MassINC
RESEARCH. JOURNALISM. CIVIC LIFE.

POLICY BRIEF MARCH 2016

Mounting an Evidence-Based Criminal Justice Response to Substance Abuse and Drug Offending in Massachusetts

BENJAMIN FORMAN, JONATHAN JONES, AND ABIGAIL HILLER*

For policymakers seeking to reduce the costs and consequences of high rates of incarceration, the first order of business is finding effective solutions to better treat and manage substance abuse. When untreated or undertreated substance abusers enter the criminal justice system, the outcomes are often poor. Among individuals with many criminogenic risk factors, drug use may aggravate anti-social behavior and lengthen criminal careers. The resulting cycle of recidivism exacts a heavy toll on communities.[1]

A close examination of those in the criminal justice system reveals the extent of the problem. Studies nationally show that nearly half of all arrestees meet the criteria for substance-use disorder. At booking, two-thirds of individuals screened test positive for illicit substances, whether arrested on drug charges, violent crimes, or property offenses.[2] Even more concerning, approximately half of all jail inmates struggle with co-occurring mental illness.[3]

The prevalence of substance-use disorder and co-occurring mental illness in the criminal justice system today is at least partially attributable to the closure of state psychiatric hospitals in the 1970s and the inadequate provision of community-based mental health services. Behavior that was once treated with psychiatric services is now the responsibility of a criminal justice system ill equipped to handle the mentally ill.[4]

Fortunately, the mental health landscape is changing. The Affordable Care Act pressures insurers to provide parity for behavioral health services, including effective treatment for substance-use disorder. As a field, medicine is integrating behavioral health treatment into primary care, ensuring that those with mental health and substance-use conditions are properly diagnosed and able to take advantage of coordinated care.

But while these long-overdue improvements will make a difference, to some degree behavioral health will always be intertwined with criminal justice. From law enforcement to corrections, agencies at every level must contend with mentally ill people. Ideally, they would respond with evidence-based interventions designed to stop these individuals penetrating deeper into the system. In criminal justice circles, this approach is called the Sequential Intercept Model. The strategy aims to divert as many people from the justice

system as it can, while recognizing that some offenders with substance-use disorder will inevitably interact with the courts and corrections agencies.[5]

Controversially, these individuals often require coerced treatment. The most common objection is that coerced treatment will be ineffective because, as a large body of research demonstrates, motivation is central to recovery. Given limited treatment resources, forcing treatment upon those who are not motivated to change their behavior is therefore wasteful.[6] That said, a growing body of evidence suggests the threat of criminal punishment can provide motivation. In many cases, this form of coerced treatment is a cost-effective solution to drug-use behaviors that undermine public safety, but only if it is applied appropriately (see text box on page 8).

The key is to ensure that, in light of an individual's risk/need profile when considering both substance use and offending, evidence-based practices are uniformly in place. This is the essential step in safely and effectively diverting individuals out of the criminal justice system or delivering coerced treatment. In this respect, many criminal justice agencies in Massachusetts are at the leading edge. A number of police departments have embraced efforts to avoid arrests by training officers to identify behavioral health disorders and building relationships with community-based treatment providers. District attorneys are also expanding the use of diversion alternatives. The Trial Court is turning to drug courts and enhanced models of probation to help individuals escape addiction. The Department of Correction and county sheriffs are providing high-quality in-prison treatment, and they are partnering with the Parole Board, the Probation Service, and community-based organizations to offer effective care after release.

These developments are promising, but far from complete. Much work remains to demonstrate their efficacy and sustainability at the scale of the entire Commonwealth. To better understand gaps in services and craft strategies to address them, we need further progress on data collection. We also need to end tough-on-crime policies, especially mandatory-minimum sentences, which make individualized treatment difficult and which perpetuate the connection between the war on drugs and racial and ethnic disparities in the criminal justice system.

These developments are promising, but far from complete. Much work remains to demonstrate their efficacy and sustainability at the scale of the entire Commonwealth.

To inform those interested in learning more about this ongoing effort, we explore available data showing where Massachusetts stands vis-à-vis diverting substance users from criminal justice and caring for them in prison. We examine the range of evidence-based practice at each stage in the criminal justice system and describe efforts to implement these approaches. We conclude with ideas for policymakers and criminal justice and law enforcement officials, who can work together to lead Massachusetts into a new era of evidence-based response to substance abuse.

I. Examining Recent Trends in Massachusetts

We cannot begin to build this new era without understanding the demands substance abuse places on the criminal justice system in Massachusetts. Data are limited but nonetheless reveal important facts about the nature of substance abuse in the Commonwealth, the results when criminal justice resources respond to drug crime, and disparate racial and ethnic sentencing patterns for drug offenders.

1. Massachusetts struggles with high rates of substance abuse and a limited understanding of the forces driving this behavior.

On most measures, Massachusetts ranks among the healthiest states in the US, but substance abuse is an exception. Massachusetts places in the top ten states on survey measures of past-month illicit drug use and illicit drug dependence, the rate of drug-induced deaths in Massachusetts exceeds the national average by 30 percent, and recent reports suggest the share of infants born with narcotics in their

system is more than three times the national average.[7]

Explaining the higher prevalence of substance abuse in Massachusetts is difficult. Substance-use disorder is the result of both genetic vulnerability and environmental influences. The exact interplay between these risk factors is unique to each individual and each drug. Heroin addiction, an outsized component of the substance abuse problem in Massachusetts, is more subject to genetic influence, but environmental factors still predict about one-half of an individual's potential for heroin addiction.[8]

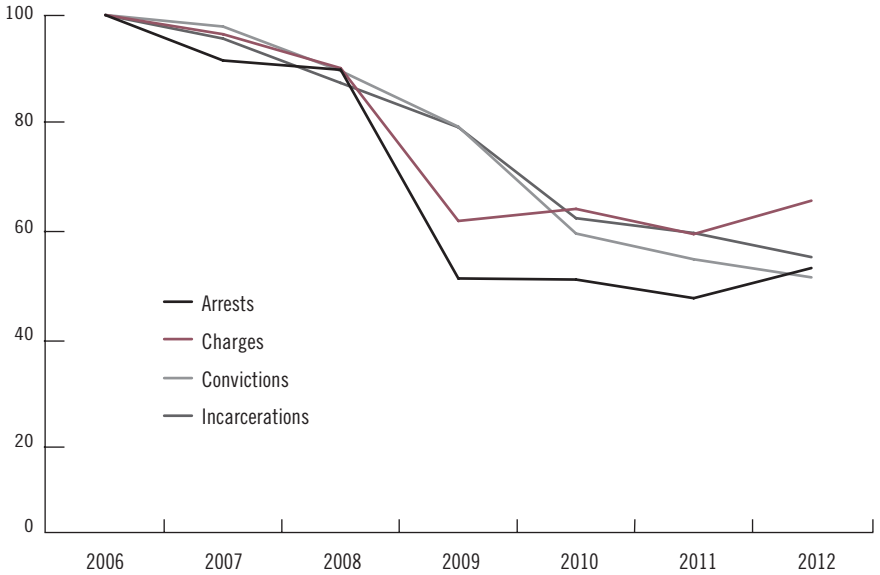
Research examining environmental factors behind regional variation in substance-abuse rates is extremely limited. We might be tempted to blame harsh winters, but there is little evidence linking climate to behavioral health disorders, and data show Massachusetts residents are no more likely to experience these conditions than are residents of warmer climes.[9] Societal attitudes could be a contributing factor: a 2014 peer-reviewed study published by the National Academy of Sciences found that Massachusetts is one of the most "tolerant" states in the US, and that more "tolerant" states tend to have higher rates of illicit drug use, controlling for other factors.[10]

Ready availability of opioids is more commonly seen as responsible for high rates of abuse. There is some evidence that the availability of opioids is related to drug abuse in the population—i.e., that supply induces demand, as opposed to demand leading to more supply—and Massachusetts and surrounding states do have significantly higher rates of prescribing for some opioid medications.[11]

Many studies link environmental determinants of substance-use disorder to severe experiences in early childhood. For instance, among twins with common genes, a sibling who suffered abuse in early childhood is six times more likely to struggle with opioid

Figure 1:

Arrest, charge, conviction, and incarceration rates for drug offenses (2006=100)

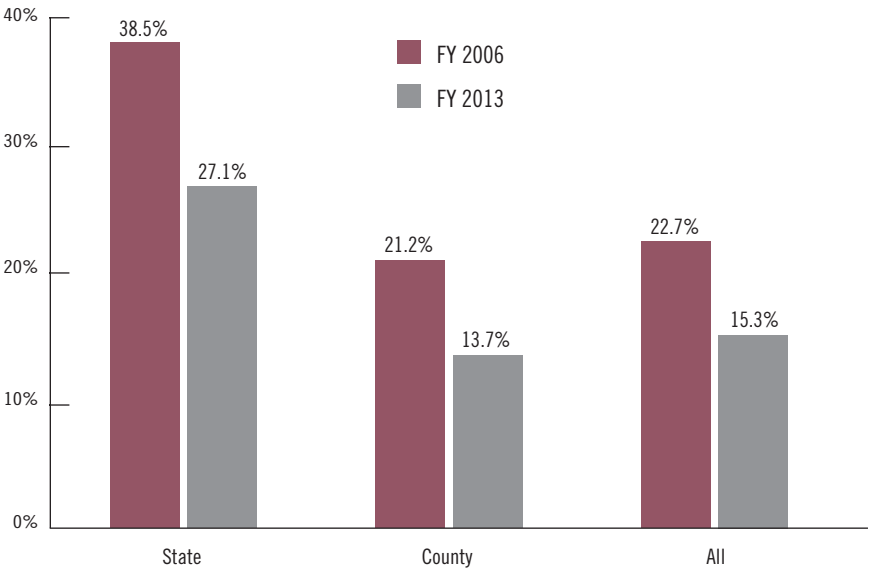


Source: MassINC analysis of data from FBI, Office of the Commissioner of Probation, and Massachusetts State Sentencing Commission

Note: Arrests and charges are measured on a calendar-year basis, while convictions and incarcerations are measured on a fiscal-year basis.

Figure 2:

Share of commitments to state and county prisons with governing drug offenses



Source: MassINC analysis of data from Massachusetts State Sentencing Commission

Table 1:

Drug court enrollees, terminations, and graduations, 2013 and 2014

	2013			2014		
	ENROLLEES	TERMINATIONS	GRADUATIONS	ENROLLEES	TERMINATIONS	GRADUATIONS
Ayer	11	4	5	11	6	4
Barnstable	33	17	8	41	21	0
Cambridge	0	0	0	0	0	0
Charlestown	16	2	0	10	6	3
Chelsea	21	10	4	33	10	11
Concord	9	3	2	7	3	0
Dorchester	20	10	5	26	13	4
Dudley	-	-	-	34	0	0
East Boston	9	5	6	14	8	4
Greenfield	14	6	11	3	6	10
Lawrence	56	10	4	39	9	1
Lowell	-	-	-	35	1	0
Lynn	44	20	11	37	17	16
Malden	19	10	5	20	12	6
New Bedford	32	7	6	67	10	11
Newton	5	1	0	3	1	0
Orange	7	5	4	14	5	8
Plymouth	87	27	24	101	41	40
Quincy	30	19	10	44	23	12
South Boston	0	0	0	0	0	0
Total	**413**	**156**	**105**	**539**	**192**	**130**

Source: Massachusetts Probation Service

dependence later in life.[12] Though reliable data are not available to compare rates across states, recent experience at the Department of Children and Families indicates that Massachusetts may have a particularly acute problem with child abuse and neglect.

While these are all valid hypotheses, the fact is we have a very limited understanding of why Massachusetts faces relatively high rates of substance use despite having a generally healthy population. To develop an effective prevention response, leaders require a more complete picture of the drivers behind elevated substance use in Massachusetts.

2. Sentencing reform and diversion are lowering incarceration rates for drug offenders in Massachusetts. However, those struggling with substance-use disorder continue to place heavy demands on the state's prisons and jails.

In recent years, Massachusetts has begun to reverse the tough-on-crime era's precipitous increase in drug-offense incarcerations. The rates of arrest, conviction, and incarceration for drug crimes have all fallen significantly since 2006 (Figure 1).

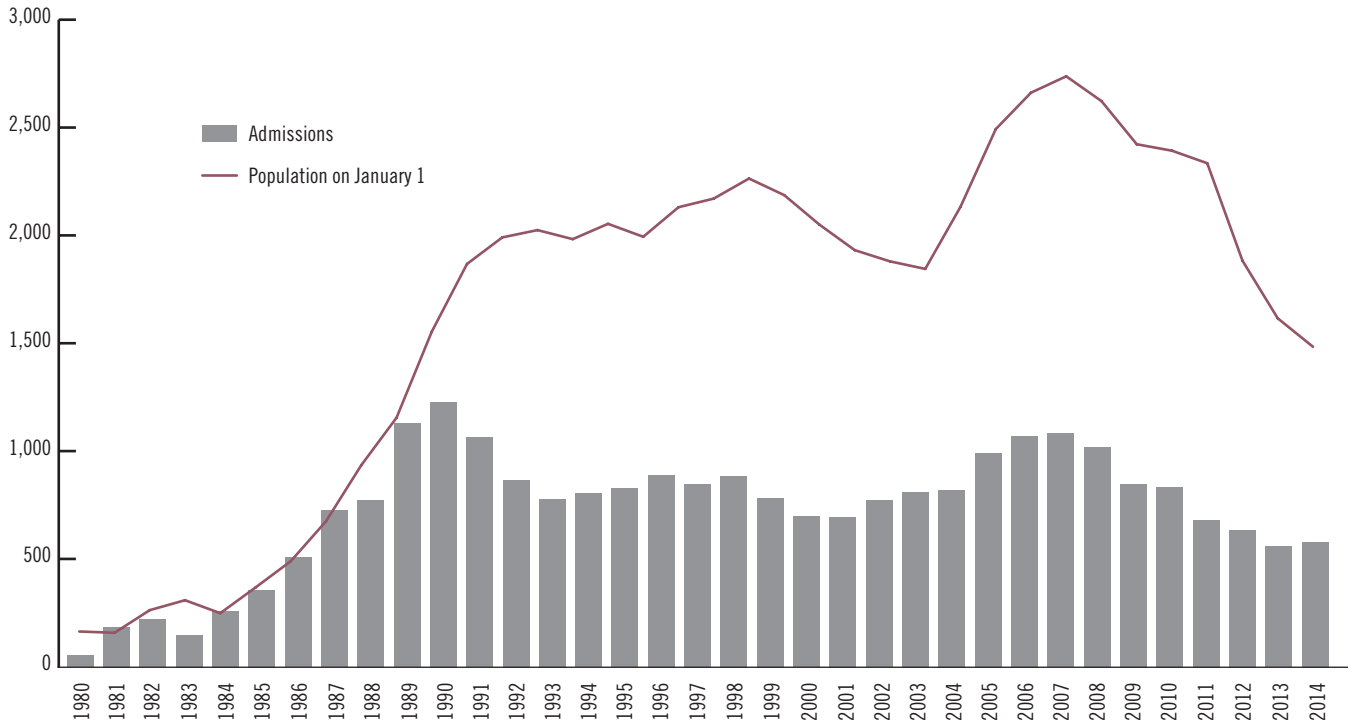
Between FY 2006 and FY 2013, commitments to state and county prisons for drug offenses declined by 50 percent; commitments for all other offenses fell just 19 percent over this period. As a result, the share of individuals committed to state and county prisons with governing drug offenses fell from 23 percent in FY 2006 to 15 percent in FY 2013; the drop in drug offenses as a share of all commitments to state prisons was particularly sharp (Figure 2).

Recent reforms to drug laws played a significant role in the changing composition of state and county prison commitments:

- The decriminalization of hypodermic needle possession in 2006 eliminated an offense that previously resulted

Figure 3:

State prisoners and admissions with governing drug offenses



Source: Massachusetts Department of Correction

Note: For 1980 to 2006, the population is the DOC custody population; for 2007 onwards, it is the DOC jurisdiction population.

in approximately 200 incarcerations per year.

- After the decriminalization of marijuana possession in 2009, incarcerations for marijuana-related offenses fell by 90 percent, from 126 in FY 2008 to just 14 in FY 2010, when the new law was fully implemented.
- Selling drugs within a school zone carries a two-year mandatory minimum jail sentence. In 2012, the size of the school zone was reduced from 1,000 feet to 300 feet. The number of people convicted of school-zone offenses fell by 61 percent, from 190 in FY 2011 to 75 in FY 2013.

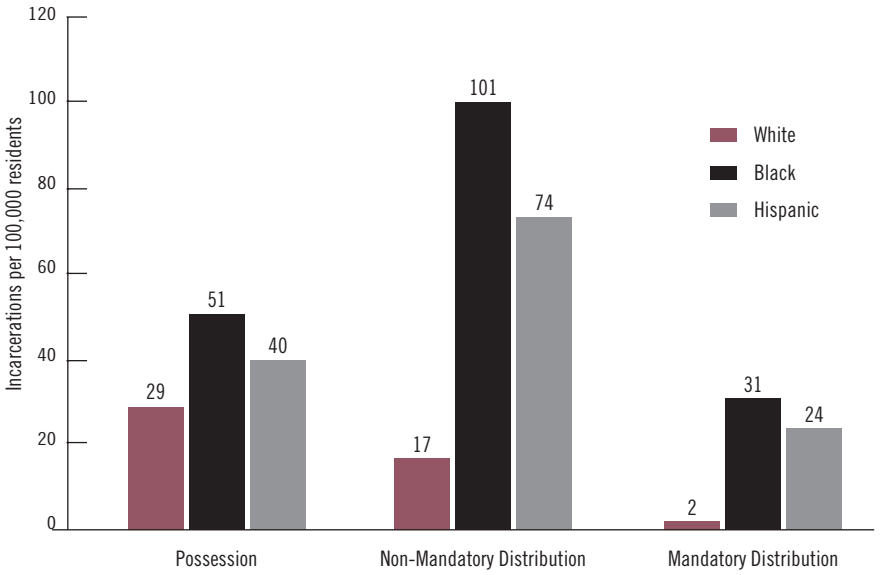
These three reforms explain about one-quarter of the 50 percent reduction in commitments for drug offenses between FY 2006 and FY 2013. Other recent legislative changes increased the amount of drugs an individual must possess or distribute in order to incur a mandatory-minimum penalty, shortened the minimum sentence, and increased eligibility for parole and earned good time. Cases dismissed due to problems at the state crime lab also led to some reduction in prison commitments. Limited data make it difficult to fully disentangle these forces and account for their impact, but it is likely that, beyond whatever role they have played, a substantial component of the reduction has been generated by the criminal justice system diverting more drug offenders from prisons to community supervision and treatment.

Drug courts are one example of this practice. Massachusetts now has 22 adult drug courts in nine counties (as well as six mental health courts, five veterans' treatment courts, three juvenile drug courts, and one homeless court).[13] Figures show that 539 people were enrolled in drug court programs in 2014, an increase of 31 percent over 2013 (see Table 1).

While these trends are promising, they don't completely capture the extent to which individuals with substance-use

Figure 4:

Incarceration rates for drug offenses by race and ethnicity, FY 2013



Source: MassINC analysis of data from Massachusetts State Sentencing Commission and 2014 American Community Survey

disorder are entering the criminal justice system. This is made clear by examining drug court caseloads. The majority of offenders in drug courts have not been charged with a drug crime; most are in the criminal justice system due to a property offense.[14]

Massachusetts is still within range of the tough-on-crime era's peak jail and prison populations. There are plenty of indications that substance-use disorder continues to play a role in high incarceration rates. According to the Hampden County Sheriff's Department, 89 percent of men and 84 percent of women in the 2015 release cohort were identified as having a substance-use disorder.[15] The Middlesex County Sheriff reports that 80 percent of individuals self-identify as substance dependent, and 46 percent require medical detoxification at intake. Nearly half have been diagnosed with mental illness at some point in their life.[16]

It is also notable that the number of offenders serving time in state prison for drug offenses remains far above pre-tough-on-crime-era levels (Figure 3). Not all of these inmates are substance abusers. Many of those serving sentences for serious drug crimes do not struggle with substance use; they are simply engaged in the drug trade. Limited resources must be carefully balanced between fighting drug crime to reduce supply and treating those with substance-use disorder to reduce demand.

3. Troubling racial and ethnic disparities in incarceration rates for drug offenses merit more attention from policymakers.

Non-Hispanic whites use substances at slightly higher rates than do members of racial and ethnic minorities in Massachusetts, but blacks and Hispanics are significantly more likely to receive a prison sentence for drug-possession offenses.[17] Incarceration rates for distribution offenses without mandatory-minimum sentences are 6 times higher for blacks than for whites, and blacks are 16 times more likely to receive a conviction for a mandatory-minimum drug offense (Figure 4).

Viewed another way, blacks and Hispanics represent less than 20 percent of the Massachusetts population, but 27 percent of all residents convicted for drug possession, 53 percent of all residents convicted of non-mandatory distribution charges, and 73 percent of residents sentenced on mandatory-minimum drug offenses.

These disparities are likely due to a combination of bias in the administration of justice, lack of resources to mount a defense, and longstanding discrimination in housing, education, and employment. Failure to recognize and address these root causes has only exacerbated the problem by directly reducing the employability of young men of color and indirectly destabilizing minority families and neighborhoods.

To date, policymakers have focused more heavily on the lack of treatment for those suffering from substance-use disorder. Continuing to overlook the racial and ethnic dimension of tough-on-crime policies and their consequences for communities of color has steep long-term consequences.

II. Understanding Evidence-Based Responses to Drug Offending

A majority of offenders entering the Massachusetts criminal justice system suffer from substance-use disorder. The system must strive to serve these

offenders particularly well; if it doesn't, many will commit more crime and place further demands on public safety resources. As scientific understanding of substance-use disorder advances, the criminal justice system is moving toward evidence-based responses. As we detail below, an evidence-based response demands individually tailored solutions at every point in the system, from arrest through reentry, and developing capacity throughout the system to effectively treat individuals with medication.

1. Police-led intervention (pre-arrest diversion)

As first responders, police officers play a critical role directing individuals struggling with substance-use disorder toward appropriate intervention. Identifying mental illness and substance-use disorder at a chaotic scene is extremely challenging. Traditionally, police officers have had limited training in this difficult work. With few treatment options, officers often feel they have little choice but to make an arrest. However, in departments around the country, this is changing as police receive more training and support. They are learning to evaluate each case and make referrals to treatment providers.[19]

The proliferation of crisis intervention teams (CITs) exemplifies improved police handling of behavioral health emergencies. CITs were launched as a response to mental illness and the growing rate of officer-involved shootings. Today, more than 3,000 police departments in the US have implemented this approach, which was pioneered in Memphis.[20] Departments train uniform patrol officers in basic crisis intervention and spread them across the district on each shift to ensure that a trained officer is available for immediate dispatch to scenes of behavioral health crisis. These officers de-escalate the crisis and assess the individual. Whenever possible, those requiring further attention are taken to community providers rather than emergency rooms. Often police negotiate no-refusal policies so they can be certain that those diverted for services will not simply be released by the provider without appropriate care. With these relationships and skills, CITs have become adept at recognizing co-occurring mental health and substance-use disorder and diverting individuals to appropriate treatment.

Departments with a particularly heavy volume of behavioral health calls may choose to implement a co-response model. These police agencies have social workers or other mental health workers on staff to respond to incidents alongside patrol officers. These medical and social services professionals are often able to access a more complete case history including the individual's prior diagnoses and current medications. In-house behavioral health professionals can also provide officers training and consultation. But sustaining the staffing for this model can be difficult considering that the highest call volume often occurs during evenings and weekends.[21]

Studies suggest that individuals diverted from arrest are more likely to access treatment and to receive appropriate medication and counseling, which leads to improved functioning and well-being. Twenty-four-hour specialized crisis response linked to community-based services with no-refusal policies has greater success reducing arrest and lowering criminal justice costs than do other pre-booking jail diversion programs for seriously mentally ill people and substance abusers. These approaches have been found to improve officers' attitudes, beliefs, and knowledge, allowing them to feel better prepared to handle calls involving individuals with behavioral health problems. Studies also find reduction in officer injuries following the introduction of these approaches.[22]

As first responders, police officers play a critical role directing individuals struggling with substance-use disorder toward appropriate intervention.

2. Pre-trial and post-adjudication diversion

While it is preferable to divert those with substance-use conditions out of the criminal justice system at the earliest point of entry, this approach only works if the individual is willing to receive treatment. For those who reject help and behave in ways that threaten the community, a criminal justice response is appropriate. Still, the best

intervention is usually the lightest, and there is an effective balance of treatment and sanctions. Research evaluating drug courts has helped to elucidate that balance.[23]

Drug courts seek to address problematic behavior without resorting to incarceration. Offenders are supervised in the community by probation agents as long they comply with the court's treatment protocol. This model is particularly beneficial with high-need drug offenders who have significant criminal backgrounds. These individuals must appear regularly before a judge or probation officer. The idea is to restrict their freedom and thereby limit their drug-seeking behavior. The court issues immediate sanctions when a participant fails to comply with a condition that he or she is capable of meeting immediately, such as submitting to drug testing. The court's response is less severe when long-term goals, such as total abstinence, are not met. The court avoids overly harsh responses in order to prevent individuals from giving up and to ensure they are not hardened to the toughest sanctions available. Positive behavior is rewarded in the hope of increasing motivation.[24]

Extensive drug court evaluations provide substantial evidence that this model works. The National Institute of Justice and the Urban Institute have concluded that drug courts significantly reduce the likelihood of relapse and produce two dollars of benefit for every dollar in cost. There is even evidence that those who have committed violent offenses can be safely diverted to community treatment following this approach.[25]

3. Incarceration

Many individuals suffering from substance-use disorder enter the criminal justice system for serious crimes that necessitate a prison sentence. All too often, these offenders receive no treatment while incarcerated, and nearly all of these inmates relapse upon release. To address their criminogenic needs and reduce the risk of recidivism, effective treatment is necessary.[26]

A large body of research shows the therapeutic-community model is the most promising approach to reducing both drug use and criminal activity following release from prison. The therapeutic community was pioneered in Delaware and scaled across the country with support from grants made by the Office of Justice Programs' Residential Substance Abuse Treatment (RSAT) program.[27]

Therapeutic communities isolate inmates in treatment from the rest of the prison population. This removes them from drugs, violence, and other aspects of prison life that may negatively affect treatment outcomes. Away from the general population and the pressures of life outside of prison, many offenders with a long history of substance use are able to focus on treatment. Inmates are empowered

COERCED TREATMENT: A MEASURED RESPONSE

Research shows that those who are coerced to attend treatment under threat of imprisonment are more likely to remain in treatment programs and reduce their substance dependence.[40] For example, controlling for readiness to change and addiction severity, one study found legally coerced patients were more likely than non-coerced patients to demonstrate reduced addiction severity at a six-month follow-up interview.[41] Another study found that those involved in the justice system and receiving mandated treatment had similar or better outcomes than patients (whether involved in the justice system or not) whose treatment was not mandated.[42] Evidence suggests that coerced treatment can also improve outcomes for vulnerable populations, such as adolescents and women with co-occurring mental illness and a history of trauma.[43]

Caution is needed to ensure that coerced treatment is used appropriately. For many, threat of legal sanction operates as an incentive, and individuals willingly engage. However, if the coercion is too strong and the treatment mode confrontational, it is likely to be ineffective and may cause harm.[44] This dichotomy highlights the need to ensure that, where treatment is coerced, the most appropriate form of coercion is used and treatment is of high quality.

By the one metric currently available (civil commitments), Massachusetts is a relatively eager user of coerced treatment.[45] As reliable data from risk/need assessments (covering both general recidivism risk and severity of substance-use disorder) become more widely available, it will be possible to better gauge the extent to which the system is using coerced treatment as a measured response.

Tracking these data is crucial because all of the research on coerced treatment compares the operation of the justice system to outcomes in the community during a period in which access to quality treatment was severely lacking. Overbuilding treatment capacity in the criminal justice system in response is a real concern. As integrated behavioral health care and community-based services become more readily available, the need for coerced treatment should abate.

to lead and build a strong sense of community around recovery. Multiple modes of treatment—including cognitive-behavioral therapy, individual counseling, group counseling, and 12-step programs—are available.

Some prisons adapt the therapeutic-community model to serve individuals with co-occurring mental illness. These environments have fewer sanctions, more flexibility, and greater sensitivity to individual differences. Cognitive-behavioral components help participants understand the relationship between substance use, mental illness, and criminal thinking. Compared to traditional in-prison treatment for inmates with mental illness and substance-use disorder, modified therapeutic communities reduce reoffending and relapse.[28]

While these evidence-based approaches to in-prison treatment have been demonstrated for some time, such services are still not available at scale to all who can benefit from them. Overcrowding is one common barrier, but the principal hurdle is often short-term access to resources. In the long term, however, cost-benefit estimates suggest that providing all high risk/need inmates access to in-prison therapeutic community treatment would generate significant savings for taxpayers.[29]

4. Reentry

Release is a particularly difficult time for those struggling with substance-use disorder. They must find work and housing and reestablish often-strained relationships. These pressures can cause many to relapse. In the first two weeks following release from prison, those with opioid addictions are particularly at-risk for fatal overdose, either because they choose to administer a lethal dose or because their tolerance fell while they were in prison.[30]

In-prison treatment is more effective when combined with appropriate care upon release. Cost-benefit analysis shows the addition of post-release care can reduce re-incarceration and produce substantial savings.[31]

Reentry programs have particularly strong benefits for those with co-occurring mental illness and substance use disorder. Maintaining continuity for these offenders in a modified therapeutic community improves medication monitoring and the delivery of psychiatric services. As participants transition, behavioral health specialists help them develop coping skills and symptom self-management. Caseworkers assist with housing placement and employment or volunteer work to move participants toward independent functioning.[32]

Housing placement is a particularly important consideration for those returning to the community with substance-use disorder. Returning to the neighborhood where they came from, or where drugs are common, is closely linked to relapse, even among those receiving high-quality in-prison treatment. Halfway houses can reduce exposure to drugs, but only when they provide high-quality services. Too often these facilities are located in neighborhoods with active drug markets and house relapsing residents without proper supervision.[33]

One solution is to offer services to families of offenders with substance-use disorder so that their families can better support them on return from prison. Former users identify strong family relationships as a factor preventing return to drug use, and family therapy has been found to be a cost-effective form of treatment for substance-use disorder. For example, the La Bodegade la Familia program in New York City, which offered family services, including workshops, support groups, case management, and crisis intervention, proved successful. Relative to a control group, substance use fell significantly more among individuals whose families participated in the program.[34]

5. Medication-assisted treatment

Medications proven to improve outcomes for individuals with substance-use conditions are severely under-utilized in the criminal justice system. For those with chronic and life threatening addiction to opiates, evidence-based treatment with methadone and other agonist medications that stimulate the central nervous system in the same manner as illegal drugs improves functioning and reduces mortality.[35] For offenders who are no longer addicted, antagonist medications such as naltrexone prevent intoxication when illegal substances are taken. Combined with counseling and support, the use of these medications can help prevent relapse.[36]

Lack of qualified medical staff in the courts and probation agencies, as well as the shortage of community treatment programs, have been major obstacles to more widespread use of medication-assisted treatment. Security concerns in prisons—it is difficult to prevent these medications from being siphoned for abuse—and treatment philosophy

among corrections professionals are also barriers. [37]

However, these impediments are waning. Lack of community capacity was related to lifetime coverage limits and other policies by insurers that artificially reduced demand for treatment. Provisions of the Affordable Care Act make treatment for mental health and substance abuse an essential benefit; plans must offer these services, and they cannot deny cost reimbursements to patients who relapse and need to reenter a treatment program.[38] Drug courts benefiting from federal funding are now required to allow clients to receive medication-assisted treatment. And efforts are underway to train probation officers and others on the use of these drugs. Studies have shown that such training, combined with building linkages to providers of medication-assisted treatment in the community, can increase referrals.[39]

CO-OCCURRING MENTAL HEALTH DISORDERS

One explanation given for high rates of incarceration in the United State is inadequate treatment for substance-use and mental health conditions. Most individuals who suffer from these conditions do not receive appropriate care. For many, criminal justice interaction is the first opportunity for any form of treatment. Nationally, nearly three-quarters of state prison inmates with a mental health disorder also have a substance-use disorder. A number of factors explain this association: genetic traits that increase risk of one type of disorder may also increase risk of the other; environmental conditions, such as abuse in early childhood or living in a high-crime neighborhood, may trigger both mental disorders and substance use; substance use may provoke the onset of various mental disorders, or, conversely, changes in the brain resulting from mental illness may make a person more vulnerable to substance-use disorder.[46]

While community treatment for both substance-use disorder and mental illness are in short supply, options are even more limited for those with co-occurring disorders. To be most effective, treatment for co-occurring disorder must address both mental illness and substance use. Many individuals with co-occurring disorders drop out of traditional treatment programs and cycle through crisis centers, hospital emergency rooms, jails, and prisons. These individuals have particularly poor outcomes when incarcerated. This is related to stressors in the prison environment and lack of high-quality services, including access to medication-assisted treatment. Poor treatment outcomes mean that individuals with co-occurring disorders are more likely to violate conditions of community supervision and commit violent acts. They recidivate at higher rates than do offenders with only a mental illness or substance-use disorder.[47]

For these reasons, it is critical that communities have strong jail-diversion models to serve this population. For over a decade, Bexar County, Texas, has been a national leader on this front. The county has opened crisis centers where police can take individuals for screening and processing for further services, freeing officers to return to their duties rather than waiting hours in hospital emergency rooms. The system also offers diversion at every phase of the system, with 46 identified intervention points, from booking and court appearances through jail, prison, and release. Everyone from police dispatchers to defense attorneys receives extensive training to improve outcomes for individuals suffering from mental illness and co-occurring disorders. The county has collected extensive data on program outcomes, which has helped to demonstrate results and draw additional state funding.[48]

III. Promising Practices in Massachusetts

The drop in drug offenders entering Massachusetts state prisons and county houses of correction is driven at least in part by innovative efforts at every point of contact between offenders and the criminal justice system. Over the past decade, considerable effort has been made to divert those struggling with substance-use disorder and to ensure that those who are incarcerated receive appropriate rehabilitation and reentry services. It is particularly notable that despite the system's fragmented nature, innovations developed by leaders in one community have quickly been adopted by those in other jurisdictions. State-level leadership at many levels is also playing a major role accelerating change. Below we capture a sample of this activity.

1. Police-led intervention

Police departments across Massachusetts have implemented Memphis-style CITs and co-response models. In 2003, the Framingham Police Department was the first in the state to use a crisis intervention approach, creating its Jail Diversion Program in partnership with Advocates, Inc., a local mental health services provider. The state Department of Mental Health (DMH) has supported communities working to develop CITs, co-response models, and other forms of specialized training for police officers. DMH grants

are currently provided to 29 direct recipients, representing 64 towns and communities in the state.

According to a recent review of this DMH funding program, around 400 arrests were avoided through diversion in FY 2013, with the majority involving potential public order charges and crimes against the person. Around half of those diverted from arrest were referred to inpatient psychiatric care or to their current community-based provider. These jail diversions saved an estimated $3.2 million in emergency room visits, booking, and jail costs. [49]

In addition to these crisis-response and jail-diversion efforts, a public health approach to substance abuse is increasingly ascendant in Massachusetts. Much of this energy was spurred by Gloucester Police Chief Leonard Campanello's ANGEL program. Since last June, anyone with a substance-use disorder who seeks help from the police is no longer arrested, charged, or jailed—even if they are in possession of controlled substances or drug paraphernalia. Instead, they are taken to a hospital, placed in a treatment program, and assigned a volunteer "angel" to provide support. Nasal Narcan, the overdose antidote, is available at Gloucester pharmacies without a prescription, and, for those without insurance, the police department covers the cost.[50]

Chief Campanello cofounded the Police Assisted Addiction and Recovery Initiative (PAARI), a nonprofit organization that supports police departments in implementing similar programs. PARRI is working with 21 police departments across Massachusetts, as well as the Massachusetts Major City Chiefs of Police Association and police departments in other states.[51]

Arlington's Opiate Outreach Initiative exemplifies the quick replication of Gloucester's model. Launched in July 2015, the Arlington Police Department's mental health clinician provides outreach to people with substance-use disorder identified through overdose cases, drug distribution investigations, and community policing. The town also hosts training and support meetings for those with substance-use disorder and their families. These meetings, facilitated by the department's clinician and a community substance abuse intervention expert, include training and distribution of Narcan and Vivitrol, an extended-release version of the antagonist medication naltrexone, which requires only one injection each month.[52]

Despite the system's fragmented nature, innovations developed by leaders in one community have quickly been adopted by those in other jurisdictions.

In partnership with PAARI, Methuen also launched an outreach initiative in July 2015. The police department hired two part-time civilian outreach coordinators to work with police officers to identify, visit, and educate people with substance-use disorder and their families. The outreach coordinators also serve as department liaisons to community detoxification and recovery centers.[53]

Recent efforts to improve the civil commitment process will provide another tool for police departments working to divert substance abusers from the criminal justice system. In January Governor Baker signed legislation requiring those with civil commitments for substance-use disorder to go to a designated Department of Public Health (DPH) treatment center rather than a correctional facility. As part of these reforms, the state will spend $6 million on 45 new beds for women at DMH's Taunton State Hospital.[54]

2. Pretrial and post-adjudication diversion

Massachusetts has been expanding its use of drug courts across the state. The Trial Court aims to continue to expand drug courts so that this diversion pathway is accessible to everyone in the Commonwealth by the end of 2017.[55]

To help drug courts implement evidence-based practices with fidelity, the Massachusetts Center of Excellence (COE) for Specialty Courts was founded in 2014 as a partnership between the Massachusetts Trial Court, the University of Massachusetts Medical School, DPH, and DMH. The COE supports drug courts with training and evaluation and facilitates efforts to implement new evidence-based practices. For instance, the Barnstable Drug court was recently awarded a $1 million federal grant to apply the MISSION model to better serve indi-

viduals with co-occurring disorders, with support from the COE.[56]

While significantly more cost-effective than incarceration, drug courts are an intensive and expensive form of treatment and should be triaged for those who pose the greatest risk of relapse and recidivism.[57] For those with a lower risk/need profile, but still relatively high risk, the Probation Department has been experimenting with a model based on Hawaii's Opportunity Probation with Enforcement (HOPE) program called HOPE/MORR (Massachusetts Offender Recidivism Reduction).

First implemented in Salem, the program has spread to Lowell and Worcester and will soon expand to a number of other courthouses across the state. Probationers in the HOPE/MORR program undergo at least one random drug test a week. If they fail or violate their probation in some other way, a judge holds a hearing as quickly as possible, and they receive a swift and certain sanction, often a short jail stay. Police support this approach by prioritizing HOPE/MORR arrest warrants. In 2012, Massachusetts was one of four states chosen as pilots for a federal study of this approach. While final results of the study are pending, early indications suggest HOPE/MORR has improved supervision, increased compliance with probation conditions, and lowered overall costs of corrections, both in terms of days of incarceration averted and avoidance of the much more expensive drug court model for those whose risk/need profile better fits HOPE/MORR service levels.

The Essex County Sheriff recently created a detox unit to provide residential treatment as another pretrial diversion option. The facility offers 28-day comprehensive treatment for pretrial detainees. Upon completion of the program, defendants may continue on to services such as probation, employment counseling, day reporting at an Office of Community Corrections, drug testing, electronic monitoring, and in some instances sober houses. Those that comply may be able to dispose of their cases. This model is a response to the 140 percent increase in the number of intakes requiring detox in Essex County between 2011 and 2014. The option is available for defendants with significant substance abuse histories who have committed a quality-of-life crime; violent offenders are excluded.[58]

Many district attorneys offer pretrial diversion to nonviolent offenders with substance-use disorder, referring them for substance abuse treatment services instead of prosecution. These diversion programs often target younger offenders. In Essex County, for example, the DA's Drug Diversion Program focuses on offenders aged 17–26.[59]

3. Incarceration

Many houses of correction have developed therapeutic treatment communities. For example, in Hampden County all inmates have their physical and mental health assessed on admission to the Correctional Center and receive a mental health evaluation from a nurse within 14 days, after which treatment plans for those with chronic or severe illness are developed.[60] Substance abuse and mental health treatment are provided on site. These include a daily triage system whereby nurses and mental health clinicians assess inmates and deliver care directly in their living quarters.

Planning for release begins upon admission, with a case manager assigned to educate inmates and refer them to medical, social, psychiatric, and substance abuse–treatment services in the community. Hamden County has contracts with three community health centers to provide services both in custody and after release. These health centers cover the areas from which more than 80 percent of inmates come, and inmates are assigned to the appropriate centers by residential zip code, helping to ensure continuity of care upon release.

Middlesex County's Accountability Recovery Community treatment facility is another example. The 126-bed pod provides 90-day treatment. Cognitive-behavioral therapy and a variety of other treatment modes are offered in this modified therapeutic community, which has been recognized as an RSAT National Mentoring Site. The facility currently has capacity for all those who meet screening criteria and opt to receive services.

4. Reentry

The Probation Service's 18 community corrections centers dispersed throughout state make up the centerpiece of Massachusetts's aftercare strategy. These centers provide intensive supervision and treatment for many inmates released from in-prison treatment. Depending on their risk/need profile, those released to parole or probation are required to visit these centers either three or five days per week for testing and group therapy. Those that relapse are placed on a stricter drug-testing regimen and

receive more intensive treatment and supervision.

Massachusetts has also developed specialized reentry services for state and county inmates with mental illness. Since 1998, DMH has provided this support through a Forensic Transition Team.[61] Team members begin to work with inmates at least three months prior to release and continue to monitor them and support community providers up to three months after release. They conduct a review of the client's needs and link the client to intensive, community-based outpatient treatment programs that provide medication and rehabilitation services, offer housing support, and facilitate access to entitlement programs. In FY 2008, the Forensic Transition Team served 119 people upon release from incarceration and coordinated and monitored a further 438 cases of DMH clients in custody.[62]

With leadership from Middlesex County Sheriff Peter Koutoujian, in 2014 the legislature passed a bill allowing for suspension rather than termination of Medicaid benefits for those who are incarcerated. Efforts are now underway to ensure that all inmates eligible for MassHealth enrollment. Enrolling eligible inmates in MassHealth and suspending their coverage allows correctional facilities to receive federal reimbursement if they require hospitalization while they are incarcerated; this produces significant savings for the state. But increasing MassHealth enrollment can also provide a powerful tool to reduce recidivism. The first seventy-two hours post-release are the most fragile period of reentry. Avoiding gaps in coverage that create barriers to receiving healthcare reduces the likelihood of relapse and reoffending. Eligible inmates leaving correctional facilities now have MassHealth coverage effective immediately upon their return to the community, allowing them to seamlessly transition to treatment.

5. Medication-Assisted Treatment

The state has worked hard to make greater use of medication-assisted treatment. In 2012, the Barnstable House of Correction began using Vivitrol for inmates with alcohol or substance-use disorder upon release. Participants receive their first injection in jail just prior to release, and further shots monthly at a community treatment facility thereafter. The manufacturer provides the first shots at no cost to the jail, and MassHealth or private insurance covers the $1,000-per-dose cost of further shots.

Between the launch of the program in April 2012 and November 2015, 178 people had received a Vivitrol injection upon release from Barnstable County Correctional Facility. Only 18 percent of those released have been re-incarcerated in the county (either for a new crime or for violating the conditions of their release). Around 80 percent of participants received their second injection, and on average participants remained in treatment for five months after release. An estimated 40 to 45 percent remained sober. While inmates must consent to receive the injection, the participation rate is high: 12 of the 17 eligible inmates scheduled for release in September 2015 enrolled in the program.[63]

Barnstable's program was cited in the White House's 2014 National Drug Control Strategy. Since 2014, nine prisons and ten additional jails in Massachusetts have begun offering Vivitrol as well. As with Barnstable House of Correction, the manufacturer provides the first shots to the facilities for free. [64]

The DOC's Vivitrol program—which was launched in September 2014 and operates at eight state prisons and the Boston Pre-Release Center—is called the Medication Assisted Treatment Reentry Initiative (MATRI). All state inmates are screened for alcohol and substance-use disorder on admission. When substance-use disorder is identified, inmates are placed in DOC's mandatory substance use–treatment program, which provides six months of intensive residential treatment, including counseling and information about addiction medication. Further participation in MATRI is voluntary, and inmates must apply at least one month before their release date and pass mental and physical health assessments. In the first year

Avoiding gaps in coverage that create barriers to receiving healthcare reduces the likelihood of relapse and reoffending.

of the program, only 20 percent of eligible inmates chose to participate. Some who opted out were concerned about the effects of Vivitrol on the liver (many inmates suffer from Hepatitis A or B). Some worried about the risks of a lethal overdose in the event of relapse. And some objected more generally to medication-assisted treatment for substance-use disorder.[65]

Massachusetts has also made considerable effort to make medication-assisted treatment more widely available in the community. In 2007, the Bureau of Substance Abuse Services partnered with Boston Medical Center to develop a program to provide the partial opioid agonist buprenorphine through community health centers.[66] Under the model, a nurse care manager screens patients for suitability, and a physician confirms an opioid use–disorder diagnosis and prescribes buprenorphine. Patients are required to attend follow-up appointments with the nurse care manager and undergo drug screening, as well as attend behavioral health counseling, which is provided by the health center or a local addiction treatment clinic. Treatment is now provided by 14 community health centers, and the program had 1,210 enrollments in 2012. Two-thirds of patients remained in treatment for more than 12 months.

Community health centers are also working directly with the criminal justice system to expand access to medication-assisted treatment. For instance, Lynn Community Health Center has partnered with the Lynn Drug Court to pilot a medication-assisted treatment model supported by a federal grant.

Governor Baker's opioid taskforce made a number of recommendations to further medication-assisted treatment, and many have been implemented. Outpatient treatment programs dispensing methadone will now have the ability to bill MassHealth for buprenorphine and naltrexone. DPH issued an alert to all licensed and contracted substance-use treatment providers reinforcing the requirement that licensed addiction treatment programs accept patients receiving medication-assisted treatment. Together, MassHealth and DPH are building a website with an inventory of primary care providers who deliver medication-assisted treatment. And MassHealth recently issued guidance to contracted to ensure uniform access to medication-assisted treatment. According to this guidance, providers may not require enrollees to have relapsed before receiving medication or to participate in 12-step therapy as a condition of receiving Vivitrol coverage.[67]

IV. Working Together on New Approaches to Drug Offending in Massachusetts

Massachusetts has made considerable progress responding to substance abuse in ways that improve outcomes and reduce contact with the criminal justice system. Leaders in law enforcement, the courts, and corrections have shown ingenuity, developing homegrown models and importing effective practices from elsewhere. In many cases, these efforts have been accompanied by rigorous evaluation. The legislature has been a steady partner exploring problems and policies and allocating resources to experiment with new approaches. Success with this collaborative approach should strengthen our resolve to continue in this manner. What is underway now is a transformative process. For decades, the criminal justice system evolved to compensate for the lack of community-based treatment for substance-use disorder and mental illness. Changing this state of affairs will require years of focused effort. Below we offer five strategies to further this work.

1. Identify gaps in evidence-based practice and community-based services. Utilizing evidence-based practices at all points of contact across the state will increase public safety and improve outcomes for individuals struggling with substance-use disorder and co-occurring mental illness. Policymakers have limited information and must on this basis allocate limited resources. The behavioral health and criminal justice research communities can provide support by working with agencies to identify areas where improvements in practice or service delivery could produce substantial gains.

Efforts to better understand the state of corrections-based treatment programs are already underway. The Executive Office of Public Safety and Security (EOPSS) is assembling an inventory of evidence-based programs at state and county correctional facilities. When this information is complete, it must still be paired with risk/need assessment data to better understand where demand exceeds capacity to deliver evidence-based services.

Similarly, we will need more data if we are to understand the state of jail diversion programs and the ability to administer staff-intensive, yet cost-effective, diversion models such as drug court and HOPE/MORR. We

must also study community corrections centers in order to address concerns surrounding them. In particular, observers find that, in some areas, they lack the staffing and services to meet current demand for aftercare and reentry support, while in others they may be underutilized because the network is too dispersed and transportation access is a barrier.

Understanding the supply of high-quality post-release housing options is a final area that merits closer investigation. The state is unlikely to reap the full benefit of investments in residential treatment if individuals returning to the community cannot find homes conducive to recovery.

2. Provide grants to address gaps in evidence-based practice. DMH's Pre-Arrest Jail Diversion Program is an effective tool to help communities build capacity to implement evidence-based practices. With a $1.3 million line item, police departments in 64 cities and towns are training officers and developing stronger relationships with community-based treatment providers.

Similarly, with modest funding, the state could support communities working to improve service delivery across a range of evidence-based approaches, such as recruiting and training recovery coaches or establishing crisis centers and detox facilities. EOPPS recently prioritized Byrne justice assistance grants to support efforts to improve community capacity to deliver medication-assisted treatment. Demand for these dollars was exceptionally high.

The challenges many communities have faced improving access to medication-assisted treatment demonstrate the complexity of reinventing systems to better service people with behavioral health conditions. These efforts must span various agencies, levels of government, and service constructs. Any gaps in these systems of care create major pitfalls for those struggling to access treatment and recover. Modest state support can help bring leaders together and better position them to accomplish this critical work.

3. Eliminate mandatory-minimum sentences to affirm a strong culture of responding to substance abuse with evidence-based practice. While the 2012 sentencing reforms were a step in the right direction, they left in place mandatory-minimum laws that contradict the message that the criminal justice system has embraced an evidence-based response to drug offending.

For instance, one-third of those incarcerated under a mandatory-minimum in FY 2013 were convicted of first-offense cocaine distribution. Under this statute, there is no minimum weight threshold; selling any amount of cocaine results in a one-year mandatory sentence. A significant number of drug offenders continue to be sentenced to a two-year mandatory-minimum sentence under the school-zone statute, although the number has been reduced thanks to the shrinking area of the zone. Because the minimum sentence is two years, this statute has an effect on prison populations in bed years equal to that of the cocaine charge based on the number of convictions in FY 2013.

Another example of problematic mandatory-minimum sentencing is the enhanced penalty for second or subsequent distribution offenses. The nature of substance-use disorder is relapse. Threatening an individual who is dealing to support a substance-use condition with a longer prison term is unlikely to deter their behavior. Over 10 percent of mandatory-minimum sentences in FY 2013 fell under second offense provisions.

Eliminating mandatory-minimums will allow judges to structure sentences in ways that effectively encourage participation in treatment and reentry programs. Equally important, it will send a strong signal that Massachusetts is joining the growing group of states working to build a culture that fully embraces responding to substance abuse and associated crime with evidence-based sentencing. This includes Connecticut and Rhode Island, which have ended most mandatory-minimum sentences for drug crimes, as well as Georgia, Maryland, and Oregon, where "safety valves" have been introduced to allow judges to sentence

Eliminating mandatory-minimums will allow judges to structure sentences in ways that effectively encourage participation in treatment and reentry programs.

below the mandatory-minimum where appropriate.

4. Target racial disparities. While the extreme racial disparities described previously are another strong argument for eliminating mandatory-minimums, it is unlikely that this step on its own will address the overrepresentation of minorities in the criminal justice system for drug-related offenses.

A number of states have begun to take on this challenge through broader sentencing reform efforts. In 2007, Minnesota's Sentencing Commission began preparing racial impact statements assessing the likely effects of new crime bills on racial disparities. Connecticut, Iowa, and Oregon followed suit, passing laws requiring racial impact statements. Similar legislation is pending in several other states.[68] Others have looked more broadly at racial bias throughout their entire criminal systems. For instance, Wisconsin Governor Jim Doyle issued an executive order in 2008 implementing wide-ranging recommendations made by the Commission on Reducing Racial Disparities in the Wisconsin Justice System.[69]

Fifteen years ago, Will Brownsberger, the current Senate chair of the Joint Committee on the Judiciary, authored an article for the Journal of Drug Issues examining potential sources of racial and ethnic disparity among Massachusetts residents with drug convictions. The study offers a rigorous review of this complex issue and poignantly concludes by calling upon policymakers to rethink sentencing laws.[70]

The analysis underway by the Council of State Governments (CSG) offers a near-term opportunity to further examine this challenge. CSG's independent analysis may provide deeper insight into sources of racial and ethnic disparity and reveal opportunities to make meaningful change, such as fundamentally rethinking how the system serves young adults, as proposed in an earlier policy brief in this series.[71]

However, it is also possible that data limitations will make it difficult for CSG to pinpoint areas for reform. A bill currently moving through the legislature—H. 2048, co-sponsored by Rep. Jeff Sanchez and Rep. Byron Rushing—offers a possible vehicle for long-term change. H. 2048 creates an Office of Health Disparities to examine racial and ethnic health disparities, including those that originate through involvement with the criminal justice system.

5. Develop standards of care and accountability. Massachusetts's decentralized criminal justice system provides communities with flexibility to ensure that justice is administered in accordance with local values. While there are many advantages to this approach, certain statewide standards are necessary with respect to the treatment of those with substance-use disorder and mental illness. A criminal justice response to individuals with these conditions is often a form of coerced treatment. To the extent that these individuals are expected to comply with treatment provisions, their treatment options should meet current medical standards of care. This is critical in the context of the opiate crisis. As noted previously, those exiting prison are at particularly high risk for fatal overdose. The system is obligated to support offenders in attempts to manage this threat.

The state has already made significant progress in this direction through the Commission on Substance Addiction Treatment in the Criminal Justice System. Among many recommendations issued last year in a report to the legislature, the commission called for efforts to ensure adherence to drug court best practices and to develop written policies on medication-assisted treatment in the court system. The Center for Court Excellence has been charged with developing a process for certifying drug courts to ensure that they follow these protocols.

In this same manner, considerable effort is needed to monitor the delivery of treatment in prisons and jails, where there is considerable variation and no consistent approach to providing treatment and a continuum of care, particularly through post-release placement. Central to this effort is improvement and standardization of risk/needs assessment for substance use disorder and general recidivism. While significant progress has been made, the system is still learning how to effectively implement risk/need assessments. These tools are increasingly utilized to dictate the mode of intervention. In the future, they will be critical to monitoring access to services and ensuring that the corrections system does not overstep its role in providing behavioral health treatment to those who would be better served in the community.

Endnotes

* Benjamin Forman is Research Director at MassINC. Jonathan Jones is a Graduate Fellow at MassINC. He holds a BA in Philosophy, Politics, and Economics from the University of Oxford and has previously worked as a researcher for *The Spectator* and as a Parliamentary Assistant in the UK. Abigail Hiller served as a summer research intern at MassINC. She is currently studying for her bachelor's degree in government at Cornell University.

1 For example, see Douglas Anglin and Brian Perrochet. "Drug Use and Crime: A Historical Review of Research Conducted by the UCLA Drug Abuse Research Center." *Substance Use & Misuse* 33.9 (1998); and Matt DeLisi and Alex Piquero. "New Frontiers in Criminal Careers Research, 2000–2011: A State-of-the-Art Review." *Journal of Criminal Justice* 39.4 (2011).

2 Sheryl Pimlott Kubiak, et al. "Treatment at the Front End of the Criminal Justice Continuum: The Association between Arrest and Admission into Specialty Substance Abuse Treatment." *Substance Abuse Treatment, Prevention, and Policy* 1.1 (2006); "2013 Annual Report Arrestee Drug Abuse Monitoring Program II" (Washington, DC: Executive Office of the President, 2014).

3 The most common diagnoses for co-occurring mental illness are major depression, bipolar disorder, psychotic disorders, and post-traumatic stress disorder. About half of those with co-occurring mental illness are diagnosed with conditions that are considered severe. See Lauren Glaze and Doris James. "Mental Health Problems of Prison and Jail Inmates." (Washington, DC: US Department of Justice, 2006); Stanley Sacks et al. "CJDATS Co-Occurring Disorders Screening Instrument for Mental Disorders (CODSI-MD) A Pilot Study." *The Prison Journal* 87.1 (2007); Stephen Ross. "The Mentally Ill Substance Abuser." *The American Psychiatric Publishing Textbook of Substance Abuse Treatment, 4th Edition.* (Arlington, VA: American Psychiatric Publishing, 2008.)

4 While deinstitutionalization is a widely accepted explanation for the overrepresentation of mentally ill people in correctional facilities, some have challenged this hypothesis. For example, see Jillian Peterson, et al. "Analyzing Offense Patterns as a Function of Mental Illness to Test the Criminalization Hypothesis." *Psychiatric Services* (2010).

5 For a fuller explanation of the model, see Mark Munetz and Patricia Griffin. "Use of the Sequential Intercept Model as an Approach to Decriminalization of People with Serious Mental Illness." *Psychiatric Services* (2006).

6 Carlo DiClemente, et al. "Readiness and Stages of Change in Addiction Treatment." *American Journal on Addictions* 13.2 (2004).

7 "America's Health Rankings." (Washington, DC: United Health Foundation, 2015); "Massachusetts Drug Control Update." (Washington, DC: Executive Office of the President, Retrieved July 22, 2015); Rose Rudd, et al. "Increases in Drug and Opioid Overdose Deaths: United States, 2000–2014." (Atlanta, GA: Centers for Disease Control and Prevention, 2016); Tracy Jan. "Massachusetts Infants Born with Opiates in System at Three Times National Rate." *The Boston Globe* (June 19, 2014).

8 For example, see Ming Tsuang, et al. "The Harvard Twin Study of Substance Abuse: What We Have Learned." *Harvard Review of Psychiatry* 9.6 (2001).

9 "The NSDUH Report: State Estimates of Adult Mental Illness from the 2011 and 2012 National Surveys on Drug Use and Health." (Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014); Marcus Huibers, et al. "Does the Weather Make Us Sad? Meteorological Determinants of Mood and Depression in the General Population." *Psychiatry Research* 180.2 (2010).

10 Jesse R. Harrington and Michele J. Gelfand. "Tightness–looseness across the 50 united states." *Proceedings of the National Academy of Sciences* 111.22 (2014): 7990–7995.

11 Benedikt Fischer, et al. "Non Medical Use of Prescription Opioids and Prescription Opioid Related Harms: Why So Markedly Higher in North America Compared to the Rest of the World?" *Addiction* 109.2 (2014); Leonard Paulozzi, et al. "Vital Signs: Variation Among States in Prescribing of Opioid Pain Relievers and Benzodiazepines—United States, 2012." CDC's *Morbidity and Mortality Weekly Report* 63.26 (2014).

12 Mary-Anne Enoch. "The Role of Early Life Stress as a Predictor for Alcohol and Drug Dependence." *Psychopharmacology* 214.1 (2011); Elliot Nelson, et al. "Childhood Sexual Abuse and Risks for Licit and Illicit Drug-Related Outcomes." *Psychological Medice* 36 (2006); Tsuang, et al. (2001).

13 Report of the Special Commission on Substance Addiction Treatment in the Criminal Justice System." (Boston, MA: Special Commission on Substance Addiction Treatment in the Criminal Justice System, 2015.)

14 Ibid.

15 Martha Lyman. "Descriptive Overview of the 2015 Release Cohort." (Ludlow, MA: Hampden County Sheriff's Department, 2016.)

16 "Sheriff Peter J. Koutoujian speaks to NAACP's Mystic Valley Area Branch" *The Patriot Ledger* (June 12, 2015).

17 While there is some evidence that Hispanic residents may suffer disproportionately from mental health disorders and lack of access to appropriate treatment, overall, racial and ethnic disparities in incarceration rates are far greater than disparities in incidence of mental illness and substance use-disorder and in access to appropriate treatment for these conditions. See Margarita Alegría and others. "The Time is Now: Tackling Racial and Ethnic Disparities in Mental and Behavioral Health Services in Massachusetts." (Waltham, MA: Massachusetts Health Policy Forum, 2014.)

18 Bruce Western, *Punishment and Inequality in America.* (New York, NY: Russell Sage Foundation, 2006).

19 Henry Steadman, et al. "Comparing Outcomes of Major Models of Police Responses to Mental Health Emergencies." *Psychiatric Services* (2000).

20 cit.memphis.edu.

21 Martha Williams Deane, et al. "Emerging Partnerships between Mental Health and Law Enforcement." *Psychiatric Services* 50.1 (1999).

22 Michael Compton and others. "A Comprehensive Review of Extant Research on Crisis Intervention Team (CIT) Programs." *Journal of the American Academy of Psychiatry and the Law Online* 36.1 (2008); Melissa Reuland and others. "Law Enforcement Responses to People with Mental Illnesses: A Guide to Research-Informed Policy and Practice." (New York, NY: Council of State Government Justice Center, 2009); Henry Steadman and Michelle Naples. "Assessing the Effectiveness of Jail Diversion Programs for Persons with Serious Mental Illness and Co-Occurring Substance Use Disorders." *Behavioral Sciences & the Law* 23.2 (2005); Henry Steadman and others. "A Specialized Crisis Response Site as a Core Element of Police-Based Diversion Programs." *Psychiatric Services* 52.2 (2001).

23 For example, see Douglas Marlowe, et al. "Matching Judicial Supervision to Clients' Risk Status in Drug Court." *Crime & Delinquency* 52.1 (2006).

24 Deborah Koetzle Shaffer. "Looking Inside the Black Box of Drug Courts: A Meta Analytic Review." *Justice Quarterly* 28.3 (2011); David Wilson, et al. "A Systematic Review of Drug Court Effects on Recidivism." *Journal of Experimental Criminology* 2.4 (2006); Meredith Thanner and Faye Taxman. "Responsivity: The Value of Providing Intensive Services to High-Risk Offenders." *Journal of Substance Abuse Treatment* 24.2 (2003).

25 Shelli B. Rossman, et al. "The Multi-Site Adult Drug Court Evaluation: The Impact of Drug Courts, Final Report, Volume 4." (Washington, DC: Urban Institute, 2011); Linda Frisman and others. "Outcomes of Court-Based Jail Diversion Programs for People with Co-Occurring Disorders." *Journal of Dual Diagnosis* 2.2 (2006); Michelle Naples and Henry Steadman. "Can Persons with Co-Occurring Disorders and Violent Charges be Successfully Diverted?" *International Journal of Forensic Mental Health* 2.2 (2003); Steadman and Naples. "Assessing the Effectiveness of Jail Diversion Programs for Persons with Serious Mental Illness and Co-Occurring Substance Use Disorders."

26 Joseph Califano, et al. "Behind Bars II: Substance Abuse and America's Prison Population." (New York, NY: The National Center on Addiction and Substance Abuse, 2010); Steven Martin, et al. "Three-year outcomes of therapeutic community treatment for drug-involved offenders in Delaware: From prison to work release to aftercare." *The Prison Journal* 79.3 (1999); Faye Taxman and others. "Drug Treatment Services for Adult Offenders: The State of the State." *Journal of substance abuse treatment* 32.3 (2007).

27 Stephen Bahr, et al. "What Works in Substance Abuse Treatment Programs for Offenders?" The Prison Journal (2012); James Inciardi et al. "Five-Year Outcomes of Therapeutic Community Treatment of Drug-Involved Offenders After Release from Prison." *Crime & Delinquency* 50.1 (2004); Michael Prendergast, et al. "Amity Prison-Based Therapeutic Community: 5-Year Outcomes." *The Prison Journal* 84.1 (2004); Douglas Lipton et al. "The Effects of Therapeutic Communities and Milieu Therapy on Recidivism: Metaanalytic Findings from the Correctional Drug Abuse Treatment Effectiveness (CDATE) Study." In James McGurie, editor, *Offender Rehabilitation and Treatment: Effective Programs and Policies to Reduce Re-Offending* (London, UK: Wiley, 2003).

28 Stanley Sacks, et al. "Modified TC for MICA offenders: Crime Outcomes." *Behavioral Sciences & the Law* 22.4 (2004).

29 James Griffith, et al. "A Cost-Effectiveness Analysis of In-Prison Therapeutic Community Treatment and Risk Classification." *The Prison Journal* 79.3 (1999).

30 Ingrid Binswanger, et al. "Return to drug use and overdose after release from prison: a qualitative study of risk and protective factors." *Addiction Science & Clinical Practice* 7.3 (2012).

31 David Olson and Arthur Lurigio. "The Long-Term Effects of Prison-Based Drug Treatment and Aftercare Services on Recidivism." *Journal of Offender Rehabilitation* 53.8 (2014); Kathryn McCollister, et al. "Post-Release Substance Abuse Treatment for Criminal Offenders: A Cost-Effectiveness Analysis." *Journal of Quantitative Criminology* 19.4 (2003).

32 Stanley Sacks, et al. "Randomized Trial of a Reentry Modified Therapeutic Community for Offenders with Co-Occurring Disorders: Crime Outcomes." *Journal of Substance Abuse Treatment* 42.3 (2012).

33 Jessica Reichert et al. "Community Reentry after Prison Drug Treatment: Learning from Sheridan Therapeutic Community Program Participants." (Chicago, IL: Illinois Criminal Justice Information Authority, 2012.)

34 Binswanger, et al. (2012); Triston Morgan et al. "The Cost of Treating Substance Use Disorders: Individual Versus Family Therapy." *Journal of Family Therapy* 35.1 (2013); Eileen Sullivan, et al. "Families as a Resource in Recovery from Drug Abuse: An Evaluation of La Bodega de la Familia." (New York, NY: Vera Institute of Justice, 2002.)

35 For example, see Herbert Kleber. "Methadone Maintenance 4 Decades Later." *Journal of the American Medical Association* 300.19 (2008).

36 Joshua Lee, et al. "Opioid Treatment at Release from Jail Using Extended-Release Naltrexone: A Pilot Proof-of-Concept Randomized Effectiveness Trial." *Addiction* 110.6 (2015). Elizabeth Harris, et al. "Criminal Charges Prior to and After Initiation of Office-Based Buprenorphine Treatment." *Substance Abuse Treatment and Prevention Policy* 7 (2012); Stephen Magura, et al. "Buprenorphine and Methadone Maintenance in Jail and Post-Release: A Randomized Clinical Trial." *Drug and Alcohol Dependence* 99.1 (2009).

37 Peter Friedmann, et al. "Medication-Assisted Treatment in Criminal Justice Agencies Affiliated with the Criminal Justice-Drug Abuse Treatment Studies (CJ-DATS): Availability, Barriers, and Intentions." *Substance Abuse* 33.1 (2012).

38 Nora Volkow, et al. "Medication-Assisted Therapies—Tackling the Opioid-Overdose Epidemic." *New England Journal of Medicine* 370.22 (2014).

39 Shannon Gwin Mitchell, et al. "Community Correctional Agents' Views of Medication-Assisted Treatment." *Substance Abuse* (2016); Peter Friedmann, et al. "Effect of an Organizational Linkage Intervention on Staff Perceptions of Medication-Assisted Treatment and Referral Intentions in Community Corrections." *Journal of Substance Abuse Treatment* 50 (2015).

40 D. Werb, et al. "The Effectiveness of Compulsory Drug Treatment: A Systematic Review." *International Journal of Drug Policy* (2015); Brian Kiluk, et al. "Prompted to Treatment by the Criminal Justice System: Relationships with Treatment Retention and Outcome among Cocaine Users." *The American Journal on Addictions* 24.3 (2015). Brian Perron and Charlotte Bright. "The Influence of Legal Coercion on Dropout from Substance Abuse Treatment." *Drug and Alcohol Dependence* 92.1 (2008).

41 Anna Burke and Thomas Gregoire. "Substance Abuse Treatment Outcomes for Coerced and Noncoerced Clients." *Health & Social Work* 32.1 (2007).

42 John Kelly, et al. "Substance Use Disorder Patients Who are Mandated to Treatment: Characteristics, Treatment Process, and 1-and 5-Year Outcomes." *Journal of Substance Abuse Treatment* 28.3 (2005).

43 Julie Yeterian, et al. "Does Mandated Treatment Benefit Youth? A Prospective Investigation of Adolescent Justice System Involvement, Treatment Motivation, and Substance Use Outcomes." *Alcoholism treatment quarterly* 31.4 (2013); Colleen Clark and M. Scott Young. "Outcomes of Mandated Treatment for Women with Histories of Abuse and Co-Occurring Disorders." *Journal of Substance Abuse Treatment* 37.4 (2009).

44 William White and William Miller. "The Use of Confrontation in Addiction Treatment: History, Science, and Time for Change." *Counselor* 8.4 (2007).

45 Paul Christopher, et al. "Nature and Utilization of Civil Commitment for Substance Abuse in the United States." *Journal of the American Academy of Psychiatry and the Law Online* 43.3 (2015).

46 Roger Peters, et al. "Co-Occurring Substance Use and Mental Disorders in the Criminal Justice System: A New Frontier of Clinical Practice and Research." *Psychiatric Rehabilitation Journal* 38.1 (2015).

47 Ibid.

48 See "Blueprint for Success: The Bexar County Model." (San Antonio, TX: The Center for Health Care Services, 2007.)

49 Massachusetts Department of Mental Health Forensic Services. "Pre-Arrest Law Enforcement-Based Jail Diversion Program Report: July 1, 2011 to January 1, 2014." (Boston, MA: Department of Mental Health.) Authors' estimate from figures provided in report (400 arrests diverted, saving $2,000 per arrest = $800,000; one-half of those arrests save $520 in jail costs, $130 per day for 4 days = $104,000; 656 emergency room visits diverted, assuming one-half of the two-year total, saving $2.3 million).

50 Gloucester Police Department. "Volunteer ANGEL Program." (Gloucester, MA: Gloucester Police Department, 2015.)

51 paariusa.org

52 arlingtonma.gov. "APD Release Plan of Action for New Addiction Protocols." (2015); arlingtonma.gov. "Arlington Police Host Successful Vivitrol Meeting This Week" (2016).

53 paariusa.org. "Methuen Police to Proactively Reach out to Drug Addicts in a Shift in Policing Strategy Inspired by The Gloucester Initiative" (2015).

54 Deborah Becker. "State Looks To Reform Handling Of Involuntary Commitments For Substance Abuse." (Boston, MA: WBUR, August 6, 2015.)

55 "Report of the Special Commission on Substance Addiction Treatment in the Criminal Justice System" (2015).

56 Haven Orecchio-Egresitz. "Federal grant bolsters Barnstable Drug Court program." *Cape Cod Times* (January 23, 2016).

57 Steven S. Alm. "A New Continuum for Court Supervision." *Oregon Law Review* 91.4 (2013).

58 Authors' correspondence with Essex County Sheriff's Department.

59 "Essex County Drug Diversion Program." (Salem, MA: Essex District Attorney's Office).

60 Thomas Conklin, et al. "A Public Health Manual for Correctional Health Care." (Ludlow, MA: Hampden County Sheriff's Office, 2002.)

61 Stephanie Hartwell and Karin Orr. "The Massachusetts Forensic Transition Program for Mentally Ill Offenders Re-Entering the Community." *Psychiatric Services* 50.9 (1999).

62 Massachusetts Department of Mental Health. "Forensic Mental Health Services: A Five Year Review (FY2004-FY2008)." (Boston, MA: Massachusetts Department of Mental Health, 2009.)

63 "Sheriff's Office continues to lead the way with opiate-blocker Vivitrol." (Bourne, MA: Barnstable County Sheriff Office, 2015); Residential Substance Abuse Treatment: Training and Technical Assistance. "Prison/Jail Medication Assisted Treatment Manual." (Sudbury, MA: Advocates for Human Potential, 2015.)

64 "National Drug Control Strategy 2014." (Washington, DC: Office of National Drug Control Policy, 2014); Christine Vestal. "Helping Drug-Addicted Inmates Break the Cycle." (Washington, DC: The Pew Charitable Trusts, 2016.)

65 Residential Substance Abuse Treatment: Training and Technical Assistance (2015).

66 Colleen LaBelle, et al. "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* 60 (2016).

67 "Action Plan to Address the Opiate Epidemic in the Commonwealth: Update." (Boston, MA: Executive Office of Health and Human Services, January 2016.)

68 The Sentencing Project. "Racial Impact Statements." (2014.)

69 Jim Doyle. "Executive Order #251." (Madison, WI: Office of the Governor, 2008.) Actions included: requiring agencies to track racial patterns in traffic citations, arrests, charging, sentencing and revocation; developing professional training for law enforcement and justice personnel to addresses factors contributing to racial disparity; expanding reentry programs and ensuring that inmates get driver's licenses or state identification cards; providing court-ordered and inmate-specific treatment services, particularly for substance abuse and mental health disorders; implementing a mentoring plan for inmates; reviewing and reporting on the discretion used by probation and parole officers in deciding whether to initiate revocation hearings; considering alternative sanctions to revocation or incarceration; and creating a Racial Disparities Oversight Commission.

70 William Brownsberger. "Race Matters: Disproportionality of Incarceration for Drug Dealing in Massachusetts." *Journal of Drug Issues* 30.2 (2000).

71 See Benjamin Forman and Sarah Yee. "Viewing Justice Reinvestment Through a Developmental Lens: New Approaches to Reducing Young Adult Recidivism in Massachusetts." (Boston, MA: MassINC, 2015.)

ABOUT MASSINC

MassINC is an independent think tank. We use nonpartisan research, civic journalism, and public forums to stimulate debate and shape public policy. Our mission is to promote a public agenda for the middle class and to help all citizens achieve the American Dream.

ABOUT THE MASSACHUSETTS CRIMINAL JUSTICE REFORM COALITION

Established in 2013, the Massachusetts Criminal Justice Reform Coalition is a diverse group of prosecutors and corrections practitioners, defense lawyers, community organizers, and businessmen and women who find common ground in the need for corrections reform in Massachusetts. The coalition sponsors research, convenes civic leaders, and promotes public dialogue to move the Commonwealth toward data-driven criminal justice policymaking and practice.

ACKNOWLEDGMENTS

MassINC would like to express gratitude to the Shaw Foundation, the Public Welfare Foundation, the Boston Foundation, they Hyams Foundation and individual donors for generously supporting the Massachusetts Criminal Justice Reform Coalition.

This paper is one in a series of policy briefs examining Justice Reinvestment in Massachusetts. Each paper explores critical issues in our criminal justice system and opportunities to improve public safety through evidence-based change in policy and practice.

Massachusetts Criminal Justice Reform Coalition

MassINC
RESEARCH. JOURNALISM. CIVIC LIFE.

11 Beacon Street, Suite 500
Boston, MA 02108

www.massinc.org