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Reducing Health Care Misutilization Among Virginia Medicaid Patients

An Applied Policy Project

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ELEVATE · THE · DEBATE

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CLIENT OVERVIEW

The Urban Institute is a thinktank involved heavily in public policy research, with a goal to "open minds, shape decisions, and offer solutions through economic and social policy research" (*About the Urban Institute*, 2017). While the Urban Institute is not directly involved with lobbying the federal government, they are asked by stakeholders across the health care industry both in the government and non-profit sectors to provide research and recommendations on how to solve national issues (*About the Urban Institute*, 2017). The Urban Institute is divided into several different issue-area focused policy centers. This APP was prepared for the Urban Institute's Health Policy Center. This Policy Center is specifically focused on research related to improving health care access, equity, and reducing the overall costs to the system. This report is designed to provide the Health Policy Center with tangible research and action items that they can further expand upon in an effort to address the overall issues of access and health care misuse that contribute to this overall problem.

DISCLAIMER

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

HONOR PLEDGE

On my honor as a University of Virginia student, I have neither given nor received unauthorized aid on this assignment.

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EXECUTIVE SUMMARY

Virginia Medicaid patients overutilize the Emergency Department (ED) and underutilize preventative health, driving up health care costs. On average non-emergency conditions treated in the ED add \$2,032 per visit—12 more than treating those conditions in a non-emergency setting (UnitedHealth Group, 2019). Considering Virginia Medicaid patients are over 50% more likely to go to the ED for non-emergency reasons than their commercially insured peers, this problem puts a significant financial strain on society (VHI, 2018). This report estimates that overall, Medicaid patients have 206,000 annual non-emergency ED visits, costing the health care system \$384M annually. Addressing this crisis is of utmost important to the Urban Institute and state of Virginia, in order to maximize the efficiency of the health care system, reduce waste, and improve patient health.

The literature suggests numerous explanations for why Medicaid patients may disproportionately visit the ED to treat non-emergency conditions. Some researchers point towards the economic incentives/disincentives regarding what patients actually pay for the care they receive (not the cost to the system). By implementing co-pays on non-emergency ED usage similar to those implemented in Oregon's Medicaid Program and Alabama's Children's Health Insurance Program (CHIP), policymakers may be able to actively disincentivize patients from pursuing non-emergency treatment through the ED (Wallace et al., 2008); (Sen et al., 2012). However, the efficacy of targeting co-payments specifically focused on non-emergency ED usage remains mixed (Mortensen, 2010); (Sabik & Gandhi, 2016). Other scholars point to a lack of patient understanding of the health care system or of their own condition as a potential explanation for the propensity to choose ED care. Lastly, some believe that a lack of available providers in a patient's area may explain their choice to visit the ED—if it is easier to get care from an ED than schedule an appointment with a provider then patients will choose the ED.

These findings inform the four policy alternatives proposed in this report. Each alternative is designed to tackle one of these issues, and will be weighed against four evaluative criteria. These criteria are: cost: how much the state of Virginia will have to pay to implement the policy; efficiency, how much the policy will both improve correct use of the health care system and decrease non-emergency ED visits; political feasibility, how likely the policy will be able to be approved by all relevant stakeholders; and administrative feasibility, how easily the policy will be able to be implemented as intended. Each alternative is ranked on a scale of one to five. In this scoring system, five represents policies that are highly inexpensive, efficient, politically feasible, and administratively feasible. In contrast, one represents policies that are highly expensive, inefficient, politically infeasible, and administratively infeasible

The alternatives this report proposes are: increasing Medicaid reimbursement rates by 10% for outpatient care services, implementing co-payments for non-emergency ED visits, permanently reduce co-payments for outpatient non-ED care, and improving patient education through community health workers.

Upon doing extensive research and creating initial projections, the alternative that this analysis ultimately recommends is that the state permanently reduce co-payments for outpatient non-emergency care. This alternative was the least costly to the state, the most politically feasible, and the most administratively feasible. While it was not as efficient as improving patient education through community health workers, it still scored well in this area as well.

In order to move forward with this alternative, the Urban Institute should conduct and supply research to the Department of Medical Assistance Services (DMAS) regarding the advantages that have come out of the eliminated co-pays that occurred as a result of the COVID-19 pandemic. Furthermore, this research should contain recommended State Plan Amendments to reduce the amount of work required by the agency. Ideally this research should be conducted and turned into a short brief that can be delivered to DMAS within the next 3 months. Though there may be some unintended consequences of the policy (such as providers reducing the number of Medicaid patients that they see due to the lost revenue), these consequences seem unlikely. Still, the Urban Institute should be cautious and honest in its research and should only move forward with this policy if their research also concludes that the benefits of the policy outweigh the costs.

PROBLEM STATEMENT

Virginia Medicaid patients overutilize the Emergency Department (ED) and underutilize preventative health, driving up health care costs. According to research from UnitedHealth Group, patients who come to the ED to get care for non-emergency conditions put serious strain on the health care system. They calculated that on average non-emergency conditions treated in the ED add \$2,032 per visit (UnitedHealth Group, 2019). This is roughly 12 times higher than the costs of treating those patients in a non-emergency setting, like a physician office (UnitedHealth Group, 2019). Furthermore, Medicaid patients are much more likely to go to the ED to receive care for non-emergency conditions than their privately insured counterparts. Addressing this issue will be the focus of this report.

BACKGROUND

A FEDERAL EFFORT TO INCREASE ACCESS TO CARE

The Affordable Care Act (ACA) was enacted in March of 2010, and sought to reform the health care system as a whole. The overall goal of this legislation was to increase access to health care for as many Americans as possible. In order to do so, the law required every American to have health insurance through a provision called the individual mandate—under this policy, those who chose to forego insurance were forced to pay a financial penalty ("Summary of Coverage Provisions in the Patient Protection and Affordable Care Act," 2012). The purpose of this mandate was to ensure that the market could protect itself from adverse selection; without it, policymakers feared that low-risk patients with little need for insure would leave the market, and only high-risk individuals would remain in the insurance pool (Eibner & Nowak, 2018). This provision was unpopular with Republicans and (though not repealed) was ultimately negated through the Tax Cut and Jobs Act of 2017, which reduced the penalty of the individual mandate to zero (Eibner & Nowak, 2018). Despite the nullification of the individual mandate, the ACA has had lasting implications on health care across the country.

The law contained multiple provisions beyond the individual mandate designed to increase access to care. For example, the bill created marketplace exchanges where consumers without coverage could purchase insurance ("Summary of Coverage Provisions in the Patient Protection and Affordable Care Act." 2012). These exchanges provided subsidies to families without insurance who made between 100% and 400% of the federal poverty level ("Summary of Coverage Provisions in the Patient Protection and Affordable Care Act," 2012). Furthermore, the law prohibited insurance companies from refusing to provide coverage to individuals with preexisting conditions (The Affordable Care Act: A Brief Summary, 2011). In addition, all states were required to expand their Medicaid coverage to all individuals making less than 138% of the federal poverty level (though this was later made optional by the Supreme Court in National Federation of Independent Business v. Sebelius) ("Summary of Coverage Provisions in the Patient Protection and Affordable Care Act," 2012). The bill also required that insurance companies allow children to stay on their parents' insurance plans until age 26, protecting young adults who were less likely to be employed (Young Adults and the Affordable Care Act, 2020). Lastly, the bill provided greater security to the employed by requiring all large employers to provide insurance to their employees, and provided some small business owners tax credits for covering certain costs of health insurance for their employees (The Affordable Care Act: A Brief Summary, 2011).

UNDERSTANDING MEDICAID

In order to understand the lasting impact of the ACA, it is important to understand a key program that was expanded by the act: Medicaid. Medicaid is a government-sponsored insurance program for low-income individuals. The program was created at the federal level through the Social Security Amendments of 1965 (Berkowitz, 2005). Medicaid is administered by the individual states according to requirements set forth by the federal government through the Center for Medicare & Medicaid Services (CMS) (Eligibility, 2020). Funding for the program comes jointly from the federal government and the states. In order for states to receive federal funding for Medicaid, they must provide coverage to certain "mandatory eligibility groups" such as seniors and the disabled who receive assistance through the Supplemental Security Income program, pregnant women, and children (*Eliqibility*, 2020). States are given significant freedoms in determining the extent of their coverage, and as a result, an individual who may be considered eligible for Medicaid in one state may not be eligible for Medicaid in another state (*Eligibility*, 2020). The ACA provided states the option to expand their Medicaid coverage in an attempt to make eligibility requirements more uniform (as described below), but 12 states have chosen not to expand their coverage and still operate off of these minimum guidelines ("Status of State Medicaid Expansion Decisions," 2020). As a result, some residents of these states fall into the Medicaid coverage gap, having incomes too high to qualify for Medicaid in their state, but incomes too low to qualify for insurance subsidies through the ACA-created exchanges (Garfield et al., 2020).

HOW DID THE ACA IMPACT MEDICAID?

Under the Affordable Care Act, states were required to expand Medicaid eligibility to all of their residents that fell below 138% of the federal poverty line (not just those falling into "mandatory eligibility groups", however a Supreme Court Case—National Federation of Independent Business v. Sebelius—overturned this provision and instead made this expansion optional ("Summary of Coverage Provisions in the Patient Protection and Affordable Care Act," 2012). States can choose to expand their programs at any time, and to date, 38 states and the District of Columbia have adopted the Medicaid expansion ("Status of State Medicaid Expansion Decisions," 2020). States that choose to expand their Medicaid programs receive significant additional funding from the federal government, which agreed to pay 100% of the increase in cost between 2014 and 2016, and no less than 90% on a permanent basis (Angeles, 2012). Presently, this equates to roughly \$62B annually in federal spending on expanded Medicaid programs (Hayes et al., 2019).

This has had a lasting impact on access to care across the country. According to a survey of available literature done by the Kaiser Family Foundation, 80% of studies have shown that the Medicaid expansion has had positive impacts on access to care, while no studies surveyed showed a negative impact on access (Guth et al., 2020). Perhaps unsurprisingly, the report also found that no studies

have found a negative impact on Medicaid enrollment overall, or on coverage rates of individual subpopulations (Guth et al., 2020).

WHAT DOES THIS MEAN FOR VIRGINIA?

In May of 2018 the Virginia General Assembly passed a budget for FY19 that initiated the Medicaid expansion within the state (Norris, 2020). Prior to this expansion, low-income individuals had to fall within certain "mandatory eligibility groups", but as of 2019, all adults and children with incomes below 138% of the federal poverty line are now eligible (Norris, 2020).

This has led to an enrollment explosion with over 494,000 newly eligible enrollees enrolling in the program as of December 2020 (*Expansion Dashboard*, 2020). About 138,000 of these people fell into the coverage gap of individuals who were not eligible for Medicaid, but also had incomes too low to receive insurance subsidies (Norris, 2020). Another 135,000 of these individuals have family incomes between 100% and 138% of the Federal Poverty Level (FPL), meaning they can now enroll in Medicaid rather than purchase health care through the exchanges—significantly reducing their out-of-pocket costs (*Expansion Dashboard*, 2020); (Norris, 2020). This increase in enrollment poses some challenges for this analysis, as the bulk of Virginia Medicaid data available comes from the pre-expansion period.

HOW CAN THE STATE OF VIRGINIA MAKE CHANGES TO THEIR COVERAGE?

The Virginia Medicaid program is administered by the Virginia Department of Medical Assistance Services. This department is led by Agency Director Karen Kimsey (*Department of Medical Assistance Services Agency Organization Structure*, 2020). Under current legislation, Virginia and the federal government have formed what is known as a state plan. This plan describes how Virginia will administer its Medicaid program (*Medicaid State Plan Amendments*, 2020). The plan includes components such as: coverage groups, provided services, and provider reimbursement (*Medicaid State Plan Amendments*, 2020). Whenever the Department of Medical Assistance Services wants to make changes to its program or its operation approach, it must send a State Plan Amendment (SPA) to CMS for approval, giving the federal government the final say in policy changes (*Medicaid State Plan Amendments*, 2020).

WHAT DO CURRENT VIRGINIA MEDICAID PLANS LOOK LIKE?

According to the Medicaid Assistance Handbook, the current primary groups eligible to enroll in Medicaid are: Pregnant women and children at or below 143% of the federal poverty line, adults at or below 138% of the federal poverty line, and senior-citizens, the blind, and the disabled who receive Supplemental Security Income or who have income that doesn't exceed 80% of the FPL (Medical Assistance Handbook, 2019). Once members are enrolled in a Medicaid

program—whether that is a Managed Care Plan or a Fee-For Service Plan—they are eligible to receive benefits. One such benefit that all Medicaid patients may qualify for is non-emergency medical transportation (NEMT) which covers non-emergency transport to and from appointments (Medical Assistance Handbook, 2019). The primary benefit however, comes in reduced out-of-pocket spending on health care. Medicaid patients see significant reductions in their own personal health care costs as the primary way that they pay for their coverage is through co-payments. These co-payments are summarized in the table below.

Table 1: Virginia Medicaio	d Co-Pariments	(Medical Assistance	Handbook 2010)

Service	Co-Payment Amount		
Inpatient hospital	\$75.00 per admission		
Outpatient hospital	\$3.00 per visit		
clinic			
Clinic visit	\$1.00 per visit		
Physician office visit	\$1.00 per visit		
Other physician visit	\$3.00 per visit		
Eye examination	\$1.00 per examination		
Prescription	\$1.00 for generic; \$3.00 for brand		
Frescription	name		
Home health visit	\$3.00 per visit		
Rehabilitation service	\$3.00 per visit		

However, some groups are excluded from these co-payments. These groups include: pregnant women, children under 21, those in hospice care, and individuals receiving institutional/community-based long-term care (Medical Assistance Handbook, 2019). Furthermore, certain services are exempt from co-payments such as: emergency services, pregnancy-related services, family-planning services, and emergency room services (Medical Assistance Handbook, 2019).

It should be noted that at the beginning of the COVID-19 pandemic these copayments were temporarily suspended. In March of 2020, Governor Northam announced that throughout the COVID-19 pandemic, Medicaid patients would no longer be required to pay any co-payment for any medical treatment (Tabackman, 2020).

LITERATURE REVIEW

BRINGING IT BACK TO THE PROBLEM

The previous background information provided an outline of the Medicaid program, the key stakeholders involved, and the Medicaid population itself in an effort to provide a framework to move forward and understand the unique circumstances and incentives that impact the Medicaid population, as well as

how changes to the systems are implemented. Now that this framework has been established, this literature review will turn back to the problem that *Virginia Medicaid patients overutilize the Emergency Department (ED) and underutilize preventative health, driving up health care costs.*

THE COSTS OF THE PROBLEM

According to research from UnitedHealth Group, patients who come to the ED to get care for non-emergency conditions put serious strain on the health care system. They calculated that on average non-emergency conditions treated in the ED add \$2,032 per visit (UnitedHealth Group, 2019). This is roughly 12 times higher than the costs of treating those patients in a non-emergency setting, like a physician office (UnitedHealth Group, 2019).

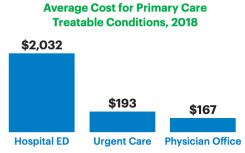


Figure 1: Average Cost of Treating Primary Care Treatable Conditions by Care Setting (UnitedHealth Group, 2019)

Furthermore, Medicaid patients are much more likely to go to the ED to receive care for non-emergency conditions than their privately insured counterparts. According to Virginia Health Information (VHI), in 2018, 16% of ED visits among Medicaid patients were made for non-emergency reasons (VHI, 2018). This rate was substantially higher than that of Virginians who were enrolled in commercial insurance/Medicare, which stood at 9.9% (VHI, 2018). Altogether, this means that roughly 100,000 ED visits in 2018 were non-emergency (VHI, 2020). By averaging this annual rate, with the rates of the other years for which data is available (calculations in Appendix), it can be seen that before the Medicaid expansion, roughly 123,000 Medicaid ED visits per year were non-emergency.

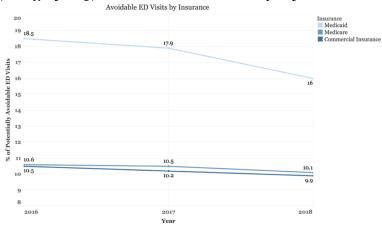


Figure 2: Avoidable ED Visits by Insurance Type (VHI, 2018)

However, the Medicaid expansion led to an explosion of Medicaid enrollment. Estimates from the Kaiser Family Foundation indicate that the Medicaid expansion led to an increase in Medicaid & CHIP enrollment of roughly 67% (KFF, 2021). If it is assumed that this increase is equally attributable to both programs and that ED usage would increase proportionally as well, then that would indicate an increase of roughly 67% in non-emergency ED usage. This would equate to roughly 206,000 annual ED visits on average.

This drastic misuse of the ED has severe consequences for society at large. As discussed above, the average non-emergency ED visit costs the state's health care system \$2,032 on average—\$1,865 more than if the patient were treated in an outpatient physician visit (UnitedHealth Group, 2019). Therefore, if these 206,000 visits were treated by outpatient physicians rather than in an ED, society could save roughly \$384,190,000 annually.

However, this analysis doesn't even begin to cover the additional externalities that put further strain on the system at large such as longer ED wait times for those with more emergent conditions. Further, patients who seek care for conditions from the ED may not be managing chronic conditions as well as if they were meeting with regularly scheduled physicians. Lastly there are large opportunity costs that are associated with this problem. If these patients were to be treated in physicians, the money saved could be reinvested towards bettering the health of those in the Medicaid program. Clearly, the costs to society of this misuse of health resources is quite substantial and addressing the issue is vital for the state of Virginia. In order to assess how the state could best address the issue, this lit review will turn to potential factors that may contribute to the overall problem.

POTENTIAL EXPLANATIONS

MISALIGNED ECONOMIC INCENTIVES

The varying co-pays faced by Medicaid patients under the pre-COVID status-quo provides an economic incentive for patients to turn to the ED to receive treatment for their care. As they face no-copayments for seeking care in the ED but do face co-pays for seeking outpatient care, it is only natural that patients would seek care from the ED where care is "free" in regards to their out-of-pocket costs.

Indeed, research supports that these co-payments do directly impact Medicaid patients' care utilization. For example, one study found that implementing co-pays on preventative care for Medicaid patients in Oregon decreased their overall utilization of those outpatient services and led to an increase of costlier inpatient care (Wallace et al., 2008). Similarly, research found that when Alabama increased CHIP (Children's Health Insurance Plan) co-payments, there were significant decreases in utilization for many services— inpatient care, physician visits, ED visits,

and brand-name medication—for which the co-pays were implemented (Sen et al., 2012). While CHIP is not the same program as Medicaid, it stands to reason that this trend would be generalizable to Medicaid as a whole, as the two programs cover individuals with similar levels of income.

While research seems to generally agree that co-payments on physician visits decrease overall utilization of these resources, there is less consensus regarding how co-payments impact non-emergency ED utilization. Some research suggests that targeting ED co-pays to only be required of patients who use the ED for non-emergency reasons may effectively decrease non-emergency utilization. Sabik & Gandhi found that this was the case in their nationwide study of Medicaid patients from 2001-2009 (Sabik & Gandhi, 2016). Their research determined that patients who faced co-pays for non-emergency ED usage did in fact use the ED for non-emergencies less, while overall utilization of the emergency room remained relatively constant, supporting the argument that these targeted co-payments may be effective (Sabik & Gandhi, 2016).

In contrast, Mortenson found in her study focused on 2001-2006 data from the Medical Expenditure Panel Surveys that the opposite was true. According to her difference-in-differences study, states that implemented co-payments did not have any significant reductions in non-emergency ED utilization (Mortensen, 2010). However, it is possible that these results may have been due to the fact that the study window concluded within a year of some states implementing this policy which may not have been enough time for the policy to have a serious impact, and may have biased the overall results (Mortensen, 2010). Still, it is important to be cautious when approaching solutions specifically targeted at raising co-payments for non-emergency ED usage.

LACK OF PATIENT EDUCATION

Some scholars hypothesize that lack of education about proper health care utilization as well as disease management are significant drivers of ED overutilization. For example, one study that took place in Ontario sought to understand what motivates patients' decisions to seek out emergency care (Kelly & Birtwhistle, 1993). Overall, the study found that there was often significant mismatch where patients believed that their symptoms were severe enough to warrant emergency care but providers disagreed (Kelly & Birtwhistle, 1993). It is possible that by increasing the overall awareness and education regarding what constitutes proper ED usage, patients may be more likely to forego emergency care when it is not necessary.

One way in which other states have sought to address this gap is to improve the overall quality and quantity of information available to Medicaid enrollees through services like community health workers or (CHWs) (Albritton et al., 2016). These CHWs typically live in the community in which they serve and help to promote more health awareness to the population that they work with (Mills, 2020). They ultimately help members of their community to navigate the health system, and to manage their diseases more effectively (Mills, 2020).

LACK OF AVAILABLE PROVIDERS

Numerous studies have demonstrated that patients who visit the ED for non-emergency reasons tend to cite a lack of access to a typical primary care provider as a reason for their ED visit. For example, a report provided by Harris Interactive for the state of California, found that patients who visited the ED for a non-emergency reason were 30% more likely to cite the fact that they did not have a regular doctor as a reason for doing so (Harris Interactive, 2005). Similarly, one study that looked specifically at the relationship between non-emergency ED visits and having a regular source of care, found that those with nonurgent visits were more than twice as likely to report that they did not have an ongoing relationship with a doctor than those who had an urgent condition. Clearly, having a reliable source of care has significant implications on non-emergency ED usage (Petersen et al., 1998).

ADDRESSING THIS ISSUE: CRITERIA & ALTERNATIVES

In order to address the issue, this report will explore several alternatives based upon the previous research explained in the literature review: increasing Medicaid reimbursement rates by 10% for outpatient care services, implementing co-payments for non-emergency ED visits, permanently reduce co-payments for outpatient non-ED care, and improving patient education through community health workers. Each of these alternatives will be assessed using four evaluative criteria that will be weighted in terms of relative importance to addressing the overall issue. An outline of the four criteria is listed below, followed by an assessment of the alternatives.

CRITERION #1: COST

This report will analyze the costs that will be incurred by the state of Virginia upon implementing each of the proposed alternatives. In order to do so, this analysis will look specifically at similar interventions employed in other states. This report will try to generalize the impacts on other states' budgets in an effort to determine how implementing the policy would impact the state of Virginia's annual budget. Each alternative will then be assigned a qualitative cost score between 1 (high cost) and 5 (low cost). Cost will be given a weight of 30% in the comparison between the 4 alternatives. All cost calculations can be found within the appendix.

CRITERION #2: EFFICIENCY

In order to measure efficiency, this report will attempt to estimate the efficiency of each alternative. In order to do so, I will use the results of similar interventions performed in other states as a means of projecting the efficiency of each proposed alternative in two areas: increasing proper care utilization outside the ED, and decreasing non-emergency ED utilization.

These two components were selected because while studies suggest that increasing outpatient care utilization reduces the total number of non-emergency ED visits, the exact relationship is ambiguous. As a result, this report will consider the two separately and rely on the understanding that both work to achieve the same goal of getting people health care from the appropriate source.

The criterion will thus be divided into two equally-weighted sub-categories in order to determine the overall efficiency. Each sub-category will be given an efficiency score between 1 (low efficiency) and 5 (high efficiency). Each sub-criterion will be given a weight of 15% for an overall efficiency weighting of 30% in the final comparison. All efficiency calculations can be found within the appendix.

CRITERION #3: POLITICAL FEASIBILITY

Seeing as this is a qualitative metric, this report will look at a multitude of factors when assessing each policy's likelihood of passage within the state. First, I will look at whether or not the proposed policy has already been on the political agenda within the state – Have legislators considered implementing this program or a similar one? How far did they get? is this an alternative that is currently being discussed? Additionally, the report will look at the positions of relevant stakeholders such as the DMAS Agency Director, Governor Northam, and CMS Administrator. Lastly, the analysis will consider the number of states that have implemented a similar program as a proxy for the national popularity of the intervention. This proxy relies on the assumption that interventions that have been implemented more broadly are likely more politically feasible than those that have been narrowly adopted. This criterion will be given a weight of 20% in the overall analysis.

CRITERION #4: ADMINISTRATIVE FEASIBILITY

As administrative feasibility is a qualitative metric, it will be assessed using a broad array of factors. For example, this report will look at the projected length of implementation of the policy —will the policy be able to be implemented within a few months or will it take multiple years? Additionally, the report will consider how many different organizations and government agencies will be involved in successfully implementing the policy. Lastly, I will consider how many major

steps the alternative requires as a final indicator for the overall administrative feasibility. This criterion will be given a weight of 20% in the overall analysis.

ALTERNATIVE #1: INCREASE MEDICAID REIMBURSEMENT BY 10% FOR OUTPATIENT CARE SERVICES

OVERVIEW

Since 2010, the gap between Medicaid and Medicare reimbursement rates in Virginia has only widened. At the beginning of the decade, Medicaid reimbursed providers at 94% of Medicare's rate, but by 2018 this had dropped to just 71% of Medicare's rate (Mahoney, 2018). While Medicaid reimbursement has been increased by roughly 15% since 2018, a substantial gap still exists between Medicare and Medicaid reimbursement rates (Magellan VA Medicaid/DMAS Rates, 2017; Magellan VA Medicaid/DMAS Rates, 2019). As a result of these lower reimbursement rates, Medicaid patients face greater difficulty in finding providers who will accept their insurance coverage. This can be seen in the fact that in some counties (like Wythe) there are only about a dozen general practice physicians who accept Medicaid in the entire county—and that doesn't even begin to cover specialists (Virginia Medicaid, 2021).

This alternative seeks to bridge this gap and incentivize a greater number of providers to accept new Medicaid patients. Some studies have found that this technique has had moderate success at improving patients' access to care. For example, one working paper published in the National Bureau of Economic Research found that closing the reimbursement gap between Medicaid and private insurers would reduce over two-thirds of health access disparities in adults (Alexander & Schnell, 2019).

In order to implement this alternative, the Department of Medical Assistance Services (DMAS) will first need to forecast roughly how much this rise in reimbursement rates would cost the state when accounting for the increased utilization of preventative health services. Afterwards, the agency should submit a budget request to Governor Northam and/or attempt to gain this funding in a budget amendment from the General Assembly.

Once the additional funding has been secured, DMAS should submit a State Plan Amendment (SPA) to the Center for Medicaid & Medicare Services (CMS) to get approval for this updated fee schedule. Once approved, DMAS should inform outpatient care providers of the reimbursement increases, and update their own system accordingly so that when physicians attempt to receive reimbursement from DMAS they are compensated at the correct rates.

Cost

According to data from the Kaiser Family Foundation, in FY 2019, the state of Virginia's Medicaid Program spent roughly \$319.2 million on outpatient acute care services, out of a total of \$2.2 billion spent on acute care services (KFF, 2020). This means that among expenditures for acute care, roughly 14.6% was spent on outpatient care. Assuming this proportion reflects the proportion of budgetary spending for all provider-based care, then this data can be used to project costs of the proposed policy.

In order to do so, this report will rely on budget projections from the recently enacted 2020-2022 biennium budget bill. This bill budgeted a total of \$10.8 billion for reimbursements for medical services in FY22 (Torian, 2020). Therefore, using the previously generated proportion, under current reimbursement rates, it is assumed that in FY22 reimbursements to outpatient providers will cost the state of Virginia roughly \$1.6 billion. Seeing as this policy seeks to increase Medicaid reimbursement rates for these outpatient providers by 10%, this would lead to an additional cost of \$160 million. As this is an incredibly expensive cost to the state of Virginia, I will assign this alternative a score of 1 for this criterion.

EFFICIENCY

By taking a sample of procedures from the current fee-schedule for both VA Medicaid and Medicare, it has been calculated that Virginia's Medicaid program pays providers an average of 81.7% of what Medicare pays those providers for the same services (CMS, 2020; DMAS, 2020a). Therefore, an increase in Medicaid reimbursement of 10% would lead Virginia Medicaid to pay 89.8% of the Medicaid rate on average. This is an increase of 8.2 percentage points in the Medicare-Medicaid reimbursement ratio.

One study published in 2018 used increases in the Medicaid-Medicare reimbursement ratio to estimate increases in utilization of numerous medical services. This study found that a 10-percentage point increase in this ratio led to an average increase of 0.67 physician office visits per Medicaid recipient, and an average increase of 0.11 hospital outpatient non-emergency visits per Medicaid recipient—the two types of medical services that would be targeted by this reimbursement increase (Callison & Nguyen, 2018). Each of these trends were statistically significant at the 5% level (Callison & Nguyen, 2018). By proportionally reducing these numbers to be reflective of our proposed increase of 8.2 percentage points, it can be assumed that per patient, physician office visits would increase by 0.54 visits per patient, and outpatient non-emergency visits would increase by 0.09 visits per patients.

According to DMAS, there are roughly 1M adult Medicaid recipients (DMAS, 2020b). Therefore, if physician visits and outpatient visits increased at the rates referenced above, then it can be concluded that this alternative would increase physician visits by roughly 560,000 visits, and increase the number of hospital outpatient non-emergency visits by roughly 96,000 visits. This equates to a total of 660,000 appropriate-use visits. Seeing as this increase is quite small in comparison to later alternatives, this report will assign this alternative a score of 1 for this component of the criterion.

Seeing as increasing reimbursement rates for non-emergency outpatient providers is not expected to have a direct impact on non-emergency ED usage, and will only impact non-emergency ED usage through the increased outpatient care, this alternative will receive a score of o for this component of the efficiency criterion.

POLITICAL FEASIBILITY

DMAS has made it a policy priority to urge the state to pass legislation designed to increase reimbursement rates (Martz, 2018). The Department has made clear that the fall in reimbursement rates over the course of the last decade puts Medicaid at a disadvantage in serving its enrollees (Martz, 2018). As a result, they have submitted budget requests to Gov. Northam to ask for greater funding to increase these rates in recent years (Martz, 2018).

While Governor Northam has not increased provider reimbursement rates to match those of Medicare, he has increased the designated funding in his requests to bring these two reimbursement rates into greater alignment. As a result, Medicaid reimbursement rates have increased, however they still fall short of the rates provided by Medicare (CMS, 2020; DMAS, 2020a).

It is possible that proponents of this policy may be able to capitalize off of the recent traction that this policy has garnered in order to push this alternative through the legislature. Still, the recent budgetary concessions may make further action politically infeasible, as some stakeholders may feel as though they have already made significant concessions. As a result, this report will consider this alternative to be moderately politically infeasible, receiving a score of 4.

ADMINISTRATIVE FEASIBILITY

DMAS will not be able to singlehandedly implement a rate increase for providers. It will require action from four separate parties: the state legislature, the governor, DMAS, and CMS. If the state wants to increase its reimbursement rates it will require a larger budget for reimbursement

which must be provided by the legislature and the governor working in tandem. Furthermore, once the budget has been approved, DMAS will need to submit an SPA to CMS in order to get approval for this updated fee-schedule. Due to the sheer number of stakeholders involved, this report will view the alternative as neither administratively feasible nor administratively infeasible, receiving a score of 3.

ALTERNATIVE #2: IMPLEMENT CO-PAYMENTS FOR NON-EMERGENCY ED VISITS

OVERVIEW

At present, the commonwealth of Virginia does not require any copayments for Medicaid patients who visit the ED (*Medical Assistance Handbook*, 2019). This stands in direct contrast to the co-payments that Medicaid enrollees are charged when they seek preventative health services (*Medical Assistance Handbook*, 2019). Though these copayments are small (less than \$5), they serve as a disincentive for patients to seek care through preventative health providers when it is easier, more expedient, and less expensive for them to seek care through the emergency department.

Other states do require co-payments for emergency department services and believe that they may provide a disincentive to using the ED for non-emergency care (Ollove, 2015). As a result, there are numerous proponents of using this policy to reduce strain on hospital EDs. However, studies show mixed results on the overall effectiveness of the intervention.

This alternative seeks to realign economic incentives by making it comparatively more expensive to get preventative health from an ED than a primary care provider. In effect, this means DMAS should begin to apply their current guidelines for determination of emergency services rendered outside of an ED, to services rendered inside an ED as well. When a patient visits the ED and is not suffering from a medical condition that qualifies as requiring "emergency care" these patients should be charged a co-payment of \$5 for utilization of services. Groups that are not required to pay any co-payments (pregnant women, those 21 and under, etc.) will continue to be excluded.

In order to implement this alternative, DMAS will need to submit a SPA to CMS in order to receive approval for the increase in co-payments. Upon approval, DMAS should update their Medical Assistance Handbook to inform enrollees and providers of the policy change.

Cost

The state of Virginia will incur only negligible costs by implementing this alternative, as the cost will be borne entirely by the patients. Co-pays are

paid by the patients themselves and not the Medicaid program, so as a result the cost of the policy itself will be effectively \$0.

The primary costs will be incurred by patients, and will be roughly \$1 million in total. This is because according to data from Virginia Health Information, roughly 100,000 of the ED visits made by Virginia Medicaid recipients in the year 2018 were made for non-emergency reasons (VHI, 2020). For the year 2017, this number is estimated to be roughly 129,000, and for the year 2016 this number was estimated to be roughly 140,000 (VHI, 2020). As data from the years 2019 and 2020 appears to be unavailable as of this time, this report will attempt to provide an estimate of current unnecessary ED-utilization using these numbers. By taking the average of these 3 years as an estimate for the true number of non-emergency ED usage among Medicaid recipients in Virginia pre-Medicaid-expansion, it is estimated that annually 123,000 annual Medicaid ED visits were non-emergency.

However, the Medicaid expansion drastically increased overall Medicaid enrollment, meaning ED utilization has likely increased. According to data from the Kaiser Family Foundation, the Virginia Medicaid expansion led to an increase in Medicaid & CHIP enrollment of roughly 67% (KFF, 2021). Assuming this rate of growth is attributable equally to increased Medicaid enrollment and increased CHIP enrollment, and that these new members are equally likely to go to the ED for non-emergency reasons, it is estimated that presently 206,000 Virginia Medicaid ED visits are non-emergency.

Furthermore, assuming that the proportion of these visits that are made by pregnant women (the primary group that is exempt from all Medicaid co-pays) is proportionate to their total enrollment within the program (2.3%) than it is estimated that 201,000 of these ED visits will require patients to pay co-payments out of pocket. As this is a \$5 co-payment, this would introduce roughly \$1 million of costs that would be borne by consumers. However, because the state itself will not be incurring any costs themselves, this report will assume that the costs of the policy will be \$0, and will assign this policy a cost score of 5.

EFFICIENCY

According to research from the University of Pittsburgh, states that had implemented co-pays for nonemergent ED usage saw a 6.3-percentage point decrease in probability that a visitor to the ED would be coming for non-emergency reasons (Sabik & Gandhi, 2016). This equated to a roughly 38.7% decrease in likelihood that a visit to the ED would be for a non-emergency (Sabik & Gandhi, 2016). Furthermore, the study found that there was no statistically significant impact on overall ED utilization rates (Sabik & Gandhi, 2016). Considering the states studied in this analysis had

co-payments of between \$0 and \$6, this report will assume that the \$5 copayment will have a similar impact in reducing the total number of nonemergent ED visits.

In order to determine how many non-emergency cases this alternative would eliminate this analysis will use the same VHI data referenced above. Within this dataset, it can be observed that in Virginia in 2016 there were roughly 757,000 ED visits for Medicaid patients, in 2017 there were roughly 723,000 ED visits, and in 2018 there were 625,646 ED visits (VHI, 2020). Taken together, this equates to an average of 702,000 annual ED visits. Using the same enrollment increase and assumptions, this report estimates that post-expansion there are an average of 1,170,000 ED visits among Medicaid patients. Using these numbers and those calculated in the subsection above, it can be calculated that on average 17.6% of Medicaid ED visits are for non-emergency reasons.

Therefore, assuming the research from Sobik & Gandhi is accurate, it can be assumed that this alternative would reduce the number of non-emergency ED visits to roughly 123,000 visits. This is a difference of about 79,600 visits from the estimated 206,000 ED visits calculated above, suggesting this would reduce the number of non-emergency ED visits by roughly 79,600 visits. Considering this is a decrease of roughly half of all non-emergency visits, this report will assign this policy an efficiency score of 3 for this component of efficiency.

This analysis will also assume that this policy alternative will primarily deter Medicaid patients from using the ED for non-emergent reasons and will have little impact on increasing utilization of outpatient care except through this decrease in ED utilization. As a result, it will assign this policy an efficiency score of o for this component of efficiency.

POLITICAL FEASIBILITY

Nearly half of all states have implemented a similar system of co-payments for non-emergency use of the emergency department (Smith et al., 2014). These states are dominated by legislatures of both parties suggesting that implementing these co-payments is not a partisan issue. However, Governor Northam has reduced all Medicaid co-payments to \$0 as a result of the ongoing COVID-19 pandemic (Tabackman, 2020). This means that presently no Medicaid recipients pay any co-payments whatsoever. Thus, they will likely be opposed to increases in their current co-payments and would likely be even more strongly opposed to a brand-new co-pay altogether. However, there may be an opportunity for the state to implement this policy if it chooses to increase all co-payments to their prepandemic levels.

Taken together, this report will conclude that this alternative is moderately politically feasible, and assign it a score of 4. This designation is based on the facts that it has been implemented across the country, receives bipartisan support in other states, and may be able to be implemented as part of a larger upcoming package. However, I will not score this alternative as highly politically feasible because acknowledging that implementing a co-payment increase without co-pay increases elsewhere may be challenging.

ADMINISTRATIVE FEASIBILITY

In contrast to the previous alternative, DMAS will be able to work a bit more independently to implement this policy alternative. If the state wants to increase co-payments for non-emergency ED usage, it will only have to submit an SPA to CMS for approval. It will not require any changes to the DMAS budget. Because implementation of this alternative will only require the work of two government agencies, this report will consider this alternative to be moderately administratively feasible, assigning it a score of 4.

ALTERNATIVE #3: PERMANENTLY REDUCE CO-PAYMENTS FOR OUTPATIENT NON-ED CARE

OVERVIEW

Prior to the onset of the COVID-19 pandemic, the commonwealth of Virginia required co-payments of \$1 when Medicaid patients took advantage of a physician office visit, or \$3 when Medicaid patients took advantage of other physician visits (*Medical Assistance Handbook*, 2019). This is a surprising contrast from the lack of co-payments Medicaid patients were charged when taking advantage of ED services (*Medical Assistance Handbook*, 2019).

However, in the past year these co-payments have been temporarily suspended. When CMS announced that if states wanted to waive co-payments for COVID-19 testing they would then need to waive all Medicaid co-payments, Governor Northam decided to do so (Tabackman, 2020). As a result, co-payments for outpatient care continue to be suspended. This alternative seeks to make this policy change permanent.

Hopefully, this will realign economic incentives by making it free for patients to get preventative health through an outpatient setting. In order to implement this alternative, DMAS will need to submit a SPA to CMS in order to permanently change their co-payment structure. Upon approval, DMAS should update their Medical Assistance Handbook to inform enrollees and providers of the policy change.

Cost

The state of Virginia will incur only negligible costs by implementing this alternative, as the cost will be borne entirely by providers. Co-pays are the patients' means of paying providers for their care, so by eliminating these co-pays, providers will lose out on some income, though the state will not have any increased costs. As a result, the cost of the policy to the state will be effectively \$0.

Still there will be some costs to physicians, according to data from CMS, nationwide, states saw an average of 7,500 outpatient visits per 1,000 adult Medicaid enrollees who received supplemental security income. In contrast, there were an average of only 4,000 outpatient visits per 1,000 Medicaid patients receiving assistance through Temporary Assistance for Needy Families (TANF) (The Lewin Group, 2012). This report will assume that these utilization rates have remained relatively consistent over the past decade and are generalizable to the state of Virginia itself.

Using these estimated rates of outpatient provider utilization between the two groups, the current overall outpatient physician utilization can be estimated. According to data from DMAS a total of 800,000 Medicaid beneficiaries are either adults, low-benefit individuals, or pregnant women, while 230,000 individuals are either over the age of 65, are blind, or suffer from a disability (DMAS, 2020). This analysis will assume that the rate of outpatient care utilization of the former group can be estimated by the utilization rate for the TANF population, while the rate of outpatient care utilization of the latter group can be estimated by the utilization rate for the SSI population. These assumptions are based on the fact that many members of the latter population would be able to enroll in SSI, while those in the former population would be ineligible for SSI but may be eligible for TANF.

Using these numbers and estimations, this report approximates that there are an average of 4,950,000 annual outpatient visits in the state of Virginia. Considering that Medicaid patients are currently charged a copayment of either \$1 for a physician office visit and a co-payment of \$3 for any other physician visit (Virginia Medicaid, 2021), I will average these costs to estimate that Medicaid patients pay a \$2 co-pay on average when seeing a physician in the outpatient setting. Using this data, it can be estimated that currently providers receive \$9,900,000 through Medicaid co-pays and that if this alternative were to be implemented there would be a loss of roughly \$4,950,000 in income on behalf of providers. However, these costs will be offset by the savings to patients.

As a result, this report will assume that the overall costs of this alternative will be effectively \$0, and will thus assign it a cost score of 5 for the final analysis.

EFFICIENCY

When the state of Oregon implemented a \$2 co-payment for outpatient visits, utilization of these services per 1,000 Medicaid enrollees decreased by 33.5% after 12 months (Ku et al., 2004). This report will assume that if the state of Oregon were to reverse this decision, non-emergent outpatient care utilization would increase by 50% (the amount necessary to recoup the outpatient visits lost). Further, this report will assume that this impact on care utilization is generalizable outside of Oregon and would thus apply to Virginia. As a result, I will conclude that eliminating cost-sharing for outpatient care would increase overall usage of outpatient care by 50%.

Therefore, using the estimate for the total number of annual outpatient care visits calculated in the previous subsection (4,950,000) this report will conclude that this alternative would increase utilization of outpatient care by 2,470,000 visits. Seeing as this would be a 50% increase in appropriate use, I will assign this alternative an efficiency score of 5 for this component of the criterion.

Because the alternative is not expected to directly decrease non-emergency ED usage, except through the increased use of outpatient care, this report will assign this alternative an efficiency score of o for this component of the criterion.

POLITICAL FEASIBILITY

When CMS announced that in order to waive Medicaid co-payments for COVID-19 testing that states would need to waive all Medicaid co-payments, Governor Northam decided to waive all Medicaid co-payments throughout the pandemic (Tabackman, 2020). As a result, the state has been operating without co-payments for over a year now, with little to no opposition from any key stakeholders. As a result, the state is presented with a unique opportunity to continue along this trajectory and make this absence of co-payments a permanent reality.

Considering the end of the pandemic is approaching and no stakeholders have yet to challenge the current status quo, this report will conclude that this alternative is highly politically feasible. As a result, it will assign the alternative a score of 5 for this criterion.

ADMINISTRATIVE FEASIBILITY

Similar to the previous alternative, if the state wants to decrease copayments for outpatient care, it will only have to submit an SPA to CMS for approval. Because implementation of this alternative will only require the work of two government agencies, this report will also consider this

alternative to be moderately administratively feasible. As a result, it will assign the alternative a score of 4 for this criterion.

ALTERNATIVE #4: IMPROVE PATIENT EDUCATION THROUGH COMMUNITY HEALTH WORKERS

OVERVIEW

Some scholars hypothesize that lack of education about proper health care utilization and disease management are significant drivers of ED overutilization (Nguyen et al., 2014). This has led several other states across the country to adopt policies that seek to address this education gap and improve the overall quality and quantity of information available to Medicaid enrollees (Nguyen et al., 2014). One such policy is the expansion of community health workers (CHWs) in an effort to improve overall patient access to education (Albritton et al., 2016). Within the state of Virginia, conversations are currently underway to explore what this alternative may mean for the state as a whole (IPHI, n.d.), and as a result this alternative will provide one potential avenue that the state could choose to adopt such a policy.

Historically, CHWs have operated through community health centers, as well as through hospitals and health districts (Albritton et al., 2016). This alternative seeks to provide a steady source of funding for CHWs to increase their overall efficiency. It is suggested that Virginia adopt a policy similar to that of the state of Minnesota when designing their CHW expansion.

First, DMAS will need to develop a set of minimum qualifications for its CHWs to meet in order to ensure reimbursement. While the state could craft a new certification, this memo suggests the state utilize the Certified Community Health Worker standard that has been created by VDH (VDH, 2020). Next DMAS will need to submit a SPA to CMS to define and get approval for the services for which they plan to reimburse certified CHWs. Upon receiving approval, they should begin providing reimbursement to CHWs who help educate Medicaid enrollees on proper health utilization and disease management.

Cost

The state of Minnesota has implemented a similar program through which community health workers receive Medicaid reimbursement through the state at a rate of \$20.84 per half hour session with a patient (Minnesota Department of Human Services, 2013). Assuming the average CHW works an average of 8-hours a day, sees an average of 12 Medicaid patients in a day (6 hours), and is compensated at a similar rate of \$20.84 per half hour, then it can be reasoned that each CHW would cost the state about

\$250 per day. Further assuming these CHWs work an average of 5 days a week, 52 weeks a year, then each CHW costs the state \$65,000 in reimbursement costs annually.

Furthermore, after implementing the program, Minnesota now has roughly 500 CHWs (Minnesota Community Health Worker Alliance, 2020). These CHWs serve an estimated 780,000 Medicaid-enrolled adults—according to 2014 data from the post-Minnesota-Medicaid-expansion period (KFF, 2017). This equates to an estimated 0.64 CHWs per 1,000 Medicaid enrollees. Considering Virginia has 1,030,000 adult enrollees (DMAS, 2020), it can be estimated that this would lead Virginia to have roughly 663 CHWs serving Medicaid patients. As a result, Medicaid would spend an additional \$43.1 million on reimbursement for these CHWs annually. As this is a moderate cost, this report will assign this alternative a cost score of 3.

EFFICIENCY

One study that looked particularly at low-income, uninsured, and Medicaid patients with asthma found that connecting patients with CHWs increased their overall usage of primary care by 12.1-percentage points or 25.2% relative to the baseline (Kangovi et al., 2014). Another study looked at patients with an income of less than 200% of the FPL and found that connecting patients to CHWs increased overall outpatient care utilization by 18.4-percentage points, or 39.4% (Krieger et al., 1999). Both of these studies found that these results were statistically significant. Therefore, I will use the average of these increases and assume that implementing this policy alternative would increase outpatient care utilization across the state by 32.3%. Furthermore, using the estimate for the total number of annual outpatient care visits calculated under Alternative 3 (4,950,000 visits), this report will conclude that this alternative would increase utilization of outpatient care by 1,600,000 visits. As this is a moderate increase, in appropriate usage, this report will assign this alternative an efficiency score of 3 for this component of the criterion.

Regarding ED utilization, a randomized controlled trial found that former prisoners who worked with community health workers saw a reduction in ED utilization of 34.9% (Wang et al., 2012). This report will assume that this trend is generalizable to Virginia's Medicaid population and thus that the implementation of this alternative will also reduce the state's unnecessary ED utilization by 34.9%. Using this assumption, it can be calculated using the estimated number of annual non-emergency ED visits calculated above that this alternative would reduce the number of non-emergency visits by roughly 72,000. As this would reduce non-emergency visits by about half, I will assign this alternative an efficiency score of 3 for this component of the criterion.

POLITICAL FEASIBILITY

This policy is currently being explored by a task force made up of the Virginia Department of Health, the Institute for Public Health Innovation, and numerous other stakeholders to provide recommendations on how the state could best implement policy to increase utilization of CHWs. As such, there is clear support for the policy across stakeholders. Still, the policy would be quite expensive to implement, and given the state of the current pandemic may face some opposition due to its cost. Still, the large stakeholder support for the plan makes it moderately politically feasible. As a result, this report will assign this alternative a political feasibility score of 4.

ADMINISTRATIVE FEASIBILITY

DMAS will require action from numerous levels of government in order to implement this alternative. Namely, DMAS will need to work with: the state legislature, the governor, and CMS. If the state wants to create new categories for reimbursement, the legislature and governor will need to work together to increase the total reimbursement budget allocated to DMAS. Furthermore, DMAS will need get approval for this updated feeschedule from CMS by submitting an SPA. Because so many levels of government are involved, this report will view this alternative as neither administratively feasible nor administratively infeasible. As a result, I will assign this alternative a score of 3 for administrative feasibility.

OUTCOMES MATRIX

Table 2: Outcomes Matrix

	Costs (30%)	Efficiency (30% total)		Polit. Feasibility	Admin. Feasibility	Overall
		Increased appropriate utilization (15%)	Reduction of unnecessary ED usage (15%)	(20%)	(20%)	
Alternative 1: Increase Medicaid Reimburseme nt Rates by 10% for Outpatient Care Services	\$157,059,597 visits (1)	657,794 visits (1)	o visits (o)	Moderately Low (2)	Neither High nor Low (3)	1.45
Alternative 2: Implement Co-Payments for Non- Emergency ED Utilization	\$0 (5)	o visits (o)	79,631 visits (3)	Moderately High (4)	Moderately High (4)	3.55
Alternative 3: Permanently Eliminate Co- Payments for Outpatient Non- Emergency Care	\$0 (5)	2,473,206 visits (5)	o visits (o)	High (5)	Moderately High (4)	4.05
Alternative 4: Improve Patient Education through Community Health Workers	\$43,113,734 (3)	1,597,948 visits (3)	71,812 visits (3)	Moderately High (4)	Neither High nor Low (3)	3.20

RECOMMENDATION: PERMANENTLY REDUCE CO-PAYMENTS FOR OUTPATIENT NON-ED CARE

In comparing the four proposed alternatives according to their costs, efficiency, political feasibility, and administrative feasibility, this report suggests that the Urban Institute recommend that Virginia make their temporary elimination of co-payments permanent. This is because this alternative scored the best overall when compared to the three other proposed alternatives.

This alternative is the most politically feasible of all of the proposed alternatives and is also one of the two most administratively feasible. Furthermore, it will cost the

state only a negligible amount. Despite the low overall cost of implementation, this alternative will be incredibly effective at increasing the number of preventative health appointments attended by Medicaid recipients. Unfortunately, this alternative will not directly decrease the number of non-emergency ED visits. Still, the fact that it will have such a strong impact on preventative health measures for such a low cost outweighs this shortcoming.

In order to move forward with this alternative, the Urban Institute should recommend that DMAS draft an SPA and deliver it to CMS. It should also suggest that DMAS create a press release and use as many means of communication as possible to inform Medicaid patients that they can attend any non-emergency outpatient care appointment without having to pay any sort of co-payment. The agency should also inform physicians who work in the outpatient setting of this change as well as those who work in emergency departments so that they can further reiterate the policy change to their patients.

IMPLEMENTATION

KEY STAKEHOLDERS

In implementing this policy, the primary stakeholders will be Virginia's Department of Medical Assistance Services (DMAS) and the Center for Medicare & Medicaid Services (CMS). These two stakeholders will be the ones who decide whether the policy itself is actually implemented. DMAS will need to first submit a State Plan Amendment (SPA) to CMS to amend the current Medicaid program in Virginia, and CMS will be the sole decider in whether or not the policy is implemented (Medicaid State Plan Amendments, 2020).

Other stakeholders include the providers who are receiving these co-pays, and the Medicaid patients who are paying the co-pays. These stakeholders could prove to be proponents or opponents of the policy. It is likely that Medicaid patients would be in support of the policy themselves as it would reduce health care costs for them personally. In contrast, providers may be opponents to the policy as these eliminated co-pays would reduce their total revenue. Still, the co-pays providers are receiving from Medicaid patients are so small (less than or equal to \$3) that they may choose not to mobilize against the policy as the costs of doing so may outweigh the costs of accepting the policy itself (*Medical Assistance Handbook*, 2019). Furthermore, some providers concerned with equity may actually support the policy as a means to increase overall access. Lastly, because this policy has been in temporary effect due to COVID-19 and has not seen large resistance from providers, it is possible that making the policy permanent would also lead to little overall resistance.

FUTURE TIMELINE

In implementing this policy, DMAS will want to act swiftly and submit an SPA to CMS permanently reducing Medicaid co-pays for non-ED outpatient care to \$0. The SPA approved by CMS on May 27, 2020 temporarily eliminated all Medicaid

patient co-pays so long as the United States was in a national state of emergency for the COVID-19 pandemic (*SPA # 20-0010*, 2020). And while the current state of emergency is ongoing, the end of the pandemic is thankfully near. Therefore, it would be in the best interest of patients to submit this new SPA as soon as possible so that the transition between the temporary and permanent SPA is seamless. This will provide continuity to patients and avoid a situation in which co-payments are temporarily re-implemented and then swiftly removed, creating patient confusion.

In order to advance this policy, the Urban Institute should conduct and supply research to DMAS regarding the advantages that have come out of the eliminated co-pays that occurred as a result of the COVID-19 pandemic. Furthermore, this research should contain recommended SPAs to reduce the amount of work required by the agency. Ideally this research should be conducted and turned into a short brief that can be delivered to DMAS within the next 3 months.

Upon implementation of the program by DMAS and CMS, the Urban Institute should publish information regarding the policy's implementation to increase the information available to key stakeholders.

POTENTIAL ISSUES

This policy could fail if CMS chose not to accept the SPA submitted by DMAS. This would be unlikely as CMS typically greenlights most SPAs, and has approved SPAs in the past designed to eliminate co-pays for medical procedures (*SPA # 20-0010*, 2020). Furthermore, under the Biden administration, it is more likely that CMS will look favorably upon eliminating co-payments than the Trump administration—which still approved SPAs that would eliminate cost-sharing (*SPA # 20-0010*, 2020). Unfortunately, if CMS rejects the proposal, DMAS has no other option other than to make changes to its proposed policy and submit a new SPA, this could mean cutting out certain types of outpatient care from this co-pay reduction plan.

Additionally, providers chose to stop seeing Medicaid patients due to the lack of co-payments reducing their total income. This would effectively dampen the overall effect of the policy by reducing the number of providers who would accept Medicaid patients, and thus the number of preventative health appointments that Medicaid patients would attend, and increasing the number of non-emergency ED visits. Still, this is unlikely as each individual provider would only be losing a small portion of their total revenue. Assuming the average provider sees between 4 and 6 Medicaid patients a day, this would only cost individual providers a few thousand dollars of revenue annually.

CONCLUSION

Therefore, it is recommended that the Urban Institute encourage the state of Virginia to permanently eliminate co-pays for Medicaid patients seeking outpatient non-ED use.

The Urban Institute will need to engage with several stakeholders, including Medicaid patients, providers, CMS, and DMAS, in order to make this policy a reality. It is suggested that the Urban Institute conduct its own research into the impacts of eliminated co-pays as soon as possible and provide a write-up to DMAS of the benefits and drawbacks of the policy in order to persuade them towards implementation. Though there may be some issues and unintended consequences that may arise during the implementation process, these appear to be unlikely. Still, the Urban Institute should be cautious and honest in its research and should only move forward with this policy if their research also concludes that the benefits of the policy outweigh the costs.

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APPENDIX A: COST CALCULATIONS

ALTERNATIVE 1

% of Reimbursement Funds Spent on Outpatient Care $= \frac{FY19\ Outpatient\ Acute\ Care\ Spending}{FY19\ Spending\ on\ Acute\ Care} = \frac{\$319,200,000}{\$2,200,000,000} \approx 14.6\%$

Projected Status Quo FY22 Outpatient Care Spending

= Projected FY22 Reimbursement Spending

× % of Reimbursement Funds Spent on Outpatient Care

 $= $10,800,000,000 \times 14.6\% \approx $1,600,000,000$

Projected Increase in Outpatient Care Spending

= Projected Status Quo FY22 Outpatient Care Spending

 \times Proposed Increase = \$1,600,000 \times 10% \approx \$160,000,000

ALTERNATIVE 2

Assumed to be 0

ALTERNATIVE 3

Assumed to be 0

ALTERNATIVE 4

Approximate Annual CHW Reimbursement Costs per CHW = Reimbursement Costs per Half Hour \times Number of Half Hours Spent with Medicaid Patients per Day \times Number of Days in Week \times Number of Weeks in Year = \$20.84 per Half Hour \times 12 Half Hours \times 5 Days \times 52 Weeks \approx \$65,000 per CHW

Estimated Number of CHWs to Reimburse = $\frac{\textit{Number of CHWs Reimbursed in Michigan}}{\textit{Medicaid Population of Michigan}} \times \\ \textit{Medicaid Population of Virginia} = \frac{\textit{500 CHWs}}{\textit{780,000 Medicaid Recipients}} \times \\ 1,030,000 \textit{Medicaid Recipients} \approx 663 \textit{CHWs}$

Estimated Additional Cost of Policy

- = Approximate Annual CHW Reimbursement Costs per CHW
- × Estimated Number of CHWs to Reimburse
- = $$65,000 per CHW \times 663 CHWs \approx $43.1 million$

APPENDIX B: EFFICIENCY CALCULATIONS

ALTERNATIVE 1

New Medicare-Medicaid Reimbursement Ratio

- = Status Quo Ratio
- + Status Quo Ratio × Proposed Reimbursement Increase
- $= 81.65\% + 81.65\% \times 10\% \approx 89.82\%$

Increase in Medicare-Medicaid Ratio

- = New Medicare-Medicaid Reimbursement Ratio Status Quo Ratio
- $= 89.82\% 81.65\% \approx 8.17$ percentage points

Increase in Medicare-Medicaid Ratio

- = New Medicare-Medicaid Reimbursement Ratio Status Quo Ratio
- $= 89.82\% 81.65\% \approx 8.17 \ percentage \ points$

Projected Increase in Physician Office Visits per Recipient

- = Increase in Office Visits per 10 Percentage Point Increase in Medicare-Medicaid Ratio
- ÷ 10 percentage points × Proposed Increase in Medicare Medicaid Ratio
- = 0.665 \div 10 percentage points \times 8.17 percentage points \approx 0.543 visits per patient

Projected Increase in Hospital Outpatient non-Emergency Visits per Recipient

- = Increase in Hospital Outpatient non-Emergency Visits per 10 Percentage Point Increase in MMR
- ÷ 10 percentage points × Proposed Increase in Medicare Medicaid Ratio
- = 0.114 \div 10 percentage points \times 8.17 percentage points \approx 0.093 visits per patient

Projected Total Increase in Physician Office Visits

- = Projected Increase in Physician Office Visits per Recipient
- \times Number of Medicaid Recipients = 0.543 \times 1,030,000 \approx 560,000

Projected Total Increase in Hospital Outpatient non-Emergency Visits

- = Projected Increase in Hospital Outpatient non-Emergency Visits per Recipient
- \times Number of Medicaid Recipients = 0.093 \times 1,030,000 \approx 96,000

ALTERNATIVE 2

 $\label{eq:continuous} \textit{Decrease in likelihood of non-emergency ED visit} = 1- \\ \text{% non-emergency visits per state-year with out co-pay-reduction in non-emergency visits per state-year with co-pay-reduction}$

% non-emergency visits per state-year without co-pay

$$1 - \frac{0.1581 - 0.0629}{0.1581} \approx 38.7\%$$
 decrease in likelihood of non-emergency ED visit

Average Number of pre-expansion ED Visits
$$= \frac{2016 \text{ ED Visits} + 2017 \text{ ED Visits} + 2018 \text{ ED Visits}}{3}$$

$$= \frac{757,336 \text{ Visits} + 723,145 \text{ Visits} + 625,646 \text{ Visits}}{3} \approx 702,042 \text{ Visits}$$

Estimated Annual post-expansion ED Visits

- = Average Number of pre-expansion ED Visits
- + Average Number of pre-expansion ED Visits
- * Growth in Medicaid Enrollment post-expansion
- $= 702,042 \, Visits + 702,042 \, Visits * 67\% = 1,172,410 \, Visits$

$$Average \ Number \ of \ post-expansion \ non-emergency \ ED \ Visits \\ = \frac{2016 \ non-emergency \ Visits + 2017 \ non-emergency \ Visits + 2018 \ non-emergency \ Visits}{3} \\ = \frac{100,000 \ Visits + 129,000 \ Visits + 140,000 \ Visits}{3} \approx 123,000 \ non-emergency \ Visits$$

Estimated Annual post-expansion non-emergency ED Visits

- = Average Number of pre-expansion non-emergency ED Visits
- + Average Number of pre-expansion non-emergency ED Visits
- * Growth in Medicaid Enrollment post-expansion
- = $123,000 \ Visits + 123,000 \ Visits * 67\% \approx 206,000 \ Visits$

Estimated Reduction in Visits due to Implementation

- = Astimated Annual post-expansion non-emergency ED Visits
- * decrease in likelihood of non-emergency ED visit
- = 206,000 Visits * $38.7\% \approx 80,000 Visits$

ALTERNATIVE 3

Estimated Annual Outpatient Medicaid non-emergency Visits

- = Adult, Low-Benefit, or Pregnant Medicaid Beneficiaries
- * TANF Outpatient Utilization Rate
- + Elderly, Blind, or Disabled Medicaid Beneficiaries
- * SSI Outpatient Utilization Rate
- = 800,000 Beneficiaries * $\frac{4,000 \, Visits}{1,000 \, Beneficiaries}$ + 230,000
- * $\frac{7,500 \, Visits}{1,000 \, Beneficiaries} \approx 4,950,000 \, Annual \, Outpatient \, Visits$

Estimated Increase in Annual Outpatient Medicaid non-emergency Visits

- = Estimated Annual Outpatient Medicaid non-emergency Visits
- * Estimated Outpatient Care Utilization
- = 4,950,000 Annual Outpatient Visits * 50%
- ≈ 2,470,000 Additional *Annual Outpatient Visits*

ALTERNATIVE 4

Estimated Increase in Outpatient Care

- = Average Increase of Similar Interventions
- × Estimated Annual Outpatient Medicaid non-emergency Visits
- 25.2% increase + 39.4% increase \times 4,950,000 Visits
- $= 32.3\% \times 4,950,000 Visits \approx 1,600,000 Visits$

Estimated Decrease in non-emergency ED Usage

- = Calculated Decrease due to Similar Interventions
- × Estimated Annual post-expansion non-emergency ED Visits
- $= 34.9\% \times 206,000 \, Visits = \approx 72,000 \, Visits$