COMBATING THE OPIOID EPIDEMIC: A POLICY PROPOSAL FOR TREATMENT AND PREVENTION

by

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Abstract

There is a Public Health emergency in the United States due to the continued use and abuse of opioids. This issue been exaggerated due to the negative perceptions associated with substance abuse and the lack of medication assisted treatment for individuals. The opioid epidemic affects not only individuals and their family, but the healthcare system, the criminal justice system, and the country’s economy as a whole. It is an issue that has permeated different levels of society. Thus why policy action is encouraged in order to mandate states to use a portion of their Substance Abuse Prevention and Treatment Block Grant and a portion of their Mental Health Services block grant from the Substance Abuse and Mental Health Services Administration to combat the opioid epidemic.

This paper investigates the policy and political implications of this proposal. In terms of policy, this proposal is cost-effective as the money spent on developing and implementing it is less than the money lost due to opioid addiction. It has the ability to treat the current stock of opioid users while also implementing protocols that would limit future generations from accessing opioids. Politically speaking, it has the potential to bring both parties together since curbing the epidemic is a bipartisan effort. In conclusion, this proposal is cost-efficient and bipartisan supported in attempting to control the opioid epidemic.

Advisor: Paul Weinstein
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Memorandum for Charles Schumer: Senate Minority Leader

January 15, 2018

From: Ajna Uzuni

Subject: Opioid Epidemic

I. Action Forcing Event

In the past few months, President Donald Trump has declared the opioid epidemic a national public health emergency. In the past decade, the number of overdose related deaths has quadrupled. In 2016 alone, approximately 64,000 people died from drug overdoses.

II. Statement of the Problem

The opioid epidemic has roots that can be traced back to the late 1990s. It was during that time that pharmaceutical companies assured medical providers that there was a slim chance that patients would become addicted to opioid pain relievers. Thus the medical community began to prescribe them at higher rates, and over the years, it was, in fact, proven that prescription opioids could become highly addictive. This has led to the current epidemic the United States faces. In 2016 alone, one hundred and sixteen people died everyday from opioid-related drug over-doses, and an estimated eleven and a half million people misused prescription opioids. There is currently a misbalance in the

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supply and demand of opioids – there is a higher demand due to the addiction but with a low supply since there is hesitation from medical providers to now prescribe them. Since the dangerous addictive properties of opioids are now known, the next step will be in trying to curb the addiction already in place and prevent future addiction from occurring.

Opioids are a class of drugs that include heroin and the prescription pain relievers: oxycodone, hydrocodone, codeine, morphine, and fentanyl. This has become an epidemic that has permeated all fifty states in America from people in the urban sprawl to the rural countryside with key differences between the two populations. According to a research study conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA), 21.8 percent of city addicts preferred heroin as their drug of choice compared to only 3.1 percent in the country.5 In contrast, rural addicts had a bigger tendency to begin using drugs at a much younger age than their city counterparts.5 The statistics continue to stagger health officials due to drug overdose deaths increasing. From 2015 to 2016, the death statistic increased by twenty-one percent – five times more than in 1999.6 The graph below highlights the number of national overdose deaths due to opioid drugs.7

Opioid addiction may begin at the doctor’s office with a prescription; however, it has been implicated as being the gateway to heroin abuse.\(^8\) In 2016, one hundred and seventy thousand people used heroin for the first time.\(^8\) It has also been estimated that eighty percent of those individuals were the ones who misused and abused prescription opioids in the first place.\(^9\) In 1999, there was a surplus of prescription opioids in the market due to pharmaceutical companies rigorously marketing them for pain alleviation hence the rise in prescriptions that followed.\(^9\) Once the dangers of opioid addiction were made known to the medical community, doctors were less likely to prescribe; however, the addiction was already in place so to keep up with it, individuals turned to their next target: heroin.

In terms of demographics, the vast majority of those who overdose tend to be non-Hispanic White Americans.\(^10\) According to the statistics, they comprise more than

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eighty percent of the annual total.\textsuperscript{10} On the other hand, non-Hispanic Black Americans and Hispanic Americans comprise approximately ten percent of the cases.\textsuperscript{10} Researchers have concluded that opioid overdoses among white Americans, particularly those without college degrees, tend to be common due to stagnating wages and decreasing career options.\textsuperscript{11} Furthermore, opioid overdoses are common among United States military veterans who suffer from chronic pain.\textsuperscript{11} It has been estimated by researchers at the National Institutes of Health that military veterans are twice as likely to die from an opioid overdose than individuals from the civilian population.\textsuperscript{11}

From a socio-economic standpoint, the opioid epidemic stretches far beyond the addicted individuals. According to the Department of Health and Human Services, the opioid epidemic is costing the United States approximately five hundred billion dollars.\textsuperscript{12} These costs can be attributed to the dollars spent on the criminal justice system, rehabilitation, and unemployment among others. The epidemic is also having disastrous consequences on individuals due to debilitating diseases. Opioid addiction has been implicated in the increase of Hepatitis C, Human Immunodeficiency Virus, and many other life-threatening immune-comprising diseases due to individuals sharing syringes.\textsuperscript{11} Furthermore, opioid addicted women during pregnancies have a high chance of passing an opioid dependency on to newborn children.\textsuperscript{11} This has been a serious consequence due to incidences of neonatal abstinence syndrome quadrupling from 2000 to 2012.\textsuperscript{12} As a

\begin{itemize}
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result of opioid addicted mothers, the United States will see a bigger increase of children in foster care.

III. History

The opioid epidemic has been a recurring problem for the United States – a problem that can be traced back as early as the Civil War. Veterans at that time were prescribed morphine in order to cope with battle wounds. Opioids then began to gain momentum towards the end of the nineteenth century when Bayer Company marketed heroin under the pseudonym Heroisch meaning “strong or heroic.” It was first marketed as a cough suppressant and it “flooded the market in many forms: tinctures, pills, even heroin throat lozenges.” In 1900, the Boston Medical and Surgical Journal published a study stating that heroine had many benefits and advantages over morphine and that there “was no danger of acquiring a habit.” It was also during this time that opioids were present in common “cure-alls sold by neighborhood apothecaries, itinerant peddlers or doctors making house calls.” Opioids were handed out for any and all types of ailments. Doctors were prescribing them to women to relieve everything from menstrual cramps to morning sickness. It was also a twofold blow at this time due to the advent of the hypodermic needle. The needle allowed morphine and heroine to be injected which intensified the euphoria for individuals. Consequently, needle sales rose exponentially.

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Physicians were in a quandary during this period despite various medical journals publishing articles about the dangers of morphine and heroin addiction. For one, there were not many pain-relieving alternatives on the market.\textsuperscript{16} Second, there were financial pressures on physicians - affluent clients demanded opioids and there were plenty of other physicians and pharmacies willing to acquiesce to their demands.\textsuperscript{16} Therefore, education played a major role in curbing addiction. Doctors needed to be aware of the dangers of prescribing opioids in order to translate that knowledge and information to their patients. Over the years and into the beginning of the twentieth century, advances in medicine and public health helped to play a role in reversing the overuse of opiates.\textsuperscript{17} The discovery of aspirin in 1899 led to a safer pain relieving alternative, and the acceptance of the germ theory of disease meant understanding the importance of sanitation for environments; therefore, fewer people were contracting dysentery, gastrointestinal, or respiratory diseases thus decreasing the need for opiates to relieve their symptoms.\textsuperscript{17} Shortly after, medical education caught up with all the knowledge and began implementing it into their curriculums since stopping this addiction began with educating physicians thus why many medical textbooks issued strong warnings against prescribing opioids.\textsuperscript{17} Furthermore, between 1895 and 1915, new state laws were passed restricting opiate sales to those with only valid prescriptions.\textsuperscript{17}

Since opioids became harder to acquire, a new addict emerged: the opium smoker. Chinese immigrants began operating opium dens in major cities that attracted both immigrants and White Americans. Up until this point, narcotic addiction was not against the law – it may have been a problem – but it was not worth throwing someone in jail for. However, once smoking became the new trend and teenagers were seen doing it on the streets with their friends it became a bigger social issue. Therefore, in the 1910s and 1920s, the federal government doubled their efforts to ban opium. In 1906, the Pure Food and Drug act was passed that “forced manufacturers to disclose the contents of their products, so consumers wary of the drug would know if it was lurking in their kids’ cough syrup.” In 1909, President Theodore Roosevelt created the First International Opium Commission which “produced the first global attempt to regulate narcotics.” Afterwards, Congress passed the Opium Exclusion Act in 1909 which banned opium imports for the purpose of smoking while punishing the possession of it with two years in jail. Due to the Opium Exclusion Act, supply and demand was heavily affected – with supply being restricted, demand increased exponentially thus encouraging illegal activity. Then 1914 saw the passage of the Harrison Narcotic Act which was intended to regulate medical opium – it put a stop to physicians prescribing opium to “maintain an addict’s habit.” Subsequently, new physicians became wary of prescribing opium related products which severely decreased the number of addicts.

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The nineteenth century saw an addiction that was more accidental in nature; however, the late twentieth century saw the rise of opioid addiction due to commercialization. By the 1970s, Percocet and Vicodin had flooded the market, and a study in the New England Journal of Medicine claimed “the development of addiction is rare in medical patients with no history of addiction.”\textsuperscript{20} In addition, a pain management specialist also published that “opioid maintenance therapy can be a safe, salutary and more humane alternative to surgery or to not treating a patient with chronic pain.”\textsuperscript{21} Therefore, opioid prescriptions increased. Physicians started treating terminally ill patients with opioids and were looking into treating patients with chronic issues.\textsuperscript{21}

In 1996, Purdue Pharma released OxyContin into the market.\textsuperscript{21} They also created a video entitled “I Got My Life Back” which detailed how OxyContin gave chronic pain patients relief.\textsuperscript{21} Purdue Pharma also claimed that individuals would not have serious medical side effects; therefore, OxyContin was the drug of choice.\textsuperscript{21} Purdue Pharma also distributed this video to doctors offices with disastrous results. In the early 1990s, prescriptions increased by two to three million a year; from 1995 to 1996 alone, the number of prescriptions increased by eight million; and simply after a year of this video being on the market, the number of prescriptions filled increased to eleven million.\textsuperscript{21} The video continued to be shown until it was taken off the market completely in the year 2000 when the company was charged with downplaying the addictive qualities in OxyContin.\textsuperscript{21} This is what has led to the dilemma the United States faces today.

\textsuperscript{20} “Opioid History: From Wonder Drug to Abuse Epidemic,” CNN, Accessed February 2, 2018: 
https://www.cnn.com/2016/05/12/health/opioid-addiction-history/index.html

\textsuperscript{21} “Opioid History: From Wonder Drug to Abuse Epidemic,” CNN, Accessed February 2, 2018:
https://www.cnn.com/2016/05/12/health/opioid-addiction-history/index.html
There is one main reason for America’s failure at controlling the opioid epidemic: stigma. People have associated opioid addiction with moral failure – going as far as referencing Darwin’s Theory of Survival of the Fittest: “Let these lost souls pay for the price of their criminal choices and criminal actions…society does not owe them multiple medical resuscitations from their own judgement, criminal activity, and self-inflicted wounds.” Sarah Wakeman, Medical Director at Massachusetts General Hospital Substance Use Disorder Initiative, described the problem in one sentence: “For 100-plus years as a society, we’ve punished and criminalized people who use drugs.” Instead of perceiving these individuals as sick with an addiction, they have been seen “as someone who needs to get his/her life together.” The advent of social media has only served to perpetuate this stigma. Social media outlets “have increased exposure of devastating images of addiction, especially photos and videos of people over-doing or near death” which have served to spread the idea that it is a result “from poor willpower and that they can be changed solely through motivation, effort and self control.” Due to this stigma, a 2016 study from SAMHSA found “that 41.2 percent of the more than 12,000 drug addiction treatment facilities in the US offered at least one kind of medication for opioid addiction…only 2.7 percent offered three.” A major reason for this lies in people believing that these medications are simply “replacing one drug with another.”

conducted by Johns Hopkins Bloomberg School of Public Health found that “the general public was more likely to have negative attitudes towards those dealing with drug addiction…additionally, researchers found that people don’t generally support insurance, housing, and employment policies that benefited people who were dependent on drugs.”

There are a few misconceptions associated with Medication Assisted Treatment (MAT). The National Council for Behavioral Health found seven, to be exact, present in the American psyche. The main misconception that revolves around MAT is the idea of trading “one addiction for another,” which is false considering MAT “bridges the biological and behavioral components of addiction.” Medications, such as Methadone, Buprenorphine and Naltrexone, “relieve the withdrawal symptoms and psychological cravings that cause imbalances in the body,” and they also “provide a safe and controlled level of medication to overcome the use of an abused opioid.” Furthermore, the “medication operates to normalize brain chemistry, block the euphoric effects of alcohol and opioids, relieve physiological cravings, and normalize body functions.” Therefore, there is no risk of increased overdose for patients who are on MAT because it helps overdoses from occurring.

Stigma has also had major implications on efforts failing and driving the epidemic forward. For example, in Lawrence County Indiana, county officials decided to end a

needle exchange program that was in place.\textsuperscript{28} Even though, “empirical evidence…by Johns Hopkins researchers, the World Health Organization, and the Centers for Disease Control and Prevention” have repeatedly found that “needle exchanges prevent the spread of diseases, such as HIV and Hepatitis C…while not increasing overall drug use.”\textsuperscript{28} Lawrence County officials voted against the program due to their morals and the Bible.”\textsuperscript{28}

As a result of this stigma, since 2000, more than three hundred thousand Americans have died from an Opioid overdose.\textsuperscript{29} In 2016 alone, there were approximately sixty-four thousand deaths – the highest number in history so far.\textsuperscript{29} In was only in April of 2017, that the Department of Health and Human Services released their five-point Opioid Strategy which aims to combat the epidemic.\textsuperscript{29} Their five-point strategy includes improving access to prevention, treatment, and recovery support services for addicted individuals; increasing the availability of overdose-reversing drugs; strengthening public health data as the epidemic evolves; supporting research that aims to understand pain and addiction in addition to the development of alternative treatments; and finally, advancing the practice of pain management while reducing inappropriate use of opioids.\textsuperscript{29} Furthermore, specific states have adopted their own strategy in combatting the epidemic. For example, Ohio has the fifth highest rate of drug over-dose deaths.\textsuperscript{30}

They created the Governor’s Cabinet Opiate Action Team in order to support overdose prevention and promote it responsibly. Together with the Ohio Board of Pharmacy they have released three guidelines on the use of opioids – the guidelines “include the Emergency Department/Acute Care Facility Opioid Prescribing Guidelines, the Opioid Prescribing Guidelines for Treatment of Chronic Pain, and the Opioid Prescribing Guidelines for Treatment of Acute Pain.” As a result of these guidelines, there were “eighty-one million fewer doses of opioids dispensed to Ohio Patients in 2015 compared with seven hundred and eighty-two doses dispensed in 2011…the proportion of unintentional drug overdose deaths involving prescription opioids has reduced from forty-five percent in 2011 to twenty-two percent in 2015.”

IV. Policy Proposal:

This proposal intends to support prevention, treatment, and recovery efforts in the nation’s battle against opioid addiction. Battling the opioid addiction requires a two-prong approach: treating the current population that are addicted to opioids while simultaneously addressing the needs to prevent addiction from occurring for future generations. There are two different populations that have to be addressed – each one with their own set of unique needs.

In order to treat the current stock of opioid users, access to treatment has to be made readily available. Therefore, it must start once a patient comes into contact with either an Emergency Room, hospital, or clinic. The addiction can be treated with a

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combination of behavioral treatments and medications. In order to tackle behavioral treatments, states need to take cues from Pennsylvania and open up Centers of Excellence – “Centers of Excellence, also referred to as health homes, coordinate care for people...who have an opioid use disorder...and need guidance to stay engaged in treatment to avoid relapsing.” As of now, Pennsylvania Governor Tom Wolf’s proposed budget of thirty-four million dollars includes opening fifty centers across the state. Therefore, a proposed budget of approximately forty million dollars for each state can make treatment centers easily accessible for the opioid addicted population.

Furthermore, the second step in treating individuals is through the use of Medication-Assisted Treatment. Once the patient goes through total detoxification of the drug in his or her system, medication assisted treatment can begin. Drugs like Naltrexone and Methadone are considered antagonist medication that “prevent other opioids from binding to and activating opioid receptors.” A full year of a Methadone maintenance treatment, for example, costs $4,700 per patient. According to the CDC, as of 2014, there were approximately two million people in the United States addicted to opioids.

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Two million people divided by fifty states yields approximately forty thousand people per state – forty thousand individuals per state times $4,700 of a year of Methadone maintenance is equal to $188,000,000. If states divide this number over ten to fifteen years and add it to their Center of Excellence budgets, then it comes out to an extra twelve to nineteen million dollars a year.

In addition, in order to better track individuals and their opioid use, it is proposed that each state institute a Prescription Drug Monitoring Program (PDMP). PDMPs are tools that aid health care providers in tracking patients’ prescribing histories as well as aiding in future prescribing decisions.37 Data is entered in real time in state PDMPs – “when pharmacists dispense controlled substances to patients, they have to enter the prescription into the state PDMP.” Therefore, it allows prescribers to look at that patients’ history before prescribing. Start-up costs for implementing a state PDMP can range “from $450,000 to over $1.5 million” and annual operating costs can range from “$125,000 to nearly $1.0 million.”38 PDMPs not only have the power to aid in identifying the current stock of opioid users, but they will also help in preventing new generations from accessing and misusing opioids.

In conjunction with PDMPs, it is proposed that states make the Center for Disease Control and Prevention Guidelines for Prescribing Opioids for Chronic Pain obligatory for all opiate prescribers. The guidelines are “intended to improve communication between providers and patients about the risks and benefits of opioid therapy for chronic pain, improve the safety and effectiveness of pain treatment, and reduce the risks

37 “What States Need to Know About PDMPs,” Centers for Disease Control and Prevention, Accessed March 1, 2018: https://www.cdc.gov/drugoverdose/pdmp/states.html
associated with long-term opioid therapy, including opioid use disorder and overdose."³⁹

There are twelve guidelines that all prescribers must follow:³⁹

1. “Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain.”

2. “Before starting opioid therapy for chronic pain, clinicians should establish treatment goals with all patients, including realistic goals for pain and function, and should consider how opioid therapy will be discontinued if benefits do not outweigh risks.”

3. “Before starting and periodically during opioid therapy, clinicians should discuss with patients known risks and realistic benefits of opioid therapy and patient and clinician responsibilities for managing therapy.”

4. “When starting opioid therapy for chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release/long-acting (ER/LA) opioids.”

5. “When opioids are started, clinicians should prescribe the lowest effective dosage.”

6. “Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than seven days will rarely be needed.”

7. “Clinicians should evaluate benefits and harms with patients within 1 to 4 weeks of starting opioid therapy for chronic pain or of dose escalation. Clinicians should evaluate benefits and harms of continued therapy with patients every 3 months or more frequently.”

8. “Clinicians should incorporate into the management plan strategies to mitigate risk, including considering offering naloxone when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, higher opioid dosages (less than or equal to 50 MME/day), or concurrent benzodiazepine use, are present.”

9. “Clinicians should review the patient’s history of controlled substance prescriptions using state prescription drug monitoring program (PDMP) data to determine whether the patient is receiving opioid dosages or dangerous combinations that put him or her at high risk for overdose.”

10. “When prescribing opioids for chronic pain, clinicians should use urine drug testing before starting opioid therapy and consider urine drug testing at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs.”

11. “Clinicians should avoid prescribing opioid pain medication and benzodiazepines concurrently whenever possible.”

12. “Clinicians should offer or arrange evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder.”

Figure 2. CDC Guidelines for Prescribing Opioids for Chronic Pain
Since the guidelines are already released, this will have no cost associated with making it mandatory.

Lastly, to start prevention tactics from a young age, state governments need to take precedent from the Drug Abuse Resistance Education (D.A.R.E) program and administer a similar program aimed towards opioids for elementary students. According to the Center for Educational Research and Development, D.A.R.E costs about forty million dollars a year to maintain. If States start implementing a similar opiate program over a ten to fifteen year period, this would cost an extra three to four million dollars a year.

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Policy Authorization Tool

To achieve this policy, it is proposed that Congress pass a bill amending The Alcohol, Drug Abuse and Mental Health Services Administration (ADAMHA) Reorganization Act of 1992 (PL 102-321) Part B, Subparts I, II, and III of Title XIX of the Public Health Services (PHS) Act. Part B established the Community Mental Health Services Block Grant and the Substance Abuse Prevention and Treatment Block Grant for SAMHSA. In order to fund this proposal, it is recommended that Congress require states to spend thirty-five percent of their Substance Abuse Prevention and Treatment Block Grant and twenty-five percent of their Mental Health Services block grant to combat the opioid epidemic. The block grants specify that states can have joint block grant goals thus allowing them to combine the two together. There is also legal

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precedent for amendment of this Act as the last one was sponsored by Senator Edward
Kennedy in 1991.43

Allotment of the block grants are calculated “on the relative shares of the
Population-at-Risk, Cost-of-Services, and Fiscal Capacity Indexes.”44 The exact dollar
amounts of the grants will vary from state to state based off of their population of
addicted individuals or at-risk individuals and based off of their cost of living expenses,
therefore why the proposal cost is an approximation for each state.

Policy Implementation Tool

The proposal will be implemented by the state’s local government, Departments
of Health and Human Services in conjunction with hospitals and pharmacies. The state’s
Department of Health and Human Services will be responsible for instituting PDMPs
across the state while hospitals and pharmacies will be held responsible for integrating
them into their Electronic Health Record systems.45 Hospitals will also be held liable for
mandating their physicians and prescribing personnel are held to the CDC prescribing
guidelines. In addition, the Centers of Excellence will also be the responsibility of the
state’s Department of Human Services.47 Contrary to popular belief, the centers are not

43 “ADAMHA Reorganization Act,” Congress, Accessed March 16, 2018:
44 “Substance Abuse and Mental Health Block Grants,” SAMHSA, Accessed March 30, 2018:
https://www.samhsa.gov/grants/block-grants
4, 2018:
physical establishments, rather they are a “central, efficient hub around which treatment revolves” meaning they can exist in current, operating rehabilitation facilities.46

SAMHSA will then provide the overall oversight across all states. As part of the Block grant application process, states must provide, on a yearly basis, the priority area, the priority type – whether its classified as substance use disorder prevention, substance use disorder treatment, or mental health service – as well as the targeted/required populations.47 Furthermore, the goals, objectives, and strategies must be clearly outlined for each state.47 Lastly, there must be annual performance indicators in which to measure the state’s success.47 These performance indicators include: “baselines measurement from where the state assesses progress, first-year target/outcome measurement, second-year target/outcome measurement, data source, description of data, and data issues/caveats that affect outcome measures.”47 As part of the grant issue, “SAMHSA will work with states to monitor whether they are meeting the goals, objectives and performance indicators established in their plans.”47 If for some reason, states are not able to achieve their goals as stated in their application, “the state will be asked to provide a description of corrective actions to be taken” and if these steps are not taken “SAMHSA may ask the state for a revised plan, which SAMHSA will assist in developing, to achieve its goals and objectives.”47

V. Policy Analysis

Societal costs of opioid addiction can be devastating from a social and economic standpoint. According to a research study conducted by the Analysis Group, Inc and King Pharmaceuticals, Inc in 2007, “workplace costs accounted for $25.6 billion, health care costs accounted for $25.0 billion, and criminal justice costs accounted for $5.1 billion…workplace costs were driven by lost earnings from premature deaths ($11.2 billion) and reduced compensation/lost employment ($7.9 billion)…health care costs considered primarily of excess medical and prescription costs ($23.7 billion)…criminal justice costs were largely comprised of correctional facility ($2.3 billion) and police costs ($1.5 billion)⁴⁸ These findings suggest a substantial burden on society which is only getting worse as the number of opioid users increases.

While it may be a lot of money upfront in order to start these treatment centers and fund Methadone treatment, the benefits far outweigh the costs in the end. Funding fifteen years of the proposal – fifteen years times approximately twenty million dollars a year yields three hundred million dollars - is only two hundredth of the cost of opioid abuse. To break it down further into specific categories, whereas a full year of Methadone treatment costs $4,700 per patient, one full year of imprisonment can run the state approximately $24,000 per person – an approximate $19,000 difference.⁴⁹ As of right now, there is a major stigma surrounding MAT due to the idea “of trading one addiction

for another.”  \(^{50}\) Furthermore, this stigma extends to opioid addicts themselves – they are rejecting it as a form of treatment because they believe it is ineffective.  \(^{51}\) If people can rally behind MAT and recognize it as “the gold standard” of care that it is, then “every dollar invested in addiction treatment programs yields a return of between $4 and $7 in reduced drug-related crime, criminal justice costs, and thefts” and “when savings related to healthcare are included, total savings can exceed costs by a ratio of 12 to 1…since major savings to the individual and to society also stem from fewer interpersonal conflicts; greater workplace productivity; and fewer drug-related accidents, including overdoses and deaths.”  \(^{52} - ^{53}\)

Pennsylvania was the first state to implement Opioid Centers of Excellence, and after one year, they have had tremendous success.  \(^{54}\) During the first year of implementation, the opioid center interacted with 14,654 individuals – 10,903 of those individuals received a Level of Care assessment which determined the type, level, and length of their treatment.  \(^{54}\) Furthermore, Pennsylvania saw an increase of twenty three percent for patients receiving treatment – prior to the centers implementation, only forty

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eight percent received treatment in contrast to the seventy one percent after the centers’
implementation.\footnote{55 \textit{“Governor Wolf Announces First Year Success of Centers of Excellence,”} Pennsylvania Counseling Services, Accessed April 3, 2018: \url{https://pacounseling.com/2018/03/13/governor-wolf-announces-success-center-of-excellence/}} In addition, prior to the centers, only thirty three percent of opioid
addicted individuals engaged in treatment for at least thirty days as opposed to the sixty
two percent of individuals during the first year of implementation.\footnote{55 \textit{“Prescription Drug Monitoring Programs,”} Congressional Research Service, Accessed March 6, 2018 \url{https://fas.org/sgp/crs/misc/R42593.pdf}} Lastly, the Opioid
Centers of Excellence were able to treat addiction and other physical and mental health
issues simultaneously thus allowing to integrate both of SAMHSA’s block grants.\footnote{55 \textit{“Prescription Drug Monitoring Programs,”} Nursing World, Accessed March 8, 2018 \url{https://www.nursingworld.org/~4af5f1/globalassets/practiceandpolicy/work-environment/health-safety/ana-paw_prescription-drug-monitoring-programs.pdf}} Since Pennsylvania was able to have such a success after only a year of the centers’
implementation, it can only be assumed that this success would extend to other states as
well.

In terms of PDMPs, while they have the ability to identify the current stock of
opioid users, they can also be a tool to prevent new generations from accessing and
misusing opioids – more so, they can be a tool to track and limit doctors’ prescriptions of
opioids according to the CDC guidelines. While implementing the guidelines in everyday
practice has no price, its value in curbing new generations from accessing and misusing
opioids is apparent. While start-up costs can range “from $450,000 to over $1.5 million”
and annual operating costs can range from “$125,000 to nearly $1.0 million, conducting a
cost-benefit analysis of either instituting a PDMP or not, the data show that it benefits
states to institute a PDMP.\footnote{56 \textit{“Prescription Drug Monitoring Programs,”} Nursing World, Accessed March 8, 2018 \url{https://www.nursingworld.org/~4af5f1/globalassets/practiceandpolicy/work-environment/health-safety/ana-paw_prescription-drug-monitoring-programs.pdf}} For example, “in Wisconsin, as a result of using PDMPs, it
is predicted that the State could save $9,290,000 in avoided opioid use.”\footnote{57 \textit{“Prescription Drug Monitoring Programs,”} Nursing World, Accessed March 8, 2018 \url{https://www.nursingworld.org/~4af5f1/globalassets/practiceandpolicy/work-environment/health-safety/ana-paw_prescription-drug-monitoring-programs.pdf}} In addition,
“preliminary data from the State of Washington indicate that PDMP usage can achieve a cost-savings of $6,000 per client per year in Medicaid services.” Overall, states that institute PDMPs “save on healthcare benefits through reduction in admissions for inpatient and outpatient addiction treatment, prescription drug overdoses and associated health problems, and prescription drug costs associated with employer-funded purchases of drugs diverted to abuse.” In fact, there was a study that estimated PDMPs nationwide had the ability to reduce healthcare costs by $113 million. Furthermore, OptumRx ran a 400 person Opioid Risk Management study which aimed to increase alignment with the CDC prescription guidelines. Its initial results were as follows: “an 82 percent decrease in prescriptions above the CDC guideline recommended dose of 50mg morphine…65 percent decrease in prescriptions for first-fill acute opioid treatment written above the maximum 7-day supply…68 percent decrease in prescriptions for current chronic opioid utilizers issues for >90mg MED; and 14 percent reduction in average dose across all opioid prescriptions.” There are critics of the CDC guidelines – namely physicians. There is this idea that the guidelines “take away physician discretion or decision-making” hence, why many physicians oppose using them in practice. Furthermore, there are some physicians that believe restricting prescriptions for pain patients “could help some” but, in the process, “destabilize others and likely promote the use of heroin or other drugs.”

Lastly, state governments need to take precedent from the D.A.R.E program and administer a similar program aimed towards opioids. The D.A.R.E (Drug Abuse Resistance Education) program was created in 1983 and it is administered in seventy-five percent of United States school districts and in 52 countries.\(^{60}\) It has been an immensely popular program with real results. According to a research study conducted by SAMHSA, “assessments of D.A.R.E graduates eight and fourteen months after graduation show lower expectation of positive consequences of drug use, lower personal acceptance of drug use two and eight months after graduation, and greater use of intervention strategies to turn down an offer to use drugs two, eight, and fourteen months after graduation.”\(^ {60}\) In order to have similar results regarding opioids, a similar program must be instituted among twelve to fifteen year olds.

While the policy may begin to show results of decreased opioid dependence year after year, it has been given a timeline of at least fifteen years in order to show dramatic decreases in addiction. While this may seem a long time for a policy implementation, similar policies have taken just as long and longer in order to show results. For example, in 1982, there were 26,173 alcohol-related auto fatalities in the United States.\(^{61}\) At that time, “drunk driving was viewed as accidental, or as some sort of rite of passage” – people had the same nonchalant attitude about drunk driving as they do about opioid use today.\(^{61}\) It was not until the 1980s, that a mother founded MADD – Mothers Against Drunk Driving – and started aggressively campaigning about the dangers of drunk driving that the public became more aware of it.\(^{61}\) They were one of the main groups that

\(^{60}\) “Is the D.A.R.E Program Good for America’s Kids?” ProCon, Accessed February 25, 2018
https://dare.procon.org

\(^{61}\) “A Brief History of Drunk Driving,” The Fix, Accessed April 1, 2018:
https://www.thefix.com/content/brief-history-drunk-driving-dui-laws-thanksgiving7007
were influential in getting more stringent drunk driving laws passed – such as creating the blood alcohol content level.\textsuperscript{62} Since MADD’s aggressive campaigning, drunk driving fatalities have decreased to 12,744 as of 2009.\textsuperscript{62} Therefore, it took about twenty to twenty-five years for drunk driving fatalities to decrease more than half.

\textbf{VI. Political Analysis}

The Opioid Epidemic has divided the public regarding their stance on the topic. “Researchers at Harvard T.H. Chan School of Public Health – Robert Blendon, Richard L. Menschel Professor of Public Health and Professor of Health Policy and Political Analysis, and John Benson, senior research scientist in the Department of Health Policy and Management – examined data from seven national polls conducted in 2016 and 2017 to determine public opinion about the opioid epidemic” and the results were surprising based on the importance of the topic.\textsuperscript{63} The analysis showed that “only 28% of the public think the opioid-abuse epidemic is a national emergency” while they are also divided over “which level of government – federal, state, or local – bears most responsibility for fighting addiction to prescription pain medicine” and whether or not “insurance companies should be required to provide coverage for opioid-treatment programs.”\textsuperscript{63} In addition, the analysis also unveiled that “although national public figures are discussing major expansion of financial support for opioid-treatment programs, only about half of the public thinks there is a treatment for prescription-painkiller addiction that is effective long-term.”\textsuperscript{63} Therefore, the public may not be fully aware of the severity of the situation.

\textsuperscript{62} “A Brief History of Drunk Driving.” The Fix, Accessed April 1, 2018: https://www.thefix.com/content/brief-history-drunk-driving-dui-laws-thanksgiving7007


<table>
<thead>
<tr>
<th>Attitude</th>
<th>Percentage of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived seriousness of the opioid-abuse problem</td>
<td></td>
</tr>
<tr>
<td>Taking increased national action to reduce the number of deaths from opioid abuse is an extremely important priority for Congress and President Trump during the rest of 2017?</td>
<td>24</td>
</tr>
<tr>
<td>National emergency</td>
<td>28</td>
</tr>
<tr>
<td>Major problem but not an emergency</td>
<td>33</td>
</tr>
<tr>
<td>Minor problem</td>
<td>11</td>
</tr>
<tr>
<td>Not a problem at all</td>
<td>5</td>
</tr>
<tr>
<td>How much of a problem addiction to prescription pain medication is in the country?</td>
<td></td>
</tr>
<tr>
<td>Emergency</td>
<td>16</td>
</tr>
<tr>
<td>Major problem but not an emergency</td>
<td>38</td>
</tr>
<tr>
<td>Minor problem</td>
<td>26</td>
</tr>
<tr>
<td>Not a problem at all</td>
<td>12</td>
</tr>
<tr>
<td>Abuse of strong prescription painkillers is an extremely serious disease or health condition facing the country?</td>
<td>28</td>
</tr>
<tr>
<td>Prescription-drug abuse is an extremely serious public health problem</td>
<td>38</td>
</tr>
<tr>
<td>In the past year, the problem of addiction to prescription drugs medications in this country has</td>
<td></td>
</tr>
<tr>
<td>Increased</td>
<td>63</td>
</tr>
<tr>
<td>Remained about the same</td>
<td>26</td>
</tr>
<tr>
<td>Decreased</td>
<td>2</td>
</tr>
<tr>
<td>Attitudes about government’s role in responding to the problem</td>
<td></td>
</tr>
<tr>
<td>Which level of government bears the most responsibility generally for fighting the problem of addiction to prescription pain medicine?</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>36</td>
</tr>
<tr>
<td>State</td>
<td>28</td>
</tr>
<tr>
<td>Local</td>
<td>21</td>
</tr>
<tr>
<td>All or none (volunteered responses)</td>
<td>11</td>
</tr>
<tr>
<td>Which level of government should be primarily responsible for paying for programs aimed at reducing the number of people abusing prescription painkillers or opioids?</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>41</td>
</tr>
<tr>
<td>State</td>
<td>33</td>
</tr>
<tr>
<td>Local</td>
<td>20</td>
</tr>
<tr>
<td>Which one of these bears the most responsibility generally for fighting the problem of addiction to prescription pain medicine?</td>
<td></td>
</tr>
<tr>
<td>The medical and mental health community</td>
<td>47</td>
</tr>
<tr>
<td>The pharmaceutical industry</td>
<td>29</td>
</tr>
<tr>
<td>The law enforcement community</td>
<td>12</td>
</tr>
<tr>
<td>All or none (volunteered responses)</td>
<td>7</td>
</tr>
</tbody>
</table>

![Figure 3. Public Attitudes about the Opioid-Abuse Epidemic.](image-url)
While the public may be perplexed about the issue, pharmaceutical companies may be the epidemic’s biggest opposition. Drug makers “have adopted a 50-state strategy that includes hundreds of lobbyists and millions in campaign contributions to help kill or weaken measures aimed at stemming the tide of prescription opioids.” While it may publicly look like drug makers are working to combat the epidemic, “The Associated Press and the Center for Public Integrity found that they often employ a statehouse playbook of delay and defend that includes funding advocacy groups that use the veneer of independence to fight limits on the drugs, such as Oxycontin, Vicodin and fentanyl.”

One of pharmaceutical companies' tactics involves mobilizing lobbyists in order to quash certain congressional bills. For example, these lobbyists do not speak up in legislative hearings, rather, they individually talk “to senators and representatives one-on-one.”

Pharmaceutical companies have spent “more than $880 million nationwide on lobbying and campaign contributions from 2006 through 2015 – more than 200 times what those advocating for stricter policies spent.” Overall, “drug makers and allied advocacy groups employed an annual average of 1,350 lobbyists in legislative hubs from 2006 through 2015, when opioids addictive nature came under increasing scrutiny.”

Their agenda revolves around keeping the status quo when it comes to opioid prescriptions. After all, it was the pharmaceutical companies in the late twentieth century that commercialized opioid use. By the 1970s, Percocet and Vicodin had flooded the market, and even though doctors were well aware of the dangers of over-prescribing opium products, a study in the New England Journal of Medicine claimed “the

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development of addiction is rare in medical patients with no history of addiction.” In addition, a pain management specialist also published that “opioid maintenance therapy can be a safe, salutary and more humane alternative to surgery or to not treating a patient with chronic pain.” Therefore, opioid prescriptions were on the rise yet again. Physicians started treating terminally ill patients with opioids and were looking into treating patients with chronic issues.

In 1996, Purdue Pharma released OxyContin into the market as a painkiller. In addition, they also created a video promotion entitled “I Got My Life Back” which detailed people who suffered from chronic pain and how OxyContin gave them the relief they needed in order to get their life back. In this video, Purdue Pharma also claimed that these individuals did not have serious medical side effects. In fact, it was Purdue Pharma that made an estimated $2.4 billion profit from opioids alone in 2015. Stricter opioid prescribing policies is tantamount to less profits not only for Purdue Pharma but for every drug maker that is in the business of making and selling opioids.

In terms of stakeholders, the major combatants of the opioid epidemic include the Department of Health and Human Services, SAMHSA and the Trump Administration. President Trump declared the opioid epidemic a nationwide public health emergency which opened up avenues on combatting the opioid crisis. The Trump administration is

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fighting back through education and prevention. For example, the Trump administration “led a national “Take Back Day” which collected 456 tons of expired and unneeded prescription drugs, making it the most successful “Take Back Day” on record.” Since it is the White House leading this coalition, the President can set aside a certain amount in the budget in order to fund options. Currently speaking, the “President’s Budget proposes $3 billion in new funding in 2018 and $10 billion in new funding in 2019 for the Department of Health and Human Services to combat the opioid epidemic.”

Subsequently, due to President Trump’s declaration, Attorney General Jeff Sessions announced “the creation of the Prescription Interdiction & Litigation (PIL) Task force, which will focus on targeting opioid manufacturers and distributors who have contributed to the epidemic” in addition to creating the “Joint Criminal Opioid Darknet Enforcement (J-CODE) Team tasked with helping law enforcement disrupt online sales of illicit opioids.” Therefore, due to President Trump’s decree, there has been treatment and recovery interventions as well as law enforcement intervention.

The NIH, on the other hand, due to President Trump’s budget allocation, is mobilizing resources in order to find “innovative scientific solutions, from prevention to intervention and treatment.” In terms of tactics, the NIH has researched pain “ranging from cell and molecular mechanisms of acute and chronic pain, to safe, effective therapy development, to large scale clinical trials” in order to find alternatives to opioids for

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managing pain. In conjunction with the Trump Administration, the NIH is attempting to develop “safe, effective non-addictive strategies to manage chronic pain, new innovative medications and technologies to treat opioid use disorders, and improved overdose prevention and reversal interventions to save lives and support recovery.” Likewise, SAMHSA has also been working on amplifying their efforts. They have funded on-line and in-person trainings for over 46,000 medical professionals on the utilization of MATs. In addition, they are leading efforts to “reduce opioid deaths by increasing the availability and use of naloxone to reverse overdose.” As of October 21, 2017, due to SAMHSA’s efforts, 3,106 Nurse Practitioners and 806 Physician Assistants have obtained waivers to prescribe buprenorphine.

Moreover, since the Opioid Epidemic affects individuals from both party lines, ending it has become a bipartisan effort. In early 2017, a bipartisan bill was unveiled by Senators John McCain (R-Ariz.) and Kirsten Gillibrand (D-N.Y.) that would limit doctors on prescribing more than a week’s supply of opioids for patients deemed to have acute pain. Additionally, a bipartisan group of senators have been calling on Senate Majority Leader Mitch McConnell (R-Ky.) and Senate Minority Leader Charles Schumer (D-N.Y.) to provide “substantial and sustained funding for the opioid epidemic.” In fact, it

was Schumer that supported a bipartisan piece of legislation that would “cutoff the follow of illicit fentanyl from China, Mexico, an other countries into Upstate New York and across the United States.”

VII. Recommendation

The state of the opioid epidemic has become dreadful and appalling. It has been ignored over the decades and has been seen as a lack of will and responsibility on the peoples’ parts. This proposal seeks to commit funding in order to end a vicious epidemic that has raged across the United States and help people live their lives free from addiction. It it highly recommended this proposal be presented to and approved by Congress.

There are some disadvantages to consider when deliberating on this proposal. Namely, the stigma that surrounds Medication-Assisted-Treatment from an opioid addict’s perception and a national perception. However, this policy can be seen as the first step in bridging the gap between what is perceived and what is reality. Over time, with successes, the reality of Medication-Assisted-Treatment being a gold standard for care will be perceived by most.

Likewise, another disadvantage is considering physician’s attitudes towards the mandatory CDC prescription guidelines. While it may seem that Physicians are being forced to prescribe in a sort of manner, the pros far exceed the cons. Trying to combat this epidemic can be seen as a learning experience for all. The epidemic got to the state

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where it is today due to misleading information and rigorous opiate prescriptions. In trying to undo that damage, certain restrictions have to be put in place in order to closely monitor prescribing patterns. Over time, as new information is gleaned, the guidelines can change in order for physicians to regain some of their control.

More importantly, however, are the proposed advantages to this policy. It has the opportunity to introduce PDMPs which will allow tracking of current opioid afflicted individuals, in addition to curbing addictions for generations to come. Furthermore, introducing a D.A.R.E style opioid program for children ensures society that future generations will not succumb as easily to opioid addiction as past generations had done. It guarantees a society that is safe and clean from addiction and the other disastrous societal consequences that are a part of the package. Lastly, this policy has the benefit of being bipartisan. Since opioid addiction does not discriminate, it is in the best interests of both parties to fund legislation that aims to eradicate it.

Therefore, it is strongly encouraged that Senate Minority Leader Charles Schumer present and advocate for this policy proposal to Congress. It would be a societal advantage for current and future generations to be free of opioid addiction.
Curriculum Vitae

Ajna was born on September 24, 1993 in Albania and immigrated to the United States when she was six years old. She graduated from Michigan State University’s Honors College with dual degrees in Finance and Clinical Laboratory Science. While completing her Masters in Public Management, she worked at Henry Ford Hospital in Detroit, Michigan as a Medical Laboratory Scientist in a Transfusion Medicine Laboratory. During this time, she completed many projects with various medical directors on instituting and improving protocols and processes for patient care. Part of her duties included developing cost-benefit analyses for each new development.