

Harvard Pilgrim HealthCare Foundation FOUNDATION

Improving Access to Substance Abuse Treatment and Reducing Incarceration and Recidivism

MASSACHUSETT

Mary Brolin, Ph.D., Scientist, Institute for Behavioral Health, Schneider Institutes for Health Policy, The Heller School for Social Policy and Management, Brandeis University

Kathleen Dennehy, M.P.A., M.A., former Commissioner of the Massachusetts Department of Correction and current doctoral student at The Heller School for Social Policy and Management, Brandeis University

Amy Booxbaum, Ph.D., M.S.W., Research Assistant to the Massachusetts Health Policy Forum, The Heller School for Social Policy and Management, Brandeis University

Constance Horgan, Sc.D., Professor and Director, Institute for Behavioral Health, Schneider Institutes for Health Policy, The Heller School for Social Policy and Management, Brandeis University

Tuesday, November 17, 2015 8:00 a.m. - 12:00 p.m.

Courtyard Boston Downtown 275 Tremont Street Boston, MA

This forum was made possible by the support of Blue Cross Blue Shield of MA Foundation and The Harvard Pilgrim Health Care Foundation. The issue brief is also supported by the Brandeis/Harvard Center to Improve System Performance of Substance Use Disorder Treatment.

Copyright @ 2015. The Massachusetts Health Policy Forum. All rights reserved.

NO. 44

To Improve System Performance

Substance Use Disorder Treatment

Blue Cross Blue Shield of Massachusetts is a sustaining funder of The Massachusetts Health Policy Forum. MHPF is a collaboration of the Schneider Institutes for Health Policy at the Heller School for Social Policy and Management, Brandeis University. The full Issue Brief can be viewed on the MHPF website at <u>www.masshealthpolicyforum.brandeis.edu</u>

Table of Contents

Executive Summary1
Massachusetts' Opioid Epidemic1
Substance Abuse Treatment Need
and its Relationship to Crime and Incarceration2
The Foundation for Change3
Recommendations for Immediate Changes to Increase Access to Treatment4
Call for Systems and Culture Change4
Massachusetts Stands Ready for Reform6
I. Understanding of the Problem
II. Substance Use and Misuse in Massachusetts and Nationally8
III. Treatment Gaps, Nationally and in Massachusetts9
IV. Social Consequences of Not Receiving Treatment13
V. Economic Consequences of Not Receiving Treatment14
VI. Federal Perspective14
A. Treatment Works14
B. Opportunities to Improve Access to Treatment15
C. Criminal Justice System Reforms to Prioritize Treatment Access16
D. Federal Support for Improvements17
VII. National and Local Evidence-Based and Promising Practices18
A. Prevention and Pre-arrest Strategies18
B. Alternatives to Incarceration19
C. Services While Incarcerated20
D. Probation, Parole and Re-entry Strategies20
E. Medication-Assisted Treatment (MAT)21
F. System Collaborations and Data Sharing23
VIII. Massachusetts Environment for Reform24
IX. Recommendations Moving Forward29
Acknowledgements35
Works Cited

Executive Summary

Massachusetts faces an opioid and substance abuse crisis at the same time the U.S. and Massachusetts have some of highest rates of incarceration in the world. This issue brief examines the problem and economic costs and consequences of untreated substance abuse. It examines the benefits of expanding access to treatment in the community, at arrest and initial detention, within the courts, within jails and prisons, at re-entry and under community supervision, with the intent to reduce substance abuse, incarceration and recidivism and thereby improve health and public safety. The report recommends (1) implementing a pre-arrest program to divert low-level drug offenders to treatment, (2) enhancing and expanding specialty courts throughout the state, (3) increasing access to medication-assisted treatment (MAT), and (4) expanding a Medicaid enrollment program in DOC and HOC facilities to improve access to healthcare services immediately upon release. To facilitate change and judicious invest of resources, it also recommends instating governance structures to coordinate efforts between health and criminal justice organizations within the Executive, Legislative and Judiciary branches of government.

Massachusetts' Opioid Epidemic

Overdoses and deaths due to opioid use have surged since the introduction of OxyContin and other opioid prescriptions. The Massachusetts Department of Public Health (2015) estimates 1,256 deaths in 2014 due to opioid use. Since 2005, the number of deaths due to unintentional opioid overdoses exceed those due to motor vehicles (MDPH, 2014). In 2014 Governor Patrick declared a public health epidemic and in 2015 Governor Baker's Opioid Working Group delivered a far reaching strategic plan with over 65 recommendations to combat the problem.



Created by Lauren Melby, MPP student at the Heller School for Social Policy and Management, Brandeis University, 2015.

Substance Abuse Treatment Need and its Relationship to Crime and Incarceration

While opioid use is growing with devastating consequences, misuse of alcohol and other substances continue to plague the Commonwealth (SAMHSA, 2013). At the same time, Massachusetts lacks sufficient treatment capacity to meet demand. Despite a comprehensive continuum of substance use disorder treatment services, consumers face challenges in accessing services, particularly for acute care, step down and long-term residential beds (CHIA, 2015). We estimate a gap of 726 step down beds given that the current capacity can only serve 17% of the 3,500 people leaving acute treatment services (ATS) each month (CHIA, 2015). These challenges are exacerbated for racial and ethnic minorities and women (Cook & Alegría, 2011). Access to treatment barriers also exist within jails and prisons, where the absence of a continuum of care complicates re-entry and may add to recidivism (Mumola and Karberg, 2007).

The link between access to treatment and reduced engagement with the criminal justice system is clear. People with substance use disorders who lack treatment have more contact with the criminal justice system. Chronic drug users engage in crime 30% more than non-drug users (French et al., 2000). Racial and ethnic minorities and women are at greatest risk due to disparities in treatment access and incarceration (Cook and Alegría, 2011; Honig, 2015). Drug laws that have been in place for more than twenty years result in high levels of incarceration (Drug Policy Alliance, 2015). Massachusetts had 11,308 individuals in state and federal prisons in 2012, 10,326 individuals held in local jails on an average day in 2011 and 70,800 individuals under community supervision in 2012 (Gates et al., 2014). With incarcerations costs over \$53,000 per year, the 1,564 inmates convicted of drug offenses cost Massachusetts \$83.0 million per year (MA DOC, 2014; MA EOPSS, 2014).

While drug use is similar or higher for Whites, incarceration disproportionately affects Blacks and Latinos. In Massachusetts, Blacks and Latinos represent 15% of the population yet account for 33% of convictions and 72% of convictions for mandatory drug offenses (Massachusetts Sentencing Commission, 2012). Although many more males are incarcerated, and at a higher rate than females (Carson, 2014), women who are incarcerated in jails have been identified as the "fastest growing corrections population" since 2010 (Glaze & Kaeble, 2014, p.1). Further, female inmates have more mental health and substance use problems (James & Glaze, 2006; Karberg & James, 2005). Despite these differences, women in Massachusetts who have been placed in confinement for court-ordered treatment due to a substance use problem have had less access to treatment than men in the system.

Involvement in the criminal justice system, particularly incarceration, reduces employment opportunities, decreases wages and impacts the racial/ethnic wage gap, damages family relationships and functioning, and impairs communities (Clear, 2007; Western, 2002). Substance misuse and dependence result in higher healthcare costs, injuries, deaths, lost productivity and crime, all significant areas of impact for individuals, families, and the Commonwealth (Brolin et al., 2005).

The Foundation for Change

Research has demonstrated that treatment works (Harwood et al., 2002; Belenko et al., 2005). For every \$1 invested in treatment, states save up to \$7 due to reduced crime, increased productivity and healthcare savings (Gerstein et al., 1994; Finigan, 1996). People who enter treatment due to coercion from the criminal justice system have longer lengths of stay and similar or better outcomes (Sherman et al., 1997; Aos et al., 2006). Conversely, the criminal justice system does not provide a cost-effective solution for dealing with low-level drug offenders (Lengyel, 2006).

Massachusetts' healthcare reform and the Affordable Care Act bring opportunities to expand access to treatment within the Commonwealth, including better integration with primary and mental health care and improved access to medication-assisted treatment.

Calls for change have come from:

- The Governor's Opioid Working Group, chaired by Marylou Sudders, Secretary of the Executive Office of Health and Human Services, putting forth strategies and recommendations to address the opioid epidemic.
- Governor Baker who filed "An Act Relative to Substance Use Treatment, Education and Prevention", which would provide medical professionals with the authority to involuntarily commit an individual for treatment for 72 hours if they pose a danger to themselves or others (Baker, October 15, 2015).
- State legislators proposing legislation to increase access to treatment, develop alternatives to incarceration and change mandatory minimum laws and sentencing guidelines.
- MassINC's Criminal Justice Reform Coalition supporting sentencing reform, culture change, justice reinvestment, and improved cross-system data systems.
- Members of the Massachusetts judiciary, including Chief Justice Gants, in favor of sentencing reform and the use of specialty courts to divert offenders from incarceration.
- The City of Boston calling for expanded and improved substance use disorder treatment services.
- The New England Comparative Effectiveness Public Advisory Council and The Institute for Clinical and Economic Review endorsing patient-centered opioid treatment in the community and within the criminal justice system.
- Beacon Health Options promoting a chronic care model for the treatment of opioid dependence.
- A national group of law enforcement personnel called Law Enforcement Leaders to Reduce Crime and Incarceration advocating for alternatives to arrest and prosecution that prioritize mental health and substance use disorder treatment.

• President Obama, the first sitting President to visit a federal penitentiary, calling for criminal justice reform, including reductions in/elimination of mandatory minimums for non-violent drug crimes and job training for inmates.

This broad appeal for reform, coupled with the opioid epidemic and lack of treatment capacity, as well as with proven solutions, drives the recommendation for systems reform within Massachusetts.

Recommendations for Immediate Changes to Increase Access to Treatment

Massachusetts should build on existing initiatives to implement immediate practice changes to increase access to treatment. Specifically, policymakers should:

- **Implement a pre-arrest program** to divert low-level drug offenders to treatment rather than booking, building on the Department of Mental Health's Jail Diversion Program.
- **Continue supporting and expanding specialty courts**, including drug courts, to enhance existing specialty courts and diffuse the model to other locations throughout the state.
- Increase access to medication-assisted treatment (MAT) within communities and at critical intercepts along the criminal justice continuum (e.g. diversion, incarceration, re-entry).
- Expand implementation of a Medicaid enrollment program at multiple points of contact on the criminal justice continuum to improve access to primary care and substance use disorder and mental health services immediately upon release.

In all of its change efforts, partnering organizations should collect and share data to accurately track investment and savings across the systems and to continuously improve the system. Net savings should be reinvested to further improve the system.

Call for Systems and Culture Change

Massachusetts, the latest state to embark on a Justice Reinvestment Initiative (CSG Justice Center Staff, October 29, 2015), has the opportunity to address the opioid epidemic, increase access to substance use disorder treatment services for those in need, decrease incarceration for low-level drug offenders, reduce recidivism rates overall and save millions of dollars, all while improving public health and safety. For example, a natural study of a reduction in inmates in Hampden County between 2008 and 2012 suggests that a 14% decrease in jail and prison pretrial and sentenced inmates across the Commonwealth could lead to \$6 million in savings each year (Jones and Forman, 2015). Expansion of community-based treatment, treatment in jails and prisons, alternatives to incarceration and re-entry treatment support could help the Commonwealth save millions more. Through its Justice Reinvestment Initiative, which will reduce the growth in the state's prison population, Washington State expects to save \$193 million in new construction costs and \$98 million in operation costs over the next six years (CSG, 2015). For Massachusetts to achieve such broad improvements, however, we will need to change the way we do business

This systems change would build on recent efforts by the Governor, Attorney General and Secretary of Health and Human Services. It would also build on the movement for reform within the Executive, Legislative, and Judiciary branches of government and among local law enforcement agencies. Such systems change would have to involve all key agencies, including the Department of Public Health (DPH), Department of Mental Health (DMH), and the myriad of law enforcement and criminal justice agencies, including the independently elected sheriffs and District Attorneys. These agencies operate in multiple layers and branches of government with varying cultures, policies and priorities. This change would require a shared mission and strategy supported at the highest levels and diffused throughout the partnering agencies. Success requires incorporating the expertise of providers, advocates and consumers to fully understand the changes that are needed and the best ways to implement them.

We propose two alternative governing structures as a way to achieve this systems change. First, the Governor could revitalize the Massachusetts Interagency Council on Substance Abuse and Prevention. Established May 16, 2005 by Governor Romney and re-established in 2008 by Governor Patrick, this Council:

- Oversees implementation of initiatives and programs that effectively direct the existing resources and minimize the impact of substance misuse; and
- Develops and recommends formal policies and procedures for the coordination and efficient utilization of programs and resources across state agencies and secretariats.

The Council is chaired by the Lieutenant Governor and includes representatives from the Executive Office of Health and Human Services; the Executive Office of Public Safety and Security; the Commissioner of Correction; the Chair of the Parole Board; the Commissioner of Probation; the Commissioner of Public Health; the Commissioner of Mental Health; the Medicaid Director; the Juvenile, Superior and District Courts; and the Legislature, as well as representatives of other agencies and a consumer representative. Work to increase access to treatment might be conducted by a subgroup of this larger board to facilitate more responsive action.

A second approach would be to build off of the Governor's Opioid Working Group and transition this group from its role in assessing the extent of the problem and recommending changes to implementation and oversight. The Working Group could reconstitute its membership to ensure that representatives from public health, mental health and the various criminal justice agencies are included.

With either approach, the group would involve coordinated governance across the Executive, Judicial and Legislative branches of government. The group would work toward systemic change with a shared mission, coordinated response, and routine data analysis for rapid cycle improvements using a plan, do, study, act model. The group would also report directly to the Governor and Legislature, with input from the Judiciary, for accountability, transparency and fiscal support. With this coordinated effort, we can change practices within and across agencies to maximize public tax dollars and improve treatment services for people with substance use problems. Increased access to treatment, when readily available in the community and at all levels of contact with the criminal justice system consistently reduces arrests, days in jail and prison, and recidivism.

Massachusetts Stands Ready for Reform

Policy makers across the Executive, Legislative and Judicial branches of government recognize the need for and endorse significant change. We have a convergence of a significant public health problem, with proven solutions and the political will to implement change. And we have the leadership to drive the kind of systemic change that is needed. The Commonwealth could invest savings from early initiatives to fund more comprehensive changes until we build sufficient capacity across our primary care and substance use disorder treatment systems, including a continuum of treatment services within jails and prisons with a link to the community upon re-entry, to reduce substance misuse and dependence, as well as engagement in the criminal justice system. This, in turn, would lead to healthier, safer and more productive communities with our Commonwealth.

I. Understanding of the Problem

Massachusetts' opioid epidemic has grabbed the attention of policy makers at every level of government, including the Governor, Lieutenant Governor, Attorney General, Secretary of Health and Human Services, the Legislature, the Judiciary, Secretary of Public Safety and Security, Sheriffs and local law enforcement. Notably, the Massachusetts Department of Public Health (2015) estimates 1,256 unintentional opioid deaths in 2014 – a rate of 18.6 deaths out of every 100,000 individuals who live in Massachusetts. This is a 251% increase from 2000 when the rate was 5.3 out of every 100,000 residents in Massachusetts, and a 6% increase over last year alone (MDPH, 2015). The death rate from opiates has reached levels never witnessed in Massachusetts, extending to 263, or 75%, of municipalities (MDPH, 2015). The problem is wide-spread.

Concurrent with the crisis is a bottleneck in access to treatment (CHIA, 2015). Massachusetts has a comprehensive continuum of addiction treatment services but lacks sufficient capacity for inpatient and residential services, including acute treatment services (ATS), continuing support services (CSS), transitional support services (TSS) and long-term residential services (CHIA, 2015). Reports of insufficient capacity come from consumers who repeatedly experience long wait times and providers who report operating routinely at 90% to 100% of capacity (CHIA, 2015). Providers typically recommend that consumers move from acute treatment to continuing support, yet these follow up services are only available to 17% of the consumers flowing out of acute treatment beds (CHIA, 2015). A similar logjam occurs as consumers try to move from acute or transitional support services to residential rehabilitation beds (CHIA, 2015). Given expansions in healthcare coverage due to Massachusetts healthcare reform and the Affordable Care Act, Massachusetts has an opportunity to improve access to treatment for vulnerable populations. Appropriate treatment can also reduce crime and engagement with the criminal justice system. Better healthcare can lead to healthier, more stable lives and decrease crime and recidivism, which in turn improves the health and functioning of families and communities (Gates et al., 2014; Clear, 2007).

The link between access to substance use disorder treatment and reduced engagement with the criminal justice system is clear. Conversely the lack of treatment leads to greater engagement with the criminal justice system, with racial and ethnic minorities and women at greatest risk due to disparities in treatment access and incarceration (Cook and Alegría, 2011; Honig, 2015). First, denied or delayed treatment leads to continued drug use and greater engagement in criminal activity either to support that drug use or while under the influence of drugs (Collins and Lapsley, 2008). Chronic drug users engage in crime 30% more than non-drug users (French et al., 2000). Second, as drug users come into contact with the criminal justice system, the laws, policies and practices that have been in place for more than twenty years result in high levels of incarceration (Drug Policy Alliance, 2015). The U.S. incarcerates 716 people for every 100,000 residents, the highest incarceration rate in the world, and although Massachusetts' incarceration rate is lower than most other states (323 per 100,000 residents), it is still more than twice as high as half of the countries/ territories around the globe (Walmsley, 2013; MA DOC, 2015).

Although the number incarcerated in Massachusetts has declined by 7% since 2012, the numbers are pushing operational capacity and the recidivism rate remains steady and high at 41% (MA DOC, 2014). Moreover, many more individuals are involved with the criminal justice system beyond those incarcerated. Massachusetts had 11,308 individuals in state and federal prisons in 2012, 10,326 individuals held in local jails on an average day in 2011 and 70,800 individuals under community supervision in 2012 (Gates et al., 2014).

While drug use is similar or higher for Whites¹, incarceration disproportionately affects Blacks and Latinos both nationally and in Massachusetts. Blacks and Latinos make up 30% of the general population, but 51% of the jail population nationally (Minton and Golinelli, 2014). Similarly in Massachusetts, we see that Blacks and Latinos represent 15% of the population yet account for 33% of convictions and 72% of convictions for mandatory drug offenses (Massachusetts Sentencing Commission, 2012). These disparities result from many factors including our laws (e.g., mandatory drug laws), policing strategies, and sentencing disparities (e.g. between crack and powder cocaine) (Subramania et al., 2015). Higher incarceration rates lead to an accumulation of criminal justice debt due to fines and fees that place a vulnerable population at even more risk for reincarceration due to nonpayment, as well as imposing employment barriers upon release (Subramania et al., 2015). Blacks are also more likely to be referred for inpatient forensic mental health evaluations (Pinals et al., 2004).

Although many more males are incarcerated, and at a higher rate than females (Carson, 2014), women who are incarcerated have been identified as the "fastest growing corrections population" since 2010 (Glaze & Kaeble, 2014, p.1). While Massachusetts saw a 3.8% decrease in males under the "...jurisdiction of state or federal correctional authorities" between 2012 and 2013, females increased by 6.3% (Carson, 2014, p.3). Furthermore, female prisoners have been identified as having higher percentages of mental health problems than males (James & Glaze, 2006) and among jail inmates, more females than males are diagnosed with alcohol or drug dependence (Karberg & James, 2005). While overall (nationally) 16% of sentenced state offenders were serving time for a drug offense, 24.6% were female compared to 15.4% who were male (Carson, 2014).

Despite these differences, women in Massachusetts who have been placed in confinement for courtordered treatment due to a substance use problem have had less access to treatment than men in the system. To address this, the state has recently invested \$6 million to fund 15 new beds for women at Taunton State Hospital, a facility that's under the supervision of the state Department of Mental Health, by January 2016, and up to 30 new beds by next June (Becker, August 11, 2015; Anderson, October 16, 2015). Massachusetts needs to monitor whether this capacity fills the need and consider other solutions to address gender and racial and ethnic disparities.

The effects of involvement with the criminal justice system, particularly incarceration, are numerous including but not limited to, negative impacts on parent-child relationships, financial difficulties on families, negative impacts on relationships (between partners and/or spouses), and deleterious impacts on the functioning of children (Clear, 2007).

¹See Alegría, M., Cook, B., Loder, S., Doonan, M. (2014). *The Time is Now: Tackling Racial and Ethnic Disparities in Mental and Behavioral Health Services in Massachusetts*, Issue Brief, Massachusetts Health Policy Forum, December 11, 2014.

Incarceration also makes getting a job more difficult, decreases wage earnings throughout the life course and impacts the racial/ethnic wage gap (Western, 2002). Furthermore, county-level analyses in North Carolina showed that incarceration rates increased child-poverty rates and most substantially in counties with higher proportions of communities of color (DeFina & Hannon, 2010). In 2010 the financial costs of prison were estimated to be \$48.5 billion to states (Kyckelhahn, 2014) and the cost of prison to taxpayers was an estimated \$39 billion (Henrichson & Delaney, 2012).

In our country, criminal justice policies and practices swing from rehabilitation to criminalization and punishment about every 20 to 30 years (Musto, 1987; Conversation with, 2006). We are now moving towards a bipartisan consensus that mass incarceration does not reduce crime. To increase public safety, and ad-

dress racial, ethnic and gender disparities, we need to develop integrated criminal justice and public and mental health solutions that prevent crime, address substance misuse and dependence prior to engagement in the criminal justice system, and appropriately divert people from the criminal justice system. In response to the opioid epidemic, Governor Baker declared that addiction must be treated as a disease (The Editorial Board, 2015) and recommendations from the Governor's Opioid Task Force include support for alternatives to arrest (Recommendations of the Governor's Opioid Working Group, 2015). We are at a time when research findings on the benefits of substance use disorder treatment and the subsequent cost savings can inform policy decision making. Social and political forces have aligned, providing an opportunity for change.

Our current system is tremendously expensive. Government spending on jails and prisons has grown almost 400 percent over the past 30 years. Today our vast system of prisons costs \$80 billion a year. These dollars could be better spent on what we know works to keep down crime – smart law enforcement policies, re-entry services, and mental health and drug treatment for those who need it.

> Statement of Principles, Law Enforcement Leaders to Reduce

II. Substance Use and Misuse in Massachusetts and Nationally

While opioid use is growing with devastating consequences, misuse of alcohol and other substances continue to plague the Commonwealth. Massachusetts residents ages 12 and older rank in the highest quintile across the nation for past month alcohol use², past month binge alcohol use, and past month illicit drug use (SAMHSA, 2015). In 2012-2013, 3.7 million residents consumed alcohol in the past month with 1.5 million reporting binge alcohol use in the past month (SAMHSA, 2013). More than half a million (658,000) reported illicit drug use in the past month. Beyond use, over half a million people ages 12 and older in Massachusetts misuse or are dependent on alcohol or other drugs (SAMHSA, 2013). In total, 8.91% of Massachusetts residents 12 years old and older misuse or are dependent on alcohol or other drugs (SAMHSA, 2013), compared to the national average of 8.2% (SAMHSA, 2014). Among adults 18 and older, non-Latino Whites used cocaine more than non-Latino Blacks, and marijuana more than Asians, otherwise substance use is comparable among racial/ethnic minority groups (Alegría et al., 2014).

² The National Survey on Drug Use and Health defines binge alcohol use as 5 or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days.

Substance misuse has been identified as a major issue facing the criminal and juvenile justice populations (Center on Addiction and Substance Abuse, 2010). In a special report, the Bureau of Justice Statistics estimated that among state and federal prisoners, 53% and 45% respectively met the DSM-IV diagnosis for drug dependence or abuse (Mumola & Karberg, 2007). These numbers are considerably higher than the national rate of substance abuse and/or dependence in the general population. Furthermore, 32.6% of state prisoners and 18.5% of federal prisoners reported using alcohol at the time of their offense (BJS, 2004). Among jail inmates, 68% met criteria for substance abuse or dependence, with more females (52%) than males (44%) meeting criteria for alcohol or drug dependence (Karberg & James, 2005).

The majority of people incarcerated have substance use issues and a majority of these also suffer from other diagnoses, most particularly mental illness (NIDA, 2008). Within the justice population nationally, approximately 74% of individuals incarcerated in prison and 76% of individuals incarcerated in jail with a mental health disorder, also had a diagnosable substance abuse or dependence disorder (James & Glaze, 2006). Additionally, females (73% state inmates, 75% jail inmates) compared to males (55% state inmates, 63% jail inmates) had higher percentages of meeting criteria for mental health problems (James & Glaze, 2006). In Massachusetts in 2014, more female (59%) than male (28%) inmates had an open mental health case and more incarcerated women (46%) than men (21%) were taking psychotropic medication (MA DOC, 2015). Women in jail also have higher rates of trauma, with one study finding that over half of females in jail (53%) meet the criteria for Post-Traumatic Stress Disorder in their lifetimes (Lynch, et al., 2012).

III. Treatment Gaps, Nationally and in Massachusetts

Nationally, out of the 22.7 million individuals (SAMHSA, 2014) who needed treatment for substance abuse or dependence, only 2.5 million individu-

als (11.0%) received specialty treatment – leaving 20.2 million people (89.0%) without needed treatment for their substance use disorders (SAMHSA, 2014). In Massachusetts, 141,000 residents (age 12 or older) needed but did not receive specialty treatment for illicit drug use and 375,000 needed but did not receive specialty treatment for alcohol use (SAMHSA, 2013).

Figure 1: Past Year Alcohol Dependence and Abuse Among Massachusetts Residents 12 and Older



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2012 and 2013.

Although nearly 50,000 residents 12 and older received treatment in the past year, most people who needed

treatment did not get it (SAMHSA, 2015). Approximately nine out of ten people aged 12 or older with alcohol dependence or abuse in Massachusetts in 2012/2013 (92.8%) did not receive treatment (See Figure 1; SAM-HSA, 2013). Similarly 87.1% of residents aged 12 or older with illicit drug dependence or abuse did not receive treatment (See Figure 2; SAMHSA, 2013).

Figure 2: Past Year Illicit Drug Dependence and Abuse Among Massachusetts Residents 12 and Older



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2012 and 2013.

Among people with substance use problems who made an effort to receive treatment but did not end up receiving care (SAMHSA, 2014, p.95):

- **37.3%** had no health coverage and could not afford the costs,
- 24.5% were not ready to stop using,
- **9.0%** did not know where to go for treatment,
- 8.2% had health coverage but the cost of treatment was not covered,
- **8.0%** had no transportation or it was inconvenient to get to treatment,
- **6.6%** believed it might negatively impact their jobs,
- **6.6%** believed they could handle the problem without treatment, and
- **5.0%** felt they did not need treatment at the time.

The vast majority of people (95.5%) do not seek treatment because they do not believe it necessary (SAMHSA, 2014). This reflects a need for education regarding substance use and misuse for the general population. Still many who did seek care were unable to receive it. Among those who made an effort to receive treatment but did not end up receiving care nearly two out of five had no health coverage and could not afford the costs, and another one out of four were not ready to stop using (see side bar). Others cited lack of information, the cost and the inconvenience as reasons for not seeking treatment (SAMHSA, 2014).

As described earlier, despite a comprehensive continuum of care, Massachusetts residents in need of services experience challenges in accessing care due to the limited supply of acute care, step down and long-term residential beds relative to demand (CHIA, 2015). Massachusetts healthcare reform and the Affordable Care Act (ACA) provide opportunities to address access barriers for nearly all residents in need of treatment, and particularly for vulnerable populations such as racial and ethnic minorities, low-income residents and women. An analysis of the implementation of Massachusetts healthcare reform, however, did not show an increase in public admissions to treatment. Perhaps this is due to increased use of private treatment, stringent utilization management, the economic downturn and the lack of new and innovative treatment options (Capoccia et al., 2012). Organizations that showed increases in clients served expanded treatment locations, engaged individuals in need of services in primary care, and integrated care with a mental health organization and an integrated hospital system (Capoccia et al., 2012).

Cook & Alegría (2011) identify disparities in access to substance use disorder treatment for Black and Latino substance users in Massachusetts. Although analysis shows that Blacks and Latinos enter treatment at higher or comparable rates compared to Whites, deeper analysis shows racial and ethnic disparities in the quality and completion of treatment, as well as disproportionate involvement with the criminal justice system. They posit that involvement with the criminal justice system leads to coerced treatment and since Blacks are arrested and incarcerated at higher rates, they enter coerced treatment at higher rates (Cook & Alegría, 2011). Thus, involvement in the criminal justice system influences whether one gets treatment and the quality and type of treatment. Similarly, substance users with low socio-economic status enter publicly funded treatment at higher rates, likely due to their overrepresentation on Medicaid or lack of insurance. When controlling for these two factors, Blacks and Latinos face disadvantages when accessing substance use disorder treatment (Cook & Alegría, 2011). Among injection drug users in Massachusetts, Blacks were more likely than Whites to receive detox services only, without connecting to treatment, while Latinos were significantly less likely to enter residential treatment services (Lundgren et al., 2001). Furthermore, we see disparities in treatment completion between Whites and Latinos for drug treatment and between Whites and Blacks for alcohol treatment (Alegría et al., 2014). Other research found Black and Latino clients in Massachusetts were less likely to complete outpatient substance use disorder treatment than their White counterparts (Arndt et. al., 2013). Barriers to treatment completion include poor quality, incongruent treatment level of care with the clients' clinical needs, treatment environment and geographical location (Saloner et al., 2013).

Access to treatment barriers also exist within jails and prisons. Among state and federal prisoners who met criteria for drug abuse/dependence, only 15% of state and 17% of federal inmates respectively reported receiving treatment while incarcerated (Mumola & Karberg, 2007). More than two out of three jail inmates (68%) misuse or are dependent on alcohol or other drugs (Karberg and James, 2005). Further, female inmates show greater dependence (52%) compared to male inmates (44%) (Karberg and James, 2005). Despite high levels of misuse and dependence, only one out of five inmates with dependence or abuse took part in substance use disorder treatment (7%) or other programs (16%), such as self-help, peer counseling or education and awareness (Karberg and James, 2005). Although Massachusetts has been expanding the number of drug courts, the lack of community-based residential treatment limits access to treatment for diversionary efforts (CHIA, 2015). Similarly, Massachusetts lacks sufficient residential beds for offenders re-entering the community from jail and prison (CHIA, 2015).

Women in Massachusetts who enter treatment through civil commitments also face disparities relative to men. In Massachusetts, General Laws Chapter 123 Section 35 allows courts to commit a person to treatment against his/her will if the individual's substance use is viewed as either putting the individual or other persons at risk (Mass.gov, n.d.). If a person is committed under Section 35, he/she may receive up to 90 days of in-patient substance use disorder treatment (Mass.gov, n.d.). A person may be committed to a licensed substance use disorder treatment facility, or if beds are not available, men may be sent to the Massachusetts Alcohol and Substance Abuse Center (MASAC) at Bridgewater (Mass.gov, n.d.) and females sent to MCI-Framingham (Mass.gov, n.d.). MASAC is a stand-alone Department of Correction (DOC) facility with a 236 bed capacity and 150 beds dedicated to men committed under Section 35. In contrast, women who cannot access a residential treatment bed are committed to MCI-Framingham. There is no equivalent of MASAC for women. Last year, civil rights groups filed a lawsuit that challenges the ability of judges to civilly commit women to MCI-Framingham through Section 35 as women sent to Framingham do not receive any substance use disorder treatment and are being held with no criminal charges against them (MacQuarrie, 2014). In 2007, the Bureau of Substance Abuse Services (BSAS) funded the Women's Addiction Treatment Center (WATC) to provide treatment to these women. At that point, the number of civil commitments for women increased dramatically (see Figure 3). Despite the addition of WATC, the number of women committed to MCI-Framingham remained high (Kates, 2013). Although WATC served 1,247 women in 2012, another 310 women were committed to MCI-Framingham (Kates, 2013). To address this, DMH is developing an innovative state of the art state-operated program on the grounds of, but separate from, Taunton State Hospital for women committed for treatment under Section 35. This program will provide 15 additional beds for women by January 2016, and up to 30 total beds by next June (Becker, August 11, 2015; Anderson, October 16, 2015). Although this is a step in the right direction, 45 beds may not provide sufficient new capacity, even without any growth in this population.

Because the federal government does not reimburse states for healthcare costs while incarcerated, many inmates leaving jail or prison who are eligible for Medicaid do not have coverage and are not reinstated for several months after release, leaving them at risk in the community. This is particularly salient for offenders in need of substance use disorder treatment services upon release. The State Auditor recommends that MassHealth suspend benefits while incarcerated rather than revoking them so that inmates can be covered for inpatient services outside a correctional facility while incarcerated and so they can access benefits immediately upon re-entry (Bump, 2015). She also recommends that DOC and HOC facilities screen and enroll eligible inmates in MassHealth to maximize benefits and federal reimbursement for appropriate healthcare costs (Bump, 2015).



Figure 3. Women's Commitments by Facility

Data source: MA Dept. of Public Health, Bureau of Substance Abuse Services 2012. Note, these figures include women who were admitted as "straight" civil commitments and those who were admitted with "dual" status of civil commitment accompanied by a criminal charge.

From Kates, E. (2013). Moving Beyond Prisons: Creating Alternative Pathways for Women. Briefing Note #1: Civil Commitments for Women in Massachusetts. Wellesley Centers on Women, Massachusetts Women's Justice Network 2012-2013. Available at: https://www.wcwonline.org/pdf/ekates/CivilCommitmentsForWomenInMArev.pdf

IV. Social Consequences of Not Receiving Treatment

Unmet substance use disorder treatment needs adversely impact individuals, families and communities (Center for Substance Abuse Treatment, 2005). Access to quality treatment options has positive economic impacts which include lower crime rates and reduced costs associated with incarceration and victimization (Belenko, Patapis & French, 2005; National Drug Intelligence Center, 2011). Substance abuse and dependence result in higher healthcare costs, injuries, deaths, lost productivity and crime, all significant areas of impact for individuals, families, and the Commonwealth (Horgan et al., 2001; Brolin et al., 2005). Lack of access to treatment places vulnerable individuals at high risk for these severe consequences. People who misuse substances and become involved with the criminal justice system in lieu of treatment face numerous consequences. Involvement with the criminal justice system limits one's ability to get and retain a job, which affects both the individual and the family. Wage earnings decrease throughout an individual's life once incarcerated (Western, 2002). And, since Blacks and Latinos face disproportionate arrests, convictions and incarceration, the decreased earnings contribute to the racial/ethnic wage gap (Western, 2002). And, since Blacks and Latinos face disproportionate arrests, earnings contribute to the racial/ethnic wage gap (Western, 2002). And, since Blacks and Iatinos face disproportionate arrests, earnings contribute to the racial/ethnic wage gap (Western, 2002). And, since Blacks and Iatinos face disproportionate arrests, earnings contribute to the racial/ethnic wage gap (Western, 2002). And, since Blacks and Iatinos face disproportionate arrests, convictions and incarceration, the decreased earnings contribute to the racial/ethnic wage gap (Western, 2002). Financial pressures due to employment issues and fees and fines required by the criminal justice system also stress families.

We see strained parent-child and partner relationships due to criminal justice involvement, with a subsequent impact on the functioning of children (Clear, 2007). Having a parent incarcerated also increases young children's antisocial behaviors (Haskins, 2015) and at-risk adolescents (aged 10-14) substance use and delinquency (Midgley & Lo, 2013).

V. Economic Consequences of Not Receiving Treatment

Excessive alcohol and illicit drug use costs our nation over \$400 billion annually (NIDA, n.d.). Massachusetts experiences similar costs from health consequences, lost productivity, crime and social welfare due to substance abuse. Alcohol abuse cost the most at \$223.5 billion nationally, largely due to lost productivity from illness and death (CDC, 2014). Drug abuse costs the nation another \$193 billion, with crime the largest contributing factor driving drug abuse costs (NDIC, 2011). Productivity losses stem from several areas: premature death, incarceration, substance-abuse related illness, and crime careers. In addition, absenteeism and presenteeism contribute significant losses in productivity (Hargrave et al, 2005). In each of these areas, people who would normally work and contribute to society's productivity are removed from the workplace or otherwise unable to contribute.

With incarceration costing over \$53,000 per year, the 1,564 inmates convicted of drug offenses cost Massachusetts \$83.0 million per year (MA DOC, 2014; MA EOPSS, 2015). On any given day there are more than 11,000 people incarcerated in Massachusetts under the jurisdiction of the DOC (MA DOC, 2014) and another 10,600 in county facilities (MA DOC, 10/12/15). One out of six inmates in DOC is incarcerated on a drug offense (MA DOC, 2014). Even more commit a crime to support their alcohol and drug misuse. Additionally, there were 911 deaths due to heroin overdoses (MDPH, 2015) and 326 alcohol-related fatalities in Massachusetts in 2013 (NHTSA, 2013). In addition to lost productivity from people who die prematurely or are incarcerated, Massachusetts experiences lost productivity from absenteeism and presenteeism due to alcohol- or drug-related illness and from people who are career criminals and, therefore, forego productive employment (Hargrave, et al., 2005).

Crime costs include police protection, processing of alcohol and drug-related cases in the criminal justice system, corrections costs and legal fees (NDIC, 2011). Crime-related costs, however, also fall into the healthcare and productivity areas (NDIC, 2011). Lost productivity due to incarceration and criminal careers adds significantly to the crime-related costs of alcohol and drug abuse. Similarly, victims of crimes also incur healthcare costs, lost productivity and a reduced quality of life. More than 30% of the economic costs due to drug abuse result from crime (NDIC, 2011). Collaborative efforts between the criminal justice and substance use disorder treatment systems represent an area for significant inroads and cost savings.

VI. Federal Perspective

A. Treatment Works

A large body of research evidence demonstrates that treatment works (Harwood et al., 2002; Belenko et al., 2005). Figure 4 describes the continuum of publicly funded treatment services available in Massachusetts. Treatment typically involves behavioral therapy and can include medication-assisted treatment (CHIA, 2015).

Figure 4. MA Continuum of Treatment Services (CHIA, 2005)



Every \$1 invested in treatment returns savings of up to \$7, due to reduced crime, increased productivity and lower healthcare costs (Gerstein et al., 1994; Finigan, 1996). Studies also show that coerced treatment works, with coerced patients having longer lengths of stay and similar or better outcomes (Sherman et al., 1997; Aos et al., 2006). We also know that the return on investment for incarceration of drug offenders is low at \$0.29 for every \$1 invested (Lengyel, 2006). Mandatory drug laws and threats of incarceration do not deter drug use, in fact, we've seen increases in drug use in the presence of mandatory minimums and three strike laws (Ramirez and Crano, 2003; Gabor and Crutcher, 2002). These findings, accumulated over the last twenty years, argue for increased access to treatment, for better health and improved public safety.

B. Opportunities to Improve Access to Treatment

The ACA and earlier healthcare reform in Massachusetts, bring opportunities to expand access to treatment. The ACA and healthcare reform provided coverage, through Medicaid and the healthcare Connector, to more people in the Commonwealth. Through the essential health benefits of the ACA, coupled with the Mental Health Parity and Addiction Equity Act of 2008, people with insurance coverage are required to receive substance use disorder treatment benefits on par with other health benefits (Carnevale Associates, 2013; Horgan et al., 2015). Additionally, provisions of the ACA promote integration of substance use disorder treatment with primary care and mental health services, which may provide new access points and new treatment approaches (Carnevale Associates, 2013; Horgan et al., in press).

On September 17, 2015, the U.S. Department of Health and Human Services (HHS) convened representatives from all fifty states and the District of Columbia to address the national opioid epidemic. The group recommended (HHS, 2015):

- Improving opioid prescribing practices,
- Increasing access to naloxone, and
- Expanding the use of medication-assisted treatment.

Toward this end, Secretary Burwell announced that HHS (HHS, 2015):

- Will revise regulations related to the prescribing of buprenorphine to treat opioid dependence to increase access to buprenorphine, and
- Award \$1.8 to rural communities to expand access to naloxone.

These changes will benefit opioid users, some of whom are engaged with the criminal justice system.

C. Criminal Justice System Reforms to Prioritize Treatment Access

Reforms in the criminal justice system also bring opportunities to divert offenders to community-based treatment or expand access to evidence-based treatment while incarcerated and at re-entry. With a growing consensus that mass incarceration does not work, bipartisan efforts have begun to address alternatives to arrest and incarceration, sentencing guidelines, and community supervision, for diversion and re-entry programs, supported by treatment.

Law Enforcement Leaders to Reduce Crime and Incarceration, a group of 130 current and former police chiefs, federal and state chief prosecutors and attorneys general from all 50 states, united to address the problem of crime and incarceration (Law Enforcement Leaders, 2015). In their statement of principles, they call for alternatives to arrest and prosecution that prioritize mental health and substance use disorder treatment whenever such options would not harm public safety and when law enforcement has the ability to make these choices (Law Enforcement Leaders, 2015). They also recommend training for law enforcement personnel to help them identify citizens in need of mental health and substance use disorder treatment services and to help them make the proper referrals and connections (Law Enforcement Leaders, 2015).

Specialty courts, such as drug courts, mental health courts and co-occurring courts, use evidence-based and other approaches to reduce crime and recidivism. In these models, courts combine treatment with incentives and sanctions to intervene in an offender's life and make improvements (e.g., treat mental health and/or substance use problems). Drug courts lead to less drug use and fewer arrests, with \$2.21 in direct benefits resulting for every \$1 invested (Bhati, et al., 2008).

Programs that support offenders re-entering the community with substance use disorder and mental health treatment, housing and employment demonstrate decreased recidivism and longer retention in the community (Ayoub and Pooler, 2015). The Kentucky Public Safety and Offender Accountability Act, which requires inmates to undergo post-release supervision that includes substance use disorder and mental health treatment when appropriate, showed fewer technical violations and fewer new crimes resulting in incarceration compared to a pre-policy group (PEW, 2014).

Other initiatives, such as repealing mandatory minimums and revising sentencing guidelines increase opportunities to divert individuals in need of treatment away from the criminal justice system. In 2014, the U.S. Sentencing Commission reduced sentences for drug offenders by reducing the quantity guidelines across drug types. Further, they voted to apply the new guidelines retroactively beginning November 1, 2015. On November 2, 2015 the Bureau of Prisons released 6,000 inmates, 20 of whom will likely return to Massachusetts (Horwitz, October 6, 2015). About two-thirds of the 6,000 will be released to halfway houses or under home confinement before being put on supervised release. About one-third are foreign citizens who will eventually be deported. In total, 46,000 drug offenders may be released early due to this change (Horwitz, October 6, 2015).

In 2012, Governor Patrick's Crime Bill reduced lengthy mandatory minimum sentences for low-level drug offenders and increased sanctions for habitual high-risk violent offenders (Lockmer, 2014). Offenders were released due to this new law, as well as the Hinton drug lab investigation, resulting in fewer incarcerations (Lockmer, 2014; Forman and Larivee, 2015). During the 114th session of Congress (2015-2016), the Senate introduced the Sentencing Reform and Corrections Act of 2015. This bill draws from the recommendations of the U.S. Sentencing Commission to reduce mandatory minimum sentences for drug offenders. Further, the bill would increase programming within the Bureau of Prisons to reduce recidivism and provide earned good time for those who attend the programming, implement a risk needs assessment system within the prisons, and report on best practices to support re-entry.

D. Federal Support for Improvements

In 2010, the Bureau of Justice Assistance (BJA) launched the Justice Reinvestment Initiative (JRI), with funding from Congress and The Pew Charitable Trusts. BJA contracts with the Council of State Governments, to work with states to apply "a data-driven approach to improve public safety, examine corrections and related criminal justice spending, manage and allocate criminal justice populations in a more cost-effective manner, and reinvest savings in strategies that can hold offenders accountable, decrease crime, and strengthen neighborhoods" (BJA, n.d.). Prior to JRI, seven states led the way with their own initiatives. Since 2010, another 26 states have worked with BJA and the Council of State Governments to initiate reform. A report on eight of the early JRI states indicates that states successfully reduced prison populations and costs and reinvested savings to promote future gains (LaVigne et. al, 2014). Massachusetts recently took steps to join this initia-tive.

In September 2014, the Substance Abuse and Mental Health Services Administration (SAMSHA) convened a meeting of federal experts, state and local agencies providing services to justice-involved people, and national advocacy organizations called the Bridging the Gap: Improving the Health of Justice-Involved People through Information Technology. The meeting focused on the disconnect between justice and health information systems, including barriers and best practices. The conference identified the following six key themes (Davis and Cloud, 2015, p. 2):

- Underdeveloped Health Information Technology (HIT) makes it difficult for health and justice systems to communicate and share data vital to the health of justice-system involved populations.
- Innovative programs from jurisdictions around the country can help others launch successful HIT programs to improve data sharing between community providers and correctional facilities.
- Representatives from Medicaid agencies, corrections departments, and community providers need to be at the table together to develop solutions that advance common goals that promote public health and public safety.

- Every locale must build a program based on its specific needs, infrastructure, and partners, but resources such as Justice and Health Connect, the National Information Exchange Model and Global Justice Information Sharing can guide jurisdictions looking to bridge the justice and health gap.
- Privacy, security, consent, and technology adaptation are difficult but surmountable obstacles to providing healthcare to the justice-system-involved population.
- Data-driven programs such as the JRI seek to cut spending and reinvest the proceeds in practices that have been demonstrated to improve safety and hold offenders accountable. The trend to-ward evidence-based evaluation of justice programs, coupled with mounting evidence that current incarceration and recidivism rates are economically unsustainable, have galvanized diverse stakeholders to collaborate on developing better responses to justice-involved people who have substance use and mental health issues.

Recognizing the important role of timely data, President Obama recently announced an initiative that will pair drug intelligence officers with public health coordinators in 15 sites to better monitor and address the opioid epidemic. A key element of the program is to track data more quickly, share that data with local law enforcement and train first responders to prioritize treatment over punishment (Fisher, August 16, 2015).

The opioid epidemic and rising criminal justice costs are driving policymakers to consider new strategies to address substance use and crime. Fair and equitable access to treatment lies at the crux of these policy solutions. The evidence-base for appropriate interventions, at all stages of the criminal justice continuum, has been growing and can inform the steps that Massachusetts chooses to take.

VII. National and Local Evidence-Based and Promising Practices

This section offers selected examples of evidence-based and promising practices used to expand access to treatment within Massachusetts and in other states. We offer these examples for Massachusetts policymakers to consider as they develop strategies to address the problem. These examples offer varying access points for intervention within communities and at critical intercepts along the criminal justice continuum (e.g. diversion, incarceration, re-entry).

A. Prevention and Pre-arrest Strategies

Police Chief Leonard Campanello of Gloucester, MA offers treatment in lieu of arrest to individuals addicted to opiates after the city had its fourth death in three months from heroin overdoses (McCoy, 2015). The City promises individuals with opioid addiction immediate entrance into treatment if they come to the police station – even if they have drugs and/or drug paraphernalia on them (McCoy, 2015). Additionally, the police in Gloucester have started providing Nasal Narcan – a medication that can reverse the impact of an opiate overdose – for free for individuals who do not have health insurance (McCoy, 2015). Since the inception of the program in May 2015, 109 individuals have come to the police station for help with their addiction (as of August 2015) (McCoy, 2015).

Gloucester also initiated a non-profit group called the Police Assisted Addiction and Recovery Initiative (PAARI) (PAARI, n.d.). PAARI's goals are the same as Chief Campanello's, treatment in lieu of arrest, as well as providing assistance to other police departments or communities to address opioid addiction (PAARI, n.d.).

In light of this innovation, The Methuen Outreach Initiative, initiated by Methuen Police Chief Joseph Solomon, has outreach workers accompany police door-to-door to help connect individuals to drug treatment and provide education to the friends and families of those struggling with addiction (Riley, 2015). The town of Arlington, through the Arlington Outreach Initiative, will host a program similar to Methuen's as well (Town of Arlington, 2015).

In 2003, Framingham initiated a Jail Diversion Program (JDP) to divert people with mental health problems prior to arrest to appropriate treatment services. In 2007, the MA Department of Mental Health began funding the initiative that runs in 24 communities today (DMH, 2014). DMH adopted the proven Crisis Intervention Model, which trains and supports officers to enhance their ability to respond to individuals with emotional disturbances. The Crisis Intervention Model also builds collaboration with officers and community organizations and develops formal policies to put a formal diversion process in place (DMH Forensic Services, 2014). In communities with JDP, 73% to 92% of eligible arrests have been diverted to treatment (DMH, 2014). To support the effort, DMH has provided more than 7,000 hours of training to 476 officers (DMH, 2014). Similar to DMH's JDP, Miami's Criminal Mental Health Project (CMHP) trains police offers to divert people with serious mental illness to treatment. The project eliminated nearly 10,000 arrests and closed one of its five jails (Eleventh Judicial Circuit, 2014).

In 2011, Seattle initiated the Law Enforcement Assisted Diversion (LEAD) program. The LEAD program, which diverts low-level drug offenders to treatment and support, reduced re-arrests and felony charges among LEAD participants relative to a comparison group processed under standard procedures (Collins et al., 2015).

B. Alternatives to Incarceration

In 2005, Washington State enacted the Drug Offender Sentencing Alternative where felony drug and property offenders can receive reduced prison terms if they complete chemical dependency treatment while incarcerated. They consider this a prison-based alternative since the standard sentence is split between prison and community supervision. Using this approach, treatment significantly reduced recidivism rates for drug offenders but not for property offenders (WSIPP, 2006).

In Brooklyn, NY, the District Attorney's office implemented the Drug Treatment Alternative to Prison (DTAP) program. Relative to a comparison group of offenders who were processed under traditional criminal justice procedures, DTAP participants had significantly (Zarkin et al., 2005):

- Fewer rearrests (57% versus 75%),
- Fewer jail sentences (30% versus 51%), and
- Fewer prison sentences (7% versus 18%).

Benefits outweighed costs in the long-term (Zarkin, et al., 2005).

With more than 3,000 drug courts operating in every U.S. state and territory (NDCRG, 2014; NADCP, 2015), research demonstrates that drug courts successfully reduce arrests, technical violations and incarceration (Marlowe, 2010). For example, an evaluation of the Multnomah drug court in Oregon demonstrated savings due to fewer arrests and bookings, less court and jail time, and lower victimization costs (Carey and Finigan, 2003). In 2013, SAMSHA awarded Massachusetts, through BSAS, a grant to expand substance use disorder treatment capacity in adult, juvenile, and family drug courts. Working with the Administrative Office of the Trial Courts, BSAS supported probation offices, courts and substance use disorder treatment providers to implement proven drug court procedures. As part of this effort BSAS and the Administrative Office of the Trial Courts have worked on a data exchange and have successfully exchanged data on drug court participants. Massachusetts currently has 34 specialty courts, including 22 adult drug courts, 6 mental health courts, 3 veterans' treatment courts and 3 juvenile drug courts (Mass.gov, 10/13/15).

C. Services While Incarcerated

Risk Needs Assessments measure an offender's criminal risk factors and need for services, such as substance use disorder treatment, that, if addressed, would likely reduce crime (Pew, 2011). The Bureau of Justice Assistance promotes the use of valid, reliable and gender-specific Risk Needs Assessments to appropriately match offenders to services and reduce recidivism. Risk Needs Assessments can be used in jails and prisons upon entry to target interventions to inmates' needs. They can also be used by courts to assess risk and support determinations for diversion and by probation and parole to identify re-entry service needs.

Valley State Prison for Women in California implemented a gender-responsive treatment program in one of its two therapeutic communities. The gender-responsive treatment included manualized curricula for *Help-ing Women Recover* and *Beyond Treatment*, both developed by Stephanie Covington. The study showed that women who received gender-responsive treatment within the therapeutic community reduced their drug use more than women who received only the therapeutic community intervention (Messina et al., 2010). The women with gender-responsive treatment also stayed in a residential aftercare program longer and were less likely to be reincarcerated within 12 months post release (Messina et al., 2010). The findings support the need for gender-specific treatment that addresses trauma for incarcerated women.

D. Probation, Parole and Re-entry Strategies

New Hampshire mandates the use of Risk Needs Assessments for offenders on probation and parole to set the length of community supervision. They estimate the state will save nearly \$11 million over five years due to shorter supervision times (Pew Center on the States, 2011).

Hawaii's Opportunity Probation and Enforcement (HOPE) program uses drug testing with swift and certain sanctions, under the supervision of a judge, to motivate behavior change among probationers. Project HOPE participants were (NIJ, 2012):

• 55% less likely to be arrested for a new crime,

- 72% less likely to use drugs,
- 53% less likely to have their probation revoked.

Essex County probationers currently participate in a national research project based on HOPE, where they receive swift, certain, and measured sanctions for any and all probation violations in an effort to reduce recidivism (MA Court System, 2015).

A study of a nine-month in-prison therapeutic community in Texas, followed by three months of a residential therapeutic community upon release showed lower recidivism rates and longer times to rearrest for those who participated in the in-person therapeutic community relative to a comparison group (Hiller et al., 1999). Further, those who also took part in the three-month post-release program fared even better, supporting a continuum of care model that transitions from prison to the community (Hiller et al., 1999).

The Worcester Initiative for Supported Re-entry (WISR) WISR is a multi-year collaborative project funded by The Health Foundation of Central Massachusetts and run by Advocates, Inc. in collaboration with the Worcester County Sheriff's Office, DOC, and other criminal justice partners. WISR provides strengths and evidence-based intensive case management services to assist ex-offenders in overcoming the primary determinants of recidivism: barriers to accessing housing, employment, addiction recovery, healthcare and social services. WISR has significantly reduced reincarceration relative to a comparison group (9.4% versus 19.3% one year post release, respectively), and ensured that no participant returns to the community homeless (Brolin & Dunigan, 2015). Three out of five participants (58%) had continuous employment for at least six months. Nine out of ten participants have health insurance and more than half reported they have seen their primary care physician. Ninety six percent of participants referred to substance use disorder treatment services accessed the recommended services (Brolin & Dunigan, 2015).

The Harlem Re-entry Court provides pre-release assessment and re-entry planning, judicial oversight, case management services post release to coordinate support services, and graduated sanctions and incentives for parolees for six to nine months post release. The initiative involves a close collaboration between parole officers and substance use disorder treatment agencies (Farole, 2003). A randomized controlled study demonstrated that 18 months post-release re-entry court participants were significantly less likely to be reconvicted (29% versus 37%) and had lower revocation rates (12% versus 22%) (Farole, 2003).

E. Medication-Assisted Treatment (MAT)

Opioid addicts who receive medication-assisted treatment with psychosocial treatment have significantly higher abstinence rates compared to those receiving psychosocial treatment with no medication (Connery, 2015). Methadone maintenance demonstrates the best outcomes, but buprenorphine/naloxone also result in good outcomes. Extendedrelease naltrexone, which many prefer because it cannot be diverted, shows early evidence of good abstinence (Connery, 2015).

THE MORTALITY RATE IN THE TWO-WEEK PERIOD FOLLOWING PRISON RELEASE IS 12 TIMES HIGHER AMONG FORMER PRISONERS THAN THE GEN-ERAL POPULATION, WITH THE LEAD-ING CAUSE BEING DRUG OVERDOSE.

> Aaron D. Fox, MD, MS (Fox, 2015)

BSAS, in collaboration with Boston Medical Center, develop and diffused The Massachusetts Model of Office-Based Opioid Treatment for Buprenorphine (OBOT-B) using a collaborative care model. In this model, nurses work with physicians to evaluate and monitor patients (LaBelle et al., 2015). Over three years, the program expanded to 14 community health centers, through which the project expanded the number of physicians with MAT waivers from 24 to 114. This improved access to OBOT-B increased annual admissions of OBOT-B patients to community health centers significantly (LaBelle et al., 2015).

Rhode Island implemented patient-centered medical homes (PCMH) within opioid treatment programs since patients visit these programs daily. The opioid treatment program, as the PCMH, connects the patient with community health care providers so they will have comprehensive health care. The patient's health team includes a nurse and case manager who help the patient navigate both addiction treatment and health care services (ICER, 2015).

Similarly, Stanley Street Treatment and Resource, Inc. (SSTAR) in Fall River became a Federally Qualified Health Center to provide primary care services to its substance use disorder patients. SSTAR started as a substance use disorder treatment organization but in 1996 they realized their patients were not receiving adequate primary care services (Bailey, n.d.). SSTAR provides MAT for tobacco, alcohol and drug dependence. With a goal of keeping patients in treatment, SSTAR offers methadone, buprenorphine and injectable naltrexone to patients. The average wait time to enter MAT services is 3.88 days at SSTAR, compared to 13.81 days across the state. Additionally, SSTAR reports that 89% of patients stay in treatment for 12 months or longer (Bailey, n.d.).

Few offenders with opioid problems receive MAT while incarcerated (Fox, 2015). Moreover, offenders with opioid addictions are at greatest risk upon release as their tolerance has diminished, making them prone to overdose (Fox, 2015). Offenders who receive MAT while incarcerated are more likely to enter MAT services upon release (Kinlock et al., 2007). Re-entry planning services should support offenders to link with MAT upon release to avoid relapse and overdose.

In July 2014, the Massachusetts Attorney General's Office awarded a grant to Spectrum, Inc. to improve the delivery of substance use disorder services to opioid-addicted individuals being released from the state prison system. Prior to the grant, Spectrum and the DOC developed a MAT pilot program for its identified opioid dependent population. This program involves education, screening, the issuance of prescription medication and individual and group counseling leading up to release. Spectrum trains DOC's entire clinical staff working behind the walls to educate offenders on MAT including information on Vivitrol, Suboxone, and methadone, medications approved to treat opioid addiction. The education also includes the importance of participating in continuing care following release.

With the new grant from the Attorney General's Office, Spectrum has improved the delivery of substance use disorder services to opioid-addicted individuals being released from the state prison system. At the core of this program is the Recovery Support Navigator (RSN) model, selected for its demonstrated success in engaging and retaining high-risk populations in MAT. It provides non-clinical services that engage, educate and support individuals seeking treatment and their families to motivate and maintain them in culturally relevant behavioral health services in the community (Spectrum, 2014).

Spectrum, Inc. works with offenders while incarcerated and provides Recovery Support Navigators to help them link to MAT in the community upon release (Spectrum, 2014). An evaluation will assess linkages to MAT, relapse and recidivism.

F. System Collaborations and Data Sharing

Louisville, KY brought together partners from the Mayor's office, a criminal justice coalition, substance use disorder treatment providers, a coalition for the homeless, the Department of Correction and many other agencies across the community to develop a community care management network for high utilizers of services (Davis & Cloud, 2015). These were people who utilized many expensive services in the city, with the same individuals showing up in the hospitals, police stations and jails. As a pilot, the team identified six high utilizers and collaborated to develop care models for each person so every agency was prepared to address the problems of a high utilizer who showed up in their system with a consistent approach. The team had to overcome barriers related to privacy and consent, but, once addressed, they developed a shared understanding and increased interdisciplinary access to the identified individuals. The effort led to decreased emergency department use and improved care across the systems. Louisville calculated they saved \$700,000 on an initial cohort of 24 high utilizers largely by providing supportive housing and reducing emergency room visits (Davis & Cloud, 2015). Louisville collaborators describe it as "an entire health ecosystem, not just healthcare narrowly defined" (Davis & Cloud, p. 27). Figure 4 below illustrates the model and collaborations.



Source: Tom Walton, director of business development, KentuckyOne Health Partners, presentation at "Bridging the Gap: Improving the Health of Justice-Involved Individuals through Information Technology." September 18, 2014. SAMHSA, Rockville, MD.

VIII. Massachusetts Environment for Reform

Criminal justice reform created unlikely political alliances, from the Koch Brothers partnering with the Center for American Progress (Miller, 2015) to Congressional Republicans and Democrats partnering on legislation (Berry, 2015). Massachusetts has also seen a commitment to reform from a range of policymakers in the legislature and criminal justice and substance use disorder treatment systems. The 2015-2016 session of the Massachusetts legislature has over 100 bills related to criminal justice and prison, with at least 18 focused on alternatives to incarceration, drug sentencing, drug policy and treatment, justice reinvestment, juvenile justice and services for prisoners (see sidebar, Criminal Justice Policy Coalition, 2015).

In response to the opioid epidemic, the Governor's Opioid Working Group, an 18 member expert panel, chaired by Marylou Sudders, Secretary of the Executive Office of Health and Human Services (EOHHS) aimed to reduce the magnitude and severity of harm related to opioid use and addiction and decrease opioid overdose deaths in the Commonwealth. Attorney General Maura Healey played a key role in the effort. To achieve their goal, the Opioid Working Group (Governor's Opioid Working Group, 2015):

- Hosted 4 listening sessions in Boston, Worcester, Greenfield, and Plymouth
- Held 11 in person meetings
- Examined documents and recommendations from more than 150 organizations
- Heard from more than 1,100 individuals from across the Commonwealth
- Reviewed academic research, government reports, and reports of previous task forces and commissions
- Submitted more than 65 actionable recommendations to Governor Baker on June 12, 2015.

Selected Bills in the 2015-2016 Session of the MA Legislature that Address Drug Policy and Treatment

H.1382 – An Act providing community-based sentencing alternatives for primary caretakers of dependent children convicted of non-violent crimes

H.1486 – An Act relative to the use of community corrections for pre-trial detainees and criminal defendants

S.756 - An Act relative to probation violations

S.1275 – An Act relative to the use of community corrections for pre-trial detainees and criminal defendants

H.1458 – An Act relative to sentencing guidelines

H.1797 – An Act relative to the civil commitment of women for alcoholism and substance abuse to MCI Framingham

S.731 – An Act protecting the rights of probationers in drug courts

H.1458 – An Act relative to sentencing guidelines

H.1620 & S.786 – An Act eliminating mandatory minimum sentences related to drug offenses

H.1806 – An Act relative to diversion to substance abuse treatment for non-violent drug offenders

H.1429 & S.64 – An Act to increase neighborhood safety and opportunity

S.76 – An Act providing for an investigation and study by a special interagency task force relative to genderresponsive programming for juvenile justice systeminvolved girls

H.1313 & S.71 – An Act promoting restorative justice practices

H.1413 – An Act establishing mandatory post release supervision in the Commonwealth

H.1167 – An Act to improve public safety by facilitating access to addiction services

H.1171 – An Act relative to ensuring quality mental health services in state correctional facilities

H.3440 – An Act relative to the implementation of a department of corrections re-entry program

H.1383 – An Act relative to work release eligibility

As a key strategy, the group recommended that Massachusetts policy makers acknowledge that punishment is not the appropriate response to a substance use disorder. They also put forward the following key strategies that address access to treatment and reduce substance misuse (Governor's Opioid Working Group, 2015):

- Create new pathways to treatment.
- Increase access to medication-assisted treatment.
- Utilize data to identify hot spots and deploy appropriate resources.
- Acknowledge addiction as a chronic medical condition.
- Reduce the stigma of substance use disorders.
- Support substance use prevention education in schools.
- Require all practitioners to receive training about addiction and safe prescribing practices.
- Improve the prescription monitoring program.
- Require manufacturers and pharmacies to dispose of unused prescription medication.
- Increase distribution of Naloxone to prevent overdose deaths.
- Eliminate insurance barriers to treatment.

Following recommendations of the Opioid Working Group, Governor Baker and Lieutenant Governor Polito announced:

- A new substance misuse anti-stigma campaign on November 4, 2015. This five-week, statewide campaign asserts that "addiction is not a choice, it's an illness" (Baker, November 4, 2015), and
- A partnership with the Commonwealth's four medical schools and the Massachusetts Medical Society to educate medical students on core competencies for the prevention and management of prescription drug misuse on November 9, 2015.

Governor Baker also filed legislation in October to support the recommendations of the Opioid Working Group. Most notably, "An Act Relative to Substance Use Treatment, Education and Prevention" would provide medical professionals with the impetus to seek voluntary treatment and then the authority to involuntarily commit an individual for treatment for 72 hours if they pose a danger to themselves or others due to substance use (Baker, October 15, 2015). The bill would also (Baker, October 15, 2015):

 Amend the civil commitment statute, section 35, to specify that women committed for substance use treatment may be sent to new secure treatment units approved by the Departments of Public Health (DPH) and Mental Health (DMH) and ends the practice of sending women to MCI Framingham for treatment.

- Limit patients to a 72-hour supply the first-time they are prescribed an opioid or when they are prescribed an opioid from a new doctor.
- Practitioners will also be required to always check the Prescription Monitoring Program (PMP) prior to prescribing an opioid to a patient, and will be required to fulfill five hours of training on pain management and addiction every two years.

Following an assessment of the Commonwealth's criminal justice system and the way it handles illegal drug users, the Massachusetts Bar Association, Drug Policy Task Force issued the following major recommendations (MA Bar Association, n.d.):

- Reform Chapter 111E to make diversion to treatment effective and available statewide.
- Enact drug sentencing reforms as soon as possible.
- Educate prosecutors, defenders, judges, probation and parole about the benefits of treatment and the expectation of relapse, and the failure of punishment to reduce recidivism.
- Expand treatment resources to enable the supply to meet the demand, without coercing abstinence or treatment for non-abusive use.
- Rethink to build commitment to systemic changes.

The Massachusetts Institute for a New Commonwealth (MassINC) supported Criminal Justice Reform Coalition promotes the following priority steps (Forman and Larivee, 2013):

- Place a moratorium on the expansion of state and county prisons;
- Empower the Sentencing Commission to revisit the state's approach to sentencing and sanctions;
- Clearly delineate responsibility for all post-release supervision to the Parole Board and pretrial and diversion to the Probation Department;
- Expand the use of community supervision and pre-release;
- Make Boston's Emergency Re-entry Program a model for urban centers across the state;
- Complete an extensive survey of condi-tions of confinement, programming, and program quality across the system;
- Standardize data systems and reporting protocols, and funnel information to a central research center;
- Understand how the state's corrections system can be oriented toward Justice Reinvestment and develop a strategy to build a culture of data-driven decision-making with the agencies.

Leaders of the federal and state judiciaries weighed in on changes to our criminal justice and substance use disorder treatment systems. Chief Judge Patti B. Saris, Chair of the United States Sentencing Commission and the Chief Judge of the United States District Court for the District of Massachusetts, shared the context and findings of the U.S. Sentencing Commission. She notes that mandatory minimum sentences can lead to different sentences for similarly situated offenders, that they often result in severe penalties for lower-level offenders, and that Black offenders were much less likely to get relief from mandatory minimum sentences (Saris, 2015). She speaks in favor of reducing mandatory minimum sentences for drug trafficking and notes an urgent need for reform (Saris, 2015).

Massachusetts Chief Justice Gants Annual State of the Judiciary, October 20, 2015

What does it mean to treat every court as a problemsolving court? Let me first tell you what it does not mean. It does not mean that we seek to transform judges into social workers, or that we no longer resolve cases in accordance with law and instead seek to resolve them in accordance with our own vision of public policy, or that we care any less about principles of fairness and due process. What it does mean is best described by two principles that come from the Jewish religious tradition, but probably are shared by nearly every religious tradition. The first is that each of us has an obligation to repair the world. The second is that, if you save one life, it is as if you have saved the entire world. In our courts, we seek to repair the world, sometimes even save the world, one person at a time.

In his Annual Address: State of the Massachu-

setts' Judiciary speech in October, Chief Justice Ralph Gants promoted specialty courts, including drug and mental health courts, sentencing reform and the state's JRI (Gants, 2015). Related to the Section 35 law and the treatment of committed women, Judge Rosemary Minehan, the first justice for the Plymouth District Court, notes that the law needs to be enforced more strictly, particularly the requirement that the system follows up with those who have completed their Section 35 commitment after release (Becker, August 11, 2015).

In addition to all these efforts, in 2014 Governor Patrick reconstituted the Massachusetts Sentencing Commission. More recently, Governor Charlie Baker, Senate President Stanley Rosenberg, House Speaker Robert DeLeo, and Supreme Judicial Court Chief Justice Ralph Gants came together in a bipartisan endeavor to collaborate with the Council of State Government to assess the state's criminal justice system as part of their Justice Reinvestment Initiative (North and Young, August 3, 2015).

The City of Boston, with funding from the Blue Cross Blue Shield of Massachusetts Foundation, released a report on Addiction and Recovery Services in the City of Boston. They call for the following systemic improvements that apply statewide (DMA Health Strategies, 2015):

- Augment existing capacity (beds) for detox and residential treatment.
- Create a central source of real-time information on available treatment beds and outpatient services.
- Develop a more cohesive and integrated continuum of care to reduce relapse and increase rates of retention during transition points.

- Encourage formal referral arrangements between organizations.
- Support integration of levels of care within single organizations.
- Reform public and private payment to support such delivery system reform.
- Expand care coordination and system navigation services.
- Improve data collection and reporting regarding need, demand and capacity.
- Conduct more detailed data collection including needs of specific populations and cultural competence.
- Advocate for implementation of evidence-based practices.
- Monitor and train to ensure fidelity of evidence-based practices and services.
- Support pre- and post-trial alternatives with city, county and state criminal justice systems.
- Expand education and awareness programs in Boston public schools and other community settings.

In expanding access to opioid dependence treatment, The New England Comparative Effectiveness Public Advisory Council and The Institute for Clinical and Economic Review came out with the following recommendations (ICER, 2014):

- Coordinate efforts across New England to improve access to opioid dependence treatment for the large number of individuals who lack adequate access to high quality care options.
- Develop innovative strategies that connect individuals in the criminal justice system to treatment for their addiction.
- Individualize treatment, including decisions about medication choice, counseling, and supportive social services, according to an initial assessment of a patient's baseline severity and unique health care needs.
- Develop systems to triage patients entering treatment to the level of care most appropriate for their individual needs in order to support patient-centered treatment and allow for more capacity in the system.
- Reconsider mandatory requirements for certain kinds of counseling, as they can have unintended consequences, to ensure they are not negatively affecting patient outcomes.
- Provide treatment for opioid dependence through comprehensive, team-based care with collaboration across health care providers.

- Adopt an individualized approach that engages the patient in setting goals dosing and tapering of medication-assisted therapy.
- Ensure evidence-based insurance coverage policies for opioid dependence services to support efficient clinical practice and provide enough flexibility to help clinicians appropriately support the care needs of a diverse group of patients.
- Policymakers should develop long-term solutions to recruit, train, and retain qualified physicians to the field of addiction medicine in addition to fostering greater awareness and skills for recognizing opioid addiction among primary care clinicians.
- Funders and the clinical research community should focus future study on key areas where further evidence is needed to appropriately manage patients with opioid dependence.

Promoting a chronic model of care for opioid dependence, Beacon Health Options put forward the following tenets (Beacon Health Options, 2015):

- Foster partnerships in the community to link resources and promote better health.
- Establish alternative payment methodologies to promote a chronic care model.
- Reinforce informed consent to support individuals' choice of treatment options.
- Build an effective continuum of care anchored on the chronic care model.
- Drive provider education on substance use disorder services.
- Improve the coordination of care through registries and electronic health records.

Nationally and within Massachusetts policymakers, practitioners and advocates endorse far-reaching transformations to increase access to treatment for those in need. The challenge is to implement a comprehensive approach that addresses the needs of all citizens, with an emphasis on decreasing racial/ethnic and gender disparities. The call for action will require commitment from and collaboration across the public health, mental health, law enforcement and criminal justice systems.

IX. Recommendations for Moving Forward

With the opioid epidemic, insufficient treatment capacity, and growing evidence that substance use problems are better addressed by treatment than punishment, the problem, policy and politics have converged. The opioid problem has grown into an epidemic. There is a major need for expanded access to treatment, including acute inpatient and residential beds, medication-assisted treatment, and integrated treatment approaches. Moreover, the barriers to treatment lead to greater engagement with the criminal justice system, and that the criminal justice system does not provide a cost-effective way to address drug problems. This combination of problems requires attention by policymakers throughout the Commonwealth. Solutions are available. We have a strong body of evidence that treatment works and is cost effective. We have evidence-based and promising practices that work in the community, pre-arrest, pre-conviction, for probationers and parolees, within jails and prisons and for re-entry populations. On top of these specific treatments, we see collaborations and justice reinvestment initiatives that involve practitioners from a variety of systems working together for positive change.

Policymakers are speaking out for change. Governor Baker put forward policy to drive innovative interventions to address the opioid epidemic. Additionally, he requested resources to fund a number of the recommendations of the Opioid Working Group. Both House and Senate members of the Legislature are considering legislation to increase access to treatment, divert more offenders to community-based treatment and to reform sentencing guidelines and mandatory minimum sentences. The Massachusetts Bar Association, members of the Judiciary and the Criminal Justice Reform Coalition are calling for similar reforms. The City of Boston and policymakers in the treatment system have spoken out for increased access to treatment, including more residential beds, greater access to medication-assisted treatment, and innovative treatment approaches that integrate treatment with other care systems. There is innovation in Gloucester and communities throughout the Commonwealth.

The range of stakeholders and plans are impressive but it is going to take coordinated efforts and concerted resources on multiple fronts to make real and sustained progress. We know what is broken. And we know what needs to be done. So, why haven't we made the necessary changes? To accomplish this, the agencies and organizations involved must engage in culture change, break down silos, and erase stereotypes. Until we have a shared interagency mission, coupled with performance metrics that hold agencies accountable to that shared mission, we will not achieve necessary sustainable reforms.

This systems change will involve all key agencies, including the Department of Public Health, Department of Mental Health, and the myriad of law enforcement and criminal justice agencies, departments and offices, including each sheriff who functions independently. These agencies operate in multiple branches of government with varying cultures, policies and priorities. Moreover, the collaborative work of these public agencies should involve treatment providers, advocates and consumers to bring a more complete perspective to the effort.

At this time, these agencies and partners have a shared need (see Figure 6). By coming together and working at the highest levels of government with key partners, these collaborators can develop a shared vision and secure buy-in from other policymakers, agency officials, care providers, those in need of treatment services, and advocates. With a shared vision and commitment, they can change the system, working toward long-term solutions. The collaborators would also need to establish performance metrics to monitor progress, hold partnering agencies accountable and work toward real improvements.

Figure 6. A Model for Change in Massachusetts



http://www.sixsigma-institute.org/Six_Sigma_DMAIC_Process_Define_Phase_Change_Acceleration_Process_CAP.php

Together, the collaborators would form an Integrated Planning Team with direct accountability to the Governor and Legislature, with input from the Judiciary (see Figure 7). With the Governor and Legislature, they would make data-driven investment decisions to strategically support system change (Forman and Larivee, 2015). An Operations Team would manage the initiatives designed by the Integrated Planning Team. This united work would lead to system transformation that would be enhanced by data exchange between participating agencies, providers and the Operations Team. The data exchange must involve all key players working toward shared outcomes and reporting data in a timely manner (see Figure 8). The data exchange would then feed into a plan, do, study, act cycle of process improvement for rapid assessment and change to further enhance the system transformation (Deming, 1986). Ultimately, this coordinated implementation process would lead to improved health and safety outcomes.



Figure 7. Model Implementation Process

We propose two alternative governing structures as a way to achieve this systems change. First, the Governor could revitalize the Massachusetts Interagency Council on Substance Abuse and Prevention. Established May 16, 2005 by Governor Romney and re-established in 2008 by Governor Patrick, this Council:

- Oversees implementation of initiatives and programs that effectively direct the existing resources and minimize the impact of substance misuse; and
- Develops and recommends formal policies and procedures for the coordination and efficient utilization of programs and resources across state agencies and secretariats.

The Council is chaired by the Lieutenant Governor and includes representatives from the Executive Office of Health and Human Services; the Executive Office of Public Safety and Security; the Commissioner of Correction; the Chair of the Parole Board; the Commissioner of Probation; the Commissioner of Public Health; the Commissioner of Mental Health; the Medicaid Director; the Juvenile, Superior and District Courts; and the Legislature, as well as representatives of other agencies and a consumer representative. Work to increase access to treatment might be conducted by a subgroup of this larger board to facilitate more responsive action.

A second approach would be to build off of the Governor's Opioid Working Group and transition this group from its role in assessing the extent of the problem and recommending changes to implementation and oversight. The Working Group could review its membership to ensure that representatives from public health, mental health and the various criminal justice agencies are included.

With either approach, the group would involve coordinated governance across the Executive, Judicial and Legislative branches of government. The group would work toward systemic change with a shared mission, coordinated response, and routine data analysis for rapid cycle improvements using the plan, do study, act model. The group would also report directly to the Governor and Legislature, with input from the Judiciary, for accountability, transparency and fiscal support.

Despite the recommendation for systems and culture change, Massachusetts should also act now to increase access to treatment given the immediacy of the problem. Toward that end, Massachusetts policymakers should consider the following four strategies:

- 1. **Implement a pre-arrest program for low-level drug offenders** similar to DMH's Jail Diversion Program. This initiative should:
 - Use DMH as a key partner with DPH to build on the lessons learned and successes of their Jail Diversion Program.
 - Have BSAS provide training for law enforcement on screening and referral.
 - Partner law enforcement agencies with substance use disorder treatment providers to divert appropriate people to treatment.

- Work with law enforcement agencies and substance use disorder treatment providers to implement a data tracking system to monitor changes to the system (e.g., decreases arrests and bookings, increases in access to treatment).
- Monitor outcomes and savings an analysis of a decrease in the jail population in Hampden County showed that Massachusetts could save \$6 million with a 14% decrease in its jail population (Jones and Forman, 2015).
- 2. Continue to support and expand the diffusion of specialty courts throughout the state, including drug, mental health, co-occurring and veterans' courts. Currently there are 34 specialty courts in Massachusetts, including 22 adult drug courts, 6 mental health courts, 3 veterans' treatment courts and 3 juvenile drug courts (Mass.gov, 10/13/15). Although this represents significant growth in recent years, there is much opportunity to expand this proven approach. This effort should:
 - Use the resources of the Administrative Office of the Trial Courts (ATOC) to assist courts in applying for and winning federal grants to support start-up efforts.
 - Disseminate a common data collection system to courts to promote collection of uniform core data elements and to share these data with appropriate state agencies (e.g., ATOC and BSAS).
 - Provide cross-system training for judges and court staff, probation officers and substance use disorder and mental health treatment providers.
 - Partner with BSAS and DMH to support the courts and probation with linkages to substance use disorder and mental health treatment providers and to develop appropriate policies and protocols.
 - Monitor outcomes and savings for future planning.
- 3. Increase access to MAT within communities and at critical intercepts along the criminal justice continuum (e.g., diversion, incarceration, re-entry). This endeavor should:
 - Expand the OBOT-B program developed by BSAS and Boston Medical Center to expand the number of sites and the number of physicians within sites prescribing buprenorphine.
 - Assess opportunities to use MAT in diversion and re-entry programs.
 - Look to DOC and participating Sheriff Departments for lessons learned and successes to build on their MAT program using Vivitrol, Suboxone and methadone behind the walls and upon re-entry.
 - Provide cross-system training to educate corrections staff about appropriate use of MAT and treatment staff about corrections security needs.
 - Partner with BSAS and MassHealth to coordinate linkages with MAT providers at the jails and prisons and in the community.
 - Partner with BSAS and MassHealth to develop appropriate policies and protocols.
- Implement a data tracking system to monitor changes to the system (e.g., relapses, overdoses, recidivism).
- Monitor outcomes and savings for future planning.
- 4. Expand implementation of a Medicaid enrollment program at multiple points of contact on the criminal justice continuum to improve access to primary care and substance use disorder and mental health services immediately upon release. This effort should:
 - Build on the lessons learned by MassHealth and DOC during their Prison Reintegration Pilot Program (Kirby, et al., n.d.).
 - Train criminal justice staff who have sufficient time with offenders (e.g., Probation officers, correctional staff) to screen offenders for Medicaid eligibility.
 - Enroll all eligible offenders who are not already covered by Medicaid.
 - Suspend Medicaid benefits for inmates on Medicaid while incarcerated.
 - Reactivate Medicaid benefits upon release and review Medicaid benefits with inmates as part of their re-entry plans.
 - Track the number enrolled and the number accessing benefits.
 - Monitor outcomes and savings, including federal reimbursement, for future planning.

As demonstrated in all of the initiatives above, partnering organizations should collect data to accurately track outcomes, investments and savings across the systems. Net savings should then be reinvested to further improve the system.

The opioid crisis presents an opportunity to improve access to treatment, reduce incarceration, address racial and ethnic disparities, and to give hope to individuals, families and communities suffering in all areas across the Commonwealth. Massachusetts policymakers have recognized the need, identified some solutions and indicated support for reform. Now we need the leadership and cross-system collaboration to create meaningful, sustainable change.

Acknowledgements

The authors want to thank Michael Doonan for his thoughtful comments on drafts and editing of this document and to Ashley Brooks of the Massachusetts Health Policy Forum for all her support. We would also like to express our gratitude to The Blue Cross Blue Shield of Massachusetts Foundation and The Harvard Pilgrim Health Care Foundation for their valuable collaboration and support in the writing of this policy brief.

- Alegría, M., Cook, B., Loder, S., Doonan, M. (2014). *The Time is Now: Tackling Racial and Ethnic Disparities in Mental and Behavioral Health Services in Massachusetts*, Issue Brief, Massachusetts Health Policy Forum, December 11, 2014.
- Anderson, K. (October 16, 2015). Baker Administration Pledges to Stop Jailing Women with Substance Abuse Issues - 5 Investigates' Karen Anderson brought Controversial Practice to Light Wednesday. WCVB. Retrieved on October 17, 2015 from: <u>http://www.wcvb.com/news/baker-administration-pledges-to-stop-jailing-women-with-substance-abuse-issues/35867014</u>
- Aos, S. Miller, M. and Drake, E. (2006). *Evidence-based Adult Corrections Programs: What Works and What Does Not*. Washington State Institute for Public Policy, Olympia, WA.
- Arndt, S., Acion, L., & White, K. (2013). *How the states stack up: Disparities in substance abuse outpatient treatment completion rates for minorities*. Drug and Alcohol Dependence, 132(3), 547-554. doi:http://dx.doi.org/10.1016/j.drugalcdep.2013.03.015
- Ayoub, L.H. and Pooler, T. (2015). *Coming Home to Harlem: A Randomized Controlled Trial of the Harlem Parole Reentry Court*. Center for Court Innovation, New York, NY. Retrieved on November 1, 2015 from: <u>http://www.courtinnovation.org/sites/default/files/documents/Harlem%20Final%20Report%</u> <u>20-%20June.pdf</u>
- Bailey, G. (n.d.). Integrated Substance Abuse Treatment in a Federally Qualified Health Center. Presentation prepared for the SAMHSA-HRSA Center for Integrated Health Solutions. Retrieved on November 3, 2015, from http://www.integration.samhsa.gov/about-us/
 Treatment Innovations Perspectives from Addiction Providers Integrating Primary Care.pdf
- Baker, C. (October 15, 2015). Governor Baker Files Landmark Substance Use Legislation: Bill Boosts Opioid Education, Tightens Prescribing, and Adds Pathway to Treatment. Press Release, October 15, 2015. Retrieved on October 25, 2015 at: <u>http://www.mass.gov/governor/press-office/press-releases/</u> <u>fy2016/governor-baker-files-landmark-substance-use-legislation.html</u>
- Baker, C. (November 4, 2015). *Baker-Polito Administration Launches New Substance Misuse Anti-Stigma Campaign*. Press Release, November 4, 2015. Retrieved on November 4, 2015 at: <u>http://www.mass.gov/governor/press-office/press-releases/fy2016/new-substance-misuse-anti-stigma-campaign-launched.html</u>
- Baker, C. (November 9, 2015). Baker-Polito Administration Announces Groundbreaking Medical School Program to Curb Opioid Crisis. Press Release, November 9, 2015. Retrieved on November 10, 2015 at: http://www.mass.gov/governor/press-office/press-releases/fy2016/medical-school-program-tocurb-opioid-crisis-announced.html
- Beacon Health Options. (June 2015). *Confronting the Crisis of Opioid Addiction A Beacon Health Options White Paper*. Boston, MA. Retrieved on September 14, 2015 at: <u>http://beaconlens.com/wp-content/uploads/2015/07/Confronting-the-Crisis-of-Opioid-Addiction.pdf</u>

- Becker, D. (August 11, 2015). *State Looks to Reform Handling of Involuntary Commitments for Substance Abuse*. WBUR News 90.9, Boston, MA.
- Belenko, S. Patapis, N. and French, M.T. (2005). *Economic Benefits of Drug Treatment: A critical review of the evidence for policy makers*. Treatment Research Institute at the University of Pennsylvania, Philadel-phia, PA.
- Berry, D.H. (2015). Unlikely alliance pushes for criminal justice reforms. The News Star, September 18, 2015. Retrieved on October 24, 2015 at: <u>http://www.thenewsstar.com/story/news/politics/2015/09/18/</u> unlikely-alliance-pushes-criminal-justice-reforms/72432208/
- Bhati, A. S., Roman, J. K., & Chalfin, A. (2008). *To Treat or not to Treat: Evidence on the prospects of Expanding Treatment to Drug-involved Offenders*. Washington, DC: The Urban Institute.
- BJA. (n.d.). Justice Reinvestment Initiative. Bureau of Justice Assistance. BJA Website at <u>https://www.bja.gov/programs/justicereinvestment/what_is_jri.html</u>
- Brolin, M.F. and Dunigan, R. (2015). WISR Recidivism Analysis through December 2014. Report prepared for Advocates, Inc., Framingham, MA.
- Brolin, M.F., Horgan, C.M., Amaro, H. and Doonan, M. (2005). Substance Abuse Treatment in Commonwealth of Massachusetts: Gaps, Consequences and Solutions. Issue Brief, The Massachusetts Health Policy Forum, 2005.
- Bump, S. M. (February 25, 2015). An Examination of State Policies and Practices Regarding Medicaid Coverage for Inmate Inpatient Healthcare Costs - For the period January 1, 2011 through December 31, 2012 (Audit No. 2013-5155-3M). Boston, MA. Retrieved on November 1, 2015 from <u>http://</u> www.mass.gov/auditor/docs/audits/2015/201351553m1.pdf
- BJS. (2004). Survey of Inmates in State and Federal Correctional Facilities: Alcohol and Crime Data from 2002 to 2008. Bureau of Justice Statistics. Retrieved on September 2, 2015 from: <u>http://www.bjs.gov/</u> <u>content/acf/29 prisoners and alcoholuse.cfm</u>
- Capoccia, V.A., Grazier, K.L., Toal, C., Ford, J.H., Gustafson, D.H. (2012). Massachusetts's Experience Suggests Coverage Alone is Insufficient to Increase Addiction Disorders Treatment. *Health Affairs* 31.5 (2012): 1000-8.
- Carey, S. and Finigan, M. (2013). A Detailed Cost Analysis in a Mature Drug Court Setting: A Cost-Benefit Evaluation of the Multnomah County Drug Court. Prepared for: Office of Research and Evaluation, National Institute of Justice, Washington, D.C.
- Carnevale Associates. (April 2013). Information Brief The Affordable Care Act: Shaping Substance Abuse Treatment - Examining the Financing and Provision of Substance Abuse Treatment. Research and Policy Analysis Group of Carnevale Associates LLC. Gaithersburg, MD. Retrieved on October 24, 2015 from: <u>http://www.carnevaleassociates.com/the_affordable_care_act-</u> <u>shaping_substance_abuse_treatment_final.pdf</u>

- Carson, E.A. (2014). *Prisoners in 2013*. U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. September 2014, NCJ 24728. Retrieved on October 24, 2015 from http://www.bjs.gov/content/pub/pdf/p13.pdf
- Center on Addiction and Substance Abuse. (2010). *Behind Bars II: Substance Abuse and America's Prison Population*. Columbia University, New York, NY. Retrieved on September 25, 2015 from: <u>http://</u> <u>www.casacolumbia.org/addiction-research/reports/substance-abuse-prison-system-2010</u>
- CHIA, 2015. Access to Substance Use Disorder Treatment in Massachusetts. Center for Health Information and Analysis. April, 2015. Retrieved on May 15, 2015 from <u>http://www.chiamass.gov/assets/Uploads/</u> <u>SUD-REPORT.pdf</u>
- Center for Substance Abuse Treatment. (2005). *Substance Abuse Treatment for Adults in the Criminal Justice System*. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2005. (Treatment Improvement Protocol (TIP) Series, No. 44.) Available from: <u>http://www.ncbi.nlm.nih.gov/books/NBK64137/</u>
- Clear, T. (2007). Imprisoning Communities: How Mass Incarceration Makes Disadvantaged Neighborhoods Worse. New York: Oxford University Press.
- Collins, D.J., and Lapsley, H.M. (2008). *The Costs of Tobacco, Alcohol and Illicit Drug Abuse to Australian Society in 2004/2005.* New South Wales: Commonwealth of Australia.
- Collins, S.E., Lonczak, H.S., Clifasefi, S.L. (2015). *LEAD Program Evaluation: Recidivism Report*. Harm Reduction Research and Treatment Lab, University of Washington – Harborview Medical Center. Retrieved on November 1, 2015 from: <u>http://static1.1.sqspcdn.com/static/</u> <u>f/1185392/26121870/1428513375150/LEAD_EVALUATION_4-7-15.pdf</u>
- Connery, H. S. (2015). Medication-Assisted Treatment of Opioid Use Disorder: Review of the Evidence and Future Directions. *Harvard Review of Psychiatry*, 23(2), 63-75. doi:10.1097/hrp.0000000000000075

Conversation with (2006). Conversation with M. Douglas Anglin. Addiction 101(2): 169-180.

- Cook, B. and M. Alegría (2011). Racial-Ethnic Disparities in Substance Abuse Treatment: The Role of Criminal History and Socioeconomic Status. *Psychiatric Services (Washington, D.C.)* 62(11): 1273-1281.
- Criminal Justice Policy Coalition. (2015). Criminal Justice & Prison-Related Bills: 2015 2016 Session of the Massachusetts Legislature, Last updated May 29, 2015. Retrieved on October 31, 2015 from: <u>http://www.cipc.org/Legislation.htm</u>
- CSG. (2015). Justice Reinvestment in Washington: Analysis and Policy Framework. The Council of State Governments, Justice Center. January, 2015. Retrieved on November 1, 2015 from <u>https://</u> <u>csgjusticecenter.org/wp-content/uploads/2015/01/JusticeReinvestmentinWashington.pdf</u>
- CSG Justice Center Staff. (2015). *Massachusetts Names Working Group for Justice Reinvestment Initiative*. Council of State Governments, Justice Center, October 29, 2015. Retrieved on November 1, 2015 from <u>https://csgjusticecenter.org/jr/massachusetts/posts/massachusetts-names-working-group-for-justice-reinvestment-initiative/</u>

- Davis, C., & Cloud, D. (February 2015). Bridging the Gap Improving the Health of Justice-Involved People through Information Technology. Vera Institute of Justice, Rockville, MD. Retrieved on October 24, 2015 from: <u>http://www.vera.org/sites/default/files/resources/downloads/samhsa-justice-healthinformation-technology.pdf</u>
- DeFina, R.H., & Hannon, L. (2010). The impact of adult incarceration on child poverty: A county-level analysis, 1995-2007. *The Prison Journal, 90,* 377-396. DOI: 10.1177/0032885510382085

Deming, WE. Out of Crisis: MIT Center for Advanced Engineering Study; 1986.

- DMA Health Strategies. (January 2015). Addiction and Recovery Services in the City of Boston A Blueprint for Building a Better System of Care, Lexington, MA. Retrieved on February 15, 2015 at: <u>http://www.cityofboston.gov/news/uploads/7551_21_20_25.pdf</u>
- DMH. (2014). Pre-arrest Law Enforcement Based Jail Diversion Programs 2015: Fact Sheet. Massachusetts Department of Mental Health. Retrieved on October 21, 2015 from: <u>http://www.mass.gov/eohhs/</u> <u>docs/dmh/forensic/jdp-fact-sheet.pdf</u>
- DMH, Forensic Services. (2014). Pre-Arrest Law Enforcement-Based Jail Diversion Program Report: July 1, 2011 to January 1, 2014. Department of Mental Health Forensic Services. Retrieved on November 13, 2015 from: <u>https://www.google.com/url?</u> <u>sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CBwQFjAAahUKEwil8Meu2I3JAh</u> <u>VHVj4KHaLWDGw&url=http%3A%2F%2Fwww.mass.gov%2Feohhs%2Fdocs%2Fdmh%2Fforensic%</u> 2Fjail-diversion-program-2014.doc&usg=AFQjCNFchrMOcgrrQVKIXutd2wsZ-rYpfg
- Drug Policy Alliance. (June 2015). *The Drug War, Mass Incarceration and Race*. New York, NY. Retrieved on October 21, 2015 from <u>http://www.drugpolicy.org/sites/default/files/</u> DPA Fact Sheet Drug War Mass Incarceration and Race June2015.pdf
- Eleventh Judicial Circuit. (2014). *Eleventh Judicial Criminal Mental Health Project Program Summary*. Eleventh Judicial Circuit, Miami Dade County, FL. Retrieved on October 24, 2015 from: <u>http://4realchange.org/wp-content/uploads/2014/10/CMHP-Program-Description-2014.pdf</u>
- Farole, D.J. (2003). *The Harlem Parole Reentry Court Evaluation Implementation and Preliminary Impacts*. Submitted to the New York State Division of Criminal Justice Services and the United States Bureau of Justice Assistance.
- Finigan, M. (1996). Societal Outcomes and Cost Savings of Drug and Alcohol Treatment in the State of Oregon. Salem, OR: Office of Alcohol and Drug Abuse Programs, Oregon Department of Human Resources.
- Fisher, M. (August 16, 2015). In heroin fight, White House will push treatment. *Washington Post*. Retrieved on September 20, 2015 from: <u>https://www.washingtonpost.com/politics/in-heroin-fight-white-house</u> <u>-tries-to-break-down-walls-between-public-health-police/2015/08/16/f63d63c2-4425-11e5-8ab4c73967a143d3_story.html</u>
- Forman, B., & Larivee, J. (March 2013). *Crime, Cost, and Consequences: It it Time to Get Smart on Crime?* MassINC, Boston, MA. Retrieved on October 23, 2015 from <u>www.massinc.org</u>

- Fox, A. D. (2015). Sign of the Times: Part I Opioid Addiction and Criminal Justice Systems: Opportunities to Break the Cycle of Incarceration, *SGIM Forum*, *38*(1), 1-2.
- French, M., McGeary, K., Chitwood, D.D., McCoy, C.B., Inciardi, J.A. and McBride, D. (2000). Chronic drug use and crime. *Substance Abuse*, *21*(2):95–109.
- Gabor, T. and Crutcher, N. (2002). *Mandatory Minimum Penalties: Their Effects on Crime, Sentencing Disparities, and Justice System Expenditures*. Retrieved on October 26, 2015 from: <u>http://www.justice.gc.ca/</u> <u>eng/rp-pr/csj-sjc/ccs-ajc/rr02_1/rr02_1.pdf</u>
- Gants, R. (2015). Annual Address: State of the Judiciary, Remarks by Ralph D. Gants, Chief Justice of the Supreme Judicial Court. Great Hall, John Adams Courthouse, Boston, Massachusetts, October 20, 2015.
- Gates, A. Artiga, S. and Rudowitz, R. (2014). *Health Coverage and Care for the Adult Criminal Justice-Involved Population*. The Kaiser Commission on Medicaid and the Uninsured, The Henry J. Kaiser Family Foundation. September, 2014. Retrieved on October 25, 2015 from: http://kff.org/uninsured/issue-brief/ health-coverage-and-care-for-the-adult-criminal-justice-involved-population/
- Gerstein, D. R., Harwood, H. J., Suter, N., & Malloy, K. (1994). *Evaluating Recovery Services: The California Drug and Alcohol Treatment Assessment (CALDATA)*. State of California, Department of Alcohol and Drug Programs.
- Glaze, L.E., & Kaeble, D. (2014). Correctional Populations in the United States, 2013. U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. December 2014, NCJ 248479. Retrieved on October 24, 2015 from http://www.bjs.gov/index.cfm?ty=pbdetail&iid=5177%20%20
- Governor's Opioid Working Group. (2015). *Recommendations of the Governor's Opioid Working Group*. June 11, 2015. Retrieved on June 11, 2015 from <u>http://www.mass.gov/eohhs/gov/departments/dph/stop-addiction/recommendations-from-the-governors-opioid-addiction-working-group.html</u>
- Hargrave, G.E., Hiatt, D., Alexande, R., Shaffer, I.A. (2008). EAP Treatment Impact on Presenteeism and Absenteeism: Implications for Return on Investment. *Journal of Workplace Behavioral Health, 23*(3):283 –293
- Harwood, H.J., Malhotra, D., Villarivera, C., Liu, C., Chong, u. and Gilani, J. (2002). Cost Effectiveness and Cost-Benefit Analysis of Substance Abuse Treatment: A literature review. Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment, U.S. Department of Health and Human Services, Rockville, MD.
- Haskins, A.R. (2015). Paternal incarceration and child-reported behavioral functioning at age 9. *Social Science Research*, *52*, 18-33. DOI: <u>http://dx.doi.org/10.1016/j.ssresearch.2015.01.001</u>
- Henrichson, C., & Delaney, R. (2012). *The Price of Prisons: What incarceration costs taxpayers*. VERA Institute of Justice. Retrieved on September 10, 2015 from: <u>http://www.vera.org/sites/default/files/resources/downloads/price-of-prisons-updated-version-021914.pdf</u>

- HHS Press Office. (September 17, 2015). HHS hosts 50-state convening focused on preventing opioid overdose and opioid use disorder, takes important step to increase access to treatment [Press release].
 U.S. Department of Health and Human Services. Retrieved on October 21, 2015 from: <u>http://</u> www.hhs.gov/about/news/2015/09/17/hhs-hosts-50-state-convening-focused-preventing-opioidoverdose-and-opioid-use-disorder.html
- Hiller, M. L., Knight, K., & Simpson, D. D. (1999). Prison-based substance abuse treatment, residential aftercare and recidivism. *Addiction*, *94*(6), 833-842.
- Honig, J. (2015). Should Massachusetts Put Women with a Substance Abuse Problem in Prison?: A critique of the use of G.L. c. 123, Section 35 to involuntarily commit female drug and alcohol abusers. *Boston Bar Journal*, January 7, 2015. Retrieved on October 25, 2015 from <a href="http://bostonbarjournal.com/2015/01/07/should-massachusetts-put-women-with-a-substance-abuse-problem-in-prison-a-critique-of-the-use-of-g-l-c-123-%C2%A7-35-to-involuntarily-commit-female-drug -and-alcohol-abusers/
- Horgan, C.M., Skwara, K., and Strickler, G. (2001). *Substance Abuse: The Nation's Number One Health Problem—Key Indicators for Policy*. Published by the Robert Wood Johnson Foundation, Princeton, NJ. February 2001.
- Horgan, C.M., Hodgkin, D., Stewart, M.T., Quinn, A., Merrick, E.L., Reif, S., Garnick, D.W., and Creedon, T.B. (2015). Health Plans' early response to federal parity legislation for mental health and addiction services. *Psychiatric Services*, 2015 Sept 15:appips201400575. [Epub ahead of print]
- Horgan, C.M., Stewart, M.T., Reif, S., Garnick, D.W., Hodgkin, D., Merrick, E.L., and Quinn, A.E.. (In press). Behavioral Health Services in the Changing Landscape of Private Health Plans. *Psychiatric Services*.
- Horwitz, S. (October 6, 2015). Justice Department Set to Free 6,000 Prisoners, Largest One-time Release. Retrieved on October 7, 2015 from: <u>https://www.washingtonpost.com/world/national-security/justicedepartment-about-to-free-6000-prisoners-largest-one-time-release/2015/10/06/961f4c9a-6ba2-11e5aa5b-f78a98956699_story.html</u>
- ICER. (September 2014). An Action Guide for Management of Opioid Dependence: Next Steps for Payers and Policymakers. Prepared by The Institute for Clinical and Economic Review in conjunction with The New England Comparative Effectivenss Public Advisory Council, Boston, MA.
- James., D.J. and Glaze, L.E. (2006). *Mental Health Problems of Prison and Jail Inmates. U.S. Department of Justice, Office of Justice Programs.* Washington, D.C. (NCJ213600). Retrieved on October 17, 2015 from <u>http://www.bjs.gov/content/pub/pdf/mhppji.pdf</u>
- Jones, A. and Forman, B. (2015). *Exploring the Potential for Pretrial Innovation in Massachusetts*. MassInc. Policy Brief, September, 2015. Retrieved on October 30, 2015 from: <u>http://massinc.org/research/exploring-the-potential-for-pretrial-for-pretrial-innovation-in-massachusetts/</u>
- Kates, E. (2013). Moving Beyond Prisons: Creating Alternative Pathways for Women. Briefing Note #1: Civil commitments for women in Massachusetts. Wellesley Centers on Women, Massachusetts Women's Justice Network 2012-2013. Retrieved on October 21, 2015 from: <u>https://www.wcwonline.org/pdf/</u> <u>ekates/CivilCommitmentsForWomenInMArev.pdf</u>

- Karberg, J. C., & James, D. J. (July 2005). Substance Dependence, Abuse, and Treatment of Jail Inmates, 2002.
 U.S. Department of Justice, Office of Justice Programs. Washington, DC. (NCJ 209588). Retrieved on October 17, 2015 from http://www.ojp.usdoj.gov
- Kinlock, T. W., Gordon, M. S., Schwartz, R. P., O'Grady, K., Fitzgerald, T. T., & Wilson, M. (2007). A randomized clinical trial of methadone maintenance for prisoners: Results at one month post-release. *Drug* and Alcohol Dependence, 91(2-3), 220-227. doi:10.1016/j.drugalcdep.2007.05.022
- Kirby, P., Ferguson, W., Lawthers, A. (n.d.). *Post-Release MassHealth Utilization*. A presentation prepared by the Center for Health Policy and Research, UMass Medical School.
- Kyckelhahn, T. (2014). State Corrections Expenditures, FY 1982-2010. U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved on September 10, 2015 from: <u>http://www.bjs.gov/content/pub/pdf/scefy8210.pdf</u>
- LaBelle, C.T., Han, S.C., Bergeron, A., and Samet, J.H. (2015). Office-based opioid treatment with Buprenorphine (OBOT-B): Statewide implementation of the Massachusetts Collaborative Care Model in community health centers. *Journal of Substance Abuse Treatment* (2015), http://dx.doi.org/10.1016/ j.sat.2015.06.010
- LaVigne, N., Bieler, S., Cramer, L., Ho, H., Kotonias, C., Mayer, D., McClure, D., Pacifici, L. Parks, E., Peterson, B. and Samuels, J. (2014). *Justice Reinvestment Initiative State Assessment Report*. Urban Institute.
- Law Enforcement Leaders. (2015). Statement of Principles: Law Enforcement Leaders to Reduce Crime & Incarceration. Retrieved on October 23, 2015 from <u>http://lawenforcementleaders.org/wp-content/</u> <u>uploads/2015/10/Statement_of_Principles.pdf</u>
- Lengyel, T. (2006). Spreading the Pain: The Social Cost of Incarcerating Parents. Alliance for Children and Families. Milwaukee, WI. Retrieved on October 29, 2015 from: <u>realcostofprisons.org/materials/</u> <u>Spreading-the-Pain-Working-Draft.doc</u>
- Lockmer, E. (March 2014). *Mandatory Minimum Drug Sentences: One year after the Governor's Crime Bill.* Massachusetts Department of Correction, Boston, MA. Retrieved on October 19, 2015 from: <u>http://www.mass.gov/eopss/docs/doc/research-reports/briefs-stats-bulletins/mando-drug-brief-3-31-2014-final.pdf</u>
- Lundgren, L. M., Amodeo, M., Ferguson, F., & Davis, K. (2001). Racial and ethnic differences in drug treatment entry of injection drug users in Massachusetts. *Journal of Substance Abuse Treatment*, 21(3), 145-153. doi:http://dx.doi.org/10.1016/S0740-5472(01)00197-0
- Lynch, S.M., Dehart, D.D., Belknap, J., & Green, B.L. (2012). *Women's Pathways to Jail: The roles and intersections of serious mental illness and trauma*. Submitted to the Bureau of Justice Assistance. Retrieved on September 26,2015 from: <u>https://www.bja.gov/Publications/Women_Pathways_to_Jail.pdf</u>
- MA Bar Association. (2008). *The Failure of the War on Drugs: Charting a new course for the Commonwealth*. Massachusetts Bar Association Drug Policy Task Force. Boston, MA. Retrieved on October 17, 2015 from <u>http://www.massbar.org/media/520275/drug%20policy%20task%20force%20final%</u> <u>20report.pdf</u>

- MA EOPSS. (2015). Frequently Asked Questions about the DOC. Massachusetts Executive Office of Public Safety and Security. Last updated March, 2015. Web page: <u>http://www.mass.gov/eopss/agencies/</u> <u>doc/fags-about-the-doc.html</u>
- MacQuarrie, B. (July 1, 2014). Suit challenges state's civil drug-abuse commitments. *The Boston Globe*, July, 1, 2014.
- Massachusetts Sentencing Commission. (2012). Survey of Sentencing Practices FY 2011. Boston, MA. Retrieved on October 22, 2015 from: <u>http://www.mass.gov/courts/docs/admin/sentcomm/</u> <u>fy2011survey.pdf</u>
- Marlowe, D.B. (2010). *Research Update on Adult Drug Courts*. National Association of Drug Court Professionals. December 2010. Retrieved on October 16, 2015 from http://www.nadcp.org/sites/default/files/nadcp/Research%20Update%20on%20Adult%20Drug%20Courts%20-%20NADCP_1.pdf
- Massachusetts Court System. (October 13, 2015). *Massachusetts Trial Court Awarded Federal Grants to Drug Courts in Barnstable and Bristol Counties* [Press release]. Retrieved on October 20, 2015 from: <u>http://</u> <u>www.mass.gov/courts/news-pubs/sjc/mass-trial-court-awarded-federal-grants-to-drug-courts-in-</u> <u>barnstable-and-bristol-counties.html</u>
- Mass.gov, (n.d.). Section 35 FAQ. Retrieved on September 25, 2015 from: <u>http://www.mass.gov/eohhs/gov/departments/dph/programs/substance-abuse/addictions/drugs-and-alcohol/section-35-faq.html</u>
- MA DOC. (May 2014). Prison Population Trends 2013. Massachusetts Department of Correction, Research and Planning Division. Retrieved on October 21, 2015 from <u>http://www.mass.gov/eopss/docs/doc/</u> <u>research-reports/pop-trends/prisonpoptrends-2013-final-5-21-2014.pdf</u>
- MA DOC. (April 2015). *Prison Population Trends 2014*. Research and Planning Division, Massachusetts Department of Correction. Retrieved on October 30, 2015 from <u>http://www.mass.gov/eopss/docs/doc/</u> <u>research-reports/pop-trends/prisonpoptrends-2014-05042015-final.pdf</u>
- MA DOC. (10/12/2015). Weekly Count Sheet. Massachusetts Department of Correction. Retrieved on October 30, 2015 from <u>http://www.mass.gov/eopss/docs/doc/research-reports/wkly-countsheet/2015/</u> week-count-10122015.pdf
- MDPH (2014). Opioid Overdose Response Strategies in Massachusetts. Massachusetts Department of Public Health, Bureau of Substance Abuse Services. April, 2014. Retrieved on November 2, 2015 from http://www.mass.gov/eohhs/docs/dph/substance-abuse/opioid/overdoseresponsestrategies.pdf
- MDPH (2015). Data Brief: Fatal opioid-related overdoses among Massachusetts residents. Massachusetts Department of Public Health. Retrieved on October 30, 2015 from <u>http://www.mass.gov/eohhs/</u> <u>docs/dph/quality/drugcontrol/county-level-pmp/data-brief-aug-2015-overdose-county.pdf</u>
- McCoy, T. (17th of August, 2015). The 'only town' in America where cops grant amnesty to drug addicts seeking help. *The Washington Post*. Retrieved on September 22, 2015 from: <u>http://</u> <u>www.washingtonpost.com/news/inspired-life/wp/2015/08/17/the-only-town-in-america-wherecops-grant-amnesty-to-drug-addicts-seeking-help/</u>

- Melby, L. (2015). *Modern History of Opioids*. Graphic created by Lauren Melby, Masters in Public Policy student at the Heller School for Social Policy and Management, Brandeis University, 2015. Used with permission.
- Messina, N., et al. (2010). A randomized experimental study of gender-responsive substance abuse treatment for women in prison. *Journal of Substance Abuse Treatment 38*(2): 97.
- Midgley, E. K., & Lo, C.C. (2013). The role of a parent's incarceration in the emotional health and problem behaviors of at-risk adolescents. *Journal of Child & Adolescent Substance Abuse, 22,* 85-103. DOI: 10.1080/1067828X.2012.730350
- Minton, T. D. and Golinelli, D. (May 2014). *Jail Inmates at Midyear 2013 Statistical Tables*. NCJ 245350, Washington, DC: United States Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
- Miller, J. (2015). An unlikely alliance forms between Koch brothers and liberal groups. *CBS News*, February 19, 2015. Retrieved on October 24, 2015 from: <u>http://www.cbsnews.com/news/koch-brothers-conservative-liberal-groups-unite-on-criminal-justice-reform/</u>
- Mumola, C. and Karberg, J.C. (2007). *Drug Use and Dependence, State and Federal Prisoners, 2004*. U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics Special Report, NCJ 213530. Revised January 19, 2007. Retrieved on October 20, 2015 from <u>http://www.bjs.gov/content/</u> <u>pub/pdf/dudsfp04.pdf</u>
- Musto, D. (1987). *The American Disease: Origins of Narcotic Control*. Expanded edn. New York: Oxford University Press.
- NADCP. (2015). *Drug Court History*. National Association of Drug Court Professionals website: <u>http://</u> www.nadcp.org/learn/what-are-drug-courts/drug-court-history, Accessed on October 30, 2015.
- NDCRC. (2014). *How Many Drug Courts Are There*? National Drug Court Resource Center website: <u>http://www.ndcrc.org/content/how-many-drug-courts-are-there</u>, Accessed on October 30, 2015.
- NDIC. (2011). National Threat Assessment: the Economic Impact of Illicit Drug Use on American Society. May 2011. National Drug Intelligence Center, Department of Justice, Washington, DC.
- NHTSA. (2013). Fatality Analysis Reporting System (FARS): FARS Data Tables: States. National Highway Traffic Safety Administration. Retrieved on October 24, 2015, from <u>http://www-fars.nhtsa.dot.gov/States/</u> <u>StatesAlcohol.aspx</u>
- NIDA. (2008). Comorbidity: Addiction and other mental illness. Research Report Series. National Institute on Drug Abuse, National Institutes of Health. NIH Publication Number 10-5771. Retrieved on September 26, 2015 from: <u>https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/rrcomorbidity.pdf</u>
- NIDA. (n.d.), *Trends and Statistics: The costs of substance abuse*. National Institute on Drug Abuse. Retrieved on October 24, 2015, from <u>https://www.drugabuse.gov/related-topics/trends-statistics</u>
- NIJ. (2012). "Swift and Certain" Sanctions in Probation Are Highly Effective: Evaluation of the HOPE Program. National Institute of Justice website: <u>http://www.nij.gov/topics/corrections/community/drug-offenders/pages/hawaii-hope.aspx</u>, Accessed on October 31, 2015.

- Norton, M. P., & Young, C. A. (August 3, 2015). Top Mass. Officials Unite Around Criminal Justice Reform Initiative. WBUR News.
- PAARI, (n.d.). *Police Assisted Addiction and Recovery Initiative*. Retrieved on September 12, 2015 from: <u>http://paariusa.org/about-us/</u>
- Pew Center on the States. (September 2011). *Risk/Needs Assessment 101: Science reveals new tools to manage offenders*. The Pew Center on the States. Retrieved on October 15, 2015 from http://www.pewtrusts.org/~/media/legacy/uploadedfiles/pcs_assets/2011/pewriskassessmentbriefpdf.pdf
- PEW. (2014). *Mandatory Reentry Supervision*. A brief from The PEW Charitable Trusts. June, 2014. Retrieved on November 1, 2015 from: <u>http://www.pewtrusts.org/~/media/assets/2014/06/</u> <u>pspp_kentucky_brief.pdf</u>
- Pinals, D. A., Packer, I. K., Fisher, W., & Roy-Bujnowski, K. (2004). Relationship Between Race and Ethnicity and Forensic Clinical Triage Dispositions. *Psychiatric Services*, 55(8), 873-878. doi:doi:10.1176/ appi.ps.55.8.873
- Ramirez, J. R., & Crano, W. D. (2003). Deterrence and incapacitation: An interrupted time-series analysis of California's three-strikes law. *Journal of Applied Social Psychology*, 33(1), 110-144. doi:10.1111/j.1559 -1816.2003.tb02076.x
- Riley, R. (July 18, 2015). Methuen police launch initiative to offer drug addicts helping hand. *Boston Globe*, July 18, 2015.
- Saloner, B., Carson, N., & Lê Cook, B. (2014). Explaining racial/ethnic differences in adolescent substance abuse treatment completion in the United States: A decomposition analysis. *The Journal of Adolescent Health: official publication of the Society for Adolescent Medicine, 54*(6), 646-653. doi:10.1016/ j.jadohealth.2014.01.002
- SAMHSA. (2013a). Massachusetts Tables 53 and 54. Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2012 and 2013. Retrieved on October 19, 2015 from: http://www.samhsa.gov/data/sites/default/files/NSDUHsaeSpecificStates2013/ NSDUHsaeMassachusetts2013.pdf
- SAMHSA. (2013b). *National Survey on Drug Use and Health, 2012 and 2013*. Center for Behavioral Health Statistics and Quality, Rockville, MD: Substance Abuse and Mental Health Services Administration, 2013.
- SAMHSA. (2014). Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings, NSDUH Series H-48, HHS Publication No. (SMA) 14-4863. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014. Retrieved on October 22, 2015 from: <u>http:// www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHTML2013/Web/ NSDUHresults2013.pdf</u>
- SAMHSA. (2015). *Behavioral Health Barometer: Massachusetts, 2014*. HHS Publication No. SMA-15-4895MA. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2015.
- Saris, P.B. (2015). Sentencing reform. Voice of the Judiciary, *Boston Bar Journal*, Summer 2015, Vol. 59, #3, July 8, 2015. Retrieved on October 24, 2014 from <u>http://bostonbarjournal.com/2015/07/08/</u> <u>sentencing-reform/</u>

- Sherman, L. Gottfredson, D., MaccKenzie, D., Eck, J., Reuter, P. and Bushway, S. (1997). Preventing Crime: What Works, What Doesn't, What's Promising. A Report to the United States Congress. Prepared for the National Institute of Justice, Office of Justice Programs. U.S. Department of Justice, Washington, D.C.
- Six Sigma Institute. (2015). Six Sigma Change Acceleration Process. Retrieved on October 29, 2015 from http://www.sixsigma-institute.org/ Six Sigma DMAIC Process Define Phase Change Acceleration Process CAP.php
- Spectrum. (2014). *Recovery Navigation for Medication-Assisted Treatment*. Project Abstract. Spectrum, Inc. Used with permission.
- Subramanian, R., Delaney, R., Roberts, S., Fishman, N. and McGarry, P. (2015). *Incarceration's Front Door: The Misuse of Jails in America*, Vera Institute. Retrieved on October 25, 2015 from http://www.vera.org/sites/default/files/resources/downloads/incarcerations-front-door-report.pdf
- The Editorial Board (August 06, 2015). Women addicts need treatment not prison. *The Boston Globe*. Retrieved on October 22, 2015 from <u>https://www.bostonglobe.com/opinion/editorials/2015/08/06/</u> women-addicts-need-treatment-not-prison/bAIF5Io2hDVIKz09RBKw5H/story.html
- Town of Arlington. (2015). APD Release Plan of Action for New Addiction Protocols. Retrieved on September 12, 2015 from: <u>http://www.arlingtonma.gov/Home/Components/News/3110/16</u>
- Walmsley, R. (2013). *World Prison Population List Tenth Edition*. International Centre for Prison Studies. Retrieved on September 15, 2015 from <u>http://www.apcca.org/uploads/10th_Edition_2013.pdf</u>
- Walton, T. (2014). *KentuckyOne Health Partners*. Presentation at "Bridging the Gap: Improving the Health of Justice-Involved Individuals through Information Technology." September 18, 2014. SAMHSA, Rock-ville, MD.
- Western, B. (2002). The impact of incarceration on wage mobility and inequality. *American Sociological Re*view, 67, 526-546.
- WSIPP. (December 2006). Washington's Drug Offender Sentencing Alternative: An Update on Recidivism Findings. Washington State Institute for Public Policy, Olympia, WA. Retrieved on October 30, 2015 from: <u>http://www.wsipp.wa.gov/ReportFile/961/Wsipp_Washingtons-Drug-Offender-Sentencing-Alternative-An-Update-on-Recidivism-Findings_Full-Report.pdf</u>
- Zarkin, G.A., Dunlap, L.J., Belenko, S., & Dynia, P. (2005). A benefit-cost analysis for the Kings County District Attorney's Office Drug Treatment Alternative to Prison (DTAP) program. *Justice Research and Policy*, 7 (1):1-26.