Decreasing Unmet Medication-Assisted Treatment Need for the Uninsured

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Prepared for:

Acknowledgements

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Disclaimer

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

Honor Statement

On my honor, as a student, I have neither given nor received any unauthorized aid on this assignment.
-Daniel Gordon Niez

Key Terms and Acronyms

ARTS:

Addiction and Recovery Treatment Services Program

DMAS:

Virginia Department of Medical Assistance Services

MAT:

Medication-Assisted Treatment

OUD:

Opioid Use Disorder

RWF:

Ryan White Funding

SMI:

Serious Mental Illness

SUD:

Substance Use Disorder

Virginia GAP:

Virginia Governor's Access Program

Table of Contents

Executive Summary

The opioid epidemic is a significant public health emergency across the United States, and the Commonwealth of Virginia is no exception. In 2017, over 1,200 Virginians died of an overdose involving either prescription opioids, heroin, or illicit opioids such as fentanyl (ARTS Program Update, 2018).

My client's organization, Virginia's Region Ten Community Services Board, was established in 1969. They are one of 40 Community Services Boards operating across the Commonwealth working to provide mental health, intellectual disability, and substance use services at the community level (About Us). Region Ten's jurisdiction covers Albemarle, Fluvanna, Greene, Louisa, Appomattox and Nelson Counties as well as the City of Charlottesville. Health outcomes in the localities Region Ten work with are as negative, if not worse, than the Commonwealth as a whole.

Despite the terrible effects the opioid epidemic has had across the Commonwealth, there is an effective treatment for individuals with Opioid Use Disorder. Medication-assisted treatment can be defined as "the use of medications in combination with counseling and behavioral therapies for the treatment of substance use disorders" (MAT Overview). There is overwhelming agreement that medication-assisted treatment is not only an effective treatment for Opioid Use Disorder, but investing in medication-assisted treatment in the short-term decreases costs in the long-run. These cost reductions come in the form of lowered public safety costs from reduced crime as well as much lower health expenditures from fewer overdoses (Levine).

In an effort to improve access to medication-assisted treatment services for Medicaid members with Opioid Use Disorder, Virginia implemented the Recovery Treatment Services program in April, 2017. There have been substantial increases in the utilization of treatment services, but the program is only available for Medicaid members. There is a slightly higher percentage of uninsured Virginians with an Opioid Use Disorder than Virginians on Medicaid; however, uninsured Virginians have significantly less access to medication-assisted treatment (Busch, et al., 2013). In the region of Virginia that Region Ten Community Services Board serves, there is an unmet treatment need for Opioid Use Disorder. Though the rate at which insured Virginians seek medication-assisted treatment is not perfect, it is significantly higher than the rate at which uninsured Virginians seek medication-assisted treatment (Busch et al., 2013).

This report provides Region Ten with multiple policy options that would increase access to treatment services for low-income Virginians who are currently uninsured. To this end, this report analyzes the projected impacts of four policy options:

1. Maintain ARTS Program at Current Levels
2. Expand GAP Treatment to People Diagnosed with an Opioid Use Disorder but not a Serious Mental Illness
3. Expand Medicaid in Virginia with a Work Requirement
4. Direct Funding of Treatment for the Uninsured

The policy options are evaluated on criteria pertaining to effectiveness, cost, political feasibility, and administrative burden. After evaluation, it is recommended that Region Ten advocate to maintain the ARTS program at current levels, as the additional costs of paying for additional claims are offset by reduced spending on emergency department visits.

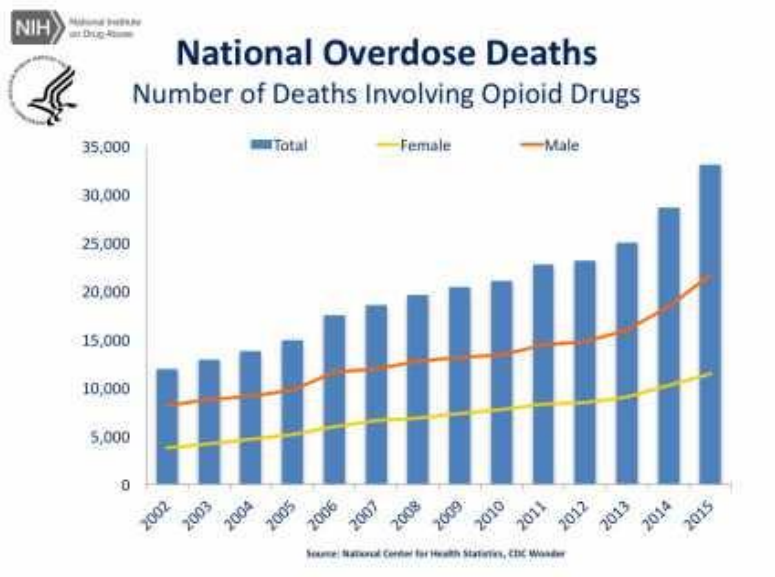
Background

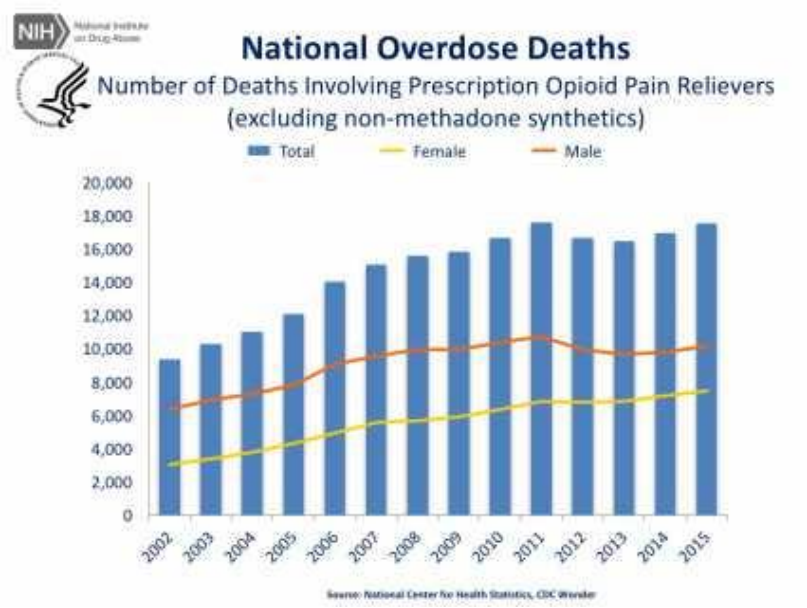
The Opioid Epidemic in the United States

Before assessing the insufficient access to opioid use disorder treatment in Virginia's Region Ten, it is first useful to understand the wider problem of the opioid epidemic, both in the United States and specifically in Virginia. According to the United States Department of Health and Human Services, 42,249 people died from an opioid overdose in 2016 alone, or 116 every day ("About the U.S. Opioid Epidemic"). The total number of opioid overdose-related deaths were five times higher in 2016 than they were in 1999. Illicit opioid use comes in different forms. Americans misuse prescription opioids at very high rates, as 11.5 million Americans misused prescription opioids in 2016 alone. 2.1 million of these individuals misused prescription opioids for the first time. In recent years, more and more Americans are dying from heroin and synthetic opioids, such as fentanyl. In 2016, 948,000 Americans used heroin, of which 170,000, or about 18 percent, used heroin for the first time.

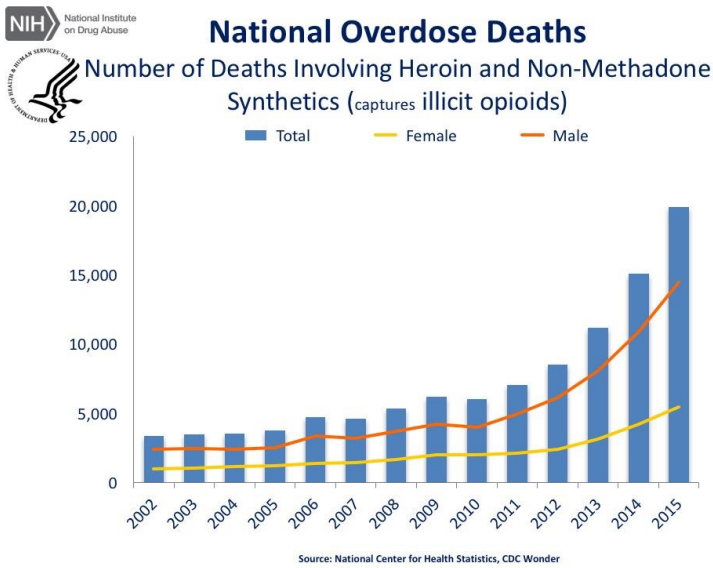
The next three graphs illustrate the proportion of deaths over time resulting from both prescription opioids as well as heroin and synthetic opioids. Created by the National Institute of Health's National Institute on Drug Abuse, the graphs illustrate the number of deaths involving different forms of opioid drugs between the years 2002-2015 (Overdose Death Rates).

The graph on the right illustrates the total number of U.S. overdose deaths involving any type of opioid drug. This graph includes deaths resulting from prescription opioids, heroin, and illicit synthetic opioids. Between 2002 and 2015 there was a 2.8-fold increase in the total number of deaths (Overdose Death Rates).





The graph on the left reflects the total number of U.S. overdose deaths involving prescribed opioid pain relievers. Between 2002 and 2011, total deaths increased by almost two-fold, but have remained about constant since then (Overdose Death Rates).



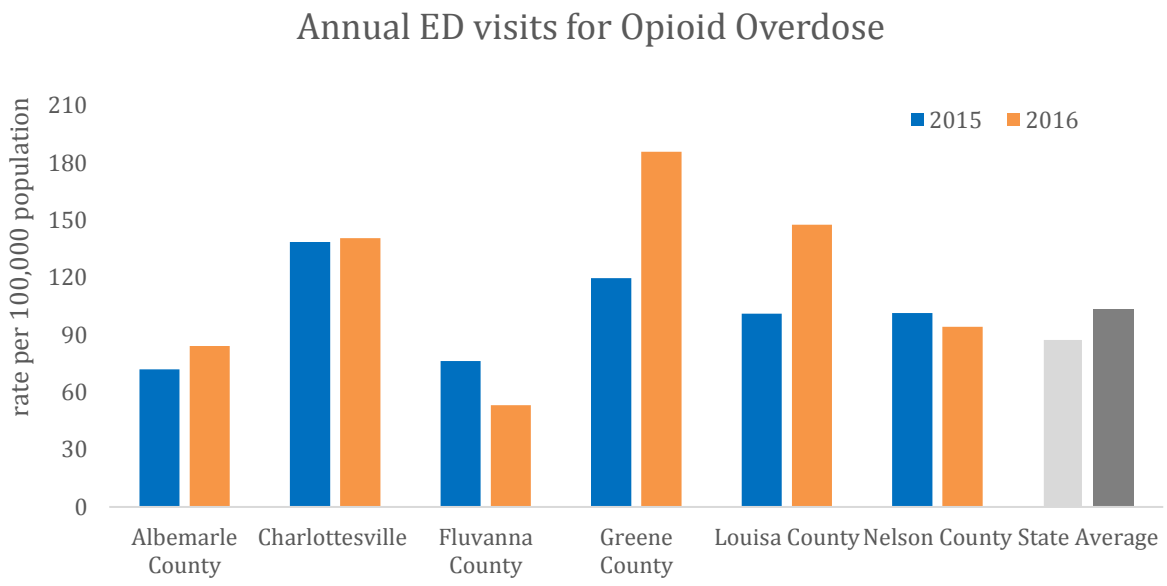
Since about 2010, Americans are looking to heroin and other synthetic opioids at an alarmingly increasing rate. The graph on the right shows the total number of U.S. overdose deaths involving heroin and non-methadone synthetics. The second category of overdose deaths involving non-methadone synthetics are dominated by fentanyl. The U.S. Drug Enforcement Administration defines fentanyl as a type of synthetic opioid (Fentanyl). As can be seen in the graph, the number of deaths slowly increased at a steady rate through the 2000s. However, since approximately 2010, the number of deaths from these types of illicit opioids have significantly increased each year. Between 2002 and 2015, there was 5.9-fold increase in the total number of deaths (Overdose Death Rates). The substantial increase in deaths involving heroin and non-methadone synthetics correlates with a plateau in the number of deaths involving prescription opioid pain relievers. In fact, while deaths involving synthetic opioids only composed 14.3 percent of total opioid-related deaths in 2010, they made up 45.9 percent of total opioid-related deaths in 2016, a higher percentage than deaths involving prescription opioid pain relievers (Jones, et al., 2018).

The Opioid Epidemic in Virginia's Region Ten

Virginia has not escaped the outcomes of the opioid epidemic. The Virginia Department of Health estimates that over 1,500 Virginians died in 2017 as a result of drug overdose. Nearly 80 percent of those overdose deaths, or approximately 1,200 Virginians, involved prescription opioids, heroin, or fentanyl (ARTS Program Update, 2018).

My client's organization, Virginia's Region Ten Community Services Board, was established in 1969. They are one of 40 Community Services Boards operating across the Commonwealth working to provide mental health, intellectual disability, and substance use services at the community level (About Us). Region Ten's jurisdiction covers Albemarle, Fluvanna, Greene, Louisa, Appomattox and Nelson Counties as well as the City of Charlottesville. To the best of my ability, I have either found data on the specific localities within Region Ten or I have extrapolated values from either state or national level data. All assumptions made are explicitly noted throughout the report.

Region Ten typically suffers from the effects of the opioid epidemic at levels at least equal, if not higher, than the rest of the Commonwealth of Virginia. As can be seen in the graph below (Source: Region Ten), almost all counties within Region Ten have higher average annual emergency department visits for opioid overdose than the average for the Commonwealth of Virginia.



Effectiveness of Medication-Assisted Treatment

The opioid epidemic remains one of the most significant public health emergencies in the Commonwealth of Virginia, yet there is a variety of evidence from multiple sources that support the notion that medication-assisted treatment, with little doubt, is the most effective method to treat individuals with Opioid Use Disorder.

The Substance Abuse and Mental Health Services Administration (SAMHSA) of the United States government defines medication-assisted treatment, or MAT, as "the use of medications in combination with counseling and behavioral therapies for the treatment of substance use disorders" (MAT Overview). Though some attempt to argue that medication-assisted treatment is simply a substitution of addictions, individuals who receive this form of treatment for their Opioid Use Disorder are more likely to sustain recovery from their addiction in the long-term than through other forms of treatment.

There are three drugs approved by the United States Food and Drug Administration for the treatment of opioid dependence; these are buprenorphine, methadone, and naltrexone (Information about Medication-Assisted Treatment). As a part of the approval process with the Food and Drug Administration, each drug was proven to be safe and effective in combination with counseling and other support. There is no maximum recommended duration of treatment using any of these drugs, and for some patients, it could be indefinite.

It is not necessary to analyze which of the three FDA-approved drugs specifically should be most utilized; rather, the FDA states that all three drugs should be made available to anyone who seeks treatment for an Opioid Use Disorder, as this "allows providers to work with patients to select the treatment best suited to an individual's needs" (Information about Medication-Assisted Treatment). As such, I will provide evidence for the effectiveness of medication-assisted treatment in general in the rest of this section.

In 1997, the National Institutes of Health consensus panel concludes that opioid addiction is a medical disorder and not just a failure of willpower. The authors conclude that methadone maintenance treatment, a specific type of MAT, "is effective in reducing illicit opiate drug use, in reducing crime,

in enhancing social productivity, and in reducing the spread of viral diseases such as AIDS and hepatitis" (Office of the Director).

Though the National Institutes of Health consensus panel report was written in 1997, there are numerous examples of both individual researchers as well as organizations offering more recent support for the effectiveness of medication-assisted treatment. For example, the Centers for Disease Control and Prevention (CDC) noted in a 2013 report that expanding access to MATs is a clear opportunity to enhance the overall effectiveness of drug abuse treatment strategies in the country (Prescription Drug Abuse Subcommittee).

Schwartz et al. (2013) found that MATs have been shown to decrease the number of fatal overdoses by approximately 37 percent (Schwartz). Moreover, Volkow et al. (2014) cited additional evidence that MATs can improve other patient outcomes, such as increasing patients' retention in treatment, improving social functioning, and reducing risk of engaging in criminal activities.

In June, 2017, Virginia's State Health Commissioner, Marissa Levine, MD MPH, gave a presentation on the opioid addiction emergency in Virginia. In the presentation, Dr. Levine cited a report completed by Virginia's own Joint Legislative Audit & Review Commission, or JLARC. JLARC's 2008 report finds that untreated substance abuse costs Virginia state and local governments $613 million per year in public safety and health care services. The report goes on to state that Virginia saves $7 for every $1 invested in treatment, based on limiting public safety expenses as well as health care costs for expensive co-morbidities such as HIV/AIDS, Hepatitis B and C, and kidney failure (Levine).

The sources referenced to this point have all been attempts to assess the efficacy of medication-assisted treatment based on existing data. However, there are very few examples in the academic world of an experiment testing the effectiveness of medication-assisted treatment. Kakko, et al., (2003) is an example of a randomized control trial experiment conducted in Sweden that does just that. Specifically, the researchers randomly allocate a sample of 40 individuals to either receive a daily dose of buprenorphine or a six-day regimen of buprenorphine followed by a placebo (Kakko, et al., 2003). Both groups were placed in cognitive-behavioral group therapy, individual counseling, and submitted weekly urine samples. The goal of the experiment was to assess one-year retention in treatment.

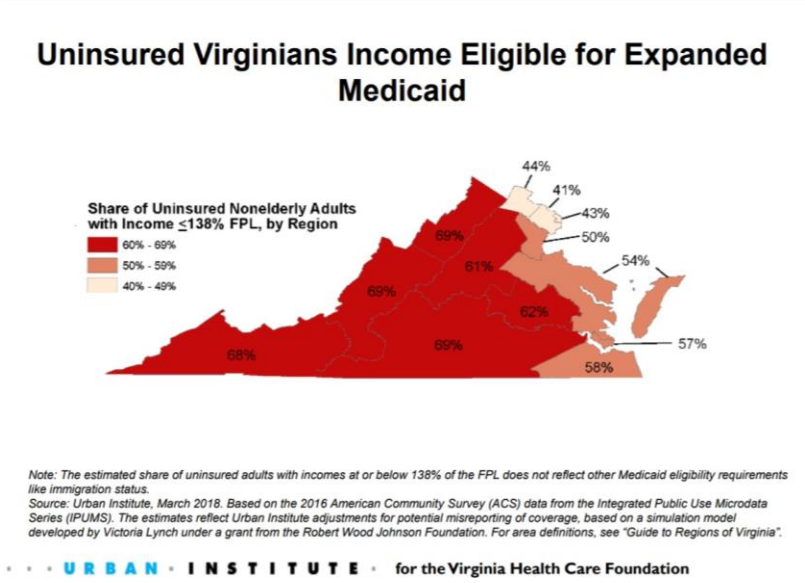
After the one-year period, 75 percent of the participants randomly assigned to the buprenorphine group were retained while not a single participant receiving the placebo stayed in the program. In fact, no participants in the placebo group lasted in the program for more than two months. Further, four participants from the placebo group died during the one-year treatment period compared to no deaths in the group receiving buprenorphine (Kakko, et al. 2003). It is important to keep in mind that there were only 40 total participants in this study with only 20 participants each in the treatment and control groups; nonetheless, the results of the randomized control trial succinctly and starkly emphasize the importance of medication-assisted treatment.

Profile of Virginia's Uninsured

There is a large amount of evidence in favor of the effectiveness of medication-assisted treatment. However, there is a large population of Virginians who could benefit from this treatment option that cannot afford it because they are currently uninsured. Laura Skopec and Joshua Aarons completed a "Profile of Virginia's Uninsured" for the year 2016 by analyzing data from the American Community Survey and the Behavioral Risk Factor Surveillance System (Skopec and Aarons, 2018).

Skopec and Aarons found that are 718,000 Virginians under the age of 65 who lacked health insurance, which is approximately 10.3 percent of all nonelderly Virginians. At 356,000, more than half, or 57.3 percent, of uninsured nonelderly adults in Virginia live in families with an income at or below 138 percent of the Federal Poverty Line, or FPL. 138 percent of the FPL is the Medicaid income threshold for childless adult coverage under the Affordable Care Act's Medicaid expansion, and, despite continued talks in the Virginia state legislature, the Commonwealth has not yet voted to expand Medicaid, though the state legislature is still working to reconcile a budget bill that may include a version of Medicaid expansion.

Skopec and Aaron's regional breakdown of Virginia differs from what Region Ten covers. In addition to the localities Region Ten works with, Skopec and Aaron's 'Region 7' includes Fauquier, Culpeper, Orange, Madison, and Rappahannock Counties. Within these counties, 24,000 Virginians live in families with an income at or below 138 percent of the FPL. This amounts to about 61 percent of uninsured nonelderly adults living in these counties. As you can see in the graph on the right, this share is one of the highest regions in the state.



In addition to including more counties than what Region Ten is responsible for, this 24,000 number also overstates the number of Virginians eligible for Medicaid under Medicaid expansion. Some of these Virginians could already be eligible for Medicaid and others may not meet other Medicaid eligibility criteria (Skopec and Aaron, 2018).

Laura Goren and Michael J. Cassidy of The Commonwealth Institute performed an analysis that specifically estimates the number of low-income Virginians that are stuck in the so-called 'coverage gap.' The coverage gap includes Virginians who do not make enough income to seek healthcare coverage through the federal insurance marketplace, but they do not qualify for Medicaid because they make too much income (Goren and Cassidy, 2018).

Goren and Cassidy estimate that, across the Commonwealth, approximately 240,000 Virginians are stuck in the coverage gap. When broken down by locality, Goren and Cassidy state that there are approximately 10,200 Virginians just within the counties Region Ten Community Services Board works with that could gain coverage through expanding Medicaid (Goren and Cassidy, 2018).

Estimating Unmet Medication-Assisted Treatment Need in Region Ten

There is currently unmet treatment need for individuals with Opioid Use Disorder in the Region Ten Community Services Board area. At its core, unmet treatment need for Opioid Use Disorder entails that there are more Virginians suffering from Opioid Use Disorder than there are Virginians in treatment for their addiction.

According to Goren and Cassidy, there are approximately 24,000 uninsured income-eligible Virginians in their Region 7, an area that includes the counties within Region Ten Community Services Board as well as Fauquier, Culpeper, Madison, and Orange Counties. Though this is not the exact geographical area Region Ten works with, this number will stand in to illustrate the unmet treatment need.

Busch, et al. (2013) studied data from the National Survey on Drug Use and Health and found that the rate of substance use disorders among "currently uninsured income-eligible individuals" was 14.6 percent. Applied to the 24,000 estimate, 3,504 Virginians in Goren and Cassidy's Region 7 are uninsured income-eligible individuals with a substance use disorder (Busch, et al., 2013). Busch, et al. go on to estimate that only 12.8 percent of these 3,504 individuals would actually seek treatment for their addiction. In other words, out of the 24,000 Virginians first estimated, only approximately 448 would go on to seek treatment.

The current number of medication-assisted treatment providers is less important to the unmet treatment need. When the Commonwealth of Virginia implemented the Addiction and Recovery Treatment Services (ARTS) program in April, 2017, there were "substantial increases in the number of practitioners and facilities providing addiction treatment services" (Cunningham, et al., 2017). This occurred because the extra resources received from the ARTS program "boosted the payments providers receive for those services – increases of up to 400 percent in some cases – to create a financial motive to open new programs" (Joseph, 2017).

That said, I made multiple efforts to contact the six current providers of medication-assisted treatment within Region Ten's jurisdiction. After three or four attempts to call each organization, I only heard back from the provider who works through Region Ten, my client. I was disappointed in the lack of access to communicating with each treatment provider, but that is not to say that the number of providers is the most significant issue regarding unmet treatment need.

Limitations of Expanding Medication-Assisted Treatment

There is a persistent limitation that affects any possible policy alternative. Vox author German Lopez wrote multiple articles in the last year on the prevailing stigma that exists against medication-assisted treatment (Lopez). Mr. Lopez notes that people with very high levels of influence on the opioid crisis, including former Health and Human Services Secretary Tom Price, hold the belief that medication-assisted treatment is simply "substituting one opioid for another" and as a result, we are "not moving the dial much" (Lopez).

Though the scientific community resoundingly agrees that MAT is a highly effective treatment method for opioid use disorder, the looming stigma surrounding MAT may continue to hinder its acceptance and widespread implementation. Additionally, because this stigma is equally pervasive across any of my policy options, it is not something I need to quantitatively account for. However, efforts to fight the stigma of utilizing medication-assisted treatment can help improve the rate at which individuals with an Opioid Use Disorder seek out treatment.

Problem Statement

States of Emergency have been declared both nationally and in the Commonwealth of Virginia, but few resources have been provided to treating Opioid Use Disorder among the uninsured. Funding has been given to medication-assisted treatment programs through the Addiction and Recovery Treatment Services program, and the program has been successful in its short existence. However, that funding has only been given to those already on Medicaid or one of Virginia's other healthcare coverage providers, such as Family Access to Medical Insurance Security (FAMIS). ***Despite efforts to combat Opioid Use Disorder through the Addiction and Recovery Treatment Services Program, the resources dedicated to providing medication-assisted treatment for the currently uninsured is insufficient.***

Methodology

As noted in the background information, efforts to provide MAT services are focused on those either on Medicaid or with private insurance. The purpose of this policy report is to propose and assess various policy options that decrease unmet treatment need for uninsured Virginians residing within Region Ten who have an Opioid Use Disorder but are not in a MAT program. The remainder of the report will introduce each alternative policy option, describe the policy option in detail, and evaluate the proposed policy using the standard set of criteria. The next section introduces the evaluative criteria upon which the assessment of the policy options is based. Following the policy analyses, this report will recommend a policy option that Region Ten will be able to advocate for to improve treatment capacity for the uninsured.

Evaluative Criteria

The following criteria will serve to standardize the evaluation of the proposed policy alternatives in this report. Standardizing the criteria upon which the policy alternatives will be evaluated allows for an evidence-based recommendation. The ideal policy will decrease the unmet medication-assisted treatment need considerably while minimizing costs. Further, the policy option should be feasible politically and easy to implement once the policy is in place. The evaluative criteria are defined as follows:

1. Effectiveness
2. Cost
3. Political Feasibility
4. Administrative Complexity

Effectiveness

I define the effectiveness of a policy with regard to **how many additional Virginians will receive treatment**. I evaluate this by first estimating how many Virginians would be eligible to access medication-assisted treatment services were the policy to go into effect. After I ascertain this number, I approximate, using evidence from the literature, the percentage of those eligible that would actually seek treatment.

Cost

I establish the cost of a policy by **how much the program would minimize cost**. In this analysis, cost and effectiveness are intimately intertwined. The literature offers multiple estimates of the average, per-person, yearly cost for providing medication-assisted treatment. The National Institutes of Health's National Institute on Drug Abuse cited cost estimates from the United States Department of Defense to note that methadone treatment, including medication and comprehensive treatment services, would cost $6,552.00 per year (How Much Does Opioid Treatment Cost?). The same report notes that buprenorphine treatment costs $5,980.00 per year, and naltrexone costs $14,112.00 per year. In interview with an employee of Region Ten, I was told that the cost of using Region Ten's medication-assisted treatment provider was $12,000. I will use **$12,000** as my per person cost of medication-assisted treatment as it is one of the prices used in the local community.

The second factor I intended to quantify was the **possible cost of additional treatment providers** needed to handle the increase in the number of Virginians seeking medication-assisted treatment. However, as noted earlier, providing additional resources for the Addiction and Recovery Treatment Services program incentivized new providers to emerge of their own accord (Cunningham, et al., 2017).

The third cost I will include in my analysis is the **decrease in the per-person costs associated with Opioid Use Disorder**. The mechanism underlying any successful policy option will be that investing in medication-assisted treatment in the short-term will far outweigh the greater public safety and health expenditures that would be paid in the long-run if the unmet medication-assisted treatment need is not decreased. Again, different academic articles offer varying costs. Stevens et al., (2016) estimate that "the average cost per ICU overdose admission increased from $58,517 in 2009 to $92,408 in 2015 (Stevens, et al., 2016). Jiang et al. (2017) estimated that the cost of heroin use disorder was $50,799 per heroin user (Jiang, et al., 2017). Lastly, the White House Council of Economic Advisors released a 2017 report estimating that the nonfatal cost of prescription opioid misuse was approximately $30,000. Because these studies estimated different drug costs, I took the simple average of the three values to create a cost per overdose of **$57,735.67.**

Political Feasibility

Political feasibility will require a qualitative assessment of how likely each proposed policy option would be to achieve passage through whatever channels each policy need to go through. This criterion will be evaluated as *LOW, MEDIUM, or HIGH*

Administrative Burden

In addition to the proposed policy's ease of passage, what will be the administrative burden of the recommended policy. Will the policy option be difficult to implement once it is in effect? The evaluation of the administrative burden each proposed policy option produces will be based on the amount of staffing, skill, and coordination between relevant departments each policy will require. This criterion will be evaluated by whether the proposed policy generates a *limited, considerable, or extensive administrative burden*.

Policy Options and Analysis

This section will provide a description as well as an evaluation of the four proposed policy alternatives determined could effectively decrease the unmet OUD treatment need in Region Ten. Each option provides strategies to increase funding for treatment of OUD for Virginians currently without insurance. The four proposed policy alternatives are defined as follows:

Option 1: Maintain ARTS Program at Current Levels
Option 2: Expand GAP Treatment to People Diagnosed with Opioid Use Disorder but not a Serious Mental Illness
Option 3: Expand Medicaid in Virginia – with a Possible Work Requirement
Option 4: Directly Fund Treatment for the Uninsured

Option 1: Maintain ARTS Program at Current Levels

Letting present trends continue would mean continuing the Addiction and Recovery Treatment Services (ARTS) program in its current form. Implemented April 1, 2017, ARTS "expands access to a comprehensive continuum of addiction treatment services" (Addiction and Recovery Treatment Services). The goal for ARTS is to achieve the Triple Aim of improved quality of care, improved population health, and decreased costs for the Medicaid population with a substance use disorder (SUD) (Virginia GAP).

The Department of Medical Assistance Services contracted Virginia Commonwealth University in September, 2017 to evaluate the ARTS program. The authors of the study looked at the 8,000 Medicaid members who received some kind of treatment for a SUD during April-June of 2017 and compared these numbers to April-June of 2016. They found that "treatment rates among Medicaid members with SUDs increased by 50% in the three-month period as compared to 2016" (VCU). The study showed that the number of outpatient practitioners providing MAT services more than doubled, from 300 to 691.

This program proved successful for its first year in implementation; however, the program only serves people enrolled in Medicaid, FAMIS, FAMIS MOMS, or GAP. There are many Virginians in Region Ten without any insurance who do not have access to MAT.

Effectiveness

Cunningham et al. (2017) notes that during the first five months that the ARTS program operated, almost 14,000 Medicaid members used addiction-related services. This represents an increase of 40 percent over the year prior. This percentage increase equates to the fact that **4,000 more Medicaid members** used addiction-related services in the first five months of the ARTS program than in the year before.

Cost

Because the status quo option is still a very young policy, I will quantify the changes in cost since the ARTS program was established. As more resources were allocated to offer medication-assisted treatment, spending on paid claims increased substantially from the year before. Spending on paid claims were almost $10 million, an increase of 32 percent (Cunningham, et al., 2017). In the five months that the ARTS program was in place, spending on paid claims **increased by $2,424,242.00.**

Despite the increase in spending on paid claims, the costs were offset by a decrease in spending on hospital emergency department use related to opioid use disorders. Spending on emergency department visits related to substance abuse decreased by 14 percent to about $16 million, meaning that spending **decreased by approximately $2,604,651.00**.

In terms of facilities, there were no costs associated with the increase in the supply of ARTS providers (Cunningham, et al., 2017). Across the commonwealth number of residential treatment programs increased from four to 78, the number of opioid treatment programs increased from six to 29, and the number of buprenorphine providers increased by seven percent.

All costs considered, in the first five months that the ARTS plan was operational, **total spending decreased by about $180,409.00**

Political Feasibility

As maintain the ARTS program is the status quo of what is currently in place, the political feasibility is ***High***. The program has proven to be successful in its short existence, and there is no reason it could not be maintained.

Administrative Burden

Again, as this policy option is the status quo, there is a ***Limited Administrative Burden***, if it is not completely negligible. The ARTS program is already in effect.

Option 2: Expand GAP Treatment to People Diagnosed with Opioid Use Disorder but not a Serious Mental Illness

In September of 2014, Governor McAuliffe rolled out *A Healthy Virginia*, a ten-step plan to provide health insurance to uninsured Virginians. The first step of the plan was to establish the Governor's Access Plan (GAP). Launched in January of 2015:

> is a Medicaid plan that provides limited medical and behavioral health care coverage for low income individuals with Serious Mental Illness (SMI). It includes mental health and substance use disorder services, medical doctor visits, medications, access to a 24-hour crisis line, recovery navigation services, and case management (What is GAP?).

There are four main areas covered by the GAP Medicaid Plan: outpatient medical services, outpatient behavioral health services, Magellan only services, and substance use services (Understanding the Governor's Access Plan).

The program is politically popular thus far. In September of 2017, the Centers for Medicare & Medicaid Services (CMS) approved Virginia's request to amend the GAP program, increasing the income eligibility threshold from 80% to 100% of the federal poverty line as well as providing additional SUD services in the GAP benefit package (Neale).
Currently, GAP offers SUD services to people with SMI. However, my client has informed me that GAP could be expanded to offer treatment to the uninsured for people with only SUD and not SMI.

Effectiveness

According to the U.S. Substance Abuse and Mental Health Services Administration, 20.2 million adults nationwide had a substance use disorder (Mental and Substance Use Disorders). Of these, 7.9 million people also had both a mental disorder and a substance use disorder. This means that approximately

7.9/20.2, or 39 percent, of Americans with a substance use disorder also have some form of mental illness. Extrapolating from this, that would mean that 61 percent of Americans with a substance use disorder only have a substance use disorder. It is **unclear** exactly how many more Virginians would be covered by expanding the GAP program.

Cost

The cost of expanding the Governor's Access Plan are also **unknown**.

Political Feasibility

The political feasibility for expanding the GAP program would be ***Medium***. The program has already proven to be popular based on the first eligibility expansion; however, that does not necessarily mean that a second expansion would be just as simple.

Administrative Burden

Expanding the GAP program would cause ***Limited Administrative Burden.*** The GAP program operates through taking applications. Once the program was expanded, the burden would simply be to promulgate the change in eligibility and process the extra applications.

Option 3: Expand Medicaid in Virginia – with a Possible Work Requirement

One of Governor Ralph Northam's priorities for his new administration is expanding Medicaid to cover individuals with incomes below 138% of the federal poverty level in Virginia. He stated in his first speech to the General Assembly that Medicaid is "a matter of basic economic justice" (Martz).
A good example of the benefits of Medicaid expansion for treating opioid addiction is West Virginia. Though West Virginia had the highest overdose death rate in 2015, the state expanded Medicaid on January 1st, 2014. The report notes that the share of people in West Virginia with substance abuse or mental health disorders who were hospitalized but uninsured fell from 23 percent at the end of 2013 to 5 percent at the end of 2014 (Dey et al.). Though the problem of opioid addiction in West Virginia is possibly the worst in the country, they have been able to make important strides as a result of expanding Medicaid.

Wen et al. (2017) studies at the increase in MAT usage across the country by utilizing a difference-in-differences design to compare a type of MAT, buprenorphine, prescriptions and spending between the 26 states that expanded Medicaid in 2014 and those that did not. The authors found that state implementation of Medicaid expansions was associated with a 70% increase in Medicaid covered buprenorphine prescriptions and a 50% increase in Medicaid spending on buprenorphine (Wen et al., 339).

In Virginia specifically, the ASPE brief written by Dey et al. (2016) estimates that Virginia has 244,000 uninsured who had either any mental illness (AMI) or SUD in 2014. Of those 244,000, about 102,000 uninsured Virginians with AMI or SUD would be eligible for Medicaid if it expanded in Virginia. Further, the Commonwealth Institute estimates that there are over 10,000 Virginians in Region Ten alone that would gain coverage with Medicaid expansion (Goren and Cassidy, 2018). In addition, Governor Ralph Northam estimates that expanding Medicaid could create upwards of 30,000 jobs, creating an indirect benefit for the Commonwealth's economy (Vozzella).

There has been considerable pushback from Republicans in Virginia's legislature on Governor Northam's goal of expanding Medicaid in the Commonwealth. Namely, Virginia Republicans will only see Medicaid expand if there is a work requirement passed with it. Recently, the Virginia House of Delegates passed a bill to impose work requirements on Medicaid recipients (Vozzella). In a special session of the General Assembly called on by Governor Northam in order to pass a budget, the General Assembly included spending for Medicaid expansion with a work requirement.

It is estimated that of about 22 million adults covered by Medicaid nationwide, 58% of all adults on Medicaid, could be subject to the work requirement. Of those about 11 million adults, or nearly one-quarter (24%) of all the adults covered by Medicaid nationwide, could lose their coverage ("Medicaid Work Requirements"). In Virginia's state fiscal year 2016, approximately 1.3 million Virginians were covered by Medicaid. If work requirements were incorporated into a Medicaid expansion, that means that around 300,000 Virginians could lose their coverage as they do not currently work nor do they seek work (2017 Medicaid at a Glance).

Effectiveness

The Commonwealth Institute estimated that 10,200 Virginians residing in Region Ten would be eligible for Medicaid with expansion. However, with the work requirement, that number would fall to 8,780. Busch, et al. (2013) studied data from the National Survey on Drug Use and Health and found that the rate of substance use disorders among "currently uninsured income-eligible individuals" was 14.6 percent. Applied to the 8,780 estimate, 1,282 Virginians are uninsured income-eligible individuals with a substance use disorder (Busch, et al., 2013). Busch, et al. go on to estimate that only 30.7 percent of these 1,282 individuals would actually seek treatment for their addiction. In other words, out of the 8,780 Virginians first estimated, only approximately **394** would go on to seek treatment.

Cost

At $12,000 per person per year, 394 additional individuals seeking medication-assisted treatment would cost $4,728,000.00. However, because the Medicaid expansion comes with a 90/10 federal matching formula, the costs to the state would only be $**472,800.00.**

Political Feasibility

The political feasibility is very ***High***, as the budget bill passed through the General Assembly with bipartisan support.

Administrative Burden

There would be a ***Considerable Administrative Burden***. Expanding Medicaid would be a significant undertaking, but Virginia could learn from other states and use the help of the federal government.

Option 4: Directly Fund Treatment for the Uninsured

It is far from a certainty that Medicaid will expand in Virginia. Policy options for treating uninsured Virginians directly also need to be considered. The Ryan White HIV/AIDS Program is a federally funded program that provides comprehensive medical care and support services for people living with HIV who are uninsured or underinsured (About the Ryan White). The program works with cities, states, and local community organizations to provide HIV care and treatment services to approximately 52% of all people diagnosed with HIV in the U.S.

Sullivan et al. (2008) completed a comparison of Ryan White supported facilities vs. non-Ryan White supported facilities and concluded that the quality of care is equivalent or better in Ryan White program supported facilities. Further, Gallant et al. (2011) referenced the Ryan White Program as an example of an effective HIV care model.

When the ACA was implemented, some questioned the need of the Ryan White Program. However, Sood et al. (2014) surveyed HIV care providers and found that most pointed to the program's funding of medical and nonmedical case management as especially vital to maintaining comprehensive care. The authors concluded that whether HIV care is provided by Ryan White funding or Medicaid, case management services are vital to treat HIV/AIDS (Sood et al., 2014).

Although some (Cahill and Mayer, 2015) (Crowley et al, 2013) believe the Ryan White Program needs to be built partly due to the changes in the healthcare system with the implementation of the Affordable Care Act, they firmly support continued funding for the system. This funding model was built on the premise that it was to treat HIV/AIDS in America. It would take an extreme amount of administrative legwork to establish a similar program at the Virginia level to provide medication-assisted treatment for individuals with Opioid Use Disorder.

Effectiveness

Nationally, the Ryan White Program serves 52 percent of all Americans living with HIV/AIDS (About the Ryan White) of the 1.1 million people nationwide (Fast Facts). 52 percent of the 10,200 income-eligible uninsured within the localities Region Ten works with is **5,100**. Any program put in place in Virginia would certainly not reach such a high percentage of reach so quickly, as the Ryan White Program has been in effect since 1990. That said, the difficulties of establishing a similar program in Virginia are included in the political feasibility and administrative burden sections.

Cost

The Ryan White Program received $2,313,185,000 in the FY 2017 budget to serve 550,000 people nationally. This divides down to approximately $4,205.79 per person. At the Virginia level, the math

works out to the per person cost of $4,205.79 multiplied by the number of Virginians within Region Ten the program could idealistically reach, 5,100. That total cost is **$21,449,529.00**

Political Feasibility

The political feasibility of this option is ***Low***. This policy option was a viable alternative so long as the prospect of Medicaid expansion did not pick up the momentum it did in the Virginia state legislature. So much progress has already been made on Medicaid expansion that this no longer appears to be a realistic alternative option.

Administrative Burden

Creating a program that directly funds medication-assisted treatment services for the uninsured would require an enormously *Extensive Administrative Burden*. Creating an entirely new funding structure and then implementing it would be the most burdensome policy option.

Outcomes Matrix

	Effectiveness	Cost	Pol. Feasibility	Admin. Burden
Maintain ARTS Program	**4,000**	**-$180,409.00**	***High***	***Limited***
Expand GAP	**Unknown**	**Unknown**	***Medium***	***Limited***
Expand Medicaid with Work Requirement	**394**	**$472,800.00**	***High***	***Considerable***
Directly Fund Uninsured Treatment	**5,100**	**$21,449,529.00**	***Low***	***Extensive***

Policy Recommendation and Implementation

I recommend maintaining the ARTS program at current levels. Though many more Virginians are accessing medication-assisted treatment, the costs are completely offset by the decreased emergency department visits related to opioid overdose.

References

"2017 Medicaid at a Glance." *Virginia Department of Medical Assistance Services*. Retrieved from http://www.dmas.virginia.gov/Content_atchs/atchs/MAG%20FINAL_1_13_17_.pdf.

About the Ryan White HIV/AIDS Program. *Health Resources and Services Administration*. Retrieved from https://hab.hrsa.gov/about-ryan-white-hivaids-program/about-ryan-white-hivaids-program.

About the U.S. Opioid Epidemic. *U.S. Department of Health and Human Services*. Retrieved from https://www.hhs.gov/opioids/about-the-epidemic/.

About Us. *Region Ten*. Retrieved from http://regionten.org/about-us/.

Addiction and Recovery Treatment Services. *Department of Medical Assistance Services*. Retrieved from http://www.dmas.virginia.gov/Content_Pgs/bh-home.aspx.

ARTS Program Update. (2018, March). *Department of Medical Assistance Services*. Retrieved from http://www.dmas.virginia.gov/content_atchs/bh/Medicaid%20Addiction%20and%20Recovery%20Treatment%20Services%20Update%20-%20March%202018.pdf.

Busch, Susan H., Ph.D., et al., (2013, June 1). Characteristics of Adults with Substance Use Disorders Expected to be Eligible for Medicaid Under the ACA. *Psychiatric Services*. 64(6): 520-526. doi: 10.1176/appi.ps.201200011.

Cahill, Sean, PhD, and Kenneth Mayer, MD. (2015, August 19). Ryan White HIV/AIDS Program a huge success – let's build on it. *The Hill*. Retrieved from http://thehill.com/blogs/congress-blog/healthcare/251375-ryan-white-hiv-aids-program-a-huge-success-lets-build-on-it#bottom-story-socials.

Care Alliance for Opioid Addiction. (2017, July). *Vermont Department of Health*. Retrieved from http://www.healthvermont.gov/sites/default/files/documents/pdf/adap_CareAllianceOpioidAddiction.pdf.

Center for Substance Abuse Treatment. (2005). *Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs*. Treatment Improvement Protocol (TIP) Series 43. HHS Publication No. (SMA) 12-4214. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2005. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK64164/pdf/Bookshelf_NBK64164.pdf.

Chalk, Mary, PhD, et al., (2013). FDA Approved Medications for the Treatment of Opiate Dependence: Literature Reviews on Effectiveness & Cost-Effectiveness. *Treatment Research Institute*. Retrieved from https://www.integration.samhsa.gov/clinicalpractice/mat/Advancing_Access_to_Addiction_Medications_Implications_for_Opioid_Addiction_Treatment.pdf.

Crowley, Jeffrey S., et al. (2013, April). Updating the Ryan White HIV/AIDS Program for a New Era: Key Issues & Questions for the Future. *Kaiser Family Foundation*. Retrieved from https://kaiserfamilyfoundation.files.wordpress.com/2013/04/8431.pdf.

Cunningham, Peter, PhD, et al. (2017, December). Addiction and Recovery Treatment Services: Access, Utilization, and Spending for the Period of April 1 – August 31, 2017. *Virginia Commonwealth University Health Behavior and Policy*. Retrieved from http://www.dmas.virginia.gov/Content_atchs/bh/VCU%20ARTS%205%20month%20report.1.04.18.pdf.

Dey, Judith et al. (2016, March 28). Benefits of Medicaid Expansion for Behavioral Health. *Office of the Assistant Secretary for Planning and Evaluation*. Retrieved from https://aspe.hhs.gov/system/files/pdf/190506/BHMedicaidExpansion.pdf.

Fast Facts. *HIV.gov*. Retrieved from https://www.hiv.gov/hiv-basics/overview/data-and-trends/statistics.

Fentanyl. *United States Drug Enforcement Administration*. Retrieved from https://www.dea.gov/druginfo/fentanyl.shtml.

Gallant, Joel E., et al. (2011, October 20). Essential Components of Effective HIV Care: A Policy Paper of the HIV Medicine Association of the Infectious Diseases Society of America and the Ryan White Medical Providers Coalition. *Clinical Infectious Diseases*, 53(11), 1043-1050. Retrieved from https://academic.oup.com/cid/article-abstract/53/11/1043/306746.

Goren, Laura, and Michael J. Cassidy. (2018, January). Medicaid Expansion Helps People in Every District. *The Commonwealth Institute*. Retrieved from http://www.thecommonwealthinstitute.org/wp-content/uploads/2018/01/Medicaid-Expansion-Helps-People-in-Every-District.pdf.

How Much Does Opioid Treatment Cost? *National Institute on Drug Abuse*. Retrieved from https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-addiction/how-much-does-opioid-treatment-cost.

Information about Medication-Assisted Treatment (MAT). *U.S. Food & Drug Administration*. Retrieved from https://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm600092.htm.

Jiang, Ruixuan, et al., (2017, May 30). The societal cost of heroin use disorder in the United States. *PLOS One*. doi: https://doi.org/10.1371/journal/pone.0177323.

Jones, Christopher M., PharmD, MPH, et al. (2015) National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment. *American Journal of Public Health*, 105(8), e55-e63. doi: 10.2105/AJPH.2015.302664.

Jones, Christopher M., PharmD, MPH, et al. (2018, February 26). Changes in Synthetic Opioid Involvement in Drug Overdose Deaths in the United States, 2010-2016. *Journal of the American Medical Association*. 319(17): 1819-1821. doi:10.1001/jama.2018.2844.

Joseph, Andrew. (2017, May 3). How Virginia dramatically expanded treatment options for addiction (and skirted federal law). *StatNews*. Retrieved from https://www.statnews.com/2017/05/03/addiction-services-virginia-states/.

Kakko, Johan, et al., (2003, February 20). 1-year retention and social function after buprenorphine-assisted relapse prevention treatment for heroin dependence in Sweden: a randomized, placebo-controlled trial. *The Lancet*. 361(9358): 662-668. doi: https://doi.org/10.1016/S0140-6736(03)12600-1.

Levine, Marissa J. (2017, June 8). The Opioid Addiction Emergency in Virginia. *Virginia Department of Health*. Retrieved from http://www.pwcgov.org/news/Documents/opioid_presentation.pdf.

Lopez, German (2017, November). There's a highly successful treatment for opioid addiction. But stigma is holding it back. Vox. Retrieved from https://www.vox.com/science-and-health/2017/7/20/15937896/medication-assisted-treatment-methadone-buprenorphine-naltrexone.

Martz, Michael, (2018, January 15). Northam tells legislators Medicaid expansion is 'a matter of basic economic justice.' *Richmond Times-Dispatch*. Retrieved from http://www.richmond.com/news/virginia/government-politics/general-assembly/northam-tells-legislators-medicaid-expansion-is-a-matter-of-basic/article_c11c76e6-4c49-5387-ad64-9e3eb291a08a.html.

MAT Overview: Medication Assisted Treatment (MAT). SAMHSA-HRSA Center for Integrated Health Solutions, Retrieved from https://www.integration.samhsa.gov/clinical-practice/mat/mat-overview.

"Medicaid Work Requirements: Who's at Risk?," *Health Affairs Blog*, April 12, 2017. DOI: 10.1377/hblog20170412.059575.

Medication Assisted Treatment Program for Opioid Addiction. (2014). *ASTHO and the de Beaumont Foundation*. Retrieved from http://www.astho.org/Health-Systems-Transformation/Medicaid-and-Public-Health-Partnerships/Case-Studies/Vermont-MAT-Program-for-Opioid-Addiction/.

Mental and Substance Use Disorders. *Substance Abuse and Mental Health Services Administration*. Retrieved from https://www.samhsa.gov/disorders.

Mitigating the Costs of Substance Abuse in Virginia. (2008). *Joint Legislative Audit and Review Commission*. Retrieved from http://jlarc.virginia.gov/pdfs/reports/Rpt372.pdf.

Mohlman, M.K. et al. (2016, May 4). Impact of Medication-Assisted Treatment for Opioid Addiction on Medicaid Expenditures and Health Services Utilization Rates in Vermont. *Journal of Substance Abuse Treatment*, 67, 9-14.

Neale, Brian. (2017, September 22). Letter to Cynthia B. Jones. *CMS*. Retrieved from https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/va/va-gov-access-plan-gap-ca.pdf.

Office of the Director (1997, November 17-19). NIH Consensus Statement: Effective Medical Treatment of Opiate Addiction. *National Institutes of Health*, 15(6), 1-38. Retrieved from https://jpo.wrlc.org/bitstream/handle/11204/3547/NIH%20Consensus%20Opiate%20Rx%201997.pdf?sequence=1.

Overdose Death Rates. (2017, September). *National Institute on Drug Abuse*. Retrieved from https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates.

Prescription Drug Abuse Subcommittee of the Behavioral Health Coordinating Committee. (2013), U.S. Department of Health and Human Services, 1-36. Retrieved from https://www.cdc.gov/drugoverdose/pdf/hhs_prescription_drug_abuse_report_09.2013.pdf.

Schwartz, RP, (2013, May). Opioid agonist treatments and heroin deaths in Baltimore, Maryland, 1995-2009. American Journal of Public Health, 103(5), 917-922. Retrieved from doi: 10.2105/AJPH.2012.301049.

Skopec, Laura, and Joshua Aarons, (2018, March). A Profile of Virginia's Uninsured, 2016. *The Virginia Health Care Foundation*. Retrieved from http://www.vhcf.org/wp-content/uploads/2018/03/Profile-of-Virginias-Uninsured-28Feb2018.pdf.

Sood, Neeraj, et al. (2014, March 19). HIV Care Providers Emphasize The Importance Of The Ryan White Program For Access To And Quality Of Care. *Health Affairs*, 33(3), 394-400.

Stevens, Jennifer P., MD MS, et al. (2016) The critical care crisis of opioid overdoses in the United States. *Thoracic*. Retrieved from http://www.thoracic.org/about/newsroom/press-releases/resources/opioid-crisis-and-icus.pdf.

Sullivan, Patrick S., et al., (2008, September). Quality of Care for HIV Infection Provided by Ryan White Program-Supported versus Non-Ryan White Program-Supported Facilities. *PLoS ONE*, 3(9). Retrieved from http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0003250&type=printable.

Treating Opioid Use. *Vermont Department of Health*. Retrieved from http://www.healthvermont.gov/response/alcohol-drugs/treating-opioid-use-disorder.

Understanding the Governor's Access Plan. *Department of Medical Assistance Services*. Retrieved from http://www.dmas.virginia.gov/Content_atchs/gap/Gap%20Flyer%20020118.pdf.

VCU ARTS Evaluation Update. (2017, September). *VCU Health Behavior and Policy School of Medicine*. 1-6. Retrieved from http://www.dmas.virginia.gov/Content_atchs/bh/HBP_ARTS%20Issue%2001_092017.pdf.

Virginia GAP Program for the Seriously Mentally Ill 1115 Demonstration Application for Amendment. (2016, August). *Virginia Department of Medical Assistance Services*. 1-124. Retrieved from http://www.dmas.virginia.gov/Content_atchs/bh/VA-ApplicationGAPWaiverAmendment-Aug2016-FINAL.pdf.

Volkow, Nora D., M.D., et al., (2014, May 29). Medication-Assisted Therapies – Tackling the Opioid-Overdose Epidemic. *New England Journal of Medicine*, 370(22), 2063-2066. doi: 10.1056/NEJMp1402780.

Vozzella, Laura. (2018, January 29). Speaker of Va. House signals willingness to consider Medicaid expansion, but with strings attached. *Washington Post*. Retrieved from https://www.washingtonpost.com/local/virginia-politics/speaker-of-va-house-signals-willingness-to-consider-medicaid-expansion-but-with-strings-attached/2018/01/29/57585ca4-0538-11e8-b48c-b07fea957bd5_story.html?utm_term=.c36d96633ad6.

Wen, Hefei, et al. (2017, April). Impact of Medicaid Expansion on Medicaid-covered Utilization of Buprenorphine for Opioid Use Disorder Treatment. *Medical Care*, 55(4), 336-341.

What is GAP? *Department of Medical Assistance*. Retrieved from http://www.dmas.virginia.gov/Content_pgs/gap.aspx.