Title Page

**Legal and Behavioral Health Service Responses to Substance Abuse and Addiction in the United States**

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Abstract

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Ashley M. Gallo, MPH

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**Abstract**

The spread and impact of drug use in the United States has serious implications for the social, environmental, legal, economic, and physical domains of our communities. These implications have been greatly compounded by the criminalization of drug use, possession, and distribution. As such, the methodology and quality of approaches to the legal and clinical treatment of addiction and substance abuse are of paramount public health relevance. This paper seeks to identify ways in which the myriad intersections of clinical and legal entities in the United States have influenced substance abuse outcomes for our communities as well as highlight what works to effectively reduce substance abuse and drug-charge related recidivism. A literature search was conducted within the PubMed and Scopus databases to identify relevant, peer-reviewed papers describing the interplay of addiction treatment, health policy, and the criminal justice system. Boolean search terminology was used, and the search was limited to papers published in the last twenty years. Findings from a narrative review of this literature indicate that significant improvements need to be made concerning the expansion of integrative healthcare, to increase equitable access to clinical treatment of substance use disorders, and to improve resources related to housing, employment, transportation, and support for the communities affected by addiction. It is recommended by public health social scientists, clinical providers, and the Substance Abuse and Mental Health Administration (SAMHSA) that access to evidence based interventions be improved and the environments in which people are able to address issues of addiction and substance abuse support the decarceration and decriminalization of such along with local, state, and federal commitments to fund and endorse these new, and potentially more therapeutic, infrastructures.

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Preface

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# Introduction

Social and institutional efforts to classify, interpret the effects of, and intervene on drug use and abuse in the United States have spanned the last two centuries. Parallel to the evolution of science and industry, various natural and synthetic compounds continue to be manipulated and distributed throughout our communities, where various stakeholders negotiate their medicinal, recreational, and lucrative properties. We are in an interesting time where the proliferation of salutary drug use and drug use-related problems co-exist. We must ask what existing literature on public health interventions says about what might work to better address substance use among the justice involved. And, knowing the complexities that involvement in the criminal justice system can create on medical needs, future employability, and access to basic needs resources to prevent recidivism, we must also ask what current research suggests about policy interventions that might decrease the representation of persons with substance use problems in criminal justice systems.

Further complicating the problem of substance abuse are the nuances of which drugs are classified as illicit and in what form, compared to how individuals in the community are engaging, manipulating, and using them. Scientists, psychiatrists, and researchers are actively exploring the potentially medicinal and beneficial properties of substances like marijuana and its subcomponents tetrahydrocannabinol (THC) and cannabidiol (CBD), for example. Additionally, psilocybin and 3,4-Methyl-enedioxymethamphetamine (MDMA or ecstasy), have been promoted for having “anti-cancer mechanisms,” and have been considered in treatments for everything from chronic pain to epilepsy, post-traumatic stress disorder (PTSD), and autism despite limited research into long-term effects and efficacy. Debates continue in the political and social domains on whether and how these substances should be legalized for medicinal and/ or recreational purposes (Mithoefer, et al., 2016; Reddy & Golub, 2016; Velasco, et al., 2016; Mouhamed, et al., 2018; Poleg, et al., 2019). At the same time, the first decade of the new millennium has included the persistent manufacturing, distribution, and use of opiate-based medications in the United States at higher rates than any other country despite the increasing public knowledge about the high rates of dependence, addiction, and dangerous overdoses that have resulted for many from their use (Mazer-Amirshahi, et al., 2014; Rudd et al., 2016). Despite efforts by legislators and various other stakeholders in the healthcare industry to develop more effective regulation protocols, actual death rates from opiate-related overdoses have escalated (Garcia, 2013; Reuter, 2013). As various stakeholders from both professional and general populations attempt to delineate how, why, and in what ways drugs can or should be used, the criminal justice system is also attempting to control and respond to the consequences that result from substance abuse whether that be public safety, crime, or economic burden. Today, there is growing acknowledgement that these efforts have disproportionately affected communities of color with heightened arrests in more impoverished neighborhoods and through the use of disproportionate sentencing structures stemming from the ‘war on drugs.’ As a result, it is of current importance to understand what the major policies passed between 1970 to 2018 were that have attempted to address substance use among the justice involved, and, to delineate what we know about the impact of these policies on those targeted.

Various efforts have emerged over the last three decades to address the clinical aspects of addiction and the growing understanding of the biological and psychosocial factors of substance use disorders. While there has been some success on micro levels in terms of the development of evidence based interventions such as Motivational Interviewing, Cognitive Behavioral Therapies, and Integrated Dual Disorder Treatment, for example, macro level policy and practice for addressing the risk environment in which people attempt to recover from addiction remains lacking.

Two main approaches for dealing with substance abuse and substance use related problems currently exist via the United States Department of Justice and the behavioral healthcare system. Some of the main concerns of these approaches include the reality that criminal justice and healthcare policies have produced a vast overrepresentation of people with problems related to drug abuse within the criminal justice system. At the same time, clinical treatment options for those facing addiction or substance use disorders have remained limited in terms of scope, reach, and effectiveness (Chandler et al., 2009; Shabbar, et al., 2018).

An evolving body of research argues that drug treatment in prison reduces the transmission of infections, recidivism, and fatal overdose on release (Clark, et al., 2017). Nevertheless, more than 80% of inmates with known addiction histories do not receive treatment while incarcerated (Chandler, et al., 2009). Research indicates that individuals recently released from jails or prisons are up to 10 to 18 times more likely to die of a fatal overdose than the general population is, yet very few correctional facilities have pursued interventions, programming, or clinical treatment to mitigate this in response (Shabbar et al., 2018). This has translated into 40-70% of individuals facing addiction who are subsequently found to relapse upon release from incarceration, as well as, accumulate additional criminal charges, and recidivate, which ultimately results in ongoing costs to the public (Humphreys, 2012). In addition, the period of six months or less immediately following release from jail or prison has been identified as having high risks with regard to not only overdose due to changes in tolerance level following periods of abstinence, but also higher rates of transmission of HIV and hepatitis C secondary to drug relapse (Binswanger et al., 2009; Zaller & Brinkley-Rubenstein, 2018).

In the United States, inmates at state and federal jails and prisons are disproportionally represented by people of color, many of whom have been living in poverty. This has yielded higher numbers of increased and overlapping health disparities within these marginalized communities as compared to their counterparts (Mauer & King, 2007; Yamatani, 2008; Bakalarski, 2016; Reuter, 2013; Walker & Mezuk, 2018). Criminalization itself regarding substance abuse, possession, and trafficking creates a host of social and environmental barriers that further complicate access to treatment on micro and mezzo levels, as well as impedes the resolution of public health and safety issues on the macro level. One such consequence of this is that people dealing with addiction do not consistently or universally receive evidence-based treatment while detained in jail or prison and may be subjected to painful withdrawal from medication assisted treatment if they had been taking methadone, buprenorphine, or naltrexone in the community prior to their incarceration. The infrastructure for making referrals to outside treatment providers is different facility to facility and often significantly overlooked, leading to revolving doors into the jails and prisons around the country (Begun et al., 2016).

In this paper, I will explore the past and present variations in access to clinical and medically-assisted treatment both inside the criminal justice system and for individuals following release. Additionally, I address the relationship of syndemics and social determinants of health to the mass incarceration of those facing drug-related charges/ convictions and drug addiction or substance use disorders in the United States population. In doing so, I will review how local, state, and federal public policy has been developed and enforced and how this has shaped the relationship between drugs, access, and criminal justice. I will seek to highlight the subsequent impacts of these dynamics on the overall public health, safety, population health, and public infrastructure within the last 100 years. Ultimately, my work finds that decarceration and decriminalization, improving the presence and availability of evidence-based, integrative healthcare both within and outside of jails and prisons, as well as the establishment of more clear and meaningful pathways to the self-determination and liberation of historically disenfranchised communities are critical to decreasing the prevalence of substance use problems among those incarcerated and improve outcomes for individuals with substance use problems who are currently involved in the justice system. I conclude by identifying strategies and recommendations needed across multiple policy level sectors to achieve the outcomes of reduced substance abuse/ crime.

# Background

The number of inmates being held in state and federal prisons in the United States as a result of illegal drug seeking behavior and/or violations in drug possession and distribution laws has risen dramatically since the 1980s. Sources range in terms of the exact numbers: Chandler, et al. and the PEW Charitable Trusts both cite a population of 25,000 in 1980 which grew to 300,000 by 2009 (Chandler, et al., 2009; PEW, 2018). Binswanger, et al. and Mumola & Karberg cite 40,900 people incarcerated on drug related crime in 1980 rising to 489,000 by 2013 (Mumola & Karberg, 2006; Binswanger, et al., 2012). The increases in the number of people incarcerated is almost entirely a result of changes in criminal justice policies and practice, a notable proportion of which is related to responses to drug related crimes (Carson & Sabol, 2012; Minton, 2012; Reuter, 2013; Wilson-Briggs, et al, 2017). During the same time period, there has been subsequently minimal proof that stricter law enforcement has been able to reduce substance abuse (Reuter, 2013).

Racial disparities are significant within the carceral system where drug related convictions are concerned. While 14% of the total population of regular drug users using at a rate of multiple times a month or more identify as African American, they represent 37% of those arrested for drug offenses, and 56% of those being held in state prisons for drug offenses (Mauer & King, 2007). Due to racially disparate sentencing laws such as the 100 to 1 crack to power cocaine disparity, African Americans held in federal prisons for non-violent, drug related offenses have been found to serve nearly identical sentences as white persons convicted of violent offenses. This is around 58.7 months and 61.7 months respectively (Mauer & King, 2007). For comparison, in 2015, a study of the population in Allegheny County entitled, “Criminal Justice in the 21st Century: Improving Incarceration Policies and Practices in Allegheny County” reflected that 13 percent of the constituents of the county were African American. However, African Americans comprised 49% of the population incarcerated at Allegheny County Jail (Yamatani, 2008). According to this study, African Americans are jailed at six times the national rate that white men are, but in Allegheny County, that number almost doubles (University of Pittsburgh, 2016). A task force made up of 40 different community leaders found that 75% of inmates in the Allegheny County Jail at the same time have a history of either regular drug or alcohol abuse or mental illness. This compares to a national rate of 68% of inmates meeting the same criteria (Bakalarski, 2016).

Individuals with a personal history of substance abuse make up 50-85% of the population of those incarcerated, with 20% reporting intravenous drug use (Nunn et al., 2009). In other words, regardless of the charge an inmate is being held on, it is estimated that at least one half of all prisoners being held in the United States meet the criteria for diagnosis of substance use disorders (Chandler, et al., 2009). A national study conducted in five major American cities found that 63-83% of arrestees had drugs—most commonly marijuana and cocaine— in their system at the time of arrest (Mumola & Karberg, 2006). Additionally, a study from Columbia University found that “significant percentages” of state and federal prisoners were noted to be under the influence of a drug at the time when they were acting in a manner or activity that resulted in their arrest (Sung & Richter, 2006). Over the first decade of the new millennium, the number of people who had opiates in their system at the time of arrest increased, with a couple of cities seeing significant increases in opiate as well as methamphetamine presence in the community (Binswanger, et al., 2012). In addition to substance abuse, more than 25% of inmates report co-occurring mental health problems while in jail which may further complicate how an inmate fairs in the carceral environment (van Olphen, et al., 2006). The availability of illicit substances within prison settings has been well documented (United Nations Office on Drugs and Crime [UNODC], 2010), and associated needle-sharing behaviors in prison settings greatly increase risk for HIV and hepatitis C acquisition during incarceration (UNODC, 2010; Aronowitz & Laurent, 2016).

Despite all this, the National Center on Addiction and Substance Abuse at Columbia University estimates that only 11% of those incarcerated who need substance abuse treatment, including any combination of behavioral interventions, clinical treatment programs, self-help support groups such as NA or AA, and medication-assisted treatment (MAT), actually receive it in any form while held or incarcerated in jail or prison (Mumola & Karberg, 2006; Sung & Richter, 2006).

In traditional terms, incarceration has been defended on “the basis of its assumed effect on deterrence, crime reduction, rehabilitation, and retribution” (Clark, et al., 2017). In terms of substance-related offenses and substance users, this has not translated effectively into crime reduction, deterrence of substance abuse, or rehabilitation for the vast majority (Kuziemko & Levitt, 2004; Clark et al., 2017). Despite the significant representation of people with drug problems in jails and prisons, treatment options inside jails and prisons remain limited, difficult to access, and are often executed in ways that deviate from evidence based practice (Peters et al., 2017). Individuals in prison with a history of ongoing drug use were less than half as likely to be receiving treatment in the early 2000s as compared to those receiving treatment while incarcerated in 1991 (Mauer & King, 2007). This equates to only 14.1% of those in state prison (15.2% in federal prison) in 2004 who had used drugs in the month prior to their arrest received treatment compared to 36.5% of those meeting the same criteria in state prison in 1991 did, as compared to 33.7% in federal prison (Mauer & King, 2007).

## Theories and Models

Interventions and research that have been conducted on substance abuse among those involved in the criminal justice system have thus far largely focused on the individual rather than the systems around the individual, and while some progress has been made on a micro level, the reality is that substance abuse and overrepresentation of people with drug related charges in the criminal justice system persist. Two theoretical orientations offer useful alternatives to the dominant micro level orientations—the risk environment framework and the life course approach. The risk environment framework essentially states that environments matter whole the life course theory posits that environmental matter differently over time. As this paper explores several micro and mezzo level interventions, the theories and models discussed are predominately reflective of problem substance use leading to incarceration on these more individual levels. Much of these interventions focus on individual traits and characteristics, particular environmental and interpersonal influences by history related to the onset of use, and in ongoing importance to continued use. At the same time, the risk environment framework proposed by Tim Rhodes provides a lens for identifying structural and systemic factors that influence health- related behaviors. As the criminalization of substance abuse is an issue that this paper attempts to look at more critically, macro level theories should not be overlooked. The risk-environment framework can be used to analyze the environmental influences across micro, mezzo, and macro levels concerning economic, physical, social, and policy-level domains that influence substance abuse. Additionally, the framework helps specifically explain how the environments in which people live present both risks and protective factors than can either increase or decrease drug abuse. The framework can be used to develop harm reductionist interventions that can be implemented on a larger scale than individualistic methods can achieve, with the goal of decreasing substance use and its associated harms by adapting the recovery or treatment environment to be more conducive to this goal (Rhodes, 2002). By understanding the effects that specific environments have on health-related behaviors, both policy and clinical treatment can be shifted to address the issues related to those environments, rather than only placing the burden on the individuals within those environments. Similarly, behavior on the part of individuals with addiction or substance misuse issues can be analyzed across multiple domains. The life course perspective suggests an approach for identifying different trajectories for drug use, understanding the role of critical events and contributing factors to the ongoing or changing patterns of drug use, and determining relationships that have impacted that use across the life span (Hser, et al., 2007).

### Risk environment framework

The dynamic environments of jails and prisons in the United States can be seen through a risk environment framework that considers the physical and sociocultural interaction of people within the carceral environment, as well as how that environment and the other individuals within it are continually shaped by competing and diverse attitudes, beliefs, varying levels of knowledge, rules, regulations, barriers, norms, and policies. Health behaviors emerge in response, juxtaposition, and opposition to the environmental constraints. The conditions of many correctional facilities across the United States are crowded, unpleasant, and at elevated risk of incubating infectious disease outbreaks (Trotter, et al., 2018). Additionally, the availability and continuity of care to medical and psychiatric providers within these facilities is often interrupted or non-existent (Taxman, et al., 2007; Trotter, et al., 2018). On the other hand, some research has indicated that going to prison could be a sentinel event in which many individuals who have not had the luxury or motivation to see a healthcare practitioner in the community are in a position to see a medical professional as part of the intake process, whereby many chronic or acute needs can be identified, sometimes for the first time, and at the least, have the potential to be subsequently treated (Chandler, et al., 2009; Binswanger, et al., 2012).

Public policy has evolved over time to respond to these environmental risk factors in a variety of ways to regulate or support public health interventions and practices for disease prevention (Trotter, et al., 2018). However, holistic approaches face more obstacles in heavily restricted environments and therefore certain programming falls to the wayside, as other methods and strategies are pursued for their cost-effectiveness, generalizability to larger numbers of inmates, and revenue opportunities for the company (Taxman, et. all, 2007). The risk environment framework can be utilized in providing a complete perspective of the factors that affect specific health behaviors, including the social determinants of health as influenced by physical environments, access to health services, and coping skills, specifically. As such, ecological frameworks can be used to integrate components of other theories and models, such as the Social Cognitive and Transtheoretical models. As such, programs are found to be more effective when they consider mechanisms to address the multiple levels of influence on health behaviors (Grella et al., 2007; Chandler et al., 2009; Fletcher et al., 2009).

### Life course theory

The life course approach looks at the individual, as well as the life events or factors that have occurred and may have some influence on the trajectory of substance use or health behavior occurring within the environment, is the life course approach (Hser, et al., 2007). This approach can be used to identify ways in which experiences such as poverty, racism, institutional oppressions, the structure and dynamics of the family unit, medical provider interactions, and trauma have shaped the course of an individual’s life and risk exposure to something such as substance misuse or crime as pivotal examples of normalized behavior within the social environment, or as potential solutions in response to critical experiences

### Transtheoretical model (stages of change model)

The Transtheoretical, or Stages of Change Model (TTM), describes various stages of behavior and insight as an individual’s readiness to change evolves in response to barriers being removed or addressed from the different domains of social determinants of health (Prochaska & DiClemente, 1992). Developed initially in the 1970s, researchers Prochaska and DiClemente defined evidence-based interventions to fit with each of the five stages, pre-contemplation, contemplation, preparation, action, and maintenance. The goal of the stage-specific interventions is to aid the person in advancing through the model to create lasting, sustainable change (Prochaska & DiClemente, 1992). Cognitive, evaluative, and affective processes with regard to cognitive and dialectical behavioral therapies, case management, and self-exploratory activities are applied with the objective to raising consciousness, self and environmental reevaluation, stimulus control and counter-conditioning, as well as, identifying prosocial relationships that encourage the desired change. While the TTM does not fundamentally focus on social contexts such as income and socioeconomic status, factors of those domains can be observed and managed as needed. A barrier to its implementation may be that TTM is applied on a very individual level, given that each person will progress through the stages at different rates and in response to unique factors of their own cognition, readiness, and support level from their associates. While meaningful in helping individuals with tailored public health interventions around drug use and recidivism, this model does not have the capacity to provoke institutional or macro level change so policies, attention, and funding towards its implementation may be limited. Given that prison and corrections systems are attempting to manage hundreds of thousands of individuals in the United States, these entities have inherent needs, protocols, and capacities that can create further barriers to the use of this evidence-based model.

### Social cognitive theory

Social Cognitive Theory (SCT) encompasses several aspects of the ecological and transtheoretical models to describe the influence of individual experiences, the actions of others, and environmental factors on individual health behaviors. SCT centers on opportunities that address self-efficacy, self-control, observational learning, comprehension, and insight to achieve behavioral control and change. While individuals who experience addiction and or some effect of incarceration or arrest have some aspects of self-agency, care should be taken to acknowledge and address the ways in which the institutional systems of the prison industry benefits from racial, economic, and ableism-based oppression where certain communities are targeted and overrepresented in the criminal justice system (Nowotny, 2015; Bachman et al., 2016; Kerrison, 2017). Nevertheless, the SCT can be used to understand the influence of the social determinants of health and a person's past experiences on behavior and behavior change.

## Methods

A literature search was conducted within the two largest databases of peer-reviewed literature, PubMed and Scopus, to identify relevant papers describing relationships between addiction treatment, health policy, and the criminal justice system. In searching the databases, multiple variations and common wordings were used in developing Boolean search terminology to capture articles that explored research incorporating both the population and topics together. A PubMed search was conducted using the following terms: ((((United States[tiab] AND Drug Policy[tiab] OR health policy[tiab] OR policy recommendations[tiab] AND Drug Abuse[tiab] OR Drug Dependence[tiab] OR Drug Addiction[tiab] OR Substance Use Disorders[tiab] OR Substance Use Disorder[tiab] OR Drug Use Disorders[tiab] OR Drug Use Disorder[tiab] OR Substance Abuse[tiab] OR Substance Abuses[tiab] OR Substance Dependence[tiab] OR Substance Addiction[tiab] OR Drug Habituation[tiab] AND justice-involved[tiab] OR Prisoners[tiab] OR recidivism[tiab] OR incarceration[tiab] OR jail[tiab] OR prison[tiab] OR criminal justice[tiab] OR criminal justice system[tiab])))). This resulted in 23,823 returns. I further filtered out anything that was not a journal article published in a core clinical journal written in English over the last 20 years on human subjects and narrowed to 1,121 results. Further references were explored in the bibliographies of those found through Boolean search, to identify other potentially relevant material. Additionally, seminal books on the subject matter and theoretical bases, as well as, current and reputable research analyses and policy briefs were utilized from the Centers for Disease Control, United Nations Office of Drugs and Crime, the University of Pittsburgh, the PEW Charitable Trust, the KATAL Center, and RAND. A literature review was formulated in two parts: 1) research defining the impact of drug, criminal justice, and healthcare policies, program implementation, and evaluation methods on provision of care and access to treatment; and 2) findings and outcomes of medication-assisted treatment (MAT) and behavioral interventions executed in jails and prisons as well as post-release and in the community with this population.

The questions being explored by this paper are: what are the major policies passed between 1970 to 2018 that have attempted to address substance use among the justice involved? What do we know about the impact of these policies on this population? What does existing literature on public health interventions say about what might work to better address substance use among the justice involved? What does current research suggest about policy interventions that might decrease the representation of persons with substance use problems in criminal justice systems?

The limitations of this project center on the complexity of the topic, as substance use, abuse, and addiction are nuanced concepts in juxtaposition to the criminal justice system. Factors such as economics, social influences, environment, genetic vulnerability, and other determinants of health allow for a variety of interactions that individuals and communities at large can have with drugs, as well as the legal system, where no single approach can therefore fully encompass the needs of the entire population impacted. Therefore, multiple programs, interventions, and modalities have proliferated in response, making it impossible to come to a singular and comprehensive conclusion on what works the most effectively in reducing recidivism and public health problems related to substance use. The absence of a unified, federal approach to the issues stemming from the trafficking, distribution, use, and addiction of drugs in the United States has resulted in limitations to fully define and address the issues, as the options, approaches, and responses further vary by state and jurisdiction. A comprehensive and unequivocal understanding by scientists and researchers on the true physiological impacts of various substances has been difficult to achieve due to the constantly changing nature of the composition and source of consciousness altering compounds. This is in part due to the limitations inherent of the efforts made thus far to legislate and criminalize various substances without a simultaneous effort to fully resolve the biopsychosocial issues that perpetuate the market and desire for use of these drugs in the first place. There is still a strong political debate within the larger culture and society about whether social determinants of health or syndemics exist in this context at all and how they should be addressed from fiscal, social, governmental, and communal perspectives. Given this, the research that exists is both broad and incomplete, difficult to compare across sub-domains, and generally calling for the need of further analysis. Stigma continues to persist around addiction in general due to the behavioral components of the disease that have alienate many family members, healthcare providers, and the community at large. As for how society in the United States negatively views those who have been arrested, convicted, and incarcerated is evidenced by continued lack of protections in employment, housing, and access to economic resources such as public assistance and student loans in some cases. The ideologies that influence continual debates about whether drug users and abusers should be managed by the healthcare system, the criminal justice system, or both, and in what ways, creates competing interests that can further interrupt funding, prioritization, and allowance by the authorities of those entities to access the data to fully investigate on these questions at all.

# Legal Responses and Policy

Today, the War on Drugs, and the rapid expansion of the opioid “epidemic” across all socioeconomic and racial domains, are the main hallmarks of what people in the United States associate with the intersections of law and policy with substance abuse and addiction. Much of the rhetoric persists in the vein of public safety although many are becoming more aware of the biological and physiological underpinnings of addiction thanks to advancements in science and medicine that explore the neuroscience of this disease (Koob, 2011). This may be related to continued state and federal lobbying efforts made for funding to be appropriated to research. This has allowed for efforts and advocacy to expand comprehensive approaches to include clinical treatment as well as prevention measures, in addition to law enforcement (Sacco, 2014). While the general public continues to wrestle with many contentions around how substance use should be addressed from legal perspectives, specific policies around regulating, classifying, and utilizing various drugs continue to evolve and change in response to medical, social, and economic influences (Wen et al., 2013).

## History and Background

Much of the antidrug policy prior to the twentieth century was developed primarily through state and local measures. Federal legislation, particularly the Harrison Act of 1914, grew out of increasing fear that social and health problems stemming from addiction to narcotics were being inadequately controlled. On its surface, the Harrison Act proposed to regulate the manufacturing and circulation of opium and coca derivatives to the public. In practice, however, it was interpreted to preclude doctors from dispensing drugs to maintain addiction, and it ultimately marshalled in a half-century of progressively disciplinary anti-drug laws (Boyum & Reuter, 2005). By the end of the 1950s, life imprisonment, the death penalty, as well as mandatory minimum sentences for certain drug-related offenses were consequences highlighted in federal and some state anti-narcotics laws. Over the next three to four decades, enforcement and the allocation of federal funding scaled up dramatically following Nixon’s declaration of the War on Drugs in 1969, which first focused on international strategies, then domestic ones. In addition to the development of sentencing policies, the creation of the Drug Enforcement Administration (DEA), and increased propaganda in the media intending to alarm the public on the prevalence and “evils” of illicit drugs, the Nixon Administration also created a federally subsidized drug treatment system. This system was built primarily around methadone, directing the majority of federal spending in this regard to treatment efforts from 1971 to 1975 and arguably less out of moralistic impetus and more for the perception that methadone offered a simple and seemingly magical solution to the complicated problem of heroin (Boyum & Reuter, 2005).

On a macro level, changes to drug policy in the United States over the last two centuries have created dramatic ripples into the daily lives and generational fabric of families through the provision of mostly regulatory policies focused on law enforcement. The rapid expansion of the prison system over the last half century stemmed in substantial part from rapidly increasing rates of incarceration under Ronald Reagan’s initiatives in the 1980s to “crack down on crime” through the 1986 Drug Abuse Act aimed at increasing law enforcement against synthetic drug use, and later in 1988 with the establishment of the Office of National Drug Control Policy (ONDCP) that centralized where policy was defined and prioritized. The Drug Abuse Act is most well-known for establishing mandatory minimum penalties for certain trafficking offenses. This Act is where the differentiation between cocaine base (crack cocaine) and powder cocaine was made, requiring 100 times more powder cocaine than crack cocaine to trigger the more severe minimum sentence (Boyum & Reuter, 2005). The War on Drugs continued to pick up speed through the 1990s by the attempts of the Clinton administration to expand surveillance and enforcement through the DEA against methamphetamine production and distribution (Mumola & Karberg, 2006). In the post-millennium and present day administrations, focus on homeland security and immigration issues has utilized rhetoric regarding international drug trafficking as an issue of concern to justify continued practices of racial profiling, detainment, and restriction against asylum seekers in the efforts to enforce changing policies (Reuter, 2013). Despite these efforts to impede the illicit drug trade and eradicate substance abuse, there has been little to no evidence linking law enforcement to these outcomes. As Boyum and Reuter state,

The idea that crop eradication, seizures, and arrests directly reduce drug consumption ignores the fact that drugs are bought and sold in markets, and that the actors involved respond to economic incentives, which indeed is the notion underlying the separation of programs into “demand reduction” and “supply reduction.” On the demand side of the market, enforcement lowers the demand for drugs by incarcerating some users (or forcing them into treatment) and persuading others that it is more difficult and riskier for them to buy drugs. On the supply side, enforcement lowers drug use by making drugs more expensive (Boyum & Reuter, 2005).

In addition to influences from the pharmaceutical industry, and addiction issues stemming from the overutilization of opiate based medications following injury, surgery, or chronic illness such as cancer, rates of drug use are also heavily proliferated through social contacts where patterns of use over time can imitate some of the characteristics of a contagious epidemic. Early users of a new drug introduce other users, who then introduce even more potential users. The burgeoning initiation rate plunges appreciably as the unpleasant effects of the drug become apparent. In contrast, many users who have become physically dependent during the upswing may or may not gradually stop using over the course of many years. The use of most drugs thus waxes and wanes, control policies notwithstanding. In that sense, while policies specifically geared to reduce use make intentions towards improving public health and safety, in practice this may be very easy or very difficult to achieve, depending on factors largely outside the government’s control (RAND, 2005).

## Implementation and Infrastructure

On a federal level, drug policy in the United States is established by the Office of National Drug Control Policy as specified in the Anti-Drug Abuse Act of 1988. This department was initiated under the Executive Office of the President and focuses on identifying the priorities and objectives of legislation aimed at eradicating illicit use, production, and trafficking of psychoactive substances. Its overarching goals are to improve public health and safety in the United States. Over time there has been a shift in how these policies have been enforced and to what extent through the involvement and expansion of the Department of Justice (DOJ), the Drug Enforcement Administration (DEA), the Substance Abuse and Mental Health Services Administration (SAMHSA), the National Institute of Drug and Alcohol (NIDA, the Centers for Disease Control (CDC), and in the sanctioning of states to develop, interpret, and enforce anti-drug legislation in their own jurisdictions. An example of how federal authority has been utilized through policy to create channels for achieving various objectives under the guise of public safety and health promotion is reflected in a law passed by Congress in 1984. This law allows the Attorney General to bypass the traditional process that had been established for scheduling substances with the goal to “avoid imminent hazards to public safety.” Once the Attorney General scheduled any substance through this temporary process, the drug would be deemed illicit and remain on the Schedule I for up to two years. The Attorney General could then extend the drug’s position on the Schedule I for another year; at which time it would ultimately need to be removed or permanently scheduled. The process for the Department of Justice and Congress to permanently schedule substances involves a significantly longer legislative or administrative process. Since 2002, the DEA has used the temporary scheduling process on 33 synthetic substances which has influenced the landscape of law enforcement, criminalization, and imprisonment (Sacco, 2014).

In terms of how federal policy development began to shape public investment, the Drug-Free Workplace Act of 1988 was introduced in an effort to improve the function and safety of those handling the allocation of government funds for business or human services. The purpose of this act was to establish a policy for some federal contractors and all federal grantees to agree that they will provide drug-free workplaces as a precondition of receiving a contract or grant from a federal agency.

In terms of the allocative aspects of criminal justice and drug policy, efforts have been made in terms of trying to direct the distribution of resources to develop treatment protocol inside correctional facilities as well as in improving the effectiveness of those that exist by increase trauma informed practices both inside and with outside service providers who are engaging these populations following release.

One such example, the Comprehensive Addiction and Recovery Act (CARA) bill, was introduced and signed into law in 2016 with an intention to dismantle the opioid crisis in the United States by putting focus, funding, and resources into accessible, community-based treatment, naloxone administration in emergency overdose situations, and increased public awareness to aid in the prevention of opioid abuse and addiction issues. This bill had an emphasis on support and programming for Veterans and those involved in the criminal justice system. The version of the bill that passed the Senate on March 10, 2016 had 28 sections falling under 8 key areas, whereas the House bill that passed on May 13, 2016 had 69 sections comprising 18 key titles. Both bills incorporate provisions to implement new programs, reauthorize and modify existing efforts, and aim to focus on areas of medical pain management best practices by forming an interagency task force, and both include the plan to support grant based treatment for pregnant and postpartum women. There are several differences where each the Senate and House bills individually include provisions for which the other bill has not accounted. Such differences may relate to amount of funding allocated, manner in which programming will be orchestrated, and who and what governmental departments will be involved and in which capacities. Both bills speak to the incorporation of grant accountability by way of annual audits for grantees receiving funding. The House bill would also seek to evaluate performance of grant programs. One critical difference that stood out between the House and Senate bills was surrounding the provision regarding access to Narcan (naloxone) to reverse opioid overdose. The Senate bill only has a single provision focused on appropriately training first responders to administer and utilize “under specified circumstances.” The House bill takes a broader approach, emphasizing a goal to increase access and training to encourage naloxone use by anyone involved in a crisis situation, not necessarily first responders.

Proponents of the CARA bill emphasize that the bill takes a highly collaborative approach joining together law enforcement, public health, community based treatment programs, and education. When it was brought to the final vote, it swept the House of Representatives with 407 in favor and only 5 voting against it. This bipartisan measure was co-sponsored and championed by Senator Sheldon Whitehouse (D-RI), Senator Rob Portman (R-OH), Congressman Jim Sensenbrenner (R-WI), Congressman John Conyers (D-MI) among others. 61 organizations listed on Maplight ranging from the American Academy of Addiction Psychiatry to many healthcare based companies, to Housing Works and the Legal Action Center supported the bill.

As with the vast majority of bills, CARA has also come under criticism throughout its evolution and in its final vote. For example, Sen. Jeanne Shaheen (D-NH) initially criticized CARA because she felt it did not provide adequate funding to fully respond to the opioid epidemic. She introduced an amendment to provide an emergency authorization of $600 million to the Department of Justice and the Department of Health and Human Services for opioid treatment programs. Ultimately, she ended up voting in favor of CARA even after the amendment she had introduced was defeated. According to Maplight, the government’s portal on revealing money’s influence on politics, the only senator who actively voted against the bill was Ben Sasse (R-NE). Senator Sasse was cited in several mainstream news outlets stating that his opposition was based on the fact that he didn’t feel addiction was an issue that would be best addressed by the government (Carney, 2016). Those who declined to vote were Ted Cruz (R-TX), Mike Lee (R-UT), Claire McCaskill (D-MO), Marco Rubio (R-FL), and Bernie Sanders (I-VT). It is difficult to say with total certainty that their opposition or neutrality was influenced by this, but Maplight has figures listed in the 100,000s of dollars that these politicians received from interest groups that supported or opposed their vote on the bill. Zero organizations were listed on Maplight as being opposed.

Prior to the CARA bill, the Mental Health Parity and Addiction Equity Act of 2008 was designed to require insurance companies offering coverage for mental health or substance use disorders to make these benefits comparable to general medical coverage in terms of what types of services were insured and at generally equivalent costs. While not focused on the quality or proximity of these services to communities that represented a higher need, the Act sought to expand economic access for those who were insured; it stated that deductibles, copays, out-of-pocket maximums, treatment limitations, etc., for mental health or substance use disorders must be no more restrictive than the same requirements or benefits offered for other medical care.

On local level, county and city jails across the country house 19 times the individuals incarcerated to state and federal prisons to the amount of some 731,000 people each day (Wilson-Briggs, A., et al., 2017). The protocols, policies and practices operating these facilities and how they interplay with other economic infrastructure of the communities into which inmates return, significantly shape additional layers of obstacles faced by this population. In New York and a majority of other states across the U.S., access to Medicaid coverage, which is terminated on arrest and reinstated only after lengthy bureaucratic process, creates additional barriers and delays in a person gaining timely access to addiction treatment following release (van Olphen et al., 2006).

## Influence, Enforcement, Barriers

As the United States becomes increasingly concerned with a growing epidemic of opioid misuse and staggering rates of heroin overdose deaths plaguing today’s society, policymakers and public health officials need a clear understanding of whether, how, and to what degree the continued use of imprisonment for drug offenses affects the nature and extent of the nation’s substance use and subsequent problems (PEW, 2018). One of the main concerns with the evolution of antidrug and criminal justice policies is reflected in research that has identified no statistically significant improvement in rates of drug use, drug overdose deaths, and drug related arrests as a result of lengthier sentences, higher penalties, and incarceration itself (Boyum & Reuter, 2005; Wilson-Briggs, A., et al, 2017). Additionally, sharp rises in federal drug related imprisonment has yielded high costs despite the low returns shown. Despite the limited outcomes across the nation, application, approach, and interpretation of policy varies widely by state. For example, today, New Jersey imprisons drug offenders at a much lower rate than Tennessee, but the states’ drug use rates remain roughly the same (PEW, 2018). In terms of costs over time, spending ballooned 595 percent on a federal level between the years 1980 and 2013 as the prison population soared.

In terms of the intersection of health disparities and public policy, we can reach back through history and identify specific points in time on the trajectory of drug policy where policy level approaches to controlling drug possession, distribution, and use have been fueled by racial discrimination and profiling. The first drug law in the United States was passed in San Francisco in 1875 which banned the smoking of opium in opium dens with the threatened punishment for offending as a heavy fine, imprisonment, or both. The reason cited was "many women and young girls, as well as young men of respectable family, were being induced to visit the Chinese opium-smoking dens, where they were ruined morally and otherwise” (Horning, 2019). Following this, other laws proliferated throughout the country aimed at barring the Chinese from trafficking opium; to the contrary, there was no effort made to curtail the use of opium in production of laudanum which was a tincture of opium and alcohol, most commonly taken as remedy for ailments by white Americans. The divergence of how white Americans and Chinese immigrants typically ingested opium was also reflected in how the laws targeted the community; Chinese immigrants tended to smoke opium, while people of European descent in the United States more commonly consumed it as an ingredient in various kinds of typically liquid analgesics and tinctures. The laws targeted opium smoking but no other methods of ingestion. Despite these laws, the late 19th century saw an increase in opiate consumption, due to the prescribing and dispensing of legal opiates by physicians and pharmacists to relieve painful menstruation. It is estimated that between 150,000 and 200,000 opiate addicts lived in the United States at the time, and a majority of these addicts were women (Brady & Randall, 1999). Nearly a century later, a parallel distinction is made in the law enforcement efforts in the southwestern United States where marijuana possession, distribution, and use were targeted heavily in the communities of Mexican Americans, and then later again, around sentencing guidelines for the crack cocaine as it was cheaper and more easily accessible to impoverished and urban neighborhoods of mainly African American populations. Harsher, mandatory sentencing became the gateway to a significant portion of the racially disproportionate mass incarceration we are still questioning today (Wilson, 2012).

In the more recent years, evidence has emerged of the potential for noteworthy change to occur in the approach and effects of national drug policy. First, there has been increasing recognition from the public and policymakers in regard to the value of drug treatment as a more appropriate response to substance abuse than incarceration in many instances. We can trace the rapid expansion of drug courts in part to these shifting attitudes. From the inception of the first treatment-oriented courts in 1989, these programs have now grown to more than 1,600 sites nationally (Mauer, 2009). “There is ongoing debate regarding the extent to which these approaches divert defendants from incarceration, but in any case they represent broad support for less punitive policies in regard to substance abuse” (Mauer, 2009).

*a.pdf*Table 1 Literature review of the impact of drug, criminal justice, and healthcare policies

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# Medical Approaches, Public Health, and Behavioral Interventions

Problems exist within treatment options both inside jails and prisons as well as out in the community for those seeking help with addiction or substance use disorders. At the same time, compelling research has been made within the last two decades that demonstrates drug treatment in both arenas is more cost-effective in addressing both substance abuse and its related crimes in comparison to costs required to continue expanding the prison system (Spohn & Holleran, 2002; Ettner, et al., 2006). An analysis conducted in California in 2006 reflected the cost-effectiveness of investing in treatment approaches; researchers found that in terms of reduced crime and increased earnings, seven dollars were saved for every single dollar put towards substance abuse treatment (Ettner, et al., 2006). Yet, even though rhetoric has overall shifted from a mainly moralistic perspective to one that at least acknowledges “addiction as a disease of the brain,” policymakers, various stakeholders, and the general public of the United States have remained skeptical at best with regard to allocating funding to programs focused on treatment and alternatives to the prison system as well as effective but controversial tactics like harm reduction, medication-assisted treatment (MAT), and needle exchanges, for example (Reuter, 2013). At the same time, the availability and accessibility of consistently evidence-based, outcomes driven addiction treatment has remained lacking in communities across the nation (Boyum, Reuter, 2005). Persons with addictions have become increasingly ill with chronic diseases and mental health issues that create additional barriers to care and quality of living. Involvement in the criminal justice system has further complicated the ability for these individuals to not only move ahead in the community with gainful employment, affordable housing, and access to resources, but from accessing and receiving truly integrated, comprehensive healthcare that addresses their co-occurring health issues in real time.

## Inside Jails and Prisons

Drug treatment programs within correctional facilities can be seen as providing a unique opportunity to address health consequences of substance abuse that, if left alone, have the potential to influence continued risk and vulnerability for the person returning into the community following their release from incarceration (Chandler et al., 2009; Binswanger, et al., 2012; Peters, et al., 2017; Moore, et al., 2019).

### Medication-assisted treatment

Medication-Assisted Treatment (MAT) – also known as Medication Assisted Recovery, – refers to the use of prescribed medications as a method of harm reduction to manage cravings in regard to physical dependence of a scheduled substance. Most commonly used in regard to opiate addiction, MAT has also been referred to as Opiate Replacement Therapy (ORT) or Methadone Maintenance Treatment (MMT) in the literature (Nunn, et al., 2009; Krawczyk, et al., 2017; Moore, et al., 2019). Oftentimes facilitated in combination with psychotherapy, MAT is proven to be one of the most effective ways on a physiological level for people with opioid use disorder to safely stop using heroin, prescription pills, or other opioid drugs (Chandler et al., 2009; Aronowitz & Laurent, 2016). Medication Assisted Treatment is the only intervention proven to reduce mortality by as much as 38-59% (Wilson-Briggs, A., 2017). While these medications can be found in some community-based clinics, primary care, and/or outpatient substance use treatment settings, they remain an option that is heavily underutilized, if not, non-existent in many jails and prisons across the United States (Wilson-Briggs, A., 2017).

For those entering the carceral system on MAT, doses may be missed or interrupted, at best, and abruptly discontinued, at worst. Individuals who are actively using and at risk of withdrawal are at elevated risk of medical compromise due to the myriad of symptoms and physiological processes that occur in juxtaposition to the abrupt absence of a substance on which the body has become dependent. This ultimately impacts the stability of the facility if access to medication and resources are not timely. A study conducted in 2016 in Vermont, found that the abrupt discontinuation or rapid taper from MAT upon incarceration was an extremely stressful experience as described by inmates themselves, citing consequences that resulted in terms of repeated relapse, increased efforts to smuggle illicit substances into the facilities, and prolonged or exacerbated mistrust of medical staff as a result of feeling their healthcare needs were ignored or not met (Aronowitz & Laurent, 2016). Individuals reported that they subsequently felt less comfortable to report serious medical symptoms based on the perception that staff would not do anything to help them, potentially compromising the safety of themselves and those around them, if not resulting in increased costs assumed by emergency medical care (Aronowitz & Laurent, 2016). Options are increasingly limited in these settings due to the relatively shorter periods individuals will remain incarcerated and the high turnover rates, as well as stigma/ bias/ ignorance around perceptions of addiction.

The first MAT program was launched on Riker’s Island Jail Complex in New York City more than 30 years ago. The state of Connecticut, as well, launched small pilots in its facilities, and a statewide effort has been implemented in Rhode Island. Studies have found these programs to be a highly impactful and operative way to save lives, reduce the risk of overdose upon relapse, increase connectivity to treatment and care, and improve a person’s ability to recover. MAT programs have also been shown reduce the likelihood that someone with an opioid use disorder will return to jail or prison (Wilson-Briggs, A., 2017). Despite this, a study conducted by Nunn et al., to assess the accessibility of MAT in state and federal prisons nationwide found that just under half of all facilities do not offer or allow methadone or buprenorphine in any circumstance. Of the half that do, 45% will only allow pregnant inmates, those assessed as being in acute withdrawal, or those deemed in need for chronic pain management to have access to these evidence-based medications. Mumola & Karberg found that 9% (15,689) federal and 13% (163,005) of state inmates reported regular heroin use in 2004 (Mumola & Karberg, 2006). Even five years later, as public awareness begins increasing around harm reduction and the opiate crisis, only nine tenths of 1% of the eligible population (estimated 1,614-1,817) of state and federal inmates could be accounted for as receiving either methadone or buprenorphine at that point in time, based on data provided by the 51 of 52 state and federal prison directors who responded to the survey in the study conducted by Nunn et al. (Nunn et al., 2009).

### Behavioral based interventions

Over time, studies have been conducted on various other programs and initiatives facilitated in select correctional facilities to address high risk behaviors, integrated models of intervention, and the demand for treatment. According to researchers Tony Ward and Claire Stewart, empirical evidence developed over the last twenty years has progressively supported the success of offender rehabilitation programs in producing reduced rates of recidivism over the use of punishment alone. By their findings, criminogenic needs and dynamic risk factors related to health, socioeconomics, and safe housing have been the focus of a considerable amount of research, having become recognized as primary intervention targets (Ward & Stewart, 2010). Additionally, evidence in research about patient healthcare outcomes improves physically and fiscally when patients are treated close to home and that engagement improves even further when natural supports or family members are involved. This is believed to be because of the comfort and strength people build within their support systems to be able to manage various aspects of daily need and functioning so that time and resources can be focused on the health needs with greater ease (Hibbard & Greene, 2013). Hibbard and Greene’s work highlight similar conclusions made previously by researchers Prochaska and DiClemente on the effectiveness of meeting people according to the degree of readiness they exhibited towards change (Prochaska & DiClemente, 1992).

Efforts to improve motivation of individuals incarcerated for drug related offenses is an area of focus in treatment that has been explored thus far. Motivational Interviewing (MI) is an evidence based tool commonly used in integrated dual disorder treatment of those with co-occurring substance use disorders as well as mental illness. MI has been used by clinicians and corrections personnel alike to improve retention and engagement in treatment, build on motivation towards change as well as behavior that exhibits progression through its focus on stages of change specific interventions based on the Transtheoretical Model (McMurran, 2009). While a number of studies evaluating the use of this strategy with those involved in the criminal justice system due to drug related offenses have been identified, more research is needed to identify consistency in how MI is applied and whether its use has any positive or negative impacts on reconviction and recidivism rates (McMurran, 2009).

Interventions for reducing substance abuse among justice-involved individuals that have been documented in the peer-reviewed literature as showing some efficacy range from prevention initiatives around health education, mobilizing access to evidence based healthcare, integrating multiple levels of healthcare such as addiction treatment, mental health, and chronic disease interventions to reduce the overlap of symptoms and barriers to access, employing peers within these initiatives to mentor target consumers and reduce stigma, increasing programming inside the prisons to address educational gaps, skills for effectively managing criminogenic factors and increasing prosocial behavior, modifying the housing within the prison to include more therapeutic communities and spaces for those in addiction recovery or mental illness, creating nurseries where children of the incarcerated can visit or live in some cases alongside the parents, as well as through efforts related to transitional planning, work release programs, on the job training partnerships, housing subsidies and halfway programs, variations on house arrest programs and community supervision. As the National Institute on Drug Abuse (NIDA) has established principles of addiction treatment for criminal justice populations, programs and curriculums should be based on evidence and informed by NIDA’s work. Therapeutic Communities and cognitive behavioral therapy are among the most widely accepted treatment approaches today. Regardless of the type of treatment provided, NIDA recommends it be “available on an extended basis given that short-term gains in desired proximal (e.g. coping skills) and ultimate (e.g. substance use) outcomes after intensive treatments typically fade without continuing care” (Humphreys, 2012).

With a focus on reducing disease risk behavior in the community through enhancing motivation and teaching coping skills, a six-session curriculum, WaySafe, was developed and implemented in 2015 to 1,393 inmates from eight different institutions in two different states. Half of the participants received treatment as usual (TAU) in a control group while the other received the WaySafe intervention. The curriculum seeks to increase positive decision making skills among soon to be released inmate participating in a therapeutic community substance abuse treatment program. The intervention utilized TCU Mapping-Enhanced Counseling as an approach to address the cognitive aspects of risky sexual and substance use behaviors in an effort to improve self-awareness, commitment to change, and skills tailored to reducing risk level. At the conclusion of the study, WaySafe participants had significantly better post-intervention scores than initial scores on all measures than did TAU participants. Being that the post-intervention surveys and other methods of assessment were conducted while the participants were still incarcerated, inference could only be made about attitudes and comprehension rather than on how the skills and knowledge acquired to improve knowledge, motivation, and confidence in avoiding risky sexual and substance use behaviors would translate into sustainable practice in the community setting following release (Lehman et al., 2015).

## Outside Jails and Prisons

Managing the challenges of addiction poses different stressors for persons living in the community and having to navigate social and interpersonal dynamics, associates related to using, as well as, potentially housing issues, ability to find gainful employment in an environment that is not triggering, and more. At the same time, being able to navigate those challenges in real time through various treatment options gives individuals an opportunity to test strategies and skills in ways that the confines of jail or prison may not allow. Social service programs that exist in the community around housing often do not have built-in resources or considerations for those returning from prison and managing substance abuse recovery, which are two essential factors that need attention in terms of access, maintenance, and ongoing safety within these programs.

### Compulsory Treatment Models

One approach of directing individuals involved in the criminal justice system into treatment is through compulsory measures. At times, a probation officer or arresting officer will, at their own discretion, give an individual who is about to be arrested on a new drug-related offense, or a probation violation related to using the conditional option to either go to rehab or go to jail. Common probation rules require individuals to submit regular and unannounced urine samples for drug-testing monitoring. Although relapse is a relatively common part of the process of substance abuse recovery, the criminal justice system still has the authority to punish individuals who relapse because society has already deemed those acts illegal. As the system slowly begins to understand the further complication this can create in helping individuals “rehabilitate” into society, drug courts as a means of diversion or alternative from traditional legal consequences are being increasingly used for first time or repeated offenders at the discretion of law enforcement. Drug courts are specialized court-based programs for select participants in which the criminal justice system seeks to address the larger issues of addiction and rehabilitation. Despite widespread implementation of these types of compulsory methods, there is a complete lack of evidence that supports the effectiveness of mandatory addiction treatment, and if it exists, has yet to be thoroughly researched and understood (Werb et al., 2016). Beyond its ineffectiveness, compulsory treatment by its nature has higher risk potential for human rights abuses (Werb et al., 2016).

Post release, Edward Latessa’s research in various communities across the country has led him to conduct assessments of over 1,000 correctional programs throughout the United States. Latessa has directed over 195 funded research projects ranging in all areas of prison programs, drug programs, and community supervision programs. He found that those programs that targeted multiple risk factors simultaneously achieved better outcomes for clients than the ones who worked with singular issues (Latessa & Reitler, 2015). Latessa & Reitler have also been able to identify after decades of incarceration and criminalization that followed the War on Drugs, as one example, shame-based, punitive, and coercive methods do not achieve the desired outcomes of reducing rates of recidivism. This is because there are no mechanisms to address the subsequent barriers to gainful employment in addition to the socioeconomic ones that already existed for many of those who were targeted by those interventions (Latessa & Reitler, 2015). ­­

Presentation2.pdfTable 2 Literature review on medication-assisted treatment and behavioral interventions

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# Discussion

Today, the drug war continues to foster mass criminalization in the United States, with millions penalized in long lasting ways for varying levels of drug related charges and convictions. Policies initially set forth in the 1980s intended to target those considered “major traffickers” or individuals who were responsible for significant distribution of illicit drugs. In reality, the majority of people housed in jails and prisons, as well as, under correctional supervision are those with lower level convictions (Spade, Jr., 1996; U.S. Sentencing Commission, 2007). “This prevalence of low-level defendants in the federal system is inconsistent with a criminal justice system that was designed to harness the resources of the national government and combat the most serious interstate and international crimes, offenses that local law enforcement was ill suited to address” (Mauer & King, 2007). The drug war has deepened and institutionalized racial disparities by sentencing African Americans convicted of low level drug related offenses as harshly as whites who were convicted of violent offenses and in targeting urban communities of color around the country with heavier enforcement and surveillance (Reuter, 2013; Bakalarski, 2016). As such, the principal reasons for substance abuse among populations in general, with some being of greater risk than others, i.e. vulnerable, economic disadvantage and marginalized populations – are influenced by upstream SDOH factors. For example, poverty, institutionalized racism or lack of insurance (underinsurance) affecting access to preventive services or treatment. The ineffective use of the legal and behavioral healthcare system that exists, the dramatic rising in the number of people being detained on drug related offenses, the lack of clear evidence that the current criminal justice system has effected any declines in substance misuse or reduction in crime, and the fact that the majority of inmates with substance abuse and addiction issues are not receiving any form of professional treatment inside these facilities are the main reasons for calls for alternative intervention and policy measures. In review of the literature surrounding the policies that have contributed to the expansion of the criminal justice system’s efforts to address substance misuse and drug-related crime, there existed a lack of research supporting punitive approaches (PEW, 2018; Walker & Mezuk, 2018). In the face of what many argue is the nation’s worst drug crisis – the opioid “epidemic” – the policies resulting from the ‘war on drugs’ in the 1980s continue to limit, interrupt, and deny access to proven opioid addiction treatment modalities such as physician supervised medication therapy using Methadone and buprenorphine today both inside and outside of jails and prisons (Wilson-Briggs, 2017). As such, research appears to indicate that the criminal justice system is rarely, if at all, using the harm reductionist approaches or implementing the evidence-based mechanisms already found to be effective in addressing the issues surrounding addiction and criminogenic behavior. In failing to utilize these tools, the system set forth by the policies lawmakers have passed over the last three to four decades have contributed more towards recidivism and many untimely, preventable deaths as a result.

The issues surrounding substance abuse/ addiction in the United States have spanned decades of policy, public practice, and a changing social environment in which adults and their children and families have been subsequently impacted on various physical, mental, and social levels. The social determinants of health embedded in the living environment, public arenas, and activities of work and daily functioning link these social and economic circumstances as influences that either promote health or increase risk of vulnerability of disease. The presence of poverty, for example, tends to co-occur with a number of negative health outcomes due to limited access to quality food, healthcare, and balance of stress and has been present in many cases with environments of heightened substance misuse and crime. Declining health outcomes for those returning from incarceration has been widely linked to increased socioeconomic challenges caused by gaps in employment, decreased education attainment, and the forced interruptions in inmates’ ability to nurture natural support systems (Arditti & Parkman, 2011; Bales & Mears, 2008; Begun et al., 2016). Often times, those reentering are coming back to broken neighborhoods and substandard living conditions that for most people do not reflect financial stability, whether due to high rent costs in comparison to income levels or the general reality that most people do not own their own homes. For many reentrants, misdemeanor and felony convictions remain disqualifiers in practice for securing employment in an already poor job market.

Several factors described above can be further modified to create new opportunities, reduce stress and strain on populations facing multiple barriers, and create room for health to improve on individual, communal, and societal levels. The complexities of experiences among those who have faced incarceration makes it difficult to discern which factors most strongly correlate to improved outcomes. Interventions have been attempted from a variety of institutional approaches, community based initiatives, and in different regions with varying degrees of success in each of these areas over the last few decades. There are clearly some factors that will take more effort than others and will require more resources and time. Public perception for instance, will require a culture shift in how and where we decide to produce commodifiable products and infrastructural signage and license plates if we stop using prison labor. We will need to find other large scale ways to create jobs and revenue in struggling towns across the country by finding alternatives to building private prisons where nothing else exists. We will need to tackle the perception on poverty, the American Dream, and all the ideology that puts an unbalanced amount of responsibility on the individual for the systems that are contributing to and perpetuating the problems. Trying to make any of these improvements within a system that is inherently broken will not be able to fix the problems with the degree of sustainability and meaning that is needed to transform individual and communal lives. In looking at the distal factors, we must dare to imagine and work towards complete alternatives and innovations to the problems at hand of crime, underemployment, poverty, unsuitable living environments, the education system, childcare, pollution and spread of disease, addiction and mental health.

­­ It is critical that public and preventative health and addiction healthcare continue to evolve outside of the walls of institutions and into the community where the real factors and stressors of daily life and the complexities people experience are also addressed and considered into that care. Consumers and patients need to be seen and treated as equal partners in their own treatment, so that providers can be able to go beyond the textbooks to see and treat people as the unique populations they are, rather than as statistics. In this, those directly affected themselves are part of the cultural shifts around disease prevention, wellness, and community livelihood as fully recognized members of the society we seek to improve.

We must develop sensible, health-based, and socially affirming public policy in the United States. It is time to decriminalize possession and use of all drugs in favor of evidence-based public, preventative, and healthcare-based treatment options that truly integrate public health approaches to address the multidimensional aspects of substance use disorders and addiction.

## Public Health Implications

Implications for the general health and wellbeing of our society are central to the social and physical environment; whether in the public and private spaces of the community or the jails and prisons. As the dynamics of the environment change, so too will the dynamics of behavioral and physical healthcare change. It is imperative that if treatment may be interrupted, stopped, or changed, consideration needs to be made of the consequences that doing so may impart (Ward & Stewart, 2010; Trotter, et al., 2018). Disparities across race, gender, and socioeconomic status appear in higher rates of chronic illness among inmates (Binswanger, et al., 2010; Friedmann, et al., 2012; Lehman, et al., 2015; Peters, et al., 2017; Wimberly, et al., 2018). Studies have repeatedly proven that a person’s readiness to change depends on a variety of internal and external factors related to self-efficacy, consciousness raising, amelioration of basic needs deficits around stable housing, income, food, clothing, etc. As a person progresses in recovery, skills are tested and refined, obstacles faced and manipulated, and needs are sustained and managed. For those who are facing mental illness as well, emotional regulation, perception of safety, energy level, self-esteem, mood, communication styles, and relationships will be variables that can either complicate or support progress. All of this manifests within the risk environment, as Rhodes indicates (Rhodes, 2009). In the risk environment, political, social, and other unpredictable factors can change at any moment and stress levels and adaptability will be fluctuating accordingly. The experience had by an inmate in a prison setting varies, but research indicates that a majority will experience prolonged stress to varying degrees and in regards their past, current, or projected future situation. It is no surprise that those who are most at risk to have poor outcomes are inmates who, in addition to the trauma of incarceration itself, have synergistically fragmented or chaotic family, environmental, occupational, and/or educational histories, those who are single, young, and male, and those who have history of chronic substance abuse or major mental illness in combination with chronic disease (Coyne & Hall, 2017). Therefore, more research needs to be made on the implications of changing the environment in which people are managing substance addiction and criminogenic traits to identify the degree at which the environmental factors can be manipulated to effect greater outcomes than the traditional criminal justice system has in terms of achieving sustainable substance abuse recovery and reducing recidivism.

## Recommendations

Based on the results of the literature review, the findings suggest that a combination of programming and efforts will be necessary to adequately address the needs of a dynamic and diverse population of those dealing with substance misuse and the consequences of its criminalization. “While disagreements persist in terms of how much punishment drug offenses deserve, research does make it clear that some strategies for reducing drug use and crime are more effective than others and that imprisonment ranks near the bottom of that list” (PEW, 2018). One of the most commonly cited examples of the most effective measures was the use of alternative sentencing options such as voluntary court diversion programs, and community-based restorative justice models to redirect non-violent drug offenders and in turn, reduce costs of incarceration (Clark, et al., 2017; Coyne & Hall, 2017; PEW, 2018). Additionally, forging strategic collaborations between law enforcement and clinical treatment providers to expand treatment within the jails and prisons for those still detained is paramount. Providing assessment, psychoeducation, and evidence-based interventions such as MAT, CBT, IDDT, MI, and criminogenic specific approaches has reflected positive outcomes in reducing substance abuse and recidivism when piloted in various jails and prisons around the United States (Peters, et al., 2007; Chandler, et al., 2009; McMurran, 2009; Nunn, et al., 2009; Lehman, et al., 2015; Moore, et al., 2019). Medication-assisted treatment should be utilized at rates more consistent with the indication level of individuals who are withdrawing, detoxing, and maintaining themselves on from opiates prior to incarceration. MAT should be offered as an option to those wishing to begin while detained, and referrals to community providers need to be more consistently facilitated to promote continuity of care and risk reduction when inmates are released. This is in harmony with the research found in the literature review that MAT is an evidence-based, harm reduction method that is effective in decreasing opiate-based substance misuse which is inherent to reducing recidivism for this population. Additionally, law enforcement should consider redirecting resources and energy toward addressing the highest-threat offenders – such as the trafficking kingpins and the violent drug related crimes, as the policies had originally intended and in which the infrastructure has been built to manage.

An important piece noted in the effectiveness of clinical treatment of substance use disorders is the recognition that change occurs in stages, the most foundational of which centers on supporting individuals to obtain sustainable access to quality affordable housing, among other basic needs such as food, water, healthcare, economic resources, and transportation. Without these basic needs met, it can be incredibly difficult for someone to address addiction issues that stem from situational stress, using access and distribution of substances to negotiate for resources to meet these needs, and in order to adequately distance themselves from old networks who may be able to provide these resources to them at a cost of their recovery/ sobriety. It is also well understood that criminal convictions can make it more difficult for a person to obtain housing and employment as entities are able to disqualify a candidate on this basis. Additionally, being incarcerated creates lapses in which a person cannot work and therefore bills go unpaid, landlords evict, and employment is replaced. Lack of access to housing creates an ongoing strain on already scarce public resources as well as influences the perceptions and experiences of public safety through the resultant and continued occurrence of crime and recidivism expressed in survival crimes such as theft of essential goods, trespassing on abandoned property for shelter, etc. (Ray, et al., 2017). Scholarly studies reinforce the notion that access to safe and affordable housing helps prevent people with criminal records from reoffending (Gowan, 2002; Metraux et al., 2007). Additionally, if opportunities existed for those with substance abuse issues returning to the community to be able to relocate or return to neighborhoods with better resources and opportunities, this may change the ways in which people can access clinical treatment and the other resources needed to remain in the community in productive, healthy ways.

* + - * 1. Notes on Terminology

The terms utilized by social scientists, public health policy scientists, clinicians, healthcare providers, legislators, the media, and the general public denoting the topic of drugs and alcohol vary considerably according to context, intention, opinion, and audience. As the U.S Department of Health and Human Services Substance Abuse and Mental Health Services Administration (SAMHSA) has identified, the lack of common language fosters fragmentation within healthcare settings, increased confusion in public spaces, and influences the ongoing perpetuation of stigma (SAMHSA, 2004). As such, I provide a guide to language used hereto forth with the intention of clarifying the complexities encapsulated in the terminology as well as promoting non-stigmatizing language. It should be noted that the terminology in this paper is not absolute or universal to all settings communities, and persons affected by substance use issues; individuals who are living with addiction and/or substance use disorders should be afforded the autonomy and self-determination to choose how they identify themselves in whatever language makes most sense to them. Data suggests that increasing opportunities for patient empowerment during medical treatment has been associated with better clinical outcomes, reduced costs, and sustained improvements in wellbeing (Johnston-Roberts, 1999). As such, clinical providers and community members should therefore defer to person-first, or patient-centered approaches by respecting the language each individual uses or prefers with the understanding that terms, definitions, and labels may change over time.

The following terms are defined in SAMHSA’s Substance Use Disorders Language Guide:

***Addiction****:* uncontrollable, compulsive substance seeking and use, even in the face of negative health and social consequences. There is a distinction between *addiction* and *dependence*, although many use the words interchangeably. Addiction conveys both social and health problems, as well as the physical manifestation of craving and the cyclical nature of behavior where dependence reflects only the health problems. Dependence is a term that was removed from DSM-V in exchange for Substance Use Disorder which is now rated on a scale of mild, moderate, and severe as opposed to the former abuse vs. dependence categorization.

***(Substance) abuse:*** the act of using a substance in a manner that can occur over time or not, and may, but not necessarily, evolve into addiction. Abuse will be used to denote any intentional ingestion, inhalation, or insertion of a substance that is illicit, prescribed, or over the counter into the person’s own body with the intention to alter one’s mental or physiological status and/or that results in an altered mental and/or physiological status, and that may also result in negative consequences, or not, to social, financial, physical, mental, emotional, environmental, or legal domains. Some criticisms of *abuse* relate to the stigmatizing association of the word to other abusive categories, a public opinion that the term is inaccurate because some feel that the substance abuses the individual not the other way around, and also because the term does not clarify severity of the issue on a societal scale.

***Substance use disorder:*** as classified in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V), criteria for a diagnosis of Substance Use Disorder (SUD) includes 11 criteria which can be summarized as including taking larger quantities of the substance for longer periods of time than intended, spending significant periods of time trying to obtain, use, or manage recovery from the use of the substance, presence of cravings or urges to use the substance, interference the substance has created in regards to work, home, and/or school obligations, continued use despite problems in social or physical domains, including safety and sacrificing of other activities in order to continue using the substance, increased tolerance, and development of withdrawal symptoms. The diagnosis requires a specification on severity – presence of two to three of the 11 criteria indicates mild SUD; four to five symptoms indicate moderate; and six or more symptoms noted indicate severe SUD (American Psychiatric Association, 2013). In terms of diagnostic criteria, the term *substance* can encompass anything from alcohol and drugs to nicotine, caffeine, and vitamins. For the purposes of this paper, substance will refer to amphetamines, barbiturates, benzodiazepines, cannabinoids, hallucinogens, inhalants, methamphetamines, narcotics, opioids, stimulants, and any other use of a substance by which its use, distribution, or possession has been criminalized.

***Addiction treatment*** will serve as an umbrella term in this paper to represent those seeking treatment both for substance use disorders and addiction or problematic substance use that falls outside of medical diagnosis for whatever reason.

***Drug*** is defined as any substance other than food that, “when inhaled, injected through intravenous or intradermal method, consumed, or absorbed percutaneously causes a physiological and often psychological change in the body” (n.a., 2005). A drug has been classified and recognized as such by the medicinal, legal, and scientific entities. In pharmacology, a drug is “a chemical substance of known structure, other than a nutrient of an essential dietary ingredient, which, when administered to a living organism, produces a biological effect (Rang, et al., 2011). A pharmaceutical medication is a chemical substance used to treat, heal, prevent, or lessen the symptoms of a disease, or, to promote well-being. Throughout history, drugs have been extracted from various plants for a variety of purposes including but not limited to altering consciousness, treating ailments, and as ceremonial or spiritual tools. Today, drugs are also developed synthetically from other chemicals and substances (Atanasov, 2015). Psychoactive drugs are “chemical substances that affect the function of the central nervous system, altering perception, mood, or consciousness” (Fox et al., 2013). Most psychoactive drugs are also referred to as “recreational;” they are generally used for pleasure purposes or other reasons than medicinally. Recreational drugs include, among other substances, hallucinogens, opiates, and amphetamines. Some of these are also used in spiritual or religious settings. The classification of some recreational drugs has been debated widely over time and changed at different points in history due to the influence of social, legal, and scientific discourse. In terms of illicit versus legal status, and in terms of being used in medicinal settings, the use of various psychoactive drugs has changed over time due to changing knowledge of the assumption of benefits or consequences of such use. For the purposes of this paper, I am focusing on examples in which drugs have been specifically criminalized or deemed illicit in terms of their particular usage, distribution, and manipulation.

**Substance** will be used here as an umbrella term for alcohol, illicit drugs, prescription medications, and any other chemical or natural liquid, solid, or gaseous matter that is manipulated with the specific intention of causing intoxication or altered consciousness. As this is a broader term that encompasses drugs within it among other elements, it also refers to the current and evolving uses or combinations of household, pharmaceutical, and other ingredients for these purposes. Much of the current experimentation in this regard is still in the process of being defined both legally and socially, for example, the use of cleaning products, detergents, solvents, plants, and synthetic materials to produce altered consciousness

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* + - * 1. Two Centuries of Drug Regulation in the United States

**1820 -** Known as the U.S. Pharmacopeia, the first anthology of standard drugs for the United States was created at a meeting of eleven physicians in Washington D.C.

**1848 –** The **Drug Importation Act** is passed by Congress and mandates U.S. Customs Service to inspect cargo in effort to stop entry of adulterated drugs from overseas.

**1902 -** The **Biologics Control Act** is passed to ensure purity and safety of serums, vaccines, and similar products used to prevent or treat diseases in humans.

1905 - The American Medical Association initiates a voluntary program of drug approval through its Council on Pharmacy and Chemistry that would last until 1955. To earn the right to advertise in AMA and related journals, companies first submitted evidence for review by the Council and outside experts to support their therapeutic claims for drugs.

**1906 -** The original **Food and Drugs Act** is passed by Congress on June 30 and signed by President Theodore Roosevelt. This Act prohibits interstate commerce of misbranded and adulterated foods, drinks, and drugs.

**1914 -** The **Harrison Narcotic Act** is passed to require anyone seeking products exceeding the allowable limit of narcotics to obtain a prescription first. The Act also mandates increased record-keeping for physicians and pharmacists who dispense narcotics. This is the first federal law to criminalize non-medical use of prescription narcotics. The Harrison Act outlawed the use of cocaine, opium, and morphine and its various derivatives. Not included in the Harrison Act were amphetamines, barbiturates, marijuana, hashish, nor hallucinogenic drugs of any kind.

**1920s** – Narcotics enforcement is closely tied to Prohibition enforcement.

**1930s** – Prohibition enforcement is transferred to the Department of Justice and a standalone agency known as the Federal Bureau of Narcotics (FBN) is created within the U.S. Treasury to handle narcotics enforcement.

**1937** – The **Marihuana Tax Act** – unofficially bans the growth and use of marijuana under federal law by imposing regulation that required a high-cost tax stamp for every sale of marijuana. These stamps were rarely issued by federal government. Law enforcement starts focusing heavily on the southwestern part of the United States. Henry Anslinger, the first commissioner of the FBN submits testimony to Congress claiming marijuana use caused “violent and insane behavior.” Anslinger also makes statements that “the narcotic addict is the most frequent and major offender in the United States.” Shortly after this, all states made possession of marijuana illegal.

Propaganda and publicity on the dangers of narcotics becomes the prime method of drug control for the FBN during the period of the Great Depression when resources were significantly scarce. Editorial support and advertisements were garnered by coercion of legislators and other government officials to newspaper companies. Many newspapers maintained a steady stream of anti-marijuana messaging throughout the 1930s.

**1938 -** FDA moves to require sulfanilamide and other selected dangerous drugs to be administered under the direction of a qualified expert, therefore launching the requirement for prescriptions to be obtained on narcotic and non-narcotic drugs.

**1948** – The Supreme Court rules in **U. S. v. Sullivan** that the FDA's jurisdiction extends to the retail distribution, thereby permitting FDA to restrict the ability for pharmacies to sell illegalized drugs classified as barbiturates and amphetamines.

**1951** – The **Durham-Humphrey Amendment** further defines the kinds of drugs that cannot be used safely without medical supervision and restricts their sale to prescription by a licensed practitioner.

The **Boggs Act of 1951** establishes mandatory prison sentences for some drug offenses.

**1956** – The **Narcotic Control Act** further increases penalties for drug offenses and establishes the death penalty for the sale of heroin to youth.

**1962** - Thalidomide, a new sleeping pill, is found to have caused birth defects in thousands of babies born in Western Europe. As news spread of this, Dr. Frances Kelsey, the medical officer of the FDA works to keep the drug off the U.S. market and public support arises around the push for stronger drug regulation.

**1963** – The American Bar Association begins to speak out against strict punishments for drug offenses. Methadone becomes an accepted medical treatment for heroin dependence. The Presidential Commission on Narcotic and Drug Abuse issues a report recommending more funds for research, less strict punishment for drug offenses, and the dismantling of the DBN. Congress joins in support.

At the same time, there is an increased push for more law enforcement personnel and Congress shifts the constitutional basis for drug control from its taxing authority to its power to regulate interstate commerce.

**1965** – The **Drug Abuse Control Amendments** are enacted to deal with problems caused by the abuse of depressants, stimulants, and hallucinogens.

**1968** – The FBN merges with the Bureau of Drug Abuse Control and is transferred to the Department of Justice’s oversight.

**1970 -** The **Comprehensive Drug Abuse Prevention and Control Act** (also known as the **Controlled Substances Act**) replaces previous laws and categorizes drugs based on abuse and addiction potential compared to their therapeutic value. This law condensed over 50 federal narcotics, marijuana, and dangerous drug laws, including the Harrison Act, into one comprehensive law. The purpose of this law was to control the drug industry, with a strong focus on stopping the importation and distribution of illicit drugs throughout the United States.

The Controlled Substances Act assigned drugs into two classifications: Schedule I drugs are considered to have no medicinal qualities while having a potential for abuse, including heroin, marijuana, and various hallucinogens. Schedule II drugs are considered to have some medicinal value while also having the potential for abuse, which at the time, includes morphine and cocaine.

As with the Harrison Act of 1914, the Controlled Substance Act of 1970 focused mainly on the supply side of narcotic distribution and the penalties involved with possession and distribution. No attention seemed to be directed to the rising need for addiction treatment.

**1973** - The U. S. Supreme Court permits FDA action to control entire classes of products by regulations rather than to proceed with case-by-case litigation in an effort to reduce the consumption of time and resources.

The Drug Enforcement Administration (DEA) is created with a starting budget of $74.9 million to enforce the Controlled Substances Act. The DEA is tasked with facilitating cooperation between the Department of Justice and the Federal Bureau of Investigations

**1975** - The DEA’s budget grows to $140.9 million.

**1980s** - The number of federal drug convictions rise sharply in the 1980s, more than doubling from 5,244 in 1980 to 12,285 in 1986. This accounted for 51% of the increase in the total number of all federal convictions.

**1984** - Congress gives the Attorney General the authority to temporarily place a substance onto Schedule I to “avoid imminent hazards to public safety.” Once scheduled through this temporary process, the drug would remain on the Schedule I for up to two years. The Attorney General can then extend this another year; at which time it must be removed or permanently scheduled. The process for the Department of Justice and Congress to permanently schedule substances involves a significantly longer legislative or administrative process.

**1986** - The Anti-Drug Abuse Act pursued law enforcement action against the synthetic drug trade and established criminal penalties for simple possession of a controlled substance. This Act is most well-known for establishing mandatory minimum penalties for certain trafficking offenses. This Act is where the differentiation between cocaine base (crack cocaine) and powder cocaine was made, requiring 100 times more powder cocaine than crack cocaine to trigger the more severe minimum sentence.

**1988** - The Office of National Drug Control Policy is established in effort to reduce drug supply and demand. ONDCP is responsible for defining policies, priorities, and objectives for the federal Drug Control Program.

**1990s** – The Clinton Administration takes aim at methamphetamine production, distribution, and abuse through policy initiatives with the DEA to mainly target operations in the southwestern United States where it first gained popularity.

**1992** - The **Generic Drug Enforcement Act** is passed to address corruption that occurred in the FDA’s process of approving drugs under abbreviated applications and includes new procedures for barring individuals convicted of crimes pertaining to the regulation of drug products from working for companies that manufacture or distribute such products.

Congress establishes the **Substance Abuse and Mental Health Services Administration (SAMHSA)** to make substance use and mental disorder information, services, and research more accessible to the healthcare industry and the public.

**1993** - A consolidation of several adverse reaction reporting systems is launched as MedWatch, designed for voluntary reporting of problems associated with medical products to be filed with FDA by health professionals.

**1995** - The FDA declares cigarettes to be "drug delivery devices." Restrictions are proposed on marketing and sales to reduce smoking by young people.

**1996** - The **Comprehensive Methamphetamine Control Act** enhances penalties for manufacturing and distributing methamphetamine in the United States, including stricter regulation of pseudoephedrine, an ingredient commonly used in meth production.

**2000** - The U. S. Supreme Court rules 5-4 that the FDA does not have authority to regulate tobacco as a drug.

**2004** - The **Anabolic Steroid Control Act** creates a ban on over-the-counter steroid precursors and increases penalties for making, selling, or possessing illegal steroids precursors, as well as provides funds for preventive education to children.

**2005** - The formation of the Drug Safety Board is announced and consists of FDA staff and representatives from the National Institutes of Health and the Veterans Administration. The Board will advise the Director, Center for Drug Evaluation and Research, and the FDA on drug safety issues and as well as help in communicating safety information to health professionals and patients.

**2010** - Congress reduces the 100:1 sentencing disparity for crack cocaine versus powder cocaine to 18:1 through the **Fair Sentencing Act.**

**2014** - The DEA’s budget has continually increased to a now approximately $2 billion.

**2016 -** The **Comprehensive Addiction and Recovery Act** is introduced with an intention to dismantle the opioid crisis in the United States by putting focus, funding, and resources into accessible, community-based treatment, naloxone administration in emergency overdose situations, and increased public awareness.

**2018** - In December, Congress passed the **FIRST STEP Act**, which was signed into law to give deserving prisoners the opportunity to get their sentences shortened for positive behavior and job training. FIRST STEP stands for “Formerly Incarcerated Reenter Society Transformed Safely Transitioning Every Person” and aims to give judges and juries the power back that the Constitution had intended to grant them in sentencing.

* + - * 1. Selected Local and National Resources

**National Institute on Drug Abuse (NIDA)**

**Office of Science Policy and Communications Public Information & Liaison Branch**

*6001 Executive Blvd. Rm. 5213, Bethesda, MD 20892 | (301)443-1124 | www.drugabuse.gov*

The mission of NIDA is to advance science on the causes and consequences of drug use and addiction and to apply that knowledge to improve individual and public health.

**Association of Medical Education and Research in Substance Abuse (AMERSA)**

*135 Lyndon Rd. Cranston, RI 02905 | (401)230-2165 | https://amersa.org*

AMERSA, founded in 1976, is a non-profit professional organization whose mission is to improve health and well-being through interdisciplinary leadership in substance use education, research, clinical care and policy.

**Substance Abuse and Mental Health Services Administration (SAMHSA)**

*5600 Fishers Ln. Rockville, MD 20857 | (877)726-4727 | www.samhsa.gov*

This federal agency within the U.S. Department of Health and Human Services commands a huge budget for preventing and treating substance abuse and addictions in the form of grants and funding for local initiatives. This organization uses its over three-billion-dollar annual budget to lead public mental health initiatives across the U.S.

**Drug Policy Alliance**

*131 West 33rd St. 15th Flr. New York, NY 10001 | (212)613-8020 | www.drugpolicy.org*

The Drug Policy Alliance envisions a just society in which the use and regulation of drugs are grounded in science, compassion, health and human rights, in which people are no longer punished for what they put into their own bodies but only for crimes committed against others, and in which the fears, prejudices and punitive prohibitions of today cease.

**Prevention Point Pittsburgh**

*460 Melwood Ave Suite 205 Pittsburgh, PA 15213 | 412-247-3404 | www.pppgh.org*

Prevention Point Pittsburgh is the only county-approved syringe exchange program in Southwestern Pennsylvania and services are unduplicated in the region. PPP considers needle exchange as a foundation for addressing a broader set of injection drug users’ needs, particularly needs that are met poorly or not at all through existing services.

**Pittsburgh SBIRT Training Program**

University of Pittsburgh School of Pharmacy Program Evaluation and Research Unit

5607 Baum Blvd. Ste. 432, Pittsburgh, PA 15206 | (412)383-4178 | www.sbirt.pitt.edu

The Screening, Brief Intervention, and Referral to Treatment (SBIRT) practice is an evidenced-based public health initiative designed to address hazardous and harmful substance abuse. By training healthcare professionals from a wide-range of disciplines, the goal of promoting healthier patients at lower risk for substance use disorders can be achieved.

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