Emerging Adult Justice in Massachusetts
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Combating the Crisis: Using justice reform to address the drug epidemic among emerging adults

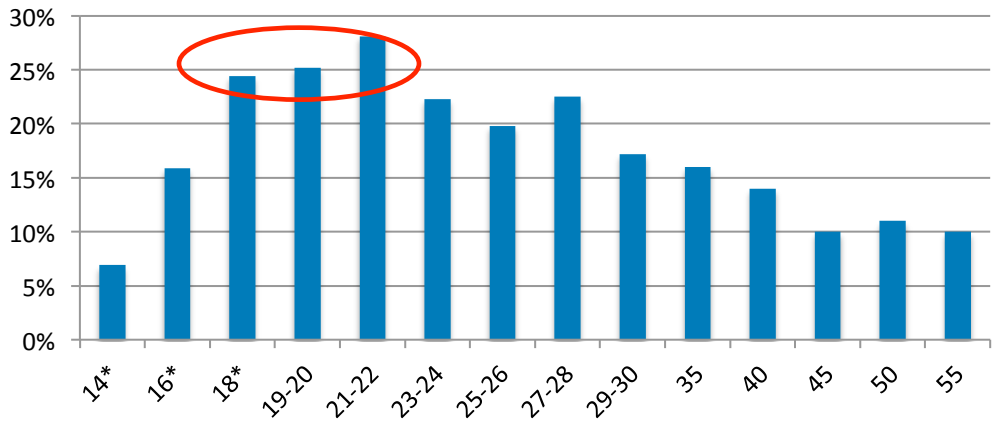
Selen Siringil Perker and Lael E. H. Chester*

For decades, the United States has experimented with a supply-focused, criminal justice-based model for addressing substance use disorders[1] and related problems. The experiment has been a failure, having little or no positive impact; drugs now are easier to access, more potent and more deadly and more people are dying from drug addiction and drug use.[2] Nationwide, annual rates of past-month illicit drug use and binge drinking have remained stubbornly high over the past decade.[3] And in Massachusetts, opioid-related deaths have increased by 350% since 2000.[4] Not only has it been ineffective, the criminal-justice-focused response to substance abuse has also produced profoundly discriminatory outcomes, widening racial and ethnic disparities in society.[5] Such disparities are particularly evident for emerging adults, defined as individuals transitioning from childhood to adulthood from the age of 18 to 25.[6] These individuals are both the most vulnerable to substance use disorders and the most adversely affected by such outcomes. As researchers, practitioners and policy-makers seek more effective ways to address substance use disorders in Massachusetts and across the country, a more focused study of the issue among emerging adults is critically important and timely.

Why is a novel approach to address substance use disorders among emerging adults needed?

Emerging adults are among the most vulnerable groups subject to substance use disorders.

Figure 1
Prevalence of Current (30-day) Illicit Drug Use by Age, 2016



Source: The Monitoring the Future Study, Vol.1 & 2, the University of Michigan (2017).
*Data points for 14, 16, and 18-year-olds correspond to 8th, 10th, and 12th Grades respectively in the source study.

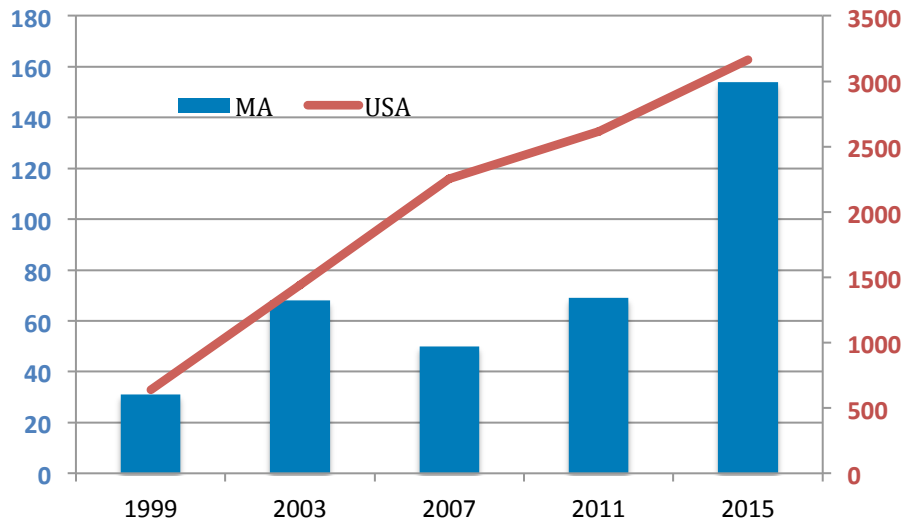
Nationwide, emerging adults have a higher prevalence of current (past 30-day) illicit drug use than any other age group, ranging between 22% and 28% among 18-to-24 year olds. [7] As Figure 1 shows, current illicit drug use in 2016 increased from 24% among 12th graders (18-year-olds) to 28% among 21-22 year olds, declining

to 17% among 29-30 year-olds and to 10% among 55-year-olds.[8] Nationally, emerging adults are three times more likely to report past year illicit drug dependence and misuse than the general population.[9]

While the opioid-related overdose death rate remains lower for emerging adults compared to other age groups, it has increased alarmingly in the last two decades. Between 1999 and 2015, fatal drug overdoses increased almost 5 fold both in Massachusetts and nationwide for individuals under 25 years old. As seen in Figure 2, the number rose from 31 to 154 in Massachusetts (left axis), and from 639 to 3165 for the whole country (right axis).[10] Tragically, opioids accounted for more than a quarter of all fatalities in the 18–24 age group in Massachusetts (2013 – 2014).[11] Of all individuals experiencing a nonfatal opioid-related overdose between 2012 and 2014, 19% were emerging adults – over two times their representation (8%) in the overall population.[12]

Fatal drug overdoses under age 25 increased *five fold* in Massachusetts between 1999 and 2015.

Figure 2
Fatal Drug Overdoses under Age 25, Massachusetts and United States (1999 - 2015)



Source: Kaiser Family Foundation State Health Facts. Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics. "Multiple Cause of Death Data, 1999-2015." (2016).

Adolescents and emerging adults are especially vulnerable to substance use disorders as the hallmarks of this developmental period include risk taking, experimentation and a diminished future orientation. For some young people, this includes trying alcohol, marijuana, or other drugs.[13] In addition, the brain undergoes significant changes during this life stage, making it particularly vulnerable to substance exposure.[14] Research shows that heavy drinking and drug use during adolescence and emerging adulthood adversely affects development of the brain and increases impulsivity.[15]

Emerging adulthood is a critical period for early treatment of substance use disorders.

2/3 of adults in treatment for opioid addiction started using opioids before age 25.

Soaring substance abuse and overdose death rates fully justify the development and implementation of more effective, age-appropriate approaches to address substance use disorders among emerging adults. Such approaches would not only benefit emerging adults at this critical stage, but would prevent substance use disorders later on in life. According to a recent national study of medical treatment of drug addiction among youth by Boston Medical Center researchers, one-third of adults in treatment for opioid addiction had started using opioids before age 18 and two-thirds had started before age 25.[16] Furthermore, with death rates for older cohorts increasing significantly, emerging adulthood is a critical time to intervene to address substance use disorders.[17]

Early treatment of substance use disorders, thus, is critically important in identifying and addressing the drug epidemic.

Why are substance use disorders a major concern for emerging adults in the criminal justice system?

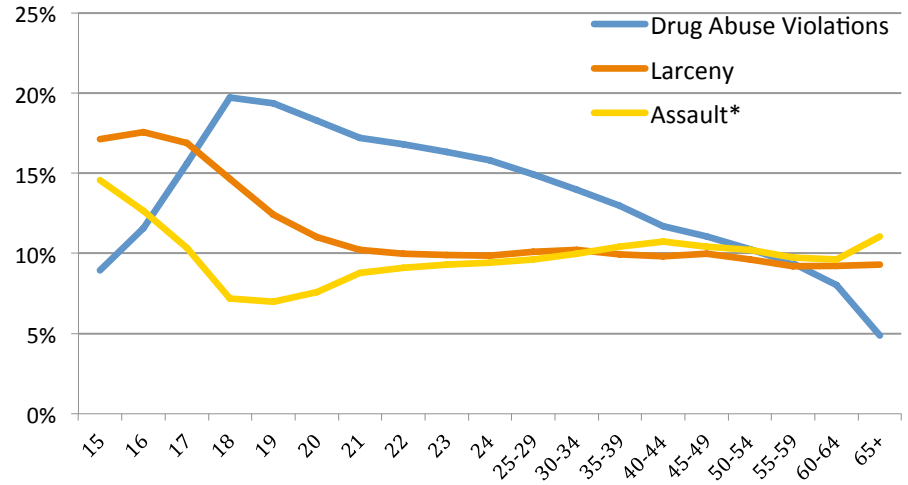
Substance use disorders and delinquency are strongly correlated.

According to a 2006 Bureau of Justice Statistics report, an estimated 42% of state prisoners and 49% of jail inmates met the criteria for mental health and substance use disorders.[18] In comparison, studies have found that for youth in the juvenile justice system, 60% met criteria for a substance use disorder.[19]

Substance use disorders can be an entryway to criminal justice for emerging adults.

Nationwide, a drug abuse violation is the leading cause of arrests for emerging adults. Furthermore, its prevalence as a cause for arrest is on the rise. In 2014, drug abuse violations (sale and possession) represented 19% of all arrests for 18-to 20-year-olds, and 17% of all arrests for 21-to 24-year olds in the U.S. compared to 17% and 15% respectively in 2012.[20] Notably, drug *possession* is by far the most frequent reason of all arrests for drug abuse violations among emerging adults, representing on average 85% of all drug arrests of emerging adults (18-24 year olds).[21]

Figure 3
Percentage of Arrests by Age and Offense Type, United States (2015)



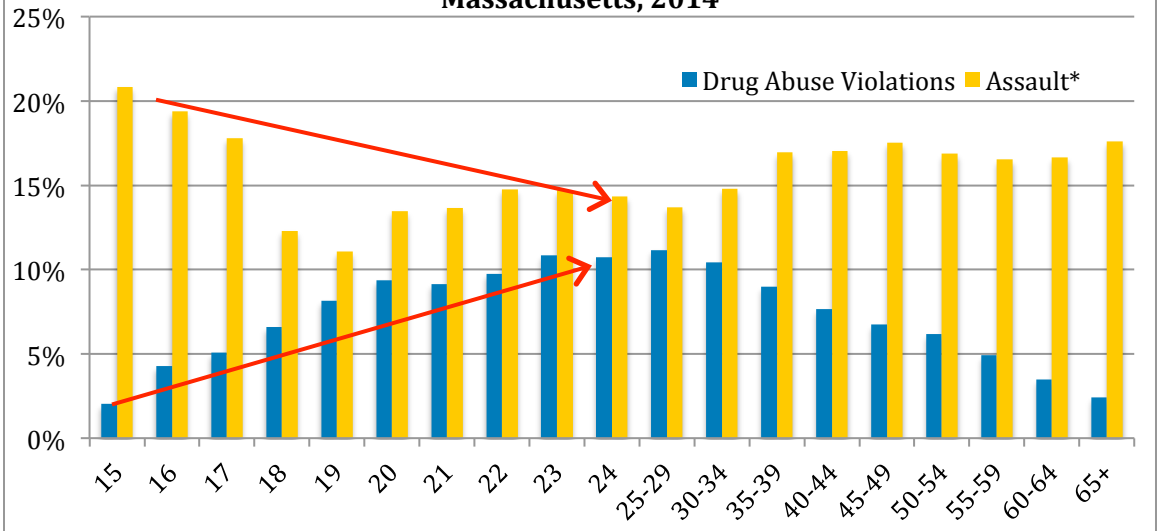
Source: Federal Bureau of Investigation, Uniform Crime Report (2015). *Includes assaults other than aggravated assault. Drug abuse violations include both sale and possession.

A closer look at the FBI Uniform Crime Report reveals that the prevalence of arrests for drug abuse violations peaks for 18-to 19-year-olds nationwide, and gradually drops for older cohorts.[22] In 2015 for instance (Figure 3), 20% of all arrests of 18-year-olds nationally were drug-related offenses, while drug abuse violations constituted 17% of all arrests for 21 year-olds, and about 13% of those over 25 years old.[23] In comparison, the prevalence of assault (other than aggravated assault), a common cause for arrest, was lowest for emerging adults, as it dropped to 7% of all arrests of 18 year-olds, and was stabilized at a range of 9 to 11% of all arrests of 21 year-olds and older. Larceny, another common cause for arrest, followed a similar trend. This suggests emerging adults across the United States are vulnerable to drug-related offenses more than any other age group and more than other common types of offense.

In Massachusetts, substance-related offenses (including drug abuse violations, drunkenness and liquor law violations), constituted over a quarter of all arrests of 18 and 19-year-olds in 2014.[24] While prevalence of drug abuse violations as a cause for arrest among emerging adults in Massachusetts is lower than the national average, it steadily increases from age 15 through age 29: Drug abuse violations constituted 4% of all arrests of 15-to 17-year-olds, 8% of arrests of 18-to 20-year-olds, and 10% of arrests of 21-to 24-year-olds (Figure 4). On the other hand, other common offenses, such as assault, are less prevalent as a cause of arrest of emerging adults, especially for 18-to 20-year-olds compared to other age groups.

In Massachusetts, a quarter of all arrests of 18-to 19-year olds is substance-related.

Figure 4
Percentage of Arrests by Age, Drug Abuse Violations and Assault, Massachusetts, 2014



Source: Federal Bureau of Investigation, Uniform Crime Report (2014). *Includes assaults other than aggravated assault. Drug abuse violations include both sale and possession.

For those imprisoned with substance use disorders, incarceration has failed to meet the societal goals of deterrence, crime reduction and rehabilitation.

Incarcerated individuals with substance use disorders are more likely to return to prison than other offenders. Nationwide, over 50% of incarcerated persons who are drug-dependent have previously been incarcerated compared with 31% of other incarcerated persons.[25] Failing to address substance use disorders among system-involved individuals not only endangers public safety and inflates criminal justice costs, but also causes loss of human life. In Massachusetts, opioid-related overdose was the cause of death for 40% of the incarcerated persons who both were released and died between 2013 and 2014.[26] Furthermore, the risk of an opioid-related death following release from incarceration is 120 times greater than for the general public in Massachusetts.[27] Notably, the risk of death after release for emerging adults between 18-to 24-years of age is roughly 10 times higher than for released individuals 45 or older.[28]

About 25% of incarcerated persons receive substance use treatment while incarcerated in Massachusetts, but the effectiveness of such programs has not been thoroughly evaluated.[29] Notably, opioid-related deaths among persons recently released from incarceration increased over 12-fold between 2011 and 2015[30] and there was not a significant reduction in risk of fatal overdose in those that received treatment.[31] Most studies looking at substance use disorders and their treatment among imprisoned populations do not include how, when or for how long treatments take place. Further research is warranted to align existing treatment programs with evidence-based practices, identify specific risk factors associated with the increased risk for those released from incarceration, and to develop alternatives to incarceration to treat substance use disorder-related offending behavior with a focus on system-involved emerging adults.

The risk of opioid-related death after release for emerging adults between 18 –to 24-years of age is roughly 10 times higher than for individuals 45 or older.

What are some public health opportunities for treatment of substance use disorders among emerging adults?

Comprehensive treatment programs, including early access to medication-assisted treatments and behavioral therapy, may help address substance use disorders among emerging adults more effectively.

"It is increasingly clear that the age of 21 years is an arbitrary demarcation line for adolescence because there is increasing evidence that brain development has not reliably reached adult levels of functioning until well into the third decade of life." – *American Academy of Pediatrics (2017)*

The time is ripe for developing novel public health approaches to more effectively address substance use disorders among emerging adults. One such approach is to integrate addiction services across both general medicine and pediatric medicine to encompass emerging adults. In its recent Policy Statement on age limit of pediatrics, the American Academy of Pediatrics discourages arbitrary age limits on pediatric healthcare, instead emphasizing the need for individualized and developmentally appropriate approaches to caring for older adolescents or emerging adults. The policy affirms "it is increasingly clear that the age of 21 years is an arbitrary demarcation line for adolescence because there is increasing evidence that brain development has not reliably reached adult levels of functioning until well into the third decade of life."[32] Thus it is an opportune time for the justice system to recognize such developmental needs of system-involved emerging adults, specifically those that suffer from substance use disorders.

Recent studies show that medication-assisted treatment programs may have a higher success rate in treating substance use disorders and especially reducing the risk of fatal opioid overdose.[33] For instance, an overview of drug-caused deaths in Massachusetts by the Department of Public Health showed that individuals receiving "opioid agonist treatment" ("OAT", i.e. medications such as methadone and buprenorphine that block the effect of opioids) have 50% less risk of a fatal overdose compared to those who did not engage in OAT.[34]

Delivering effective medications to younger cohorts – possibly within the primary-care pediatric setting -- *could* help young people suffering from substance use disorders, especially opioid addiction, achieve milestones that

mark a healthy transition to adulthood, such as completing school, getting a job and improving family relationships. Unfortunately, young people addicted to opioids rarely receive medication for their condition. A recent study by Boston Medical Center researchers found that among young people ages 13 to 25, only one out of every four diagnosed with opioid addiction received medications that can prevent a return to drug use.[35] Moreover, the younger cohorts, as well as Hispanic, Black and female patients, were significantly less likely than others to be prescribed the appropriate medications.[36] A member of the American Academy of Pediatrics Committee on Substance Use and Prevention recently expressed a specific concern that emerging adults, ages 18 to 25, are not getting medications that treat addiction.[37]

While there is some evidence that medication-assisted treatment and early access to it may support the fight against substance use disorders, several barriers exist before it can be widely adopted. These include: (1) negative public perception, especially misinformation and stigma, and discourse surrounding "opioid substitution"; (2) practical concerns, including limited training of pediatricians in addiction medicine; (3) debate around medical insurance coverage for addiction treatment; and (4) the knowledge gap on available medication-assisted treatments.[38]

Use of addiction medicine is only one way to treat substance use disorders. Public health experts recommend comprehensive treatment plans that include behavioral therapy, counseling, and support groups in addition to use of addiction medicine.[39] In recent years, an innovative adaptation of standard multisystemic therapy for adolescents to emerging adults with a serious mental illness and justice involvement (Multisystemic Therapy – Emerging Adults or MST-EA) has been piloted with promising outcomes in reducing substance use and recidivism.[40] MST-EA targets mental illness and substance abuse symptoms through individualized cognitive and behavioral interventions that integrate clinical techniques with empirical basis within a community-based setting for emerging adult populations. In the pilot test of total of 80 cases treated with MST-EA, while 83% had substance use disorders at start of their treatment, 58% of these demonstrated a reduction in the frequency of substance use at discharge, and only five clients in the clinical program had new arrests for drug related offenses during the treatment.[41] While work to enhance such clinical trials and research to include a randomized trial is undergoing, MST-EA may, in the near future, emerge as an effective approach to address substance use disorders at the critical ages of emerging adulthood.

"Every dollar spent on substance use disorder treatment saves $4 in health care costs and $7 in criminal justice costs." – *The Surgeon General's Report on Alcohol, Drugs and Health (2016)*

A public health approach to treat substance use disorders could potentially save thousands of lives each year while also using scarce public resources more effectively. In fact, studies show that every dollar spent on substance use disorder treatment saves $4 in health care costs and $7 in criminal justice costs.[42]

Emerging adult justice reform can promote better public-health-focused responses to treating substance use disorders among youth.

The legislative session of 2017-2018 in Massachusetts is seeing an increased emphasis on justice reform for treatment of emerging adults as a distinct developmental group and the application of age-appropriate responses to their specific needs.[43] Treating emerging adults differently than fully mature adults in the criminal

justice system paves the way for the development of and increased access to age-appropriate treatment programs for substance use disorders among emerging adults. The juvenile justice system has been experimenting with individualized assessments and treatment of substance use disorders for a number of years in ways not provided in the adult criminal justice system. For example, substance abuse services of the Department of Youth Services (DYS) use Global Appraisal of Individual Needs screening and diagnostic assessment tools (GAIN-SS and GAIN-CORE) to identify behavioral disorders and employ an evidence-based curriculum integrating Dialectical Behavior Therapy and motivational interview techniques tailored to the age-specific needs of juvenile offenders.[44] DYS' practices that involve Positive Youth Development, a policy perspective that emphasizes providing services and opportunities to support young people in developing a sense of competence, usefulness, belonging and empowerment, are nationally recognized in the treatment of juvenile offenders, as opposed to existing adult practices.[45] Proposed legislation to raise the age of juvenile justice system to age 19 provides an opportunity to leverage this experience to benefit a significant portion of emerging adults.

The new focus on emerging adults in the justice system should also increase the demand for additional research to understand what works best to address substance use disorders among emerging adults in comparison with younger youth. There has been scant research done on the appropriateness of the current assessment instruments, screening tools and treatment models used for emerging adults in the criminal justice system to-date, and the legislative activity and attention appears to be already changing the research activity. Such research could utilize the experience of few specialized young adult mental health care units in other states. For example, under the Child, Adolescent and Young Adult Services Division of Maryland's Behavioral Health Administration, a specialized unit serves transition-aged youth.[46] And in Connecticut, the Young Adult Services Division of the state's Department of Mental Health and Substance Abuse Services applies trauma sensitive treatment to 18-to 25-year-olds with a history of mental health problems and/or substance use disorders.[47]

By enabling expansion and adaptation of rehabilitation and treatment services to the distinct needs of emerging adults, criminal justice reform can support sustained recovery from addiction and substance use disorders among youth and promote better public health and safety outcomes in Massachusetts.

Endnotes

* Selen Siringil Perker is Senior Research Associate and Lael E. H. Chester is the Director of Emerging Adult Justice Project at The Justice Lab, Institute for Social and Economic Research and Policy at Columbia University. Authors completed part of this work at the Program in Criminal Justice Policy and Management, John F. Kennedy School of Government, Harvard University, where they were Research Fellows until October 2017. They wish to thank the Open Philanthropy Project, the Gardiner Howland Shaw Foundation, the Laura and John Arnold Foundation, and the William T. Grant Foundation for supporting research on Emerging Adult Justice.

[1] Substance use disorders, as used in this brief, refers to abuse of alcohol and all major classes of drugs, including abuse of prescription opioids and use of illegal drugs.

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[6] For more information on emerging adults as a distinct group in the justice system, see our first issue brief in this series. Siringil Perker, S. and Chester, L. (June 2017). "Emerging Adults: A Distinct Population That Calls for an Age-Appropriate Approach by the Justice System." Emerging Adult Justice Issue Brief Series, Program in Criminal Justice Policy and Management, Harvard Kennedy School. Available at https://www.hks.harvard.edu/centers/wiener/programs/criminaljustice/news-events/pcj-news/pcj-report-on-emerging-adult-justice-in-massachusetts.

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[11] "The Massachusetts Opioid Epidemic: A data visualization of findings from the Chapter 55 report." Available at http://www.mass.gov/chapter55/#populations. Substance use disorders among female emerging adults may require even more urgent attention. In contrast with other age groups, opioids caused death of females among 18-to 24-year-olds at a higher rate than men in this group (28.5% and 25.6% of all deaths respectively). *Id.*

[12] Massachusetts, Department of Public Health. (August 2017). "An Assessment of Fatal and Nonfatal Opioid Overdoses in Massachusetts (2011-2015)."

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[14] *Id.*

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[18] *See* https://www.samhsa.gov/criminal-juvenile-justice.

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[20] Bureau of Justice Statistics, Arrest Data Analysis Tool, https://www.bjs.gov/index.cfm?ty=datool&surl=/arrests/index.cfm#.

[21] *Id.*

[22] FBI Uniform Crime Report does not distinguish between drug sale and drug possession, but gives aggregate number of arrests for all drug abuse violations.

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