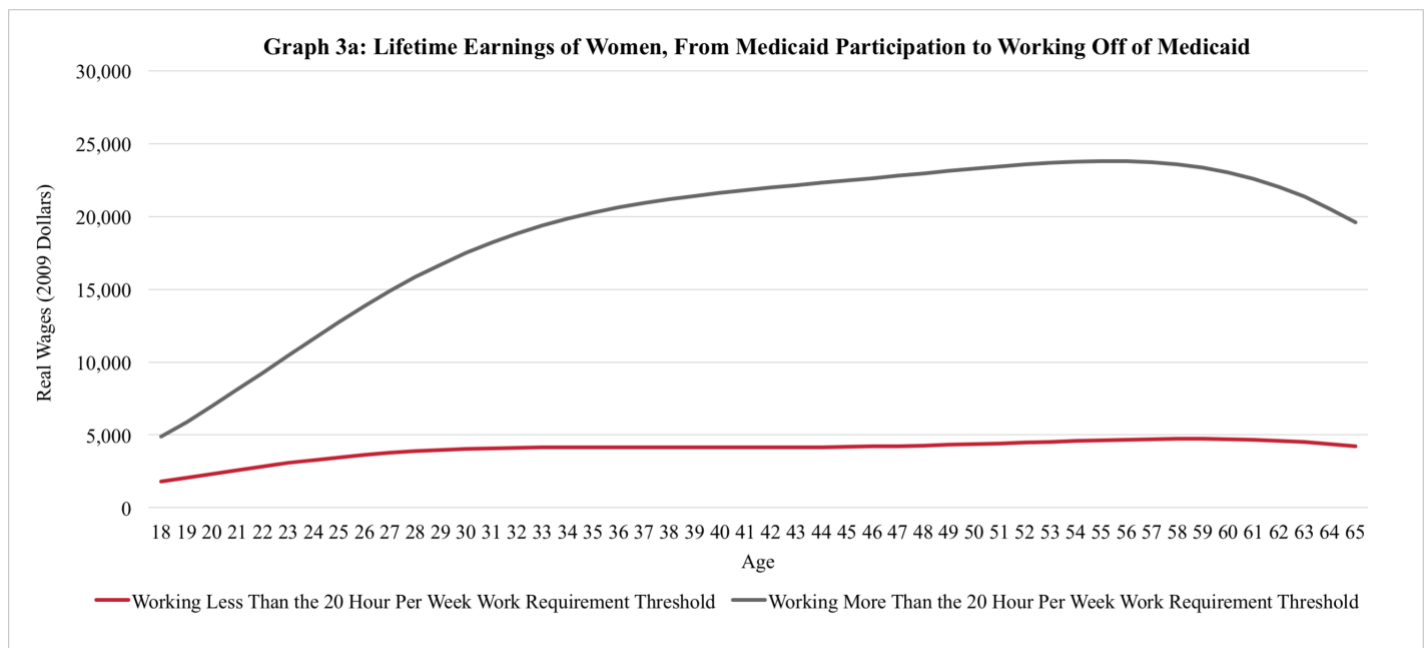


The estimate contains another potential bias because it assumes that individuals in both the treatment group and control group stay on Medicaid their entire working lives. An individual's duration on Medicaid varies greatly, however, and may not be consistent over an extended period.³⁵ If individuals working less than 20 hours per week were more likely to exit Medicaid due to earning more in wage income than those who work more than 20 hours per week, the estimates would be an overstatement. But if those who are already working at least part-time hours are more likely to leave Medicaid (because they earn too much income) than their less than 20-hour workweek counterparts, the estimates may be biased downward.

³⁵ Mark C. Berg and Dan A. Black, "The Duration of Medicaid Spells: An Analysis Using Flow and Stock Samples," *The Review of Economics and Statistics*, Volume 80, Issue 4 (November 1998) p. 667-675.

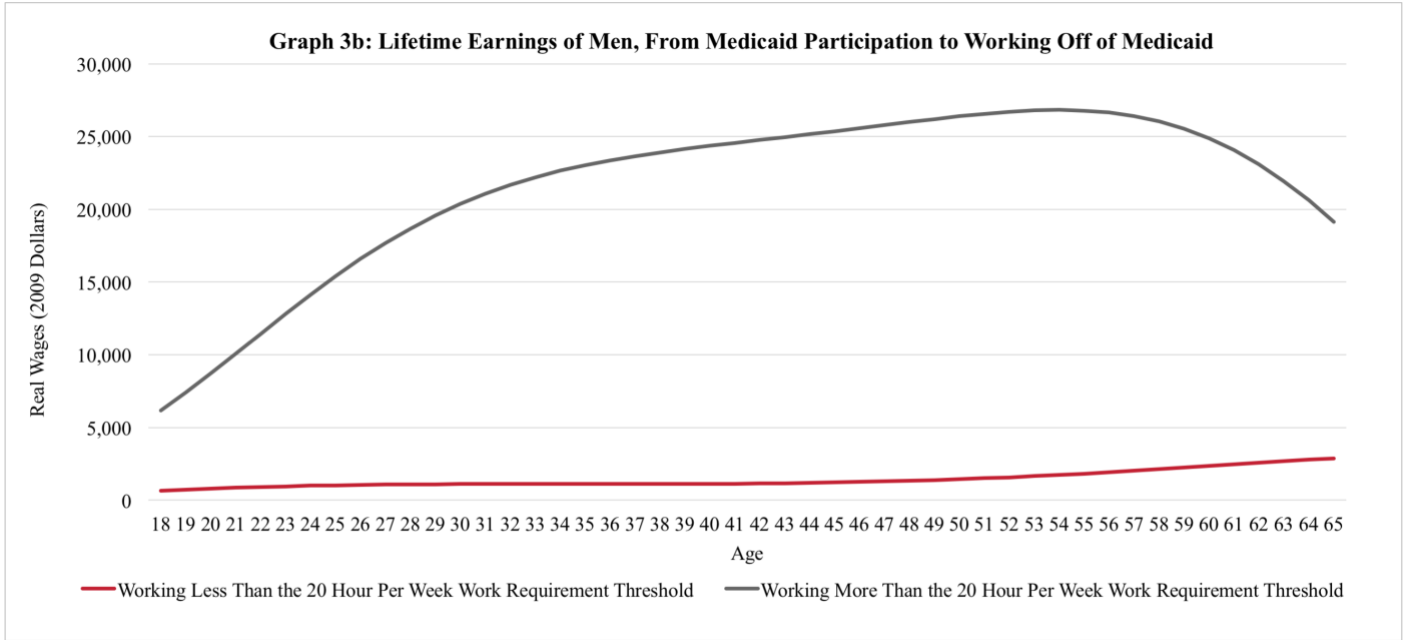
Exploring data from the 2014 Wave 2 of the Survey of Income and Program Participation (SIPP)³⁶ reveals that, regardless of working more or less than 20 hours per week, single, working-age individuals with no child dependents tend to stay on Medicaid for at least one year. If there was more available data tracking individual work activities and Medicaid receipt in Medicaid expansion states over time, we could refine the analysis and study the income dynamics of Medicaid recipients. Such data are not yet available.

As an alternative analysis, another empirical framework compares the treatment group of individuals only on Medicaid to individuals working more than 20 hours per week, regardless of Medicaid coverage. The control group is expanded to explore the potential lifetime gains of earnings to individuals who work their way off of Medicaid due to the work requirement and follow a career path similar to those not on Medicaid. The method to estimate the profile for this new control group is similar to that described above. The difference between the two earnings profiles represents the total effect of the work requirement, transitioning individuals with higher earnings off of Medicaid. The results are presented in Graphs 3a and 3b.



Source: Economic Research Center analysis of American Community Survey Data (2008-2016). Sample Size of analysis: 268,179. Working less than the work requirement threshold group implies they are on Medicaid. Working more than the work requirement threshold group may be on Medicaid or may not.

³⁶ SIPP is maintained by the U.S. Census Bureau and contains information on participation in public welfare programs over time.



Source: Economic Research Center analysis of American Community Survey Data (2008-2016). Sample Size of analysis: 333,316. Working less than the work requirement threshold group implies they are on Medicaid. Working more than the work requirement threshold group may be on Medicaid or may not.

Under this scenario, the work requirement has the potential to increase men's lifetime real wage income by \$967,770, and \$725,743 for women.

Conclusion

Implementing work requirements for benefits eligibility creates an incentive for individuals to increase human capital investment through the labor market. With understandable exceptions for some unable to meet those requirements, we find that work requirements on able-bodied adults with no dependents may lead to significant potential economic benefits for these individuals.

Adopting a work requirement for Medicaid eligibility can move able-bodied adults without dependents toward the goal of full employment. Some individuals may opt not to work or be unable to find work, but reasonable exemptions, such as attending school or pursuing career training, will allow otherwise ineligible individuals to maintain Medicaid eligibility without working. Such “community engagement” activities build human capital and increase the likelihood of future employment as well as lifetime earnings, keeping these individuals on track for full employment.

We find that implementing Medicaid work requirements has the potential to raise the usual weekly hours worked between 22 and 25 hours (more than half a full-time work week), well above the typical 20 hours per week requirement. As individuals work more, they gain experience and that experience translates into higher wages and even more hours worked, leading up to full-time employment. With single, able-bodied individuals with no dependents on Medicaid averaging approximately 11 hours of work per week, the 22- to 25-hour increase in work hours confirms that individuals would tend towards full-time work if required to work at least 20 hours per week. Moreover, the overall effect of work requirements on lifetime earnings can be quite substantial. An individual on Medicaid who increases their work experience and skill development can potentially earn a million dollars more over their lifetime.

The results of our analysis must be caveated. The income profiles, like all similar profiles, do not show or predict how any given individual’s income may change over the course of their life. They indicate the average values for income for each age, holding a number of individual characteristics constant. Here, these are average incomes at each age, holding Medicaid status, disability status, marital status, parental status, and employment status constant. For most people, none of these characteristics are constant across their lifetimes. Put another way, the typical individual on Medicaid at age 20 does not necessarily become the typical individual on Medicaid at age 50. This means that a precise interpretation of the lifetime income gains from work requirements described would be the *cumulative of average gains across ages* among those currently on Medicaid who are targeted by work requirements.

Holding Medicaid status constant for the sample is an assumption. As the group of single, able-bodied adults is new to Medicaid eligibility, little is known about how often this group transitions on and off of Medicaid, especially conditional on how much they may or not may not be working. According to a Census Bureau analysis of SIPP data for 2009-2012, 35.6 percent of all participants stay on Medicaid for less than a year, and 35.3 percent stay on it for more than three years (Irving & Loveless, 2015).³⁷ More recent SIPP data (Wave 2 of the 2014 SIPP) suggest that the group effected most by Medicaid work requirements (primarily those childless, working-age adults who are not disabled and part of the Medicaid expansion group) stay enrolled in Medicaid for at least a

³⁷ Shelley K. Irving and Tracy A. Loveless, *Dynamics of Economic Well-Being: Participation in Government Programs, 2009-2012: Who Gets Assistance?*, Household Economic Studies, U.S. Census Bureau, May 28, 2015.

year at a higher rate, but the sample size for this subgroup is too small to conduct complex analysis at this time.

This paper can be a basis for further study of the Medicaid expansion group and work-related outcomes. The lifetime profile of earnings by individuals on Medicaid assumes Medicaid enrollment for the entire life of the individual and that, in the absence of work requirements, individuals who work less than 20 hours per week will continue to do so for the remainder of their lives. In reality, people improve their earnings enough to leave Medicaid, increase their hours worked on their own, or just enroll in Medicaid while between jobs only to dis-enroll when they find work. Data that allow for tracking and comparing individuals on Medicaid across time would permit a more refined duration analysis. With such data, an ideal analysis could examine how work requirements affect the duration of time that people spend enrolled in Medicaid, the duration of time people on Medicaid spend looking for work, and from that, calculate changes to lifetime earnings with more precision.

Implementing work requirements will not be without its political and administrative difficulties. But some foreseeable difficulties, such as the unplanned program dropouts and the increased costs of authenticating new eligibility requirements, can be managed with some relatively simple steps.

State and federal Medicaid departments will need to plan ahead and train their case workers adequately in order to ensure effective communication about and administration of the new policy. Medicaid departments should also conduct an information campaign to educate current Medicaid recipients regarding the changes to eligibility requirements, how they will be affected, and what new steps may be required for maintaining eligibility.

Linking recipients to work programs, apprenticeships, training programs, and recruiting and employment agencies will help ensure that eligible recipients fulfill the requirement and avoid unnecessary lapses in Medicaid coverage. And policymakers could require all employers to report employee hours to their state Medicaid agencies, lowering the compliance cost for individual recipients at a minimal cost to employers.

These suggested remedies may help ensure that all eligible individuals maintain Medicaid coverage, minimize program disenrollment due to inadvertent non-compliance, and expand opportunities for Medicaid recipients to increase their earnings and live independent of Medicaid.

About the Authors



Rea S. Hederman Jr. is the executive director of the Economic Research Center and vice president of policy at The Buckeye Institute. In this role, Hederman oversees Buckeye's research and policy output. A nationally recognized expert in healthcare policy and tax policy, Hederman has published numerous reports and papers looking at returning health care power to the states, the impact of policy changes on a state's economy, labor markets, and how to reform tax systems to spur economic growth.

Prior to joining Buckeye, Hederman was director, and a founding member of the Center for Data Analysis (CDA) at the Heritage Foundation, where he served as the organization's top "number cruncher." Under Hederman's leadership, the CDA provided state-of-the-art economic modeling, database products, and original studies.

While at Heritage, Hederman oversaw technical research on taxes, health care, income and poverty, entitlements, energy, education, and employment, among other policy and economic issues, and he was responsible for managing the foundation's legislative statistical analysis and econometric modeling.

In 2014, Hederman was admitted into the prestigious Cosmos Club as a recognition of his scholarship. He graduated from Georgetown Public Policy Institute with a Master of Public Policy degree and holds a Bachelor of Arts degree in history and foreign affairs from the University of Virginia.



Andrew J. Kidd, Ph.D. is an economist with the Economic Research Center at The Buckeye Institute. In this position, Kidd conducts and produces original economic research that looks at and analyzes the impact of state and federal policies on peoples' lives and on the economy.

Prior to joining The Buckeye Institute, Kidd worked in litigation consulting, providing expert testimony related to economic damages in legal cases. Kidd also served as a research assistant at the UW Population Health Institute at the University of Wisconsin-Madison, which, through its health policy group, performs research and analysis projects on health care access, cost, financing, health system performance, and quality. During his time at the University of Wisconsin-Madison, Kidd's research focus was in demography, education, labor outcomes, and the effects of public policy on labor, education, and health outcomes. He was a College of Letters and Science teaching fellow and was awarded the Anna Morris Ely Teaching Award from the Department of Economics. While there, he taught classes in wages and the labor market, analytical public finance, the principles of microeconomics, and the principles of macroeconomics.

Kidd continues to study questions regarding labor markets and the effects of public policy and demographics on labor market outcomes and behaviors, as well as evaluating health care policy and education policy. A native of Lima, Ohio, Kidd received his bachelor's degree in economics and mathematics from the University of Notre Dame before completing his master's degree and his doctorate in economics from the University of Wisconsin-Madison.

Tyler Shankel

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Prior to joining Buckeye's Economic Research Center, Shankel was a research contractor at the Institute for Humane Studies at George Mason University. In that role, he reviewed the works of scholars from around the world and provided recommendations on how to best work with them to forward the organization's mission.

Shankel attended the University of Colorado Boulder's economics doctorate program before returning to Columbus. While at the University of Colorado, he worked on a project that examined the causal factors relating to internal migration patterns within Canada, to be compared with their effects on new immigrants settling throughout Canada.

Shankel earned his bachelor's degree in economics and a minor in Persian from The Ohio State University. There, he worked on a comprehensive policy analysis project examining land tenure reform on Indian reservations, and other policy issues relating to economic development in Native American communities.

James B. Woodward, Ph.D.

James B. Woodward, Ph.D. is an economic research analyst with the Economic Research Center at The Buckeye Institute. In this position he collects economic data, performs research, and writes about economic policy issues.

Prior to joining The Buckeye Institute, Woodward earned his Master of Public Policy and a Ph.D. in public policy from the University of Kentucky. During his time there, Woodward worked for the commonwealth's Hazard Mitigation Grant program, helping to verify the quality of regional emergency preparedness plans. He also performed policy-related research for the Commonwealth Council on Developmental Disabilities, contributing to a paper on possible, new treatment options for those with disabilities.

Woodward has also spent time researching public economics, health economics, and occupational licensing. His dissertation, *American Obesity: Rooted in Uncertainty, Institutions, and Public Policy*, looked at the role bad public policy (as opposed to consumers and/or market forces) may have played in the rapid increase in obesity rates.



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Healthy and Working: Benefits of Work Requirements for Medicaid Recipients

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