Virginia Medicaid Expansion: Informing a Section 1115 Demonstration

VIRGINIA'S MEDICAID PROGRAM
DMAS
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UNIVERSITY of VIRGINIA
FRANK BATTEN SCHOOL of LEADERSHIP and PUBLIC POLICY

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Disclaimer

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On my honor as a student, I pledge that I have neither given nor received unauthorized aid on this assignment.

Executive Summary

Virginia's passage of Medicaid Expansion has afforded the opportunity for roughly 423,000 Virginians to gain access to health insurance, 138,000 of whom would otherwise have lacked coverage. While this change is an opportunity to provide coverage to many individuals, the Commonwealth of Virginia is tasked with determining an innovative way to provide coverage, while also empowering individuals to improve their health, obtain other insurance, and ensure the long-term sustainability of the Medicaid program. In order to do so, Virginia's Department of Medical Assistance Services (DMAS) summitted a Section 1115 application to the Center for Medicare and Medicaid Services (CMS) to impose conditions on Medicaid beneficiaries. Based on what other states have done, this typically looks like imposing work requirements or charging premiums and co-payments for services in order to ensure more efficient utilization of health insurance coverage.

Tradeoffs exist in terms of providing insurance coverage for individuals. Providing coverage poses a cost to the Commonwealth, but provides the individual with needed access to care. Losing health insurance coverage typically results in worsening individual financial outcomes and has the potential to decrease health outcomes, which could both impose negative externalities on society. However, failing to develop an efficient program could threaten the long-term sustainability of Virginia's Medicaid program.

Drawing on insights from other states and similar programs, along with Virginia's Section 1115 Waiver Application, I first conduct an analysis using the American Community Survey (ACS) to gain an understanding of what the expansion population looks like. I then propose various alternatives to consider imposing on program recipients. This report examines some of those conditions in order to determine what best meets policy objectives. The following four alternatives are considered and compared to the baseline:

- Baseline (Medicaid Expansion without any conditions imposed)
- Work/Community Engagement Requirements ("Work Requirements")
- Monthly Premiums
- Co-Payments for non-emergent usage of the emergency room ("Co-Pays")
- Healthy Behavior Incentives

Each of these alternatives will be assessed upon the following six criteria: cost-effectiveness, impacts to health outcomes, long-term sustainability, employment outcomes, equity concerns, and financial well-being.

Based upon my analysis of the projected outcomes of each of these alternatives, I recommend Alternative Three: requiring monthly premiums for individuals on Medicaid. This alternative will involve individuals with incomes 100-138% of the FPL, without any enumerated exemptions, (projected around roughly 42,000 individuals) to pay $5-$10 in monthly premiums in exchange for insurance coverage. This alternative will require a concerted effort to notify individuals subject to the requirement of this change in coverage. This option is the most cost-effective, and one of the most equitable. I also consider the trade-offs for health and financial well-being. At the end of this report, I provide some guidelines for how DMAS might consider to implement such an alternative, as well as a recommendation for a program impact evaluation.

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Acronyms and Key Terms

ACA – Affordable Care Act (short name for the Patient Protection and Affordable Care Act of 2010)
FPL – Federal Poverty Level
CHIP – Children's Health Insurance Program
HHS – Health of Human Services (Department of Health and Human Services)
CMS – Center for Medicare and Medicaid Services
DMAS – Virginia Department of Medical Assistance Services
HWA – Health and Wellness Accounts
KFF – Kaiser Family Foundation
BCR – Benefit-Cost Ratio
NPV – Net Present Value
BRR – Benefit Reduction Rate
ACS – American Community Survey
SSI – Supplemental Security Income
SSDI – Social Security Disability Insurance
ER – Emergency Room
ED – Emergency Department
FY – Fiscal Year
JLARC - Joint Legislative Audit & Review Commission
VDSS – Virginia Department of Social Services

Problem Statement:

After passing Medicaid Expansion, the Virginia Legislature directed the Virginia Department of Medical Assistance Services to devise a Section 1115 demonstration to introduce conditions on some of the projected 423,000 Medicaid recipients. The goal of which is to "empower individuals to improve their health and well-being and gain employer-sponsored coverage or other commercial health insurance coverage, while simultaneously ensuring the program's long-term fiscal stability" (Office of Health and Human Resources, 2018). The role of this project will be to determine a condition that will optimally achieve the objective of ensuring a sustainable Medicaid program, while still serving program beneficiaries. In theory, the main way to reduce expenses for the state is by disenrolling individuals from coverage, which is fundamentally contrary to the goal of Medicaid, but may be necessary in order to manage the program long-term. Otherwise, the Commonwealth must explore other cost-savings mechanisms, while trying not to sacrifice quality, access, or health benefits.

Policy History:

Virginia's Medicaid Expansion provides the potential for 423,000 individuals to obtain health insurance coverage, 138,000 who otherwise wouldn't have been able to obtain coverage. Such a large program will offer the potential to make drastic improvements in the lives of many, but also poses significant challenges. DMAS is tasked with developing a program that empowers individuals to improve their health and well-being, while also trying ensure the long-term sustainability of the Medicaid program.

Overview:

The Affordable Care Act provides federal funding to assist states in expanding Medicaid eligibility to adults with incomes up to 138% of the federal poverty level (Medicaid and CHIP Payment and Access Commission, 2018). In May 2018, the Virginia Legislature voted to expand Medicaid eligibility to Virginians with incomes up to 138% of the federal poverty level, currently up to $16,643 for an individual (Vozella & Schneider, 2018). In June 2018, Governor Ralph Northam approved the 2018 Appropriations Act which, in part, directed DMAS to expand Medicaid coverage in Virginia to non-disabled, non-pregnant adults aged 19 to 64 with incomes up to 138% FPL, which ended up going into effect on January 1, 2019. The Appropriations Act also directed DMAS to seek a waiver from CMS under Section 1115(a) of the Social Security Act to introduce new experimental, program features and conditions on recipients. The goal is to impose conditions on individuals in order to help reduce costs or remove individuals from Medicaid coverage with the objective of transitioning them to employer coverage.

Section 1115(a) of the Social Security Act grants power to the Secretary of Health and Human Services (HHS) to waive provisions of Medicaid and CHIP statues in order to allow states to establish an "experimental, pilot or demonstration" project, that promotes the objectives of the Medicaid program (The Kaiser Family Foundation, 2012). In effect, this allows states to pilot some sort of conditions on Medicaid recipients in order to receive the benefit, typically enforced as a work/ community engagement requirement or cost-sharing program.

In January 2018, CMS established new policy guidance that allowed states to explore work requirements as a condition on Medicaid recipients for the first time, with the aim of helping Medicaid beneficiaries improve well-being, improve mental, physical, emotional health, and achieve self-sufficiency, the overarching goal, and rationale for imposing these requirements (Neale, 2018). CMS argues that employment improves health, which will reduce the need for future healthcare utilization and potentially equip individuals to obtain employer-sponsored health insurance. CMS requires an evaluation of quality, accessibility, and health outcomes for the approach.

The Trump Administration has been encouraging states to submit Section 1115 applications to impose requirements that would require non-disabled adults to work a certain number of hours per week or engage in other job-search or community engagement activity in order to be eligible for Medicaid coverage (S. Rosenbaum, 2017). Federal District Judge James Boasberg rescinded HHS Secretary Alex Azar's approval of Kentucky's Section 1115 waiver (S. Rosenbaum, 2018b). The ruling did not conclude that work requirements are illegal, or that work improves health, but ruled that in approving the waiver, HHS neglected to consider whether the waiver would "help the state furnish medical assistance to its citizens, a central objective of Medicaid," failed to account for evaluating the effects of all recipients without prioritizing some over others, and "neglected the project's effect on medical coverage" (S. Rosenbaum, 2018a).

Information to Inform Virginia's Medicaid Conditions

CMS has defined certain characteristics that must be a part of any Section 1115 demonstration. These include federal transparency requirements, budget neutrality, i.e. a state may not accrue savings from a reduction in enrollment that may occur as a result of using this section 1115 authority and states will be required to submit budget neutrality documentation, and a monitoring and evaluation component which seeks to help understand the outcomes and impacts of the state innovations (Neale, 2018). Therefore, any savings that the state obtains must be used to further the objectives of the Medicaid program.

In order to understand the implications of potential conditions imposed on recipients, I will explore present literature surrounding this program and similar programs. Section II will explore the economic and policy rationales for work requirements and other conditions, Section III will survey other states that have imposed Section 1115 waivers and draw insights from their programs, Section IV will explore evidence from other entitlement programs that have imposed similar work requirement conditions on recipients, Section V will explore premiums and cost-sharing, and Section VI concludes.

Section II: Economic Rationale

There is a non-trivial amount of literature regarding the economic rationale behind imposing work requirements and other conditions on public benefit recipients. One potential motivation is to combat the work disincentives inherent in benefit programs. In a means-tested program like Medicaid, individuals receive the full benefit of Medicaid up until they earn more than 138% of the FPL, and then receive no Medicaid benefit. The current cutoff threshold of 138% of FPL for a single adult is $16,643, and the value of Medicaid[1] is roughly $6,355 (Wolfe, Rennie, & Truffer, 2017). So, exceeding the earnings threshold of $16,643 would effectively be in a cut in total income (the benefit) of $6,355. Individuals may be incentivized to make sure they earn less than the cutoff amount (by working less), so that they don't get their benefits reduced, which can be thought of as a very high marginal tax rate on low-income benefit recipients that come off of public programs. A depiction of this can be seen in Figure A1 in appendix one.

Evidence suggests that labor supply is reduced by benefit programs (such as Aid to Families with Dependent Children and Food Stamp programs). This is robust to both older studies and newer ones (Hamilton et al., 2011; Moffitt, 1992). Work incentives attempt to reduce the implicit tax rate on earnings in low-income assistance programs.

[1] This is assumed is assumed to be $6,355 based on projected Medicaid expenditures on medical assistance payments per enrollee for expansion adults for 2019 as determined by the 2017 Actuarial Report on the Financial Outlook of Medicaid.

Another rationale is to avoid creating a culture of dependency on public-benefit programs. Conditions on program recipients help effectively distribute scarce resources by imposing a "time cost" on a benefit recipient. For some individuals, the benefit received from Medicaid coverage may not exceed their perceived cost of the condition or work requirement, effectively screening them out of the program and dedicating the resources to someone who obtains a higher value of the resource (Falk, McCarty, & Aussenberg, 2014).

Premiums and cost-sharing have been used to better align public coverage with private coverage and to encourage more personal responsibility for healthcare choices. They also serve to address equity issues and keep individuals from dropping private coverage and taking up public coverage (preventing crowd out), and serve as ways to limit or reduce state program costs (O'Malley & Artiga, 2005).

Section III: Other States' Medicaid Work Requirements

Given that Medicaid expansion was authorized and funded by the ACA in January 2014, there has been very little time for states to create experimental expansion plans and very few have been imposed, thus the literature on these requirements is rather limited. To gain a sense of the current landscape of Section 1115 waivers and work requirement specifically, see the following two figures. Figure one, on next page, shows the number of approved and pending Section 1115 Demonstration Waivers by type. Figure two, on next page, shows the states that have submitted requests for work requirements and their status. The following is a snapshot of Arkansas' work requirements, for more details about Kentucky's, see appendix eleven.

<u>Arkansas</u>

The bulk of the literature on the observed implications of work requirements on Medicaid comes from Arkansas, the state that has had work requirements implemented for the longest. Work requirements took effect in June 2018 in Arkansas, requiring non-disabled Medicaid expansion recipients aged 30-49, without children under 18, who did not meet other exemption criteria to work, volunteer, attend school, search for work, or attend education classes for a total of 80 hours per month and report it to the Arkansas Department of Human Services online. Failure to report hours any three months of the year results in loss of Medicaid coverage until the following calendar year (Greene, 2018).

More than one-quarter of the population subject to Arkansas' work requirements in the first month did not meet the requirements (Brantley & Ku, 2018). From September through December 2018, over 18,000 people were disenrolled for failure to comply with the requirements for three months, at an average rate of 3,533 people a month. Figure three shows the cumulative disenrollment numbers during this time period. See table A6 in the appendix for more detail.

Looking at December 2018, 60,680 people were subject to work reporting requirements. 90% of those individuals (54,593 people) were exempt from reporting due to either special exemption status or their work was identified by the state through a data match. Of the remaining 6,087 required to report, 78% of them failed to report their work, either meaning they did not complete the work requirement or failed to report it online. Nearly all of these 4,776 enrollees did not report any work activities, most likely implying that they did not create and link the online accounts required to enable them to report or experienced challenges accessing or navigating the online portal. This implies that significant barriers may exist to being able to certify completion of the requirements, even if the individual actually does complete them.

The number of enrollees reporting work has decreased since October 2018 (Rudowitz, Musumeci, & Hall, 2019). The removal of beneficiaries from Medicaid is expected to grow as Arkansas requires individuals aged 19-29 to be subject to the work requirement in 2019, adding 45,000 more

beneficiaries to the work requirement, given that over 22 percent of all beneficiaries subject to the new policy have lost coverage due to the requirements (Wagner, 2018).

Figure One: Medicaid Demonstration Waiver Statistics, figure from the Kaiser Family Foundation

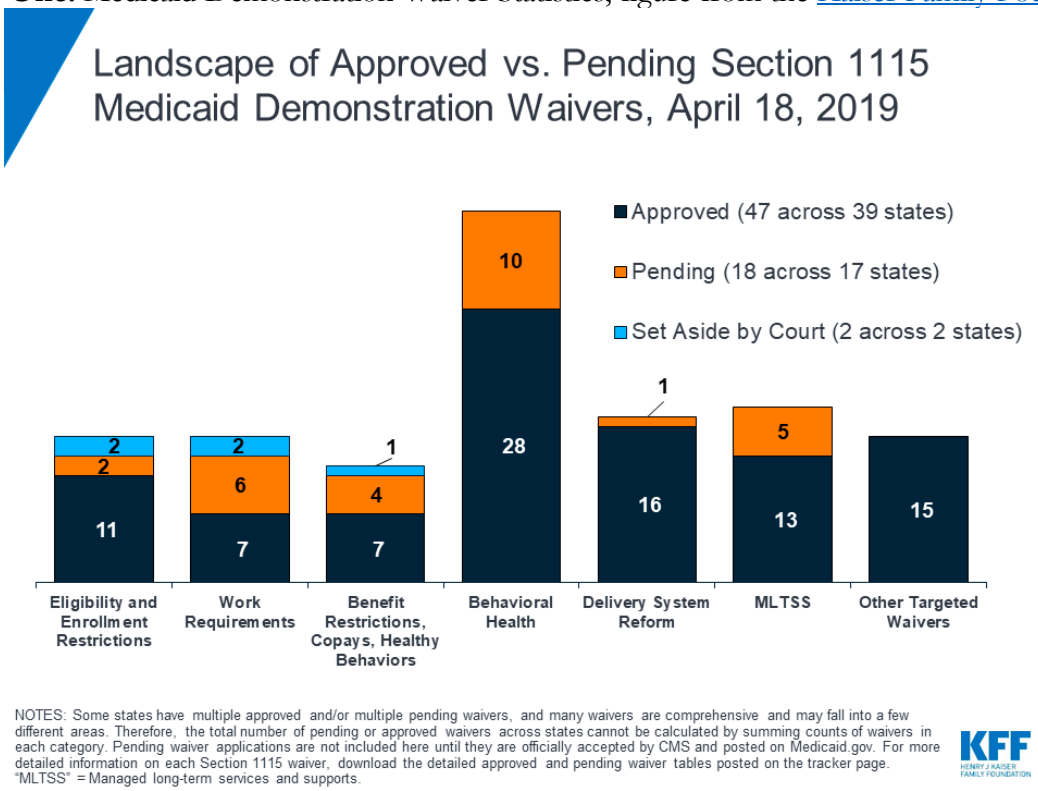


Figure Two: States application status for Section 1115 waivers for work requirements. Data from The Commonwealth Fund, as of April 9, 2019

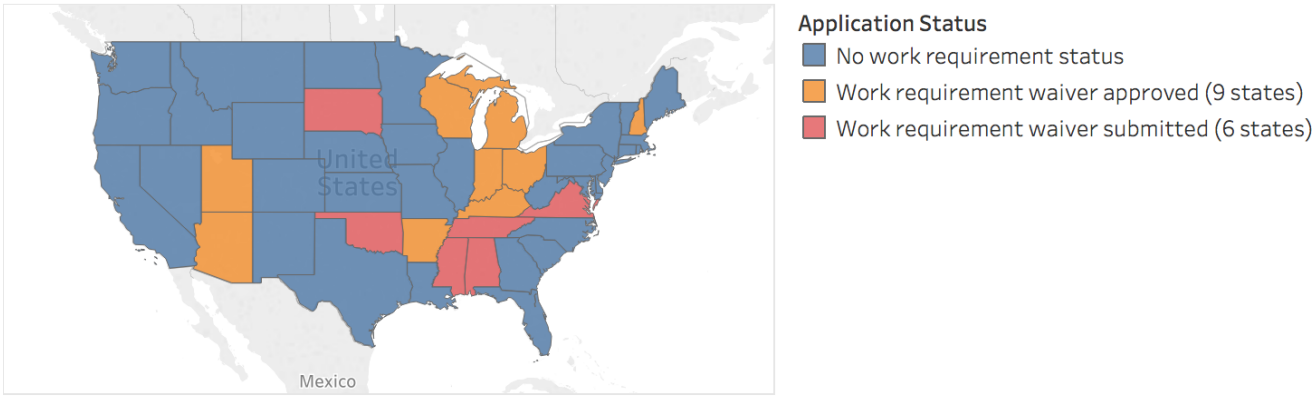
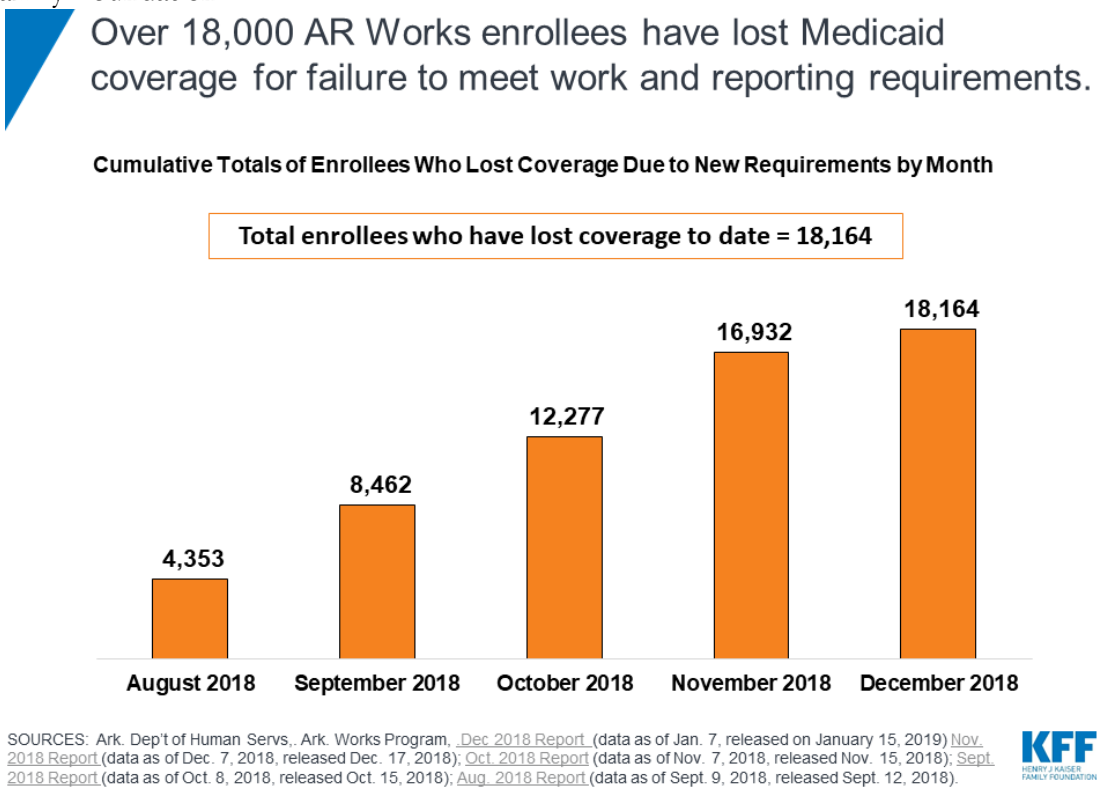


Figure created using Tableau. Note: Alaska and Hawaii aren't included in the figure, but both have no work requirement status. While Kentucky and Arkansas' waivers have been approved, they have currently been vacated by the court and are pending appeals.

Figure Three: Disenrollment in Arkansas' Medicaid Program, August-December 2018. Figure from Kaiser Family Foundation.



Section IV: Evidence on Work Requirements from Other Entitlement Programs

Since we lack an expansive body of literature on work requirements with Medicaid, it is worthwhile to draw insights from the impact of these requirements on other entitlement programs. Work requirements have been long served as conditions for public benefits since the Personal Responsibility and Work Opportunity Act of 1996. I identify SNAP and TANF (see appendix ten for details about TANF) as the most similar to Medicaid, mostly due to their nature of entitlement, work requirements, and the population of beneficiaries.

Supplemental Nutrition Assistance Program (SNAP)

One of the most similar work requirements to what is proposed with Medicaid is the Supplemental Nutrition Assistance Program's (SNAP, formerly known as the Food Stamp Program) work requirement for able-bodied adults without dependents (ABAWDs). These are individuals between the ages of 18 and 49 who do not have dependents and aren't disabled. ABAWDs may only receive SNAP benefits for 3 months in 3 years if they do not have an exemption or meet work requirements consisting of 80 hours per month of qualified work, education, and training activities, or compliance with a State-approved workfare program (Food and Nutrition Service, 2018). These requirements and individuals are very similar to those receiving Medicaid expansion.

There is more evidence about the impact of SNAP work requirements on ABAWDs, yet still not very much literature on work requirements generally. Using SNAP administrative data, evidence shows that work requirements reduced SNAP participation by around 3 percentage points among ABAWDs under 250% of the FPL, though this is only significant at the 10% level, and among SNAP recipients, there is a null effect on labor supply. The effects are more significant for individuals with

weaker job prospects (a reduction in SNAP participation of 5.7 percentage points for counties with a high unemployment rate) (Stacey, Scherpf, & Jo, 2018).

While that working paper is one of the more recent and particularly relevant pieces of literature regarding SNAP work requirements, it has not been peer-reviewed, yet there have been several other noteworthy, reputable studies that have found similar effects. ABAWDs subject to time limits are much more likely to leave SNAP in the first few months of their spell, compared to those not subjected to the time limit, with exists associated with time limits reducing the ABAWD caseload by up to 20%. Exits from SNAP were also much more likely to occur in months where recipients needed to recertify (Ribar, Edelhoch, & Liu, 2010).

In 2014, Kansas and Oklahoma re-imposed ABAWD work requirements after many years of waivers, prompting large declines in caseloads, most likely due to ABAWDs inability to meet the work requirement and thus being removed from the program (Bolen, Rosenbaum, Dean, & Keith-Jennings, 2016). In 2014, the State of Maine imposed a work requirement on ABAWDs that caused a rapid 80 percent drop in SNAP caseload (Rector, Sheffield, Dayaratna, & Bryan Hall, 2016). While there exists a study that found positive effects on employment and wages in Kansas (Ingram & Horton, 2016), this study simply compared average rates of employment and wages over time, but neglected to consider other potentially confounding factors that may impact wages and employment and has been criticized for failing to consider that some SNAP recipients subject to the requirement already have employment (D. Rosenbaum & Bolen, 2016).

It's important to consider how these issues may be analogous to Medicaid, that reporting requirements for work may churn individuals off of Medicaid, and may fail to change the intended objective of employment.

Section V: Cost-Sharing

In addition to work requirements, another component of the Section 1115 demonstration can involve cost-sharing mechanisms (such as co-pays, premiums, and Health Savings accounts). Cost-sharing for Medicaid is found to have a deterrent effect on the initiation of treatment, can reduce utilization of ongoing treatment, and many argue that it may be difficult for low-income patients to understand and have sufficient information to choose medical treatment, and difficult to balance within the budgets of poor adults (Powell, Saloner, & Sabik, 2016).

Premiums and Co-Pays

Artiga and O'Malley (2005) examined a comprehensive set of 13 studies conducted in seven states regarding the effects of cost-sharing measures on Medicaid, SCHIP, or other public healthcare coverage programs. Largely, they found that new or increased premiums serve as a barrier to obtaining and/or maintaining public coverage, that premiums disproportionately impacted those with the lowest incomes, led to disenrollment across income ranges, and while some dis-enrollees obtained other coverage, many became uninsured. Cost sharing led to unmet medical need and financial stress, even when amounts were nominal or modest. Coverage losses and affordability problems stemming from increased out-of-pocket costs led to increased pressures on providers and the healthcare safety net, and increases in beneficiary costs may have created savings for states, but concludes that they may accrue more from reduced coverage and utilization rather than increased revenue (O'Malley & Artiga, 2005).

Other literature is consistent with these findings, that higher copayments cause low-income individuals to decrease use of both essential and non-essential healthcare, that those with chronic health conditions are the most vulnerable, and that state savings are limited (Artiga, Ubri, & Zur, 2017; Kaiser Family Foundation, 2013; Ku & Wachino, 2005; Powell et al., 2016).

Nominal co-pays, even $5 still reduce utilization. Figure four below shows the maximum federal allowable levels of co-pays without an 1115 waiver. Copays as low as $12-$15 were found to reduce women's utilization of needed mammograms (Trivedi, Rakowski, & Ayanian, 2008) and drastically reduce needed children's health services (Medical News Today, 2008). The amount of the co-pay (intensive margin) also matters, in addition to the presence of co-pays (extensive margin). For example, raising office visit co-pays $10 reduced utilization by nearly 20 percent; the same study found that increasing prescription copays by $1 reduced utilization by over 20 percent (Chandra, Gruber, & McKnight, 2010). The relationship is monotonic, as reductions in co-pays have been effective in increasing utilization. Reducing copays from $11 to $5 increased medication compliance by 7 to 14 percent among patients with several chronic illnesses (Chernew et al., 2008). Race, gender, age, economic status, and medical condition are factors to consider when setting co-pays (Schilling, 2009).

Figure Four: Maximum allowable co-pays by income level and type of service. Figure form KFF.

Table 1: Maximum Allowable Cost Sharing Amounts in Medicaid by Income

	<100% FPL	100% – 150% FPL	>150% FPL
Outpatient Services	$4	10% of state cost	20% of state cost
Non-Emergency use of ER	$8	$8	No limit (subject to overall 5% of household income limit)
Prescription Drugs			
Preferred	$4	$4	$4
Non-Preferred	$8	$8	20% of state cost
Inpatient Services	$75 per stay	10% of state cost	20% of state cost

Notes: Some groups and services are exempt from cost sharing, including children enrolled in Medicaid through mandatory eligibility pathways, emergency services, family planning services, pregnancy related services, and preventive services for children. Maximum allowable amounts are as of FY2014. Beginning October 1, 2015, maximum allowable amounts increase annually by the percentage increase in the medical care component of the Consumer Price Index for All Urban Consumers (CPI-U).

Premium effects are largest for those with the lowest incomes. For example, in Oregon, nearly half of adults dis-enrolled from Medicaid after a premium increase with a maximum premium amount of $20 (Artiga et al., 2017). Additionally, another study of Medicaid expansion in Indiana found that for adults below 138% FPL, who faced premiums ranging from $1-$100 to enroll in a more comprehensive plan, 55% of eligible individuals either did not make their initial payment, or missed a payment (The Lewin Group, 2016).

Cost-sharing reduces utilization of services, including vaccinations, prescription drugs, mental health visits, preventative and primary care, inpatient and outpatient care, and decreased adherence to medications with many of the studies having co-pays be as small as $1-5 (Domino et al., 2011; Guy Jr, 2010; Ku, Deschamps, & Hilman, 2004; Sen et al., 2014; Stoecker, Stewart, & Lindley, 2017). Research is relative inconclusive in terms of if copays increase or decrease emergency room usage (Marton, Kenney, Pelletier, Talbert, & Klein, 2012; Mortensen, 2010; Sabik & Gandhi, 2016), yet ED usage increases with Medicaid coverage (A. N. Finkelstein, Taubman, Allen, Wright, & Baicker, 2016; Taubman, Allen, Wright, Baicker, & Finkelstein, 2014).

KFF also reported that some studies find that utilization among individuals with chronic conditions or significant health needs is much less sensitive to co-pays compared to those with fewer health needs (Chandra, Gruber, & McKnight, 2014). Other research finds that relative small co-pays can still reduce utilization among individuals with significant health needs (Hartung et al., 2008).

While Virginia is considering implementing these requirements, they ought to consider what the impacts are, including unintended consequences, especially on the most low-income individuals,

and how they will impact access to care, as that is a key component of the Medicaid program, and an important tradeoff to consider.

Healthy Behavior Incentives

In order to reduce costs of care and improve health outcomes, there is a desire for individuals to engage in healthy behaviors such as preventative care and primary health screenings to improve their well-being and cut costs. One potential condition for Medicaid recipients is to make their coverage conditional on engaging in these healthy behaviors or providing them a reward for doing so. In Virginia, a randomized controlled trial was conducted among low-income individuals to see whether cash incentives are effective at encouraging primary care visits. Study participants were randomly selected to receive either $0, $25, or $50 for completing a primary care visit within 6 months. By randomly assigning these incentives to individuals, we can reasonably assume that any difference in behavior is a direct cause of the incentive. The study found modest reductions in non-urgent emergency department usage, and increase outpatient use with the incentive, but no reductions in overall cost (Bradley, Neumark, & Walker, 2017). Given that this was conducted in Virginia; this would likely be analogous to a Medicaid expansion population. Most corporate healthy behavior programs have typically been utilized by individuals less likely to be in the bottom quartile of income (Jones, Molitor, & Reif, 2018).

In other countries, personal financial incentives have been used to change behavior, mostly aimed at reducing rates of obesity, smoking, and other addictive behavior, and have been found to be modestly successful in achieving health-related behavior changes (Marteau, Ashcroft, & Oliver, 2009), yet the same cannot be said for the United States. For a list of states that have tried healthy behavior incentives and their results, see appendix nine.

The following recommendations are advised for states considering imposing Medicaid incentive programs: advertise the program and its benefits, forge partnerships to promote and implement the program, pay attention to beneficiary characteristics, have a simple benefit structure, and have a rigorous evaluation component (Crawford, 2014). In West Virginia, the most effective means of communication was via mailers and trusted health care workers (Gurley-Calve, Bone, Pellillo, Plein, & Walsh, 2010).

If chosen, it will be important for Virginia to effectively communicate the existence and specifics of such a program, since a similar program existed in Indiana, and only 60 percent of beneficiaries were aware of their existence, and less than 50 percent actually had these accounts (The Lewin Group, 2016).

VI: Conclusion

By introducing additional work or administrative requirements to obtaining Medicaid, there will likely be an increase in the number of enrollees who churn off Medicaid each year and increase the number of uninsured or those experiencing laps in coverage. Complications may occur when people who try to re-enroll in Medicaid are faced with the requirement of proving they work at least twenty hours a week. Consider seasonal workers, if their work falls below 20 hours/week during the off-season, they would have to prove they were working to re-enroll in Medicaid. Such hurdles could lengthen coverage gaps for individuals who were forced off of Medicaid due to exceeding an earnings threshold during times of hard work, and then fail to meet minimum work-requirements after (Collins et al., 2018).

Weighty documentation requirements and administrative barriers, especially renewal, have been found to be a key reason why adults lose their Medicaid coverage (Sommers, 2009). No longer having Medicaid coverage (such as caused by the termination of eligibility), unless for obtaining other coverage such as that provided by an employer or Medicare, leaves most former recipients without

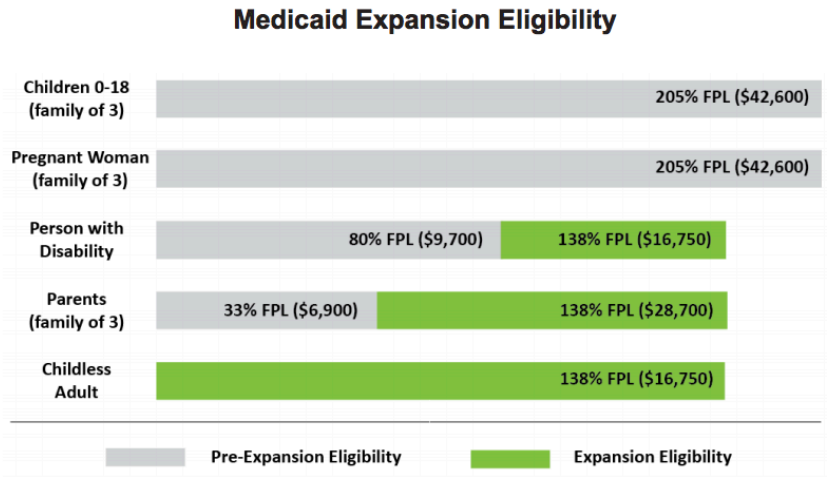
other insurance options. Terminating Tennessee's Medicaid expansion resulted in most adults who lost Medicaid coverage not gaining other coverage, delaying care as a result, with some studies finding impacts concentrated among less educated childless non-elderly adults (DeLeire, 2018; Tello-Trillo, 2016).

Forcing individuals off of care reduces the expenditures by the state on those individuals, so that funds are free to be used in other components of Medicaid, however, there are negative implications for healthcare utilization of those forced off of care, possibly imposing negative externalities on the rest of society. Cost-sharing programs should be structured to incentivize less costly preventative care. Drawing on insights from the relevant literature, if Virginia is adamant on imposing these restrictions, there are certain steps that should be taken in order to avoid unnecessary loss of benefits and additional costs.

Definition of the Expansion Population

In order to make informed decisions about conditions that will be applied to Medicaid expansion recipients, it is important to contextualize the expansion population. The three categories of individuals who are eligible for Medicaid coverage can be best described using Figure five, below:

Figure Five: Medicaid Expansion Eligibility by Category, 2019 Medicaid at a Glance

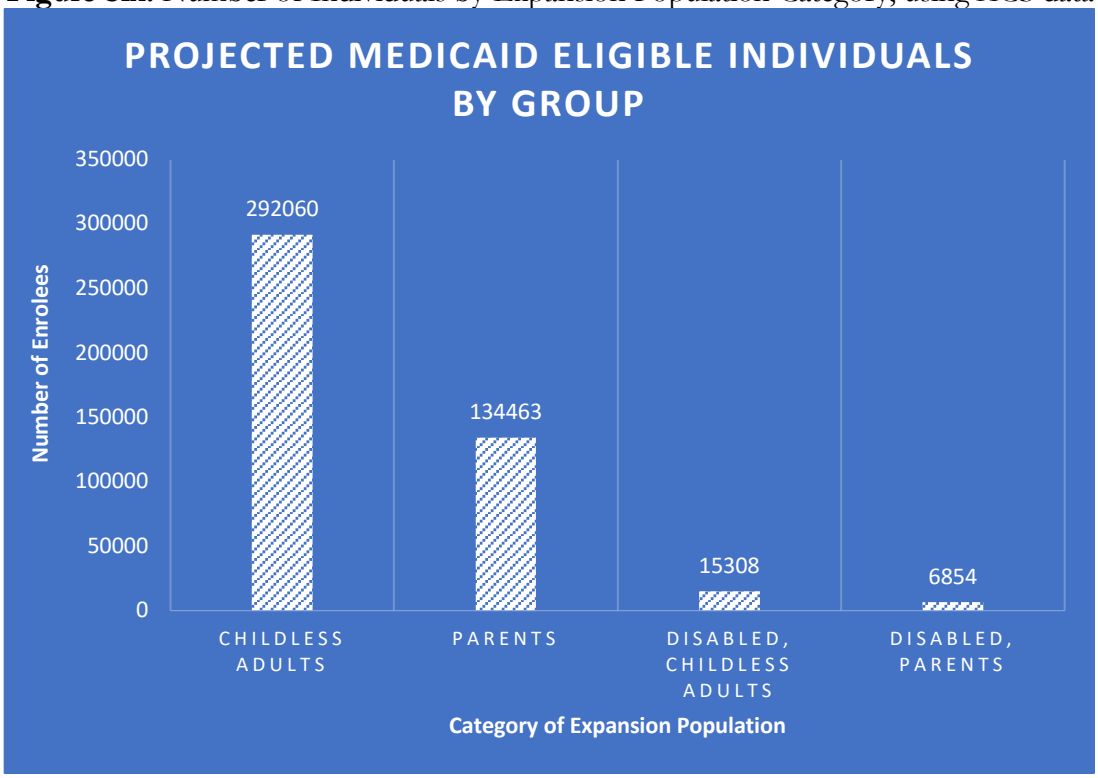


Using ACS data, via a procedure described in appendix three, I estimated the Medicaid expansion population. The computed estimate (around 448,000 individuals) is most likely an overestimate, see appendix three for more details. The breakdown of individuals by category of eligibility can be seen in Figure six.

While broad information regarding Medicaid eligible individuals can be found in table A3 in appendix three, there a few facts about the expansion population to consider:

- Over 60% are under age 40
- Roughly a third of eligible individuals below to each of the following income groups: 0-49% FPL, 50-99% FPL, 100%-138% FPL
- Roughly half are currently employed and nearly a quarter are currently enrolled in school
- Approximately 15% lack access to the internet and roughly 12% lack access to a vehicle

Figure Six: Number of Individuals by Expansion Population Category, using ACS data



The ACS data indicated that all individuals who would qualify under the disabled population (disabled and 80-138% FPL) also were either eligible due to being a parent (and within 33-138% FPL) or a childless adult (0-138% FPL). This makes intuitive sense that individuals, regardless of disability status, would fall into one of these two categories.

Policy Alternatives:

As a guiding framework for developing alternative possible conditions to be imposed on Medicaid recipients, I consider DMAS' defined objective of the program, to "empower individuals to improve their health and well-being and gain employer-sponsored coverage or other commercial health insurance coverage, while simultaneously ensuring the program's long-term fiscal stability" (Office of Health and Human Resources, 2018). Thus, I will explore the following potential conditions:

Alternative One: No conditions imposed ("Let present trends continue")

This alternative doesn't satisfy the objective of the Section 1115 Demonstration Waiver, but serves as a good baseline and alternative in the event that the Department of Health and Human Services does not approve the proposed conditions on Medicaid expansion recipients. This is a potential concern, given that a federal judge struck down Kentucky's plan to impose work/volunteer requirements on Medicaid recipients (Goodnough, 2018). This alternative will serve as a baseline comparison and will draw some insights to the changes that Medicaid expansion made to the various criteria. It will not be recommended or evaluated in the outcome matrix.

Alternative Two: Work, Work Preparation, and Community Engagement Requirements – will be referred to as "Work Requirements" throughout the remainder of the analysis

This alternative would require an individual to either work a certain number of hours per week (most states have settled around 20 hours per week, Virginia's plan can be seen in Figure seven) or participate in activities that might lead to a job including job search, education and job training, activities that support job readiness, or volunteer activities.

The current proposal that DMAS is submitting to CMS is called the Training, Education, Employment, and Opportunity Program (TEEOP), which requires non-disabled adults with incomes up to 138% of the FPL, excluding those with certain exemptions enumerated in appendix two, to comply with work and community engagement requirements. The Commonwealth will provide supports in assisting individuals in finding opportunities to satisfy TEEOP requirements. These include educational supports (industry certification and licensure), pre-vocational supports (public transportation assistance, emergency funds, etc.), and individual and small group employment supports (such as job training, financial literacy, interview coaching, etc.).

According to the proposed plan, requirements can be satisfied through employment, job skills training, job search activity, participation in a state workforce program through Virginia Workforce Centers or other approved agency, participation in a tribal, agriculture, or migrant labor workforce program, obtaining education or vocational training, community and public service, as well as caregiving for a non-dependent relative with a chronic, disabling health condition (Virginia Department of Medical Assistance Services, 2018).

Figure Seven: Proposed TEEOP required participation hours

Number of Months after Enrollment in TEEOP	Required Participation Hours
3 months post-enrollment	20 hours per month
6 months post-enrollment	40 hours per month
9 months post-enrollment	60 hours per month
12 months post-enrollment	80 hours per month

Requiring individuals to be involved with work or activities that prepare them to work may help to achieve the goal of obtaining employer-sponsored health insurance coverage and improving health outcomes. This would also meet the cost-containment goal, as those individuals who perceive the cost of working too great compared to the benefit of the coverage would not obtain coverage.

Virginia's Joint Legislative Audit and Review Commission (JLARC) estimated that roughly 120,000 enrollees would not meet exemption criteria, and therefore would be subject to the requirements. However, JLARC also estimated that 45% of the estimated enrollees subject to TEEOP would currently be in compliance due to employment status or schooling (Joint Legislative Audit and Review Commission, 2018). Given that there are many other opportunities that can be used to meet the requirement, this 45% figure should be looked to as a lower bound of the proportion of people who are already ex-ante fulfilling the work/community engagement requirement.

Failure to comply with the requirement or reporting standards, without an exemption, for three months within a 12-month period will result in suspension of coverage if they fail to demonstrate compliance within 30 days of the notice of 3 months of non-compliance. If the individual fails to comply at that point, the Commonwealth will determine whether the enrollee is entitled to an exemption or eligible for another Medicaid eligibility group. Upon demonstrating compliance with requirements for one month after losing coverage, Medicaid benefits would be reinstated.

Alternative Three: Premiums

This requirement would involve recipients with income between 100% and 138% of the federal poverty line, without any other exemptions (as stated in the TEEOP program), to pay a monthly tiered premium based on income in order for the individual to receive health care coverage. Per state legislation, DMAS' current proposed sliding premium can be seen in Figure nine below:

Figure Nine: Proposed Monthly Premium Amounts by Income Level

Monthly Income	Premium Amount
100-125% FPL	$5 per month
126-138% FPL	$10 per month

Medicaid coverage will be available on the first day of the month following the receipt of the premium payment which can be paid directly by the recipient or on behalf of an enrollee by a third party. To ensure that those who are un-banked can pay, the Commonwealth will accept payment via a variety of mechanisms, pre-payment, cash, money orders, etc.

Enrollees who fail to make their payments after a three-month grace period will have their coverage suspended. Coverage will be reinstated after making one premium payment, meeting an exemption criterion, or having monthly income decrease to less than 100% FPL. This alternative has the objective of trying to raise some money to cover the costs of Medicaid coverage to help make the program cost-sustainable but also to make the program sustainable by limiting access to the program to those who do pay their premiums (Virginia Department of Medical Assistance Services, 2018). In practice, the cost-savings component of the alternative will not come from revenue collected from premium payments, but rather from the removal of individuals from Medicaid coverage for failure to pay premiums, as well as serving to deter individuals from signing up for Medicaid coverage.

In order for the premiums to cover a non-trial proportion of the expenditures, the cost of the premium would have to be significantly higher. JLARC estimates that 35% of Medicaid expansion enrollees will be between 100 and 138 percent of the federal poverty level, and that 42,000 enrollees will be subject to the premium requirements (Joint Legislative Audit and Review Commission, 2018).

Alternative Four: Co-Pays

This requirement would require individuals with income between 100% and 138% of the federal poverty line to be subject to co-pays for non-emergent usage of the emergency department as defined by the Prudent Layperson Standard[2] (PLP). Recent studies have found that expanding Medicaid substantially increased the usage of the emergency room among recipients (Finkelstein et al., 2012). Emergency room visits to treat primary care have been found to be 320% to 728% more expensive than those treated in primary care clinics (McWilliams, Tapp, Barker, & Dulin, 2011). Additionally, around 37% of emergency room visits have been found to non-urgent at triage or retrospective ED evaluation (Uscher-Pines, Pines, Kellermann, Gillen, & Mehrotra, 2013). Those living in deprived areas, the most likely to be on Medicaid, have the highest likelihood of inappropriate attendance at the emergency room (McHale et al., 2013). By imposing co-pays on non-emergent usage

[2] This standard assesses risk based on the patient's symptoms, rather than final diagnosis, e.g. if a patient has chest pain, but turns out to have a non-urgent medical condition (like a hiatal hernia), a co-pay wouldn't be assessed because the patient presented with a symptom that is considered an emergency (American College of Emergency Physicians, 2018).

of the emergency department, the program disincentivizes such usage which serves to be a cost-savings mechanism for the Medicaid program.

DMAS' proposal recommends that the co-pay be $5 as a slight disincentive[3] for the non-emergent or avoidable usage of the emergency room which would not be assessed at point-of-service, but rather billed later. This amount meets federal statutory requirements, and exemptions would exist for individuals who qualify for a TEEOP exemption. In accordance with federal requirements, individuals will not be required to pay more than 5 percent of their aggregate household income in premiums and/or co-payments (Virginia Department of Medical Assistance Services, 2018). Since it's below the threshold, this option is likely one of the most feasible given that it is not subject to additional CMS scrutiny and approval (Centers for Medicare & Medicaid Services, 2014). Figure eight below shows the states that have enacted emergency room co-payments, as well as the amount.

The revenue collected from each non-emergent usage of the emergency room is relatively trivial, therefore revenue is not intended to be one of the key benefits for the Commonwealth of this program.

Figure Eight: Medicaid Emergency Room Co-Payments (as of May 2018)

State	Co-Payment	Details
Arizona	$8	"Non-Emergency Visit"
California	$5	None
Colorado	$3	"Non-Emergency Visit"
Florida	15% of allowed charges, max $15	"Non-Emergency Visit"
Illinois	$3.90	None
Indiana	$8/$25 (First/Each Subsequent)	"Non-Emergency Visit"
Iowa	$8	None
Kentucky	$20/$50/$75 (Account Deduction)	"Non-Emergency Visit"
Maine (Pending)	$10	"Non-Emergency Visit"
Michigan	$3/$8 (<100% FPL / >100%FPL)	"Non-Emergency Visit"
Minnesota	$3.50	"Non-Emergency Visit"
Montana	$8	None
New York	$3	None
Pennsylvania	Up to $3	Fee-based on complexity, coding
Utah	$8	"Non-Emergency Visit"
West Virginia	$8	"Non-Emergency Visit"
Wisconsin (Pending)	$8	All ED Visits

Source: American College of Emergency Physicians (2018)

[3] While $5 does not seem like a significant amount, among individuals in the RAND Health Insurance Experiment, those without cost sharing had 42% higher ED expenses than those with (O'Grady, Manning, Newhouse, & Brook, 1985). Evidence also suggests a significant, negative effect of the presence of a Medicaid copayment policy on the likelihood that an ED visit is non-urgent, with a maximum co-payment amount of $6 (Sabik & Gandhi, 2016). "Nominal" ($1-3) co-payments have been shown to reduce health care access and utilization, so by imposing a co-payment on ED usage, but not on regular medical services, there will hopefully be a deterrence in utilization of the Emergency Room, providing a cost-savings to the Commonwealth (Ku & Wachino, 2005; Sabik & Gandhi, 2016).

Alternative Five: Healthy Behavior Incentives

This requirement would involve encouraging Medicaid recipients to engage in some sort of healthy behavior with the goal of reducing their future need for healthcare. According to the Section 1115 application, this includes wellness exams, mammograms, pap seams/cervical cancer screenings, colon cancer screenings, flu vaccinations, nutrition counseling, tobacco cessation counseling, substance abuse disorder treatment, etc. (Virginia Department of Medical Assistance Services, 2018). Instituting such a requirement would help achieve the mission of "empower[ing] individuals to improve their health and well-being," by completing activities designed to improve their health outcomes.

Individuals who may be subject to premium requirements, who complete these requirements and complete all of their required premium payments, will be eligible for up to a 50% reduction in future premiums (if applicable), and those will receive a rebate in the form of a limited-use Health Rewards gift card that can be used to pay for non-covered medical or health-related products and services, such as eyeglasses, vitamins, nutritional supplements, etc. The amount of money that they pay towards their premiums will go into a health and wellness account that will be used to fund their gift card rebate in order to minimize the amount of outlay by the Commonwealth.

Those who are not subject to premium requirements will simply receive a $25 limited-use Health Rewards gift card that can be used to pay for non-covered medical or health-related products and services, such as eyeglasses, vitamins, nutritional supplements, etc. They will only be eligible for this if they have paid any applicable co-pays or fees and complete a healthy behavior.

By encouraging individuals to engage in more preventative behavior, it will hopefully reduce the costs of caring for these individuals long-term by reducing the amount of health expenditures that would be paid for by Medicaid. Also, improving health is a desired outcome of the Section 1115 waiver. Emphasis would be placed on ensuring this opportunity was adequately publicized to the expansion population, as this *has* been an issue in other states.

Evaluative Criteria

As a guiding framework for criteria, I consider CMS' guidance in terms of key objectives and approval criteria, they include (Hinton et al., 2019):

- Positive health outcomes
- Long-term sustainability of Medicaid
- Upward mobility and improved quality of life
- Beneficiary engagement and responsible-decision making
- Align Medicaid with traditional health insurance products
- Innovative delivery system and payment models to create value for Medicaid

Thus, any policy proposal should be judged upon meeting these objectives and those outlined in the statement of purpose.

The criteria that will be considered are as follows:

- Cost-Effectiveness
- Health Outcomes
- Employment Outcomes
- Long-term Sustainability
- Equity
- Financial well-being

The following section will survey each criterion, and provide an analysis of how each of the previously mentioned alternatives measures up against that criterion. Many of these criteria depend on the number of individuals that will be disenrolled from Medicaid as a result of the condition or are subject to some other incentive structure, so I have computed the following estimates in terms of the number of individuals that will be used throughout the remainder of the analysis. To see how these numbers were derived, please see appendix six.

Work Requirements: 28,596 to 50,000 disenrolled
Premiums: 12,000 disenrolled
Co-pays: 10,500 potentially impacted (not necessarily number payers)
Healthy Behavior Incentives: 56,000 potential users

A note on weighing: The overarching goal of a Section 1115 waiver, and the reasons that most states pursue them, is to achieve cost-savings for the state that can be used to better the Medicaid program, in order to maintain budget neutrality, as required by Section 1115. The other components such as improved health outcomes, etc. are an important second-order consideration, therefore, I weigh the criterion of cost-effectiveness most heavily at 50%, and the remaining 5 criteria at 10% each.

The following pages contain a relatively qualitative discussion of each of the criteria for each alternative, a more quantitative analysis is derived in appendix eight (Tables A8 through A13) and applied at the outcomes matrix.

Criterion One: Cost-Effectiveness

This criterion will explore the strictly fiscal implications of each alternative. In order to estimate cost-effectiveness, I will compute a benefit-cost ratio[4] of sorts for each alternative. The primary benefit will be cost savings for the Commonwealth (in terms of reduction in expenditure for care), and the cost will be the variable cost of each program. Given that the length of the program is uncertain, I will look at a point in time estimate rather than a sum of present-value cash flows and costs. Essentially, the estimate will be the amount of savings from disenrollment per the cost of the alternative. While there are social implications of each alternative, those will not expressly be explored in this alternative. Excluding the social implications also allows me to explore the impacts on health outcomes, financial stability, etc. in isolation.

Baseline:

Cost Effectiveness: N/A

Given that the baseline does not involve any change in the number of individuals on Medicaid or their utilization, there is no applicable cost-effectiveness measure for this alternative.

Work Requirements:

Cost-Effectiveness: Moderately Low: BCR=0.90

The main cost-savings (benefit) from work requirements result from decreased expenditure on Medicaid coverage by removing individuals from coverage, and the main cost is the cost of administering the work requirement program. The computed benefit-cost ratio is 0.90, meaning that for every $1 spent, 90 cents would be saved. This indicates that this alternative is not very cost-effective, mostly because of the high cost of administering work requirements. Calculations for this can be found in appendix seven.

Premiums:

Cost-Effectiveness: High: BCR=2.21

The main cost-savings (benefit) from work requirements result from decreased expenditure on Medicaid coverage by removing individuals from coverage, and the main cost is the cost of administering the work requirement program. The amount collected is relatively nominal and uncertain, and for sake of creating a conservative estimate, is excluded for calculating benefits for the Commonwealth. The benefit-cost ratio for premiums is 2.21. Information regarding this calculation can be found in appendix seven. A ratio of 2.21 indicates that this alternative is relatively cost-effective, providing more in savings than the cost of the alternative.

[4] While typically, a cost-effectiveness analysis would be used in lieu of a cost-benefit analysis, given the fact that two of the outcome "unit" for two of the key outcomes (premiums and work requirements) would be individuals disenrolled or deterred from Medicaid, and for two others (co-pays and healthy behavior incentives) the outcome would be reduction in ER utilization and increase in healthy behaviors, it is impossible to have a common "effectiveness unit" metric. Instead, I employ a cost-benefit analysis, which observes strictly the fiscal implications, and compute a standardized cost-benefit ratio in order to figure out how much it costs to save $1 of expenditure when each of these programs is employed.

Co-Payments

Cost-Effectiveness: Low: BCR=0.11

The benefits of co-payments are reduced expenditures from the cost of non-emergent emergency department usage, and the main costs are administrative. Due to the relatively low success of co-payments reducing non-emergent ER utilization, the benefits from this alternative are relatively low, and the costs for administering the program are relatively high. This has resulted in a benefit-cost ratio of 0.11, indicating that this alternative is not very cost-effective.

Healthy Behavior Incentives

Cost-Effectiveness: Low: BCR=0

Healthy behavior incentives have not been proven to produce any cost-savings regardless of the incentive and therefore the benefit-cost ratio, by definition, must be zero, regardless of the cost of the incentive.

Criterion Two: Health Outcomes

This criterion will seek to determine how each of the proposed alternatives affect the health and well-being of program participants, considering that the health and well-being of program participants is one of the goals of the program. The evidence on the impact of losing Medicaid coverage on health outcomes is sparse, so focus will also be placed on access to care, which is strongly correlated with health outcomes.

General impacts of Medicaid coverage loss on health outcomes:

Those who lost Medicaid health insurance coverage were more than five times more likely to report unmet health needs, one fifth as likely to have a primary care visit, and twice as likely to have reported unmet medication needs as those who had continuous Medicaid coverage (Carlson, DeVoe, & Wright, 2006). Persons who lost Medicaid coverage were more slightly more likely to report their health as fair or poor compared to those who didn't (Kasper, Giovannini, & Hoffman, 2000). When losing Medicaid coverage, individuals experience worsening health, especially in terms of the number of days these individuals who lost coverage experience bad days of physical or mental health. Losing Medicaid coverage results in an increase of 1.2 days of incapacitation per month (Tello-Trillo, 2016). The consensus is that there is a loss of health care access once individuals lose Medicaid coverage which results in individuals not seeking care as a result of cost.

Baseline:

Health Outcomes: No Changes

Low-income adults in states that expanded Medicaid (Arkansas and Kentucky) had a 23-percentage point increase in the share of those who reported they were in "excellent" health, were 56 points more likely to have regular care for their chronic conditions and 51 points less likely to skip medications because of cost, compared to low-income individuals in Texas without Medicaid expansion (Sommers, Maylone, Blendon, Orav, & Epstein, 2017).

Research suggests that Medicaid expansion increased the utilization of primary care services, has increased adherence to medication, and has largely broadened access to care. There have only been very modest improvements or no significant changes to health. Medicaid coverage may not move the needle in terms of health outcomes but does provide additional access to healthcare, higher rates of diabetes detection and management, and lower rates of depression (Baicker et al., 2013). Providing additional access to care may help with the detection and maintenance of chronic conditions. For example, there have been small increases in early-stage cancer diagnosis for all cancers, non-Hodgkin

lymphoma, and pancreatic cancer especially, suggesting that improved access has increased screening services and symptom assessment (Han, Yabroff, Ward, Brawley, & Jemal, 2018).

Work Requirements:

Health Outcomes: Severe Negative Impacts

In justifying applying work requirements on Medicaid expansion recipients, CMS has argued that work and community engagement can improve health outcomes (Neale, 2018). While being in poor health is associated with job loss and unemployment, the evidence regarding work improving health outcomes is sporadic and mixed (Antonisse & Garfield, 2018; Rijn, Robroek, Brouwer, & Burdorf, 2014). Working for the purpose of obtaining benefits is associated with negatively affected health and well-being among enrollees and their dependents (Gibson et al., 2018). Based on the research and precedent in similar programs, the likely impact of work requirements on health for those working would be either negligible or slightly negative.

Those who do find employment are unlikely to have their health changed as a result of that employment, and that it is projected that between 28,596 and 50,000 individuals will be disenrolled, and face the negative health consequences listed above from that, this option would produce negative health outcomes in a large magnitude compared to the other alternatives.

Premiums:

Health Outcomes: Slight/Moderate Negative Impacts

The primary impact of premiums is in dis-enrolling individuals from Medicaid coverage. There is little evidence to show that conditional on having Medicaid coverage, a $5 to $10 per month cost significantly alters health outcomes, even among low-income individuals. Therefore, the impact on health outcomes will come from the "general impacts of Medicaid coverage loss" stated above for those that lose coverage. Projections estimate that roughly 12,000 people will lose coverage as a result of Medicaid, which is less than what is projected for work requirements. The impacts of Medicaid coverage loss are likely negative health impacts, and therefore this option will have moderately negative health outcomes, though not as severe as work requirements, simply because they impact a smaller segment of the population.

Co-Pays

Health Outcomes: Likely No Change

Since co-pays only apply to non-emergent usage of the emergency room, we do not observe negative health impacts from co-pays on typical preventative and primary care (decreased utilization of primary care, vaccines, adherence to medication, etc.) that could typically drive negative health outcomes. The evidence is relatively mixed as to whether co-pays are a significant deterrent for ER usage, with many studies finding that ER usage does not change (Mortensen, 2010), yet other studies find that small co-pays do alter ER utilization, primarily by decreasing the odds that a given visit is non-urgent (Ku & Wachino, 2005; Sabik & Gandhi, 2016). There is also little evidence to show that a small co-pay for non-emergent usage of the emergency room alters any other utilization of care or any other metrics of health. Given that there is either no change in ER utilization or a decrease in non-emergent usage of the ER, it is likely that the impact on health outcomes will be relatively small.

Healthy Behavior Incentives

Health Outcomes: Likely No Change

Healthy behavior incentives are typically found to have a slightly positive impact on primary care utilization and health checkups but don't significantly improve incentivized behaviors such as smoking cessation or weight loss (Huf, Volpp, Asch, Bair, & Venkataramani, 2018). One of the most

consistent challenges of healthy behavior incentives is raising awareness of the existence of such programs. Many states that have introduced section 1115 waivers for these incentive programs have less than a quarter of eligible beneficiaries participating in the early years of implementation (Askelson, Wright, Bentler, Momany, & Damiano, 2017; The Lewin Group, 2016). Due to lack of uptake of healthy behavior incentives and general uncertainty and mixed results regarding the effectiveness of such incentives (Saunders, Vulimiri, Japinga, Bleser, & Wong, 2018), it is likely that they may not have much of a significant impact on health outcomes.

Criterion Three: Long-term Stability

This criterion looks to explore the long-term stability of imposing these conditions on program participants, given one of the objectives and reasons for imposing requirements is to ensure the long-term feasibility of Medicaid. It will explore the political feasibility, the cost to maintain the program, and political and legal nature of work requirements based on various court rulings, Center for Medicare and Medicaid Services guidelines, Section 1115 waiver approval, and partisanship.

Baseline:

Stability: Likely stable

Given that Medicaid expansion has significant support and was passed by a Republican House of Delegates and Senate, and a Democratic Governor, it seems unlikely to be overturned. However, many lawmakers did express an interest in applying some sort of condition (such as work requirements) on recipients. In the event that CMS doesn't approve any Section 1115 waiver for the Commonwealth, there is potential that there may be pushback. However, given the Trump Administration's recent push for Section 1115 waivers, this seems unlikely, and even so, the likelihood of repeal of Medicaid expansion in Virginia seems very low. We have not seen Medicaid expansion repealed in any state that passed it since 2014 when the ACA enabled expansion to occur.

Work Requirements:

Stability: Low

Work requirements for Medicaid coverage are one of the newest and most vulnerable Section 1115 conditions that can be applied on individuals. While they face significant support from the Trump Administration (The Council of Economic Advisors, 2018), they are very recent innovations, only approved by CMS in January 2018 (Neale, 2018). They have also been under the most recent legal scrutiny. Work requirements were also successfully challenged in Kentucky, Arkansas, and are currently being challenged in New Hampshire (S. Rosenbaum, 2019)

Work requirements have been implemented for other social service programs such as SNAP and TANF, though those are mandated by federal statute (Food and Nutrition Service, 2018), whereas work requirements for Medicaid coverage are not. Given the recent challenges to these requirements, the relative recency of work requirements on Medicaid, and the lack of creation through statutory mechanism, this option is likely the least stable for long-term. It also has the greatest potential of removing individuals from Medicaid coverage, which is one of the driving reasons that opponents argue against conditions on Medicaid recipients. This alternative is one of the most difficult to implement. It is the most drastic policy change, and there are significant equity concerns about work requirements. Given these circumstances, the stability of such a program is uncertain, and relatively low, compared to other alternatives.

Premiums:

Sustainability: Moderate to High

Premiums have a longer history of being implemented with Medicaid coverage. Twenty-two of thirty-two Medicaid expansion (as of January 2018) states charge some sort of cost-sharing for expansion adults (Brooks, Wagnerman, Artiga, & Cornachione, 2018). Premiums are a relatively more accepted condition and have been implemented longer in a variety of states, compared to work requirements. Premiums were also included in the recent challenge that struck down work requirements in Kentucky and Arkansas, so some additional scrutiny is warranted, particularly in the Trump administration's process of approving future Section 1115 applications.

Premiums do not represent as drastic a change as work requirements and don't require as much administrative support. The main hurdle is transitioning individuals who previously not subject to premium requirements to pay premiums in exchange for coverage. CHIP, a program similar to Medicaid but specifically for children, features premiums much more prominently, with twenty-two states imposing premiums and four states charging annual enrollment fees (out of 36 states). Depending on the impact in terms of the number of individuals that are disenrolled, there is some potential for a challenge to premiums, but it is far less likely and politically charged than work requirements. Once implemented, it seems that such an alternative would be a relatively stable alternative, especially since its elimination would mean the loss of some revenue. The key question will be if revenue collection outpaces administrative costs, as this failure has been the reason that some other states have eliminated premiums.

Co-Pays:

Sustainability: Moderate

Co-payments for non-emergent usage of the emergency room are one of the most stable options in terms of legality. Given that the $5 co-payment is under the federal maximum, it does not require a Section 1115 waiver. Possible threats to stability come from the amount, i.e. there may be a desire to raise the amount for all visits, or subsequent non-emergent visits, which would require a new Section 1115 waiver (if they were to exceed $8), though these have been approved for multiple states, and in the event that this condition doesn't have much of an effect on ED usage, there may be an incentive to get rid of it. There also may be an incentive to eliminate if the administrative costs outpace co-payment collections and there are not sufficient savings, which is relatively likely to occur.

Healthy Behavior Incentives:

Sustainability: Moderate

Healthy behavior incentives have been approved in a number of states, so the likelihood of them being challenged is very low. The threat to stability is in the event that these incentives fail to improve health outcomes or provide cost-savings to the Commonwealth, which (in the short term), research indicates is a likely outcome. Pushback is also likely due to the administrative complexity of setting these programs up and continuing to support them. If sufficient participation fails to exist, as has happened in many other programs, the sustainability of this program will likely be low.

Criterion Four: Employment Outcomes

This criterion measures employment outcomes for individuals based upon each of the different alternatives. It is likely that most of these alternatives will not alter employment outcomes, and there may be no effect across the board. While zeros across the board would seem to indicate that this isn't an important criterion, many policymakers look to these conditions as a way to increase jobs (especially work requirements), and so considering what the change is to employment is a worthwhile venture.

Baseline: Medicaid Expansion without Conditions

Employment Outcomes: Likely no change in employment

Based on the first fifteen months of Medicaid expansion, in the states that expanded in January 2014, there were no significant changes in employment, job switch, or full vs. part-time status (Gooptu, Moriya, Simon, & Sommers, 2016). Research indicates no effect of Medicaid coverage on employment or earnings (Baicker, Finkelstein, Song, & Taubman, 2014). Some states (such as Montana) have reported modest increases in labor force participation among low-income, non-disabled expansion recipients (Bureau of Business and Economic Research, 2018), but there is not robust evidence to support this.

Work-Requirements

Employment Outcomes: Likely no change in employment

Work requirements for Medicaid coverage have been found to improve job-searching population, and increase the number of individuals searching for work, but does not change the likelihood of employment for nearly 90 percent of those who might enroll in Medicaid (Sommers et al., 2018). In similar programs that require work in exchange for a benefit or entitlement (such as SNAP), increases in employment are found to be scarce and very small if at all, between a 0 to 2 percent increase (Harris, 2019). In addition, research indicates that Medicaid expansion had virtually no impact on employer provision of health insurance (Abraham, Royalty, & Drake, 2018).

Premiums

Employment Outcomes: Likely no change in employment

Given that the primary impact of premiums on health insurance is removing individuals from Medicaid coverage, the likely effect of premiums on employment will be the impact of losing healthcare on employment. There is little evidence to suggest that paying a $5-$10 per month premium has any impact on employment for those who comply with premium payments. Medicaid coverage has been found to make job search easier and easier to continue employment (Ohio Department of Medicaid, 2016). Individuals with Medicaid coverage have reported that coverage allowed them to perform better at work (Tipirneni et al., 2017). Those who lose insurance as a result of not paying their premiums may face increased difficulty in finding a job or maintaining their same level of performance at their job as a result of loss of coverage.

Co-Pays

Employment Outcomes: Likely no change in employment

Co-payments for non-emergent usage of the emergency room are unlikely to have a significant impact on employment. They will not cause individuals to lose health insurance, which is the primary driver of health-related changes in employment.

Healthy Behavior Incentives

Employment Outcomes: Likely no change in employment

Healthy behavior incentives are unlikely to have a significant impact on employment, apart from the fact that when individuals become healthier (though evidence doesn't necessarily say that healthy behavior incentives actually significantly positively impact health), they are more able to find and maintain employment.

Criterion Five: Equity

This criterion seeks to determine how equitable the imposition of the conditions would be. Using ACS data, I examine who will be subject to each condition, compared to the entire Medicaid expansion population, to see what groups are disproportionately impacted.

Baseline:

Equity: Equal Impact

The baseline doesn't involve any change to those that are currently receiving benefits from Medicaid expansion, so there aren't any equity implications associated with a non-existent change. For more information as to what populations benefited from Medicaid expansion, see appendix three for a summary of factors that describe the expansion population.

Work Requirements:

Equity: Disproportionate Impact

Individuals with disabilities and persons of color face disproportionate challenges in meeting requirements and face disproportionate recourse under work requirement programs (Tipirneni et al., 2017), which could result in wider disparities in health insurance coverage and health outcomes (Antonisse & Garfield, 2018). Based on the ACS analysis, those potentially subject to work requirements tend to look relatively similar to the Medicaid expansion population over the analyzed factors (which can be found in appendix five, table A5), with the exception of looking older.

When breaking down the population of individuals subject to work requirements into those who are currently working and those who aren't, I observe more stark differences. Those who are subject to work requirements and are employed are relatively younger than those not employed, and relative to the expansion population, much more likely to have higher income levels, relatively more educated, and are less likely to lack access to a vehicle. Those subject to work requirements and not employed are predominantly older, lower income, lack higher education (above high school), are more likely to lack internet access and access to a vehicle. Across both populations, there does not seem to be much of a racial disparity in terms of those subject to work requirements.

Given that internet access and access to a vehicle are some of the most important components in job search and requisites for employment, this alternative has the potential to disproportionately harm individuals without such access.

Premiums:

Equity: Relatively Equal Impact

Premiums would apply to all individuals between 100-138% of the FPL without the exemptions that apply to work requirements. Compared to the entire Medicaid expansion populations, premiums would apply to a disproportionately older population, with the relative same racial breakdown, with lower rates of higher education, that are more likely to be in the labor force and employed (working 20+ hours per week and 40+ weeks per year), but are much less likely to lack access to a vehicle. These aren't factors that should significantly deter these program beneficiaries from complying with the requirement. Since these individuals qualify for the same exemptions as work requirements but restrict the population to only those over 100% FPL, it has a more equal impact than work requirements.

Co-Pays:

Equity: Relatively Equal Impact

Co-pays would apply to the exact same populations as premiums, including the exemptions. See above (Premiums) for information regarding what populations are disproportionately impacted.

Healthy Behavior Incentives:

Equity: Relatively Equal Impact

Given that healthy behavior incentives apply to all individuals eligible for Medicaid expansion, there aren't significant equity concerns. The implications for equity come with participation. Given low awareness and participation rates, it is likely that those who will benefit from these incentives are individuals with greater access to transportation and the internet in order to learn about and comply with the incentives. In theory, everyone is eligible, in practice, much more emphasis will need to be placed on communicating the program in order to ensure equitable access.

Criterion Six: Financial Well-being

Given that the role of insurance is to be a financial risk mitigation mechanism, this criterion seeks to determine how the conditions imposed on the beneficiary impact an individual's financial well-being. By imposing conditions on recipients, they may face costs or receive income from work incentivized by programs, so this criterion will analyze the impact of each of the criteria on an individual's financial situation. This will include changes in expenditures on medical care, the likelihood of bankruptcy, amount of severely delinquent debt, etc.

General impacts of Medicaid coverage loss: Those who lost Medicaid health insurance coverage were more than three times more likely to have medical debt than those continuously insured (Carlson et al., 2006). The amount of this debt is relatively significant. Individuals in Tennessee who lost Medicaid coverage, on average, faced an increase in severely delinquent debt by roughly $2,517, and a decrease of the credit score by roughly 46 points (Argys, Friedson, Pitts, & Tello-Trillo, 2017).

Baseline:

Financial Impacts: Very positive

Medicaid expansion significantly reduces the number of unpaid bills and amount of debt sent to third-party collection agencies among those residing in zip codes with the highest share of low-income, uninsured individuals. Gaining Medicaid coverage results in a decrease in collections balances of roughly $1,140 (Hu, Kaestner, Mazumder, Miller, & Wong, 2016). Additionally, Medicaid coverage results in a 25 percent decline in the probability of having an unpaid medical bill sent to a collections agency and a 35 percent decline in having any out-of-pocket medical expenditures (A. Finkelstein, Taubman, Wright, Bernstein, Gruber, Newhouse, Allen, Baicker, et al., 2012). The impact has a spillover effect into other parts of consumer finances as well, those in counties where Medicaid expansion took place have average per capita credit card balances declining by roughly $200 per year compared to those that did not expand Medicaid (Zafar, Pinkovskiy, & Dussault, 2016).

Work Requirements:

Financial Impacts: Severe negative impacts

The estimated 28,596 to 50,000 individuals who will lose Medicaid coverage as a result of work requirements will be subject to the general impacts of Medicaid coverage loss, which are quite severe, and will have a large impact, given that most individuals are projected to be disenrolled via work requirements of all considered conditions. There will also be negative implications for hospitals[5].

[5]The Commonwealth Fund finds that Medicaid work requirements could decrease hospital revenues by roughly 18-22 percent for states that implement such requirements (based on Indiana and Kentucky). Nationwide, Medicaid work requirements could contribute to an increase in uncompensated hospital care of between $2.5 billion and $3.7 billion in 2019 due to loss of

Premiums:

Financial Impacts: Mildly Negative Impacts

Given that the premium amounts are $5 and $10, depending on income, the fact that no premiums will be charged if the income level is less than 100% FPL, and that premium payments will be capped at 5% of income, the likelihood of the cost of the premium being a significant financial impediment is low. The mechanism by which there is potential to have harm to financial well-being is the shock of losing Medicaid coverage, so the "general impacts of Medicaid coverage loss" can be applied here. This would apply to the expected 12,000 individuals who will lose coverage. Though not as severe as work requirements, it will still have a negative impact on the financial well-being of those who lose coverage.

Co-Pays

Financial Impacts: Little to no impact

Since co-pays are only $5, apply only to non-emergent usage of the emergency room, and are capped at 5% of an individual's income, it is unlikely that paying the co-pays would have a significant impact on an individual's financial well-being.

Healthy Behavior Incentives

Financial Impacts: Little to no impact

Healthy behavior incentives are not a significant enough amount to make an impact on an individual's overall financial well-being. The benefits of improved health and seeking primary care can have positive health impacts, given that improved health is largely correlated with better financial wellbeing, primarily through ability to work, but other impacts as well (such as decrease in certain health-related expenditures).

insurance. Hospitals in states that expand Medicaid will see the largest increase in uncompensated care. Hospitals in Kentucky (a state that expanded Medicaid and implemented work requirements) are expected to see operation margins of hospitals decrease by -1.7 to -3.1 percent (Haught, Dobson, & Luu, 2019).

Outcomes Matrix

The following outcomes matrix summarizes the tradeoffs between each alternative based on the various criteria. For each criterion, each alternative is rated on a scale from 1-5 (where 1 is the worst and 5 is the best) with the score being determined from the rubrics contained in appendix eight. The baseline is not considered, because it doesn't represent a change, it is rather the standard by which we compare the alternatives to. The criteria are weighted based on their relative importance and then a final score out of 5 is computed. Premiums are the clear winner, scoring 3.98 out of five.

Figure Ten: Outcomes Matrix

	Weight	Baseline: No conditions	Work Requirements	Premiums	Co-Payments	Healthy Behavior Incentives
Cost-Effectiveness	50%	N/A	3 Borderline cost-effective (BCR = 0.90)	5 Highly cost-effective (BCR = 2.21)	1 Not-cost effective (BCR = 0.11)	1 Not cost-effective (BCR = 0)
Health Outcomes	10%	N/A	1 Severe negative impacts	2 Moderate negative impacts	3 Likely no change	3 Likely no change
Long-term Sustainability	10%	N/A	1.8 Low	3.8 Moderate-to-High	3.15 Moderate	3.45 Moderate
Employment Outcomes	10%	N/A	3 Likely no employment change	3 Likely no employment change	3 Likely no employment change	3 Likely no employment change
Equity	10%	N/A	2.75 Disproportionate impact	4 Relatively equal impact	4 Relatively equal impact	4 Relatively equal impact
Financial Well-being	10%	N/A	1 Severe negative impacts	2 Mildly negative impacts	3 Likely no change	3 Likely no change
Total Score	Out of 5	N/A	2.455	3.98	2.115	2.145

Policy Recommendation

Recognizing the trade-offs between each of the potential policies, as depicted in the outcome matrix, the ultimate recommendation is to impose premiums on eligible individuals (100-138% FPL, who do not fall into one of the aforementioned exemption categories). The clearest and most tangible reason for choosing this option is its cost-effectiveness. It is the only alternative that has a benefit-cost ratio greater than one, meaning that the benefits (cost-savings to the Commonwealth) exceed the expenditure necessary to obtain that cost-savings. Since reducing the cost in order to enable long-term sustainability of the program is a key objective of a Section 1115 waiver, this alternative seems most likely to satisfy.

The outcomes matrix provides additional insight as to why this is the preferred alternative. This alternative likely results in the disenrollment of roughly 12,000 individuals, which provides some cost-savings that can be used to better manage and support Medicaid at a relatively cost-efficient amount, compared to the other alternatives. Additionally, given this amount of disenrollment, we see some potential negative health outcomes and financial outcomes, but they are far less than for work requirements, the next most cost-effective option. In order to avoid some of the adverse consequences, the Commonwealth should look to see if there's other options they can recommend to individuals who are removed from Medicaid coverage to maintain their health and financial well-being, perhaps partnering with community organizations.

Implementation

In order to implement premiums on Medicaid expansion recipients, I recommend the following timeline. Premiums should go into effect at the beginning of the year (either January 1, 2020 or January 1, 2021, depending on when approval is received from CMS). Aligning the beginning of premiums with the start of a new insurance cycle allows individuals to compare Medicaid with other plans that will likely have their open enrollment periods leading up to January 1. Notification that premiums will be imposed should be communicated to all enrollees online six months prior and by mail to current enrollees who will be subject to the premiums three months and again one month prior to the institution of such premiums. Clear instructions should be included regarding what the premium amounts are, an explanation of what premiums are, as well as clear and specific deadlines. For those currently enrolled, it should be made very clear that this is a change from current operation, in order to avoid confusion. The same should be included at the time of enrollment for new individuals who will be subject to premiums. Within these notifications, there should also be a description of the consequences for failing to pay (loss of coverage after three consecutive months of failing to pay premiums).

Options for payment for multiple months at a time should be made available, but not required, in order to increase accessibility for individuals who are worried they may forget to pay their premiums. Options should be set up in order to allow a third party to pay premiums on behalf of an individual enrolled on Medicaid. The options of payment should be made explicit and broad, i.e. accepting, cash, check, credit card, etc., in order to ensure that all individuals have a means of paying, even those who might be unbanked.

Notification should also go out after two consecutive months of individuals failing to make their premium payments, that one more month will result in the termination of their insurance. This notification should also include a hotline in order to report "special hardship" exemptions as well as to ask questions and to process payment over the phone. It should also contain a web-link for individuals to be able to find out more information. All content should also be made available in both English and Spanish.

Special emphasis should be placed on awareness of this new policy since it marks a departure from the status quo, and the reason for dis-enrollment should be centered around failing to pay premiums, not lack of knowledge of their existence. DMAS should attempt to partner with non-profits and other organizations that typically serve individuals who would be on Medicaid and subject to these requirements to help spread the word from an already familiar source. DMAS should conduct a best-practices analysis to see what strategies worked best in publicizing Medicaid expansion and replicate that for imposing premium requirements.

Evaluation:

Evaluation is a key component of the implementation of the policy. It is generally a good practice, but is also required to measure quality, accessibility, and health outcomes for the approach as part of the CMS guidelines. In order to determine if this is a policy that the Commonwealth wants to keep in place and continue to support, DMAS should conduct an impact evaluation of the policy. It will also help determine if this is a fair and equitable policy.

This would involve initially randomizing (among the eligible population) the requirement of paying a premium. Randomly selecting individuals to be subject to the premium requirement will allow the causal determination of the impact of such a requirement, in terms of disenrollment, health outcomes, financial stability, and other outcomes of interest. Six and twelve months after, individuals should be surveyed, and using administrative data and interviews, to measure a series of key evaluation metrics, i.e. desired health outcomes, employment outcomes, utilization, etc.

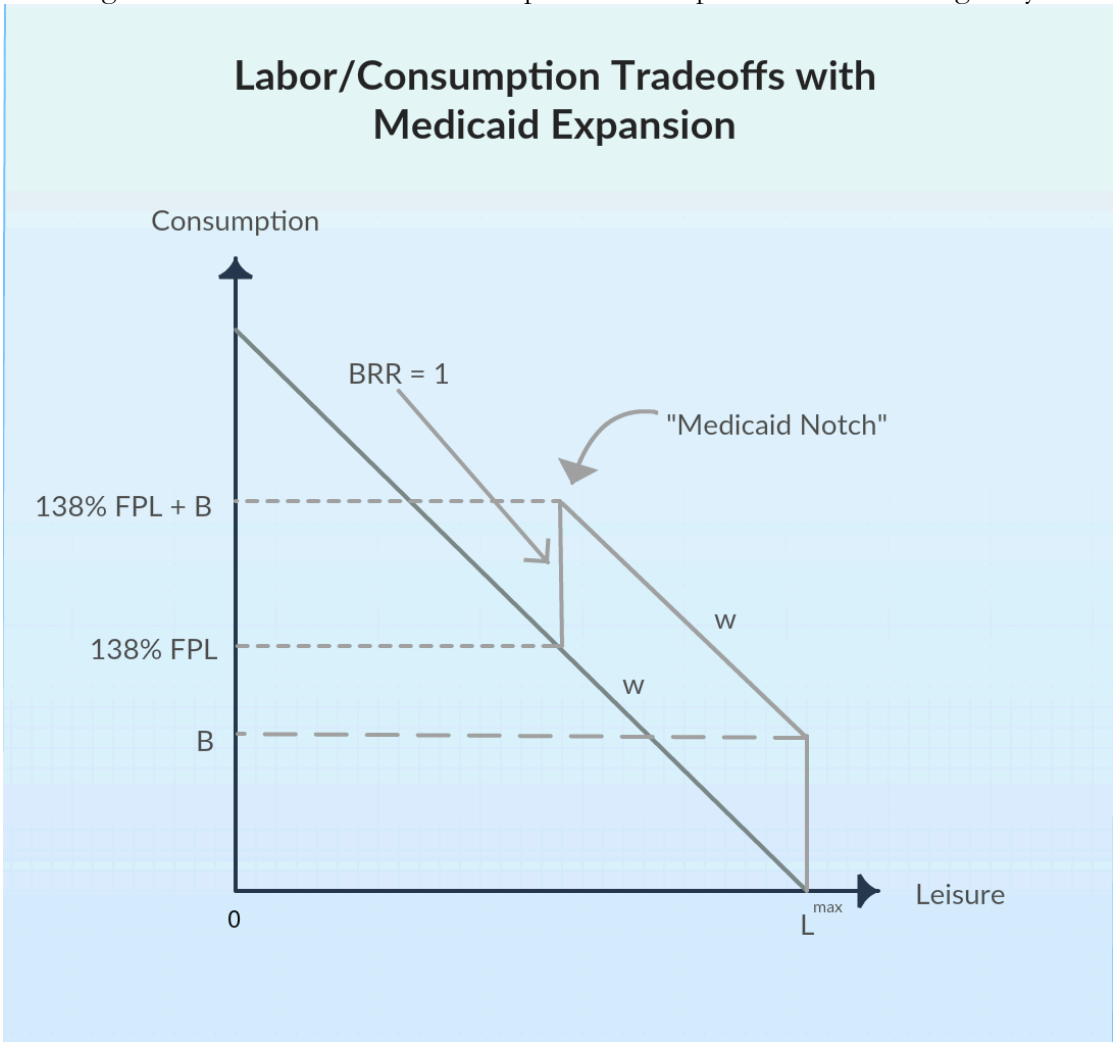
After the premium requirement is randomized, using eligibility and enrollment data, as well as survey data, the Commonwealth should assess coverage gaps and utilization trends. Additionally, the Commonwealth should examine coverage trends within and outside of Medicaid in order to see if the premiums deter individuals from signing up or enrolling in Medicaid.

In the event that randomization isn't approved, DMAS should work with their evaluation team to develop another means of designing rollout of the premiums to ensure a causal estimate of the effect (such as a staggered rollout strategy).

Once an evaluation is completed, a cost-benefit analysis should also be completed in order to see if the causal outcomes obtained from imposing premiums created a net-positive for the Commonwealth.

Appendix One: Work Incentives with Medicaid Coverage

Figure A1. Labor Incentives and Implicit Tax Graph with Medicaid Eligibility



Note: Figure created using Creately.

This figure shows the tradeoffs for individuals on Medicaid. The x-axis shows Leisure where 0 would mean an individual spends all of their time working and L-max means the individual spends all of their time on leisure and no time working. An individual at L(max) earns no wage, but receives the benefit of Medicaid coverage *B*. We can approximate the value of *B* at roughly $6,355, the actuarial cost of Medicaid coverage. From there, an individual is able to earn wage *w* and have the benefit of Medicaid by working up until they reach 138% FPL, at which time they lose the benefit of Medicaid coverage, which represents a loss of *B*. This can also be thought as of a tax of *B* for earning over 138% of the FPL. Since Medicaid coverage is binary, this represents a 100% reduction in benefits or a BRR of 1. After earning 138% FPL, an individual does not receive the Medicaid benefit, therefore, an individual is better off earning 137% of the FPL than 139% of the FPL. This poses a potential disincentive for work, which is the primary justification for work requirements. Economic theory would predict that we expect to see bunching at the kink points, i.e. many individuals would choose to be located at (L-max, B) or the "Medicaid Notch" where individuals earn just enough to still qualify for Medicaid, but earning an additional dollar would mean the loss of coverage, i.e. the point where the discontinuous drop in benefits occurs (Yelowitz, 1995).

Appendix Two: TEEOP Exemptions

- Taken Directly from Section 1115 Application: (Virginia Department of Medical Assistance Services, 2018)

Standard Exemptions

Individuals who qualify for a standard exemption include enrollees who are:

- Children who are under age 19
- Full time, three-quarter time, and part-time students in post-secondary education, including community college courses leading to industry certifications or a STEM-H related degree or credential
- Individuals age 65 and older
- Individuals dually enrolled in Medicaid and Medicare
- Individuals who have blindness or who have a disability, including individuals who are:
    - Enrolled in a 1915(c) Waiver;
    - Defined under the Americans with Disability Act, Section 504 or Section 1557, who are unable to comply with the requirements due to disability-related reasons;
    - Supplemental Security Income (SSI) recipients;
    - Social Security Disability Insurance (SSDI) recipients; or
    - State-based disability program recipients
- Pregnant women and postpartum women up to six months after delivery
- Former foster care children under age 26
- Primary caregiver for a dependent child under age 19
- Primary caregiver for an adult dependent with a disability or a non-dependent relative
- Medically frail individuals
    - An individual who is medically frail or has special medical needs. Individuals with medical frailty or special medical needs include but are not limited to: individuals with disabling mental disorders, individuals with chronic SUD, individuals with serious and complex medical conditions, individuals with a physical, intellectual or developmental disability that significantly impairs their ability to perform one or more activities of daily living, individuals with a disability determination based on Social Security Criteria
    - Individuals found to be medically complex and enrolled in a Commonwealth Coordinated Care (CCC) Plus Medicaid managed care plan
    - Individuals participating in a SUD treatment program (receiving ARTS services) or a state-certified drug court program
    - Individuals with a SUD diagnosis
    - Individuals who are physically or mentally unable to work
    - Individuals with HIV/AIDS
    - Individuals who are chronically homeless (residing in a place not meant for human habitation, a shelter for homeless persons, a safe haven, or the streets)
    - Individuals who were incarcerated within the past 12 months
    - Other individuals whom DMAS has determined to be medically frail due to serious and complex medical conditions or special medical needs
    - Individuals receiving long-term services and supports
- Individuals fulfilling Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) work program requirements
- Individuals with acute medical conditions that a medical professional validates would prevent compliance with work and community engagement requirements
- Individuals residing in institutions
- Individuals with a serious mental illness or disabling mental disorder
- Victims of domestic violence
- Any additional exemptions as the Commonwealth deems necessary to support the health of enrollees and achieve the objectives of the program

Appendix Two, continued: TEEOP Exemptions

Hardship Exemptions

- Taken Directly from Section 1115 Application: (Virginia Department of Medical Assistance Services, 2018)

Hardship/Good Cause Exemptions

To address life circumstances that affect an individual's ability to engage in work and community engagement, the Commonwealth will exempt the following Medicaid enrollees. The duration of the exemption will be dependent on the individual's circumstances:

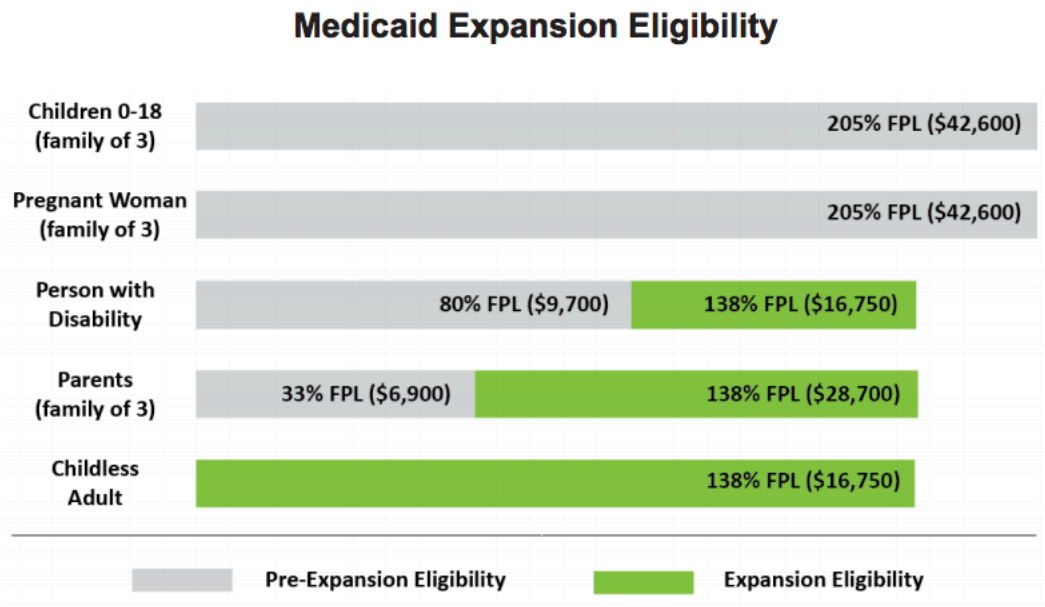
- Individuals who experience a hospitalization or serious illness or who reside with an immediate family member who experiences a hospitalization or serious illness
- Individuals who are temporarily incapacitated
- Birth or death of a household member
- Severe inclement weather
- Family emergency
- Change in family living circumstances (e.g., separation, divorce)
- Individuals living in geographic areas with high unemployment rates, as defined by the Commonwealth
- Individuals residing in geographic areas where Commonwealth workforce programs are unavailable or at full capacity
- Provider attestation of inability to engage in work and community engagement on a short-term basis
- Individuals displaced or significantly impacted by a natural or man-made disaster or catastrophic event

Appendix Three: Expansion Population

In order to compute estimates of the number of individuals in each of these categories, I utilized 2017 ACS data. I restricted all samples[6] to Virginia, adults aged 19-64, who do not have Medicare or Medicaid insurance, and whose incomes fall within the appropriate range[7]. As can be seen from figure A1 below, the Medicaid Expansion population can be defined as three individual groups:

- Disabled individuals with family incomes 80%-138% FPL
    - Being disabled is defined as having at least one of the following disabilities: ambulatory difficulty, independent living difficulty, self-care difficulty, vision or hearing difficulty, or cognitive difficulty.
- Adults with children with family incomes 33%-138% FPL
    - The sample is restricted to adults who have at least one child.
- Childless adults with family incomes 0%-138% FPL
    - The sample is restricted to adults who have zero children.

Figure A2. Medicaid Expansion Groups



Source: 2019 Medicaid at a Glance

[6] ACS variable for person weight (perwt) was utilized in order to appropriately weigh the survey data.

[7] While the primary metric for income eligibility is the ACS' measure of income as a percentage of the FPL (POVERTY), there were some issues with earned compared to total income factoring into the poverty level, so in addition, I included maximum income (total family income) eligibility thresholds based on VDH guidelines (slide 11: Virginia Medicaid Expansion and 2019 Affordable Care Act)

The 2017 ACS assumes that there are 8,470,020 Virginians and based on the analysis of the three groups, an estimated 5.297% of Virginians would now become eligible for Medicaid coverage, working out to an expansion population of roughly 448,685 individuals.

This estimate of the expansion population is in the ballpark of many others which find roughly 400,000 to 423,000 individuals would be in the expansion population (Norris, 2018; Scott, 2018). The ACS estimate computed is most likely a slight overestimate, because those eligible for SSDI (and eligible for, but not on Medicare) would not be included in the expansion population, but the ACS does not allow a way to exclude these individuals, so they may bias our results.

Table A3. Entire Medicaid Expansion Population Demographic Statistics, Panel A

Demographic Statistics on Medicaid Expansion Population	
Age	
19-29	42.43%
30-39	19.18%
40-49	15.23%
50-69	16.22%
60-64	6.94%
Race	
White, Non-Hispanic	51.16%
Black, Non-Hispanic	26.22%
Hispanic	13.50%
Other, Non-Hispanic	9.12%
Marriage and Family	
Married	30.93%
Divorced	11.11%
Childless	68.50%
Parent of children age 18 and under	27.46%
Parent of children age 6 and under	15.82%
Income and Education	
Income <50% FPL	31.89%
Income ≥50% and <100% FPL	33.34%
Income ≥ 100% FPL	34.78%
Less than HS Education	6.62%
Some HS Education	7.87%
HS Grad	39.37%
Some College	28.35%
College Graduate	17.79%

Table A3. Entire Medicaid Expansion Population Demographic Statistics, Panel B

Demographic Statistics on Medicaid Expansion Population	
Labor Market	
% in Labor Force	62.70%
% Employed	54.60%
% Employed (conditional on being in the labor force)	87.08%
% worked last year	65.93%
% work 20+ hours per week	56.56%
% work 20+ hours per week (conditional on being employed)	87.39%
% work 40+ weeks per year	40.77%
% work 40+ weeks per year (conditional on being employed)	71.92%
% enrolled in school	23.31%
Disability	
% of individuals with at least one reported disability[8]	11.50%
% of individuals with two or more reported disabilities	6.71%
Internet and Vehicle Access	
Household has no internet access	14.31%
Household has no broadband (cable/DSL/fiber-optic) internet access	19.85%
Household has no access to a vehicle	11.83%

[8] A disability is defined as having one of the following: cognitive difficulty, ambulatory difficulty, independent living difficulty, self-care difficulty, and vision or hearing difficulty.

Appendix Four: Premium and Co-Pay Population

TEEOP exemptions exist for individuals who are students, individuals who have disabilities or are medically frail, recipients of Supplemental Security Income (SSI), primary caregiver for a dependent child under the age of 19, primary caregiver for an adult dependent, recipients of SNAP and TANF. To gain a better understanding of the individual subject to work requirements, I repeat the analysis using the ACS, but exclude individuals who are subject to the above exemptions. I exclude individuals who are in school, have at least one of the identified disabilities, receive SSI (defined as more than $0 of SSI income per year), are in the household of someone who receives SSI, have a child aged 18 or under, or are a beneficiary of SNAP.

Table A4. Medicaid Expansion Population Demographic Statistics 100-138% FPL by exemption status, Panel A

Demographic Statistics on Medicaid Expansion Population, 100-138% FPL		
	100-138% FPL, all individuals	100-138% FPL, excluding TEEOP exemptions
Age		
19-29	33.55%	33.83%
30-39	24.19%	18.62%
40-49	18.42%	10.46%
50-69	16.95%	24.61%
60-64	6.89%	12.48%
Race		
White, Non-Hispanic	47.79%	49.52%
Black, Non-Hispanic	26.15%	25.64%
Hispanic	17.08%	14.34%
Other, Non-Hispanic	8.98%	10.51%
Marriage and Family		
Married	40.72%	28.86%
Divorced	11.48%	14.28%
Childless	53.19%	91.13%
Parent of children age 18 and under	40.51%	0%
Parent of children age 6 and under	23.03%	0%
Income and Education		
Income <50% FPL	0%	0%
Income ≥50% and <100% FPL	0%	0%
Income ≥ 100% FPL	100%	100%
Less than HS Education	6.57%	5.01%
Some HS Education	8.46%	7.72%
HS Grad	43.11%	47.15%
Some College	24.99%	22.46%
College Graduate	16.87%	17.65%

Table A4. Medicaid Expansion Population Demographic Statistics 100-138% FPL by exemption status, Panel B

Demographic Statistics on Medicaid Expansion Population		
	100-138% FPL, all individuals	100-138% FPL, excluding TEEOP exemptions
Labor Market		
% in Labor Force	74.31%	76.22%
% Employed	68.53%	68.46%
% Employed (conditional on being in the labor force)	92.22%	89.82%
% worked last year	75.09%	76.35%
% work 20+ hours per week	70.67%	71.14%
% work 20+ hours per week (conditional on being employed)	94.67%	93.16%
% work 40+ weeks per year	59.17%	59.62%
% work 40+ weeks per year (conditional on being employed)	83.57%	82.92%
% enrolled in school	13.07%	0%
Disability		
% of individuals with at least one reported disability[9]	10.26%	0%
% of individuals with two or more reported disabilities	6.46%	0%
Internet and Vehicle Access		
Household has no internet access	13.61%	16.01%
Household has no broadband (cable/DSL/fiber-optic) internet access	18.54%	20.36%
Household has no access to a vehicle	9.12%	7.30%

[9] A disability is defined as having one of the following: cognitive difficulty, ambulatory difficulty, independent living difficulty, self-care difficulty, and vision or hearing difficulty.

Appendix Five: Work Requirement Population

For those who are considered part of the Medicaid expansion population, exemptions for work requirements exist for individuals who are students, individuals who have disabilities or are medically frail, recipients of Supplemental Security Income (SSI), primary caregiver for a dependent child under the age of 19, primary caregiver for an adult dependent, recipients of SNAP and TANF.

In order to gain a better understanding of the individual subject to work requirements, I repeat the analysis using the ACS, but exclude individuals who are subject to the above exemptions. I exclude individuals who are in school, have at least one of the identified disabilities, receive SSI (defined as more than $0 of SSI income per year), are in the household of someone who receives SSI, have a child aged 18 or under, or are a beneficiary of SNAP.

Table A5. Medicaid Expansion Population Demographic Statistics by Work Requirement Status

Demographic Statistics on Medicaid Expansion Population				
	Likely Exempt from Work Requirements	Potentially Subject to Work Requirements	Potentially Subject to Work Requirements, employed	Potentially Subject to Work Requirements, not employed
Age				
19-29	46.58%	33.35%	37.39%	28.39%
30-39	20.47%	16.44%	20.47%	11.03%
40-49	15.86%	13.89%	14.40%	13.19%
50-59	12.83%	23.46%	20.57%	27.34%
60-64	4.26%	12.67%	7.17%	20.04%
Race				
White, Non-Hispanic	50.41%	52.75%	49.82%	56.69%
Black, Non-Hispanic	25.74%	27.25%	28.05%	26.18%
Hispanic	13.94%	12.56%	15.24%	8.97%
Other, Non-Hispanic	9.91%	7.43%	6.89%	8.16%
Marriage and Family				
Married	32.98%	26.52%	21.94%	32.66%
Divorced	9.29%	15.02%	15.43%	14.48%
Childless	56.78%	93.61%	93.06%	94.34%
Parent of children age 18 and under	40.27%	0%	0%	0%
Parent of children age 6 and under	23.20%	0%	0%	0%
Income and Education				
Income <50% FPL	31.84%	31.98%	20.31%	47.62%
Income ≥50% & <100% FPL	34.14%	31.62%	36.19%	25.50%
Income ≥ 100% FPL	34.02%	36.40%	43.50%	26.87%

Table A5. Medicaid Expansion Population Demographic Statistics by Work Requirement Status, continued

	Likely Exempt from Work Requirements	Potentially Subject to Work Requirements	Potentially Subject to Work Requirements, employed	Potentially Subject to Work Requirements, not employed
Less than HS Education	7.04%	5.71%	5.84%	5.54%
Some HS Education	8.56%	6.39%	6.94%	5.66%
HS Grad	35.70%	47.23%	43.78%	51.87%
Some College	32.06%	20.40%	22.57%	17.49%
College Graduate	16.64%	20.26%	20.88%	19.43%
Labor Market				
% in Labor Force	60.20%	68.07%	100%	25.26%
% Employed	53.35%	57.28%	100%	0%
% Employed (conditional on being in the labor force)	88.63%	84.15%	100%	0%
% worked last year	65.54%	66.76%	100%	22.20%
% work 20+ hours per week	55.42%	59.00%	89.54%	18.06%
% work 20+ hours per week (conditional on being employed)	86.31%	89.54%	89.54%	0%
% work 40+ weeks per year	39.53%	43.43%	72.64%	4.27%
% work 40+ weeks per year (conditional on being employed)	71.55%	72.64%	72.64%	0%
% enrolled in school	34.19%	0%	0%	0%
Disability				
% of individuals with at least one reported disability[10]	16.88%	0%	0%	0%
% of individuals with two or more reported disabilities	9.85%	0%	0%	0%
Internet and Vehicle Access				
Household has no internet access	13.09%	16.93%	13.40%	21.66%
Household has no broadband (cable/DSL/fiber-optic) internet access	19.51%	20.57%	18.01%	23.99%
Household has no access to a vehicle	12.46%	10.47%	8.98%	12.46%
Estimated Beneficiaries	305,878	142,807	81,800	61,007

[10] A disability is defined as having one of the following: cognitive difficulty, ambulatory difficulty, independent living difficulty, self-care difficulty, and vision or hearing difficulty.

Appendix Six: Number of Individuals likely to be impacted by each alternative

Work Requirements:

Arkansas was the first state to implement work requirements, and the following shows the rate of non-compliance due to not meeting the work requirement each month. This is either a result of not completing the work requirement or not reporting the work requirement to the Arkansas Department of Human Services.

Table A6. Disenrollment on Arkansas Medicaid due to Work Requirement Non-Compliance

Month	Number Subject to Work Requirement	One-month non-compliance	Two months non-compliance	Three months non-compliance (Disenrollment)
June 2018	27,140	7,041	N/A	N/A
July 2018	46,025	6,531	5,426	N/A
August 2018	62,635	6,174	5,076	4,353
September 2018	76,222	7,748	4,841	4,109
October 2018	71,514	2,600	6,002	3,815
November 2018	66,628	2,429	1,936	4,655
December 2018*	60,680	0	0	1,232
January 2019	105,158	8,895	0	0
February 2019	116,229	7,066	6,472	0

* Numbers reset at the end of each calendar year

Source: (Arkansas Department of Human Services, 2019)

In the first year, there were a total of 18,164 individuals disenrolled due to non-compliance. During the year, in a given month the maximum number of individuals that was subjected to such requirements was 76,222 individuals. Using these estimates, that indicates that roughly 23.83% of individuals subject to requirements churned off of the program in the first six months due to failure to comply.

The Commonwealth of Virginia estimated that roughly 120,000 individuals would be subject to work requirements, if implemented. My ACS estimates indicate that roughly 140,000 individuals would be subject, but this is most likely due to overestimates of the expansion population and underestimates of exemptions. Using the 120,000 number, and the above likely churn rate, I estimate that roughly 28,596 individuals would lose Medicaid coverage as a result of work requirements. While this is a simple means of estimating the likely impact of the work requirement, due to the few states that have thus far implemented work requirements, this is the best available data to use for such a computation.

Virginia DMAS estimates that roughly 50,000 individuals would not meet work requirements and be dis-enrolled from coverage based on exemptions required by CMS and experience with current Medicaid members (Department of Planning and Budget, 2018).

Co-Pays:

Roughly 44.5% percent of Medicaid recipients had an ED visit at least once a year, and approximately 25% of Medicaid recipients had a low-severity ED visit at least once per year (Kim, McConnell, & Sun, 2017). Given that low-severity visits are the most likely to be non-emergent, and

that Virginia estimates the co-pay eligible population to be 42,000, roughly 25% of that would be 10,500 individuals that might be exposed to co-payments. Far fewer would actually have to pay the co-pays because it is unlikely that 100% of low-severity ED visits are non-emergent.

Premiums:

The Commonwealth of Virginia estimated that roughly 42,000 enrollees would be subject to premium requirements. My ACS estimates are closer to 50,000 but still in the general neighborhood, most likely an overestimate due to the overestimation of the expansion population and inability to control for certain other exemption criteria.

In Indiana, roughly 29% of the total people who were subjected to premium requirements either never received or missed out on continuous Medicaid coverage due to premium requirements. If we were to apply this same rate to Virginia, using the 42,000 estimate, this would mean roughly 12,000 individuals would be disenrolled from Medicaid coverage (Stewart, Mejia, & Cassid, 2018).

Healthy Behavior Incentives:

In Iowa, less than ten percent of enrollees with incomes above the poverty line engaged with the incentive, and only 18 percent in Michigan. Virginia has not allocated any funding specifically for outreach and advertising of this alternative (Stewart et al., 2018). Based on these estimations, I estimate that roughly 14% of individuals would engage in healthy behavior incentives, and based on approximately 400,000 enrollees in Medicaid, that's roughly 56,000 people using these incentives.

Appendix Seven: Cost-Effectiveness Calculations

Assumptions:

Given the uncertainty in the length of time of each alternative, the BCR will be defined as the cost-savings from the alternative divided by the cost of the alternative, rather than the ratio of net-present benefits to net-present costs.

The table below contains the projected actuarial cost of Medicaid coverage for expansion adults, as determined by the Office of the Actuary of the Center for Medicare and Medicaid Services. It assumes a discount rate of 5%. Given that states are only responsible for 10% of cost, with the Federal government picking up the remainder of the cost.

Table A7. Projected Actuarial Cost of Medicaid Coverage

Fiscal Year	2019	2020	2021	2022	2023	2024	2025	2026
Projected PV Cost of Medicaid Coverage	6,355	6,364	6,366	6,379	6,392	6,399	6,411	6,418
Expected Cost to the Commonwealth	636	636	637	638	639	640	641	642

Source: Office of the Actuary of the Center for Medicare and Medicaid Services

There are also administrative costs associated with administering Medicaid coverage by the Commonwealth. The Commonwealth's Senate Finance Committee estimates administrative costs of Medicaid expansion at roughly $14,770,834 in FY 2019 and $17,368,267 in FY 2020. DMAS assumes average monthly enrollment of 190,694 in FY 2019 and 298,658 in FY 2020, which would mean administrative costs per person would be between $77.45 and $58.15. For the sake of this analysis, I will assume a $70 per enrollee administrative cost. The majority of these administrative costs are likely to be fixed costs, so they will not be factored into cost-savings from disenrollment.

Work Requirements:

Based on JLARC analysis of DMAS and VDSS data, the cost of case management of work requirements per recipient is expected to be between $341 and $1,080 per year (Joint Legislative Audit and Review Comission, 2018). The average amount would work out to $711 per enrollee for continuous case management.

The cost of the program to administer would be $711 per year, and the annual savings from a disenrolled individual would be approximately $638, indicating a benefit-cost ratio of 0.90. This alternative would cost more to remove individuals from Medicaid coverage than the amount the Commonwealth would save from disenrollment.

Premiums:

Virginia has previously implemented premiums on CHIP recipients. In 2002, premiums were $15 per month and administrative costs were reportedly 1.39 times the premium per person, which would work out to $250.20 in administrative costs per year, and if inflated to 2019 terms, that would be $353.54 (Brooks, 2013). Similarly, Arkansas had Health Independence Accounts which required the collection of funds, and could be considered similar to premium collection. That cost worked out to be $9 million for 40,000 eligible persons, working out to roughly $225 per person (Zylla, Planalp, Lukanen, & Blewett, 2018). Averaging these two costs together, I get $289.27 to administer. In

Arizona, the administrative costs of collecting co-pays and premiums was $15.8 million, and they only collected $2.9 million in Premiums and $2.7 million in co-payments (Buntin, Graves, & Viverette, 2017).

To be more conservative in the benefit-cost estimate, I assume that premiums collected will go towards paying other administrative costs, and so the state doesn't receive any net benefit from them. Computing a benefit-cost ratio then consists of dividing the expected savings in Medicaid coverage expenditures ($638) by the expected administrative costs of collection ($289.27) to get 2.21.

Co-Payments

The estimated additional cost of services at the emergency room compared to the non-ED charge (the incremental cost of a non-emergent ED visit) for all conditions was found to be $93.85 in 1987 terms. Inflated to 2019 terms, using the Medical CPI[11] works out to be $360.41 (Baker & Baker, 1994). Sabik and Gandhi (2016) found that such a co-pay for non-emergent usage of the emergency room only decreases the likelihood that an ED visit is non-emergent by 6.2 percentage points. Since the $5 co-payment is not revenue raising, but rather to be seen as a deterrent, the benefit of these co-pays, on average are roughly $22.35.

While we lack a lot of good information regarding the costs of administering co-payments. Arkansas' program cost roughly $9 million for a revenue collection program, and Arizona's program cost $15.8 million for co-pays and premiums, so assuming that half of the cost would be for each, $7.9 million would be the cost. Among 42,000 eligible people, that would bring per-enrollee administrative costs to be between $188.10 and $214.26. Using an average of $201.18, that would result in a benefit-cost ratio of 0.11.

Healthy Behavior Incentives

Most research has indicated that healthy-behavior incentives do not provide any net savings to the state. A study in Virginia specifically found that total costs did not decline because of the tradeoff with increased outpatient usage. These incentives also do not have a large enough take-up to create significant change and the changes, if they were to occur, would pay-off a long time from when the incentive was offered. With a sufficiently-high discount rate, we can assume that these benefits would be insignificant, and thus assume a benefit-cost ratio of 0.

[11] Medical costs have outpaced the costs of most other items in the market, so I utilize the Medical CPI.

Appendix Eight: Outcome Matrix Component Calculations

Cost-Effectiveness

I convert the BCRs that have been computed into point equivalents in order to create a standardized metric of comparison for the outcomes matrix:

Table A8. Cost-Effectiveness Ratings

BCR Range	Point Equivalent
0 – 0.5	**1**
0.5 – 0.75	**2**
0.75 - 1	**3**
1 – 2	**4**
2+	**5**

Health Outcomes

I convert the health outcome impacts that have been determined into point equivalents in order to create a standardized metric of comparison for the outcomes matrix:

A9. Health Outcomes Ratings

Change in Health Outcomes	Point Equivalent
Severe Negative Impacts	**1**
Slight/Moderate Negative Impacts	**2**
Likely No Change	**3**
Slight Improvements	**4**
Major Improvements	**5**

Equity:

In addition to the discussion of equity, I compute an equity score based on the following four components: disparities in terms of racial impacts, the proportion of individuals without a high school diploma subjected to the requirements, the proportion of individuals below 100% of the FPL*, and the proportion of individuals that face some impediment to fulfilling a requirement based on their demographic characteristics/living situation.

Table A10. Equity Ratings

	Minority Racial Disparities (pp= percentage point)	% of Individuals without HS diploma	% of Individuals below 100% FPL	% of individuals with difficulty complying[12]	Total
Possible Rating	5 if <5pp 4 if 5.01-10pp 3 if 10.01-15pp 2 if 15.01-20pp 1 if >20pp	5 if 0-4% 4 if 4.01-8% 3 if 8.01-12% 2 if 12.01-16% 1 if >16%	5 if 0-10% 4 if 10.01-20% 3 if 20.01-30% 2 if 30.01-40% 1 if >40%	5 if 0-10% 4 if 10.01-20% 3 if 20.01-30% 2 if 30.01-40% 1 if >40%	
Weighting	25%	25%	25%	25%	Out of 5 points
Status Quo	N/A	N/A	N/A	N/A	N/A
Work Requirements	5	2	1	3	2.75
Premiums	5	2	5	4	4
Co-Pays	5	2	5	4	4
Healthy Behavior Incentives	5	2	5*	4	4

*Since healthy behaviors apply to everyone, the % of individuals under 100% FPL doesn't matter in complying with this requirement, so we give this the alternative highest rating for that sub-criterion.

Here is the calculation of differences in racial disparities:

Work Requirements:

Table A10b. Work Requirement Calculations for Equity Ratings

	Expansion Population	Work Requirements	Difference
Black, Non-Hispanic	26.22%	27.25%	1.03 percentage points
Hispanic	13.50%	12.56%	-0.94 percentage points
Other	9.12%	7.43%	-1.69 percentage points

Premiums and Co-Pays:

Table A10c. Premium and Co-Pay Calculations for Equity

	Expansion Population	Premiums and Co-Pays	Difference
Black, Non-Hispanic	26.22%	25.64%	-0.58 percentage points
Hispanic	13.50%	14.34%	0.84 percentage points
Other	9.12%	10.51%	-1.39 percentage points

[12] For work requirements, difficulty complying is the proportion of individuals with a disability, who lack access to a vehicle, or access to the internet. For premiums and co-pays, this includes individuals who lack access to the internet and earn less than 100% of the FPL. For healthy behavior incentives, it includes individuals who lack access to the internet. These are all risk factors that could potentially prevent an individual from engaging with the requirement.

The entire expansion population is eligible for healthy behavior incentives, so by definition, there is no racial disparity.

Employment Outcomes:

I convert the employment outcome impacts that have been determined into point equivalents in order to create a standardized metric of comparison for the outcomes matrix:

Table A11. Employment Outcomes Ratings

Description	Point Equivalent
Severe negative employment impacts	**1**
Mildly negative employment impacts	**2**
Likely no change to employment	**3**
Slight increase in employment	**4**
Significant increase in employment	**5**

Financial Well-being:

I convert the financial well-being outcome impacts that have been determined into point equivalents in order to create a standardized metric of comparison for the outcomes matrix:

Table A12. Financial Well-being Ratings

Description	Point Equivalent
Severe negative impacts	**1**
Mildly negative impacts	**2**
No change in financial well-being	**3**
Slight increase in financial well-being	**4**
Significant increase in financial well-being	**5**

Long-term Sustainability:

In addition to the discussion of long-term sustainability, I compute a sustainability score based on the following five components:

Table A13. Computing Sustainability Ratings

	Long-term (10+ years) of these programs in existence in other states	Proportion of other Medicaid Expansion states with similar conditions currently approved by CMS	Number of times set aside by courts within last year	Partisan Nature of the Issue	Likelihood of being eliminated due to cost	Score
Possible Rating	5 if yes, 1 if no	0 other states: 1 1-3 other states: 2 4-6 other states: 3 6-10 other states: 4 11+ other states: 5	0 times: 5 1 time: 3 2+ times: 1	Scale from 1 (most partisan) to 5 (least partisan)	Scale from 1 (most likely) to 5 (least likely)	Out of 5
Weighting	15%	15%	20%	15%	35%	
Status Quo	N/A	N/A	N/A	N/A	N/A	N/A
Work Requirements	1	4	1	1	2	1.8
Premiums	5	4	3	3	4	3.8
Co-Pays	5	4	5	3	1	3.15
Healthy Behavior Incentives	5	5	5	4	1	3.45

Appendix Nine: Healthy Behavior Incentive Examples

Below is a list[13] of states that have offered healthy behavior incentives with Medicaid, and their results, if applicable (Crawford, 2014):

- Florida's Enhanced Benefits Reward$ Program (2006–2014): Medicaid beneficiaries earned $15 to $25 credits for compliance with 19 healthy behaviors. Half of available credits were redeemed, with the majority of credits earned for childhood preventive care (45 percent) or adult/primary care office visits[14]
- Idaho's Behavioral Preventive Health Assistance Program (2007–2014): Medicaid beneficiaries who consulted with a doctor about losing weight or quitting smoking could earn a $100 voucher, to be used for gym memberships, weight management programs, nutrition counseling, and tobacco cessation products. Of the approximately 185,000 eligible beneficiaries, 1,422 participated after two years.[15]
- Idaho's Wellness Preventive Health Assistance Program (2007–present): Beneficiaries receive $10 per month for keeping well-child exams and immunizations up-to-date, which is used to pay for premiums. A quasi-experimental study found a 116 percent increase in CHIP children with up-to-date exams and immunizations, compared to a 13 percent increase among children without the incentives (Greene, 2011).
- West Virginia's Mountain Health Choices Program (2005–2014): Provided access to an "enhanced" benefits package if beneficiaries sign and conform to an agreement with the state that they will engage in healthy behaviors. Ten percent of eligible adults enrolled in the enhanced plan. Those who enrolled were more likely than others to have more doctor visits and take their medications, and to have physicians involved in the decision to enroll.[16]
- Wisconsin's BadgerCare Plus Individual Incentive Pilots (2008–2010): Six Medicaid health plans were awarded two-year grants to test if offering incentives would encourage enrollees to adopt healthier behaviors. None of the six projects reached their health outcomes goals.[17]
- Michigan and Iowa have offered lower premiums to Medicaid expansion enrollees who pursue health behaviors. The Michigan Healthy plan offered a reduction in required contributions or a gift card if they complete a health risk assessment and agree to address or maintain healthy behaviors (Crawford, 2014).

[13] List compiled by Maria Crawford from the Center for Health Care Strategies, Inc. in her Brief: Healthy Behavior Incentives: Opportunities for Medicaid

[14] Florida Medicaid Reform: Year 6 Annual Report (July 1, 2011 – June 30, 2012)

[15] Idaho Department of Health and Welfare. Facts, Figures, Trends, 2008–2009

[16] West Virginia Department of Health and Human Resources. Mountain Health Choices

[17] Wisconsin Department of Health Services. "Do Incentives Work for Medicaid Members? A Study of Six Pilot Projects."

Appendix Ten: TANF

Temporary Assistance for Needy Families (TANF)

There is also literature about Temporary Assistance for Needy Families (TANF) work requirements. The literature on TANF is also far more robust than Medicaid and tends to find that states apply work requirements inappropriately, contribute to the near elimination of cash safety nets without generating lasting gains in work, and many families losing TANF benefits experience hardships. This suggests that even if a state intends to impose work requirements only on "workable" individuals, recipients who face personal or family challenges might still risk losing coverage without having obtained gainful employment (Pavetti, 2018). Additional evidence tends to corroborate these findings, that employment increases were modest and decreased with time, not leading to increases in stable employment, those that faced barriers to employment (mental and health conditions) did not find work, and most recipients remained poor and in poverty (Hahn et al., 2017; Hamilton et al., 2011; Pavetti, 2016). Pavetti (2016) analyzed 13 studies[18] that conducted random assignment of mandatory work requirements or related activities to create a clear comparison of the impact of these types of programs. By using randomized assignment studies, the authors were able to ensure that the only differences between the treatment and control groups were due to random chance, which allows us to get a clear, causal estimate of the effect of these programs.

The broad takeaways from these programs are that work requirements don't necessarily help people find jobs, they end up resulting in individuals losing needed benefits, and they don't provide significant cost savings to states. There is a high likelihood that the same phenomena would occur with Medicaid expansion in Virginia. When considering the goals of the program, it will be essential to look at the lost coverage as a result of work-requirements and avoid unnecessary additional costs

[18] These studies came from Jeffrey Grogger and Lynn A. Karoly in their book, *Welfare Reform: Effects of a Decade of Change,* Harvard University Press, 2005.

Appendix Eleven: Kentucky Work Requirements

Kentucky

Though work requirements haven't officially gone into effect in Kentucky, studies have projected the impact. Work requirements would apply to any Medicaid eligible adult between the ages of 19-64 who is not disabled, pregnant, a full-time student, "medically frail," or a primary caregiver of a dependent minor or disabled adult (Kentucky Health, 2018). Using American Community Survey Data, Gangopadhyaya and Kenney (2018) attempted to determine how many adults would be subject to new work requirements. They determined that of the 653,000 individuals enrolled in Medicaid in 2016, roughly a quarter would be unaffected by the waiver due to either a disability or dual enrollment in Medicare and Medicaid, a quarter would be exempt because of their status as a student or primary caregiver. The remaining individuals would be required to meet work requirements. Of these remaining 330,000 individuals, about half are currently employed, while the other half (around 165,000 individuals) are not, indicating that the work requirements might have a significant impact here.

Individuals are required to document exemption status, obtain and retain work, or fulfill community engagement activities and report completed hours. Failure to do so results in disenrollment from Medicaid coverage. In Kentucky, 74% of the not-working, non-exempt population who otherwise would be eligible for Medicaid under expansion lack access to a vehicle, lack access to internet, have less than a high school education, have a serious health limitation or lives with someone who has a serious health limitation (Gangopadhyaya & Kenney, 2018).

Via an analysis of coverage patterns using the federal Medical Expenditure Panel Survey, research from the Commonwealth Fund found significant implications of implementing work requirements in Kentucky. In their application for a Section 1115 waiver, Kentucky estimated that nearly 95,000 people over four years could dis-enroll from Medicaid as a result of the requirement (Collins, Glied, & Jackson, 2018). It is possible that Virginia may face similar challenges in the composition of their expansion population subject to work requirements.

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