The National Center on Addiction and Substance Abuse

GUIDE FOR POLICYMAKERS

PREVENTION, EARLY INTERVENTION AND TREATMENT OF RISKY SUBSTANCE USE AND ADDICTION

DECEMBER 2015

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Accompanying Statement by Samuel A. Ball, PhD, President and Chief Executive Officer

For more than 20 years, it has been the defining mission of The National Center on Addiction and Substance Abuse to connect science with policy and practice to better the lives of all people affected by substance use and addiction. In all our work, our aim has been to identify the strategies that are most effective in preventing substance use and treating addiction, and thereby help to reduce the tremendous health, social and financial burdens of addictive substances on our families, communities, systems and society.

A key target of our efforts has been policymakers at all levels of government and within certain non-governmental organizations because it is the policymaker who has the greatest leverage and broadest reach to produce large-scale changes in how we address this nation's primary and most costly preventable health problem.

In each of the reports, white papers, books, journal articles, editorials and blog posts that we have published or disseminated over the years, a central theme has been to employ the most valid and reliable research findings available to identify practical and effective policies and programs In this *Guide for Policymakers: Prevention, Early Intervention and Treatment of Risky Substance Use and Addiction*, we have compiled a comprehensive set of effective policies and practices that delineates specific actions for improving how we address risky substance use and addiction in the United States.

This *Guide* is of unprecedented breadth and depth. It draws on an extensive body of scientific research regarding what works best to prevent and reduce all forms of addictive substance use--tobacco, alcohol, illicit drugs and controlled prescription drugs. It includes policies and practices relevant to those working within the key social systems most directly affected by substance use and addiction and for which carefully considered initiatives can produce the most significant results: health care, education and justice. The *Guide* offers resources and references for deeper examination of the issues and does not shy away from the more controversial topics, such as marijuana legalization; regulation of alternative tobacco/nicotine products; medication-assisted treatment in the health care and justice systems; and health care, education and justice reform.

The health, social and economic costs of addictive substances are becoming more and more evident, as is the need for dramatic improvements in substance use prevention and addiction care. The wide gap that exists between the breadth of available knowledge on how best to prevent risky use and treat addiction and the practices currently in use contributes directly to the profound human and economic costs of these health problems. This gap decidedly cannot be bridged without the concerted and well-informed efforts of policymakers.

Substance use and addiction constitute one of the largest health problems in the United States and abroad, causing or contributing to countless medical conditions, deaths and costly health expenditures. They undermine academic progress and success, disrupt functioning and performance, and contribute to injuries, unsafe sex, violence and crime. Substance-related criminal offenses clog up our judicial system, drain scarce resources and lead to the imprisonment of far too many young people whose lives could have been turned around if only they received timely, appropriate and effective addiction care. Substance use and addiction put a tremendous financial strain on local, state and federal government budgets and their direct and indirect consequences eat up a significant portion of taxpayer dollars.

Thoughtful research-based policies can make a substantial difference. We already have seen concrete results from effective policies and programs that have been implemented at various levels of government in recent years--for example, in reductions in cigarette smoking and alcohol-related traffic fatalities and in increased opioid overdose reversals--which have helped to improve the public health and safety while reducing costs.

This *Guide* is not meant to be the final word on how to reverse past weaknesses in our approach to substance use and addiction in the United States. Nor is it a complete account of all effective policies and programs that have been considered or implemented to address these issues. Instead, it is meant to inform policymakers who play an essential role in helping to ensure that best practices in addiction prevention, early intervention, treatment and disease management are implemented effectively across the United States.

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The National Center on Addiction and Substance Abuse's *Guide for Policymakers: Prevention, Early Intervention and Treatment of Risky Substance Use and Addiction* was prepared under the direction of Linda Richter, PhD, Director of Policy Research and Analysis. Many current and former staff members contributed to the development and preparation of this Guide, but we would like to especially thank Emily Feinstein, JD; Susan E. Foster, MSW; Brandie Pugh, MA; Tiffany John, LMSW; Cathleen Woods-King, JD, LLM; Margaret Raskob, MPH; Mark T. Stovell, BA, and Victoria Fritz, BA, for their valuable contributions. David Man, PhD, MLS, and Alexis Nager, MS, assisted with the references. Andrea Roley, BA, Michelle Conley, MIPH, and Elizabeth Mustacchio, MBA, managed the communications, marketing and distribution activities. Jennie Hauser and Jane Carlson managed the bibliographic database and provided administrative support.

While many contributed to this effort, the opinions expressed herein are the sole responsibility of The National Center on Addiction and Substance Abuse.

Chapter I
Introduction and Executive Summary

The risky use of addictive substances is a significant public health problem and addiction is a complex disease. Together, they affect nearly half the U.S. population, result in untold human suffering, cost taxpayers billions of dollars a year and adversely affect nearly every sphere of government-funded public service. In fact, they are among the most costly health problems facing the United States.

Despite the tremendous burden of these health problems, the many scientifically proven ("evidence-based") interventions that exist to prevent, reduce, treat and manage them are not widely implemented. Providing these services can considerably improve the public health while reducing the financial burden on government and taxpayers.

Many parties have a role to play in preventing and reducing risky substance use and in ensuring effective care for the millions of Americans with addiction. Yet policymakers at all levels of government, as well as in non-governmental organizations that provide or advocate for social services, are uniquely positioned to help bring the prevention and treatment of risky substance use and addiction in line with the standard of care that exists for other public health and medical conditions. Their leverage is broad and particularly extensive within the primary social systems where such efforts would accrue the most significant results: health care, education and justice.

WHO IS A POLICYMAKER?

A policymaker is anyone involved in the formulation of policies, especially but not only within government. The measures and initiatives presented in this guide can be implemented by various types of policymakers, including, but not limited to:

- Local, state and federal legislators
- Local, state and federal agency directors and administrators
- National policy organization administrators
- Professional association administrators
- State professional board administrators
- State attorneys general
- Directors of private health, education and justice institutions
- State health insurance commissioners
- Public insurers (e.g., Medicare, Medicaid, TRICARE)
- Private/commercial insurers
- Accrediting organizations and regulatory commission administrators
- Health care practice and system administrators
- Graduate professional education program administrators
- Primary, middle and high school administrators
- College and university administrators

To help identify the measures and initiatives that can create significant change within and beyond these systems this compendium presents policies and practices that research has suggested will help to reduce risky substance use and addiction in the United States. This guide is not meant to be a complete account of all effective policies and programs that have been considered or implemented to address these issues. Instead, it presents prominent, evidence-based approaches to preventing and reducing risky substance use

and addiction and their consequences with the goal of helping to ensure that best practices in addiction prevention, early intervention and treatment are implemented effectively across the United States.

DEFINING THE TERMS

Risky substance use is the use of substances in ways that threaten health and safety and increase the chance of addiction. It includes any use of tobacco/nicotine products or illicit drugs, exceeding national guidelines for safe alcohol use, or misusing controlled prescription drugs. It does not include use that meets clinical diagnostic criteria for a substance use disorder (a term which encompasses what used to be called substance abuse and substance dependence).

- Risky substance use often involves multiple substances, and the use of one substance can increase the likelihood of other substance use and addiction.

- Risky substance use is a public health problem that can be prevented through evidence-based approaches to disease prevention and reduction.

Addiction is a complex disease, often chronic in nature, with significant behavioral characteristics that involves the compulsive use or misuse of tobacco/nicotine, alcohol, illicit drugs or controlled prescription drugs. Individuals with addiction are those who meet diagnostic criteria for a substance use disorder of a moderate or severe nature, as defined in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).

- Like other public health and medical problems, we know the risk factors for addiction and how best to intervene. Although there is no cure for addiction, there are effective evidence-based psychosocial and pharmaceutical therapies and approaches to managing the disease.

What Can Effective Policies Achieve?

Close the Gap between Science and Practice

There is a profound gap between what existing research demonstrates to be effective means for addressing risky substance use and addiction and the practices that are currently in use. This gap is due in part to decades of marginalizing risky substance use and addiction as social or moral problems rather than addressing them with interventions and treatments that match the responses given to other health conditions.

The science of addiction is clear, but public policy and opinion are lagging behind at huge social, health and financial costs to society. Given that the protection of public health and safety via the implementation of effective and cost effective practices is the central feature of the mission of policymakers, this group of decision makers can use their leverage within key public and private institutions and programs to create an integrated and comprehensive approach to addiction prevention and care that works.

Protect the Public Health and Safety

Risky substance use and addiction together constitute America's largest health problem, causing or contributing to more than 70 other conditions requiring medical care, including cancer, respiratory disease, cardiovascular disease, sexually transmitted diseases, pregnancy complications and trauma. They

can exacerbate existing health conditions and complicate their treatment. It is estimated that more than 20 percent of deaths in the U.S. are attributable to tobacco/nicotine, alcohol and other drug use.[1]

Risky substance use and addiction undermine education and academic progress at all levels, directly affecting students' functioning and increasing the risk of poor academic performance, cognitive impairment and school dropout. A lax approach to prevention, intervention and treatment on and around school property, including college and university campuses, undermines students' health and safety, and increase the risk of injury, unsafe sex, and crime.

Risky substance use and addiction are key factors in the majority of criminal incidents and failing to adequately address them within the justice system is a key barrier to effective rehabilitation and to crime prevention and reduction.

Reduce Costs and Assure Effective Use of Scarce Funds

Addiction and risky substance use are leading causes and contributors to a range of costly health and social consequences that put a significant financial burden on already strained public and private budgets.

Taxpayer dollars are routinely squandered away on the consequences of risky substance use and untreated addiction rather than being more wisely allocated to effective prevention and treatment measures.

- Of every dollar federal and state governments spend on risky substance use and addiction, an estimated 96 cents goes toward dealing with their consequences; only 2 cents goes toward prevention and treatment. The remaining 2 cents goes toward research, taxation, regulation and interdiction.[2]

The taxpayer tab for government spending on the consequences of risky substance use and untreated addiction totals an estimated $468 billion a year[*]--almost $1,500 for each person in the United States.[3] More recent estimates put tobacco, alcohol and other drug-related costs in the U.S. at more than $700 billion annually.[4] The majority of the spending on the consequences of risky substance use and untreated addiction is in the areas of health care and justice, with a considerable portion of the spending devoted to education and social welfare programs:

- Health care costs account for an estimated 58 percent of substance-related federal and state government spending.

- Justice system costs, including substance-related costs of incarceration, probation and parole, juvenile justice and criminal and family court, account for an estimated 13 percent of substance-related federal and state government spending.

- Education, child and family assistance, and mental health and developmental disabilities programs are other areas in which substance-related government spending is significant.[5]

In line with current health reform measures, effective policies are those that concentrate limited resources on cost-saving prevention, early intervention and effective treatment within each of these social systems, thereby reducing the costly health, social and criminal consequences of risky substance use and untreated addiction.

[*] Based on data from 2005.

Effective Policies Can and Do Make a Difference

Thoughtful and creative government policies as well as private initiatives already have yielded concrete reductions in the health, social and financial costs of risky substance use and addiction, considerably improving public health and social welfare. While these conditions often seem intractable, there have been profound reductions in the past years in cigarette smoking, alcohol-related traffic fatalities and injection drug-related incidence of HIV/AIDS--all due in large part to well-conceived policy measures and consumer, family and organizational advocacy. Some notable examples of policies that have documented evidence of success[*] include the following:

Tobacco/Nicotine

- **Higher taxes** on tobacco/nicotine products are strongly linked to reduced use among young people. The United States federal cigarette tax increased by 159 percent in April 2009. An analysis of state-level data collected from the 2002-2011 National Survey on Drug Use and Health (NSDUH) revealed that, while the impact of the tax increase varied by demographics, the odds of smoking initiation and current[†] smoking among youth declined following the tax increase.[6] More recent state-level data from January 2012-December 2013 likewise found significant reductions in the number of cigarette packs purchased following a tax increase.[7] Raising tobacco/nicotine taxes not only helps to keep these products out of the hands of young people, it also helps to reduce use among adults, resulting in improved health outcomes and lower health care expenditures. The application of tobacco tax revenues to tobacco/nicotine-related prevention and treatment initiatives can further enhance the benefits of these tax hikes.

- **Restrictions on youth access to tobacco** through enforcement efforts and local ordinances prohibiting the sale of tobacco/nicotine to minors have proven effective, according to a review of more than 400 articles and 400 government reports published from 1987-2010.[8] Other means of reducing youth access, such as restrictions on vending machine purchases, repackaging and free-sample distribution, as well as identification requirements for purchase have been associated with lower smoking rates among females.[9]

- **Bans on smoking in restaurants, bars and workplaces,** which occurred in counties across the country between 1991 and 2008, have been associated with a 20 percent decrease in hospital admission rates for heart attacks among Medicare beneficiaries aged 65 and older. Hospital admissions for chronic obstructive pulmonary disease declined by 11 percent in counties with workplace smoking bans and by 15 percent in counties with bar smoking bans.[10] A recent study examining data over an 11-year period, from 1997-2007, found that smoke-free laws are associated with a reduced likelihood that youth will initiate smoking, become current smokers and--for those who do smoke--be frequent smokers.[11] Other research shows that the benefits of indoor smoking bans may extend to alcohol use: in states with smoking bans in bars, individuals had a lower likelihood of developing an alcohol use disorder and those with an alcohol use disorder were more likely to recover compared to individuals in states without these smoking bans.[12]

- **State-funded tobacco control programs** have been associated with lower rates of youth susceptibility to smoking, past-year smoking initiation, current smoking and established smoking.

[*] The examples provided here are only those for which there are published outcomes. Many other promising policy-oriented strategies have been implemented across the U.S. that do not have outcome data available to verify their effectiveness.

[†] Reported use in the past 30 days.

Likewise, the higher the proportion of a state's population covered by smoke-free air laws, the lower the rates of youth susceptibility to smoking, current smoking and established smoking.[13]

- **Nationwide media campaigns** such as the truth® campaign developed by Truth Initiative (then known as Legacy) in 2000--a counter-marketing campaign that provided adolescents with facts about the harms of smoking and about the tobacco industry's marketing practices--can be highly effective. The truth® campaign was responsible for approximately 22 percent of the overall decline in youth smoking between 1999 and 2002.[14] In states that implemented antismoking campaigns based on the truth® model, smoking reduction rates among youth were approximately twice those in other states.[15] An analysis by Truth Initiative of the cost-effectiveness of the campaign found that not only were the costs of the campaign recovered, but there was a nearly $1.9 billion savings in medical costs; a less conservative estimate found the health-care cost savings to be as high as $5.4 billion.[16]

NEW YORK'S COMPREHENSIVE ANTI-SMOKING INITIATIVES

- Since the 2002 implementation of New York City's anti-smoking campaign and the 2003 implementation of a comprehensive tobacco control plan (which included higher taxes, clean indoor air laws, a media campaign and support for cessation services), smoking rates decreased by 28 percent among adults (from 2002 to 2012) and by 52 percent among youth (from 2001 to 2011).[17]
- After a statewide smoking ban was implemented in New York State in 2003, the rate of hospital admissions for heart attacks decreased by 8 percent (statistically controlling for potentially confounding factors).[18]
- In 2013, New York City adopted a bill to increase the legal age for purchasing tobacco/nicotine products to 21.[19] Research indicates that an increase in the minimum legal sale age for tobacco/nicotine products may delay smoking initiation among youth, leading to lower rates of smoking.[20]

Alcohol

- **Higher taxes on alcohol,** which raise its price, are consistently associated with reduced binge or excessive drinking and adverse alcohol-related health outcomes.[21]

- **Enhanced alcohol enforcement efforts,** such as anti-DWI initiatives, have been found to decrease the rate of alcohol-related crashes and fatalities; for example, in New Mexico, such initiatives were associated with more than a 35 percent reduction in such rates between 2004 and 2010.[22]

- **Internal possession laws,** which allow law enforcement to charge underage drinkers with alcohol possession if they have ingested alcohol, have been associated in one study with lower rates of current drinking among high school students, aged 14 and 15.[*] [23]

Other Drugs

- **Opioid overdose prevention programs,** such as those distributing the medication naloxone, can reverse the effects of opioid overdoses and prevent overdose deaths. More than 16,000 lives were lost in 2013 in the U.S. to prescription opioid overdoses; more than 8,000 deaths were due to

[*] According to data from 12 states.

heroin overdoses.[24] These deaths are largely avoidable. One study found that since the first opioid overdose prevention program began in 1996, participating programs trained and distributed naloxone to 152,283 laypersons and the program resulted in an estimated 26,463 overdose reversals.[25] A systematic review found that naloxone administration by nonmedical bystanders was successful at averting overdose deaths in the vast majority of cases in which it was used.[26]

- **Expanded access to opioid addiction medication-assisted treatment (MAT),** such as that provided through the 2000 Drug Addiction Treatment Act (DATA), has allowed physicians to prescribe buprenorphine within office-based settings.[*] [27] One preliminary study found that 28 percent of individuals receiving buprenorphine stated that they would not have sought methadone treatment, the other primary maintenance medication for opioid addiction, suggesting that without this Act, a sizable proportion of individuals with opioid addiction would not have received evidence-based pharmaceutical treatment.[28]

- **Prescription Drug Monitoring Programs (PDMPs) can be effective** in monitoring and controlling the overprescribing, inappropriate prescribing and diversion of controlled prescription drugs. PDMPs collect data from pharmacies on dispensed prescriptions for controlled medications and make the data available to authorized users, including physicians, via a secure, electronically accessible database. PDMPs can improve medical care; reduce misuse, diversion and prescription fraud; contribute to lower rates of prescription drug-related addiction, overdose and death; and save states millions of dollars in health care, lost productivity and drug diversion investigation costs.[29] A recent examination of the effect of PDMPs on overdose mortality revealed a 25 percent decrease in oxycodone[†]-related deaths following the implementation of a statewide PDMP in Florida. This effect remained even after statistically controlling for other potential contributing factors such as tamper-resistant packaging, enforcement crackdowns and other relevant regulations.[30]

Systems that Warrant Special Consideration

There are three systems within which risky substance use and addiction merit special attention and for which specific measures are presented in subsequent chapters of this guide:

Health Care

As is true of other health conditions and diseases, risky substance use and addiction should be addressed by physicians and other qualified health professionals. Addiction affects more people than heart disease, diabetes or cancer, yet only about one in 10 people with addiction receives any form of treatment.[31]

Our failure to properly treat addiction results in sicker patients, complicated care, poor health outcomes and unsustainable costs. Persons with untreated addiction are among the highest-cost health care users in the U.S.:[32] they tend to have high health care utilization rates, frequent emergency department visits and hospital admissions and long hospital stays.[33] Despite the gravity and broad reach of the disease and its significant impact on health and spending, addiction historically has been marginalized by the health care system, its care relegated to a separate addiction treatment system that is inconsistently regulated and underfunded. The majority of addiction treatment providers are not equipped with the knowledge and

[*] In order for physicians to prescribe buprenorphine, they have to obtain a Drug Enforcement Administration (DEA) Drug Addiction Treatment Act (DATA) waiver and abide by particular requirements, such as attending a training session and limiting the number of patients to whom they can administer this medication.
[†] An opioid medication.

skills necessary to provide the full range of evidence-based services to treat the disease.[34] This problem is not limited to the front-line addiction counselors working in community-based programs. An online survey found that 43 percent of physicians in the sample considered addiction to alcohol to be a personal or moral weakness (9 percent saw it primarily as a personal or moral weakness and 34 percent saw it equally as a personal or moral weakness and as a disease or health problem).[35] Patients also face other formidable barriers to receiving addiction treatment, including insurance benefit restrictions, limited availability of treatment slots, long waiting lists, lack of childcare and the need to comply with onerous rules and treatment protocols.[36]

Education

Adolescence is *the* critical period of risk for both initiation of substance use and for experiencing more harmful consequences as a result of substance use. Tobacco/nicotine, alcohol and other drug use directly affect students' functioning and increase the risk of cognitive impairment, poor academic performance and school dropout.[37] Since young people spend the majority of their time at school, academic institutions have significant leverage--and a significant responsibility--to influence and manage the substance-related attitudes and behavior of their students. This includes helping to prevent use, intervening early with students already engaged in substance use and linking those with addiction to effective treatment.

Justice

Risky substance use and addiction are key factors in the continuous growth of the U.S. inmate population. Alcohol and other drug use are implicated in most types of crime: more than 80 percent of all incarcerated adults are substance-involved,[*] as are approximately 50 percent of incarcerated youth.[38] Among youth in the juvenile justice system, 78 percent are substance involved.[39] There is a documented link between continued substance use and recidivism:[40] approximately half of all individuals in the criminal justice system who are substance-involved re-engage in criminal behavior once they are released from jail or prison.[41]

[*] Defined as having a history of using illicit drugs regularly, meeting clinical criteria for addiction, having been under the influence of alcohol or other drugs when committing the crime, having a history of alcohol treatment, having been incarcerated for an alcohol or other drug law violation, having committed the offense to get money to buy drugs, or some combination of these characteristics.

Chapter II
A Two-Pronged Approach: Prevention/Early Intervention and Treatment/Disease Management

Effectively addressing risky substance use and addiction requires the implementation of evidence-based:

- ***Prevention and Early Intervention.*** Public education and awareness, school- and community-based prevention programs that are grounded in prevention science, and effective regulations that reduce the availability, accessibility and appeal of addictive substances all have been shown to be effective in preventing risky substance use. Early intervention with those at risk via routine screening and therapeutic interventions are effective approaches to reducing risky substance use and the development of addiction.

- ***Treatment and Disease Management.*** Evidence-based treatment, disease management and support for those with addiction are critical for reducing the prevalence and consequences of the disease.

To accomplish these goals, policymakers at all levels of government and within other public and private service sectors should base their actions on solid research evidence. When such evidence is unavailable, the funding of quality and targeted research studies would expand the knowledge base regarding what works best in addiction prevention and care.

A Two-Pronged Approach to Addiction Prevention and Care

Below we summarize effective measures and initiatives that have been shown to promote prevention, early intervention, treatment and disease management with regard to risky substance use and addiction. In subsequent chapters, we describe research-based measures that have been shown to be particularly effective for addressing risky substance use and addiction in the health care, justice and education systems.

Prevention and Early Intervention

The best way to avoid the costly consequences of risky substance use and addiction is to invest in prevention and early intervention. Effective prevention is comprised of public education and awareness that helps to reduce the appeal of addictive substances, as well as laws, regulations and policies that reduce their availability and accessibility, particularly to young people. Effective early intervention seeks to help those who already have started using addictive substances reduce their use and related symptoms so that their health is improved and to prevent them from progressing to an acute or chronic disease state of addiction.

Professionals in the health care, education, justice and other social service sectors should be properly trained to engage effectively in prevention efforts. They should be well equipped to educate the populations they serve about risky substance use and addiction, identify when someone is engaging in risky use or exhibiting signs of addiction, know how to respond when such cases are identified, and participate in strategies to reduce the availability and accessibility of addictive substances.

Research supports the need for funding, designing and implementing school- and community-based prevention programming that includes evidence-based initiatives to reduce risk factors and bolster protective factors, as well as protocols for screening students for early signs of risk. Many existing school- and community-based programs lack the intensity or comprehensiveness needed to be effective. Existing programs and initiatives that do not meet standard scientific criteria for effectiveness should be modified or replaced with those for which effectiveness has been documented in controlled research studies. The priority should be to direct scarce resources toward scientifically supported prevention efforts, including:

Public Education and Awareness to Reduce the Appeal of Addictive Substances. Consistent with other successful initiatives to educate the public about poorly understood public health problems and diseases such as depression or HIV/AIDS, the following can help to prevent risky substance use:

- **Getting the facts out** through population-wide public information campaigns. Such campaigns:
  - Educate the public about the nature of risky substance use and addiction--what increases vulnerability (particularly early use), what the consequences are and how best to prevent and treat them.
  - Clarify the difference between risky substance use (a behavior that typically is amenable to change via lower intensity psychosocial interventions) and addiction (a medical condition that typically requires evidence-based treatment and recovery supports), and explain how best to respond to each condition.
  - Address all addictive substances--including tobacco/nicotine, alcohol, illicit drugs and controlled prescription drugs--in a comprehensive manner.
  - Evaluate the impact of these information campaigns through credible and independent research, and adjust their messaging and implementation accordingly.

- **Funding, designing and implementing evidence-based prevention programs** in schools, health care settings, communities and other venues where the target population may be at risk for tobacco/nicotine, alcohol or other drug use. Effective programs are those that:
  - Maintain a health and wellness rather than a punitive focus.
  - Comprehensively address the full range of risk factors known to increase substance use (e.g., poor coping skills, trauma, family history of substance use, peer use, psychiatric symptoms or disorders like depression and anxiety) and the protective factors known to decrease risk (e.g., academic achievement, family and peer support, a nurturing school or community environment).
  - Address all addictive substances as well as co-occurring health (including mental health) conditions.
  - Ensure that prevention initiatives are sensitive to age, gender, sexual orientation and cultural group.
  - Are based in science, implemented with fidelity and carried out by trained prevention specialists.
  - Include a special focus on children and adolescents who are most vulnerable to substance use initiation and to the addicting effects of tobacco/nicotine, alcohol, illicit drugs and controlled prescription drugs.

Professional Training. Investing in the education and training of those professionals best positioned to help prevent the initiation and continued use of addictive substances can be very effective in reducing risky substance use and addiction. Because individuals who are at risk for or already engaging in the risky use of addictive substances, as well as those who have addiction, regularly come into contact with every sector of public service (e.g., health, education, justice, social welfare), it is incumbent upon

professionals providing those services to know how to address these problems effectively. To accomplish this goal, it is important to:

- **Educate and train health professionals** in the predictors of risky substance use and addiction; prevention, intervention, treatment, and management options; co-occurring conditions; and special population and specialty-care needs.

- **Educate non-health professionals--**including educators, law enforcement and other criminal justice personnel, legal staff, and child welfare and other social service workers--about risky substance use and addiction. Those who do not provide direct addiction-related services but who come into contact with significant numbers of individuals who engage in risky substance use or who may have addiction should have a level of knowledge that surpasses that of the lay public about these issues and how to address them.

Reduced Availability and Accessibility of Addictive Substances. In addition to diminishing the appeal of or demand for addictive substances, effective measures limit their supply, making them less available and accessible to the public. A broad range of laws, regulations and policies that can help to reduce exposure to and use of addictive substances, particularly among young people, include:

- **Higher taxes** on tobacco/nicotine and alcohol products which help to prevent youth initiation of smoking and drinking and reduce the use of these products among youth and adults. Increasing the cost of these products through higher taxes not only is associated with reduced use, particularly among youth,[1] but also generates revenues to help fund prevention and treatment services.

- **Advertising and marketing prohibitions** for all tobacco/nicotine, alcohol and marijuana (in states where marijuana is legal for personal use) products in any venue to which youth are exposed.
  - Prohibiting tobacco/nicotine, alcohol and marijuana product advertising, sponsorship and promotions in media with 15 percent or greater youth audiences and in venues with 15 percent or greater youth attendance can reduce youth initiation and use of these products.

- **Legal purchase age laws** that restrict the sale of all tobacco/nicotine, alcohol and marijuana (in states where marijuana is legal for personal use) products to minors.

- **Zoning laws** that restrict the density of tobacco/nicotine and alcohol outlets (and marijuana outlets in states where marijuana is legal for personal use), including stores and bars.

- **Comprehensive indoor/outdoor clean air laws**, which are a cost-effective public health measure associated with reduced smoking and related health care costs. Clean air laws should apply to all tobacco and nicotine products (including electronic cigarettes) and to marijuana (in states where use is legal). Smoking bans not only limit adolescents' access to these products, but also send a clear message that they are dangerous and socially unacceptable.

Tobacco/Nicotine

Initiatives specifically aimed at addressing tobacco/nicotine use and addiction include:

- **U.S. Food and Drug Administration (FDA) regulation of all tobacco and nicotine products.** Companies that produce tobacco and nicotine products should be required to manufacture,

package and market all combustible and non-combustible tobacco and nicotine products in ways that reduce the likelihood of initiation among youth and of addiction among youth and adults:

- Extend regulation to the production, advertising and marketing of all tobacco and nicotine products, including electronic cigarettes (e-cigarettes) and "premium cigars." E-cigarettes should be subject to the same marketing restrictions as combustible cigarettes. Because these products are not bound by the advertising restrictions that pertain to traditional combustible cigarettes, many e-cigarette campaigns directly appeal to youth with advertisements that contain cartoons, promote youth-oriented flavors and glamorize the use of these products.[2]
- Require all tobacco and nicotine products to carry an addiction warning label.
- Ban all flavorings, including menthol, in all tobacco and nicotine products.

- **Adequate taxation of all tobacco/nicotine products**, including non-cigarette tobacco/nicotine products:
  - Amend the definition of "tobacco products" in state tobacco tax laws to include alternative tobacco/nicotine products such as e-cigarettes; and
  - Establish a required minimum tax on smokeless and alternative tobacco/nicotine products such as e-cigarettes, vaping devices and e-liquids.[3]

- **Comprehensive clean indoor air laws** and other smoking bans (including for e-cigarettes.

- **A legal purchasing age of 21 for all tobacco/nicotine products.** Research clearly supports the need to keep all tobacco/nicotine products from children and teens, not only because of the harms associated with their use but also because delaying onset of use until the brain is more fully developed decreases the risk of addiction. Raising and enforcing the minimum legal purchasing age for all tobacco/nicotine products to 21 reduces access and sends a clear message that use of these products by young people is harmful.[4]

THE INSTITUTE OF MEDICINE'S CONCLUSIONS REGARDING RAISING THE MINIMUM AGE OF LEGAL ACCESS TO TOBACCO PRODUCTS

1. "Increasing the minimum age of legal access to tobacco products will likely prevent or delay initiation of tobacco use by adolescents and young adults.
2. Although changes in the minimum age of legal access to tobacco products will directly pertain to individuals who are age 18 or older, the largest proportionate reduction in the initiation of tobacco use will likely occur among adolescents of ages 15 to 17 years.
3. The impact on the initiation of tobacco use of raising the minimum age of legal access to tobacco products to 21 will likely be substantially higher than raising it to 19, but the added effect of raising the minimum age beyond age 21 to age 25 will likely be considerably smaller."[5]

- **Bans on the sale and distribution of tobacco/nicotine products through non-face-to-face means,** including via vending machines, the Internet, email, direct mail, telephone, smart phones, and other communication technologies**.**

- **Tobacco retailer licensing laws** that enforce tobacco tax and point-of-sale laws, control retail outlet density and location (e.g., restrict sales near schools or youth-oriented facilities) and promote responsible sale and distribution of tobacco/nicotine products (e.g., restricting product sampling, banning sales in pharmacies, restricting flavored products, banning coupon redemption).

- **High impact, mass-reach health communication interventions** that promote tobacco- and nicotine-free norms and inform the public of the risks of tobacco and nicotine use.

- **Monitoring and evaluating the effectiveness of programs** targeted toward tobacco/nicotine control and prevention and modifying these programs based on the findings to improve outcomes.

Alcohol

Initiatives specifically aimed at addressing risky alcohol use and addiction include:

- **Laws aimed at reducing impaired driving**, such as sustained sobriety checkpoints, license suspension for driving under the influence (DUI) of alcohol (or other drugs) or driving while intoxicated or impaired (DWI), *per Se* alcohol and other drug impairment laws,[*] and training for law enforcement to better identify impaired drivers and enforce these laws.

- **Laws that discourage adults from providing alcohol to minors,** which have been shown to reduce alcohol-related motor vehicle fatalities.[6] Such laws include:
  - Social host laws, which extend civil liability to adults who serve or provide alcohol to minors in the event that a minor is killed or injured or kills or injures another person.
  - Dram shop liability laws, which impose liability on vendors who allow for the intoxication of a minor who subsequently causes an injury.
  - Routine retailer compliance checks, which identify those who illegally sell alcoholic beverages to minors.
  - Keg registration laws (or keg tagging laws), which require alcohol sellers to attach an identification number to kegs that exceed a certain gallon minimum and record identifying information about the purchaser at the time of sale.

- **Elimination of state Uniform Accident and Sickness Policy Provision Laws (UPPL)**, which allow insurance providers to deny coverage for injuries sustained by a person who was under the influence of alcohol or other drugs at the time of the injury. These laws provide physicians with disincentives to screen patients for substance problems or document substance-involved injuries, thereby reducing the likelihood that those who are at risk will get the help they need.

Marijuana, Other Illicit Drugs and Controlled Prescription Drugs[7]

Initiatives specifically aimed at addressing marijuana and other illicit drug use and the misuse of controlled prescription drugs include:

- **Maintaining the illegal status of marijuana to protect the public health and decriminalizing the possession of marijuana for personal use.**[8] In those states where marijuana is legal, regulating its sale and use and funding and implementing effective prevention and treatment initiatives via the following measures can help reduce use, especially among youth:
  - Prohibit the sale of all marijuana-containing products to people under the age of 21 and strongly enforce minimum purchase age laws by imposing fines and/or criminal sanctions for violations.

[*] Per se laws in DUI or DWI cases generally establish that once an individual is shown to have a blood-alcohol concentration (BAC) at or above .08 percent, that person will be considered intoxicated by law without the need for further evidence of intoxication or impairment to be demonstrated. Drug per se laws are closely related to zero-tolerance laws that make it illegal to drive with any amount of certain drugs in your system.

- Set high sales and excise taxes on marijuana to discourage use.
- Apply tobacco clean indoor/outdoor air laws to marijuana to discourage use in public spaces.
- Prohibit advertising, marketing and use of marijuana products in entertainment media.
- Restrict the sale of marijuana products to licensed retail establishments where no other products are sold.
- Impose financial penalties on individuals possessing small amounts of marijuana for personal consumption to discourage use.
- Impose criminal penalties on individuals who engage in marijuana trafficking, distribution and sale, and on those who drive while intoxicated by marijuana.
- Implement sustained public awareness campaigns about the risks of marijuana use, especially for young people.
- Prioritize treatment over incarceration and assuring the availability of evidence-based brief interventions and treatment for those at risk for or with symptoms of a marijuana use disorder.

"MEDICAL MARIJUANA"

State "medical marijuana" laws are not advised because they bypass the FDA drug review and approval process, which ensures the safety and efficacy of new medications. Instead, a sound approach with regard to medical marijuana entails:

- Developing streamlined procedures to expand research on the utility of cannabinoids for medical use and encouraging the development of better THC-based, FDA-approved medications.
- Convening regular meetings to evaluate research data on therapeutic indications for cannabinoids and, when appropriate, making recommendations to the FDA about approving new indications.
- Working to encourage or fund research to test the safety and efficacy of marijuana-based and cannabinoid medications.
- In states that have approved "medical marijuana," surveillance programs that monitor safety, adverse events and outcomes can help protect the public and inform future policy.

- **Expanded access to effective medication-assisted treatment (MAT)** for illicit and prescription opioid addiction and medications that are successful at preventing and reducing overdose.

- **Prevention programs and public awareness campaigns that reduce demand for illicit and controlled prescription drugs,** designed to be targeted in an age-appropriate way to audiences throughout the lifespan, including young people and older adults who are at particularly high risk.

- **Restrictions on direct to consumer marketing of controlled prescription drugs**, which has proliferated over the past two decades and has contributed to reduced public perceptions of risk with regard to potentially addictive medications.[9]

- **Stronger FDA regulation of controlled prescription drugs.** Pharmaceutical companies can manufacture, package and market controlled drugs in ways that reduce the likelihood of misuse,[*]

[*] When a person takes a medication in a manner or dose not recommended by a health professional or when a person takes a drug not prescribed to him or her.

diversion* and addiction. To this end, the FDA should be given the authority to require pharmaceutical companies that manufacture controlled drugs to:

- Formulate or reformulate these drugs, where possible, to minimize the risk of misuse.
- Include proactive risk management plans in all new applications for controlled prescription drugs, demonstrating strong evidence of the drug's safety and incremental benefits relative to existing drugs, and specifying the steps that will be taken to prevent misuse of the drug while maintaining its maximum therapeutic effectiveness.

- **Comprehensive prescription drug monitoring programs** that ensure collaboration between states to reduce the diversion and misuse of controlled prescription drugs.

- **Provider training in pain management and safe prescribing** to reduce the supply and availability of controlled prescription medications.

Screening, Brief Interventions and Referrals to Treatment. Because the costs of untreated addiction are so high and the human consequences so great, health care professionals should be provided with the resources and incentives to look for substance-related problems and address them early. This can best be accomplished by:

- **Incorporating screening and early intervention into routine health care practice** and into health services offered through schools, justice systems and social service programs.
  - Screening should occur on a regular basis and be designed to identify risky tobacco/nicotine, alcohol, illicit drug and controlled prescription drug use.
  - Screening and interventions should be offered in a variety of venues, programs and services, including emergency departments, health clinics, trauma centers and doctors' offices; schools and colleges; traffic safety, juvenile justice and adult corrections programs; welfare and child welfare programs; and mental health and developmental disabilities services.
  - Public services should not be denied to individuals who screen positive for risky substance use or who have addiction.

- **Ensuring that those who screen positive for risky substance use** are referred to a trained health professional for intervention, diagnosis, treatment and disease management that is tailored to the individual's needs.

- **Encouraging expansion and reimbursement of medical billing codes** for screening and brief interventions in private health insurance plans.

- **Implementing standardized workplace assistance programs** covering tobacco/nicotine, alcohol and other drugs.

- **Investing in research** designed to develop reliable and valid screening and assessment tools that address risky substance use and addiction involving all substances and addictive behaviors, and that can be tailored to special populations, including adolescents and young adults.

* When controlled prescription drugs are diverted or sidetracked from their lawful (medical) purpose to illicit use.

Treatment and Disease Management

Since a significant proportion of the population already has addiction, quality treatment and disease management services are essential. Currently, only 11 percent of people who meet diagnostic criteria for a substance use disorder receive any treatment, and most of those who do receive treatment either do not receive evidence-based care or do not receive it in sufficient intensity and duration to promote long-term positive outcomes.[10] For those with a severe, chronic, relapsing substance use disorder--which often co-occurs with other medical or psychiatric problems--chronic care maintenance services may be needed. Such services may be required following the completion of acute treatment but also may overlap with acute care services.

Policies and initiatives that provide effective services for individuals across the full range of addiction severity hold the most promise for closing the addiction treatment gap. Such measures include:

- **Requiring all treatment programs and services that receive public (or private) funds to offer a full range of evidence-based treatments and requiring all treatment providers to be properly trained and licensed**. To accomplish this goal, improved standards of practice for treatment services are necessary as are measures aimed at assuring that providers meet appropriate licensing and certification requirements.

- **Subjecting all addiction treatment facilities and programs to the same mandatory licensing processes as other health care facilities**. As a condition of licensure, all facilities and programs providing addiction treatment should be required to adhere to established national minimum standards for accreditation.

- **Assuring access to the full range of psychosocial and pharmaceutical treatments and social supports**, tailored to gender, age, race/ethnicity, sexual orientation and life circumstances. Successful treatment also requires effective services for the health problems that frequently co-exist with addiction, including mental health problems.

- **Assuring the availability of detoxification services** that are effectively linked to treatment. While often an important prerequisite to treatment, detoxification alone typically is not sufficient and does not constitute treatment.

- **Diverting individuals from juvenile and adult corrections**, when possible, through expanded, evidence-based treatment and aftercare programs (alternative sentencing) and through drug treatment courts that promote the use of outpatient psychosocial and medication-assisted treatments in addition to residential services.[*]

- **Eliminating mandatory sentencing laws** for substance-involved individuals in the criminal justice system to enable prosecutorial and judicial discretion in treatment referrals and monitoring, particularly for those with non-violent offenses.

- **Encouraging participating providers and facilities in publicly funded health care programs to adopt evidence-based practices, institute quality improvement measures and assess patient outcomes** using all available tools, including quality assurance measurements, pay-for-performance contracting and other incentives.

[*] See Chapter V for an expanded discussion of medication-assisted treatment in the criminal justice system.

- **Assuring access to long-term medical management** that is consistent with the access provided for other chronic diseases, including management of co-occurring health (including mental health) problems.

- **Providing access to auxiliary support services** including education, vocational training, employment; life, parenting and other family skills; child care, housing and transportation support; and recovery and mutual support through twelve-step or other self-help programs.

Chapter III
Specific Measures for the Health Care System

The health care system bears a significant proportion of the total cost of the consequences of risky substance use and addiction, making it a prime target for research-based policy interventions.

RISKY SUBSTANCE USE AND ADDICTION CONSTITUTE THE LARGEST PREVENTABLE AND MOST COSTLY HEALTH PROBLEM IN THE UNITED STATES

- Risky substance use and addiction cause or contribute to more than 70 other health conditions that require medical care, including cancer, respiratory disease, cardiovascular disease, HIV/AIDS, pregnancy complications, cirrhosis, ulcers and trauma.
- More than 20 percent of deaths in the U.S. are attributable to tobacco/nicotine, alcohol and other drug use.
- Nearly one-third (32.3 percent) of all hospital inpatient costs are attributable to risky substance use and addiction.[1]
- Risky substance use and addiction account for an estimated 32 percent of total federal health care spending and 29 percent of total state health care spending.[2]

The most effective measures the health care system can take to improve substance use prevention and addiction care include:

- **Training and incentivizing health care providers** to address risky substance use and addiction within the health care system;
- **Increasing access** to prevention, early intervention, treatment and disease management services; and
- **Improving the quality** of addiction prevention, early intervention, treatment and disease management.

Addiction Prevention and Care in the Health Care System

The goal of the information presented below is to inform policymakers and professionals working within the health care system of evidence-based approaches to prevent, identify, diagnose, treat and manage addiction more effectively and efficiently. Changing health care practice requires sustained, systematic effort at various levels, from provider training requirements to institutional practices to reimbursement. No single measure is a silver bullet but, taken together, these changes can shift the addiction treatment paradigm toward a science-based model that is fully integrated into the health care system. This shift can substantially help curb the health, social and economic costs of risky substance use and addiction.

Expand Insurance Coverage for the Full Range of Addiction Care Services

A critical means of increasing access to a full spectrum of quality addiction care is the provision of comprehensive insurance coverage. Comprehensive coverage entails providing incentives to health care professionals to offer the full range of addiction care services--from prevention and early intervention to treatment and disease management--and removing the critical barrier of cost that prevents many patients from obtaining the services they need. The following strategies can help make addiction care accessible to those who need it:

Reduce Cost Barriers by:

- **Providing comprehensive coverage in all health insurance plans**, including addiction prevention (education, screening), evaluation, brief intervention, treatment and disease management for patients of all ages.
    - All insurance programs, including Medicare and VA/TRICARE, should include comprehensive benefits for addiction prevention, early intervention, treatment and disease management in their plans, without limitations or exclusions.
    - In the absence of a state requirement, private insurers should cover comprehensive addiction prevention, early intervention, treatment and disease management services, and promote these services within their provider networks.

- **Implementing the provisions of the Patient Protection and Affordable Care Act (ACA)**, which require covered plans, as part of the Essential Health Benefits package, to offer addiction services, including:
    - Tobacco/nicotine use screening and cessation services for adults (and expanded counseling for pregnant women who use tobacco/nicotine products);
    - Alcohol misuse screening and brief interventions for adults; and
    - Alcohol and other drug use assessments for adolescents.[3]

ADDICTION-RELATED ESSENTIAL HEALTH BENEFITS

For a complete list of services that should be covered by insurance, please see Essential Health Benefits Recommendations for States, available on our website. [http://www.casacolumbia.org]

- **Implementing the provisions of the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA)**, which require insurance benefits for mental health and addiction care to be offered on par with coverage for medical and surgical benefits. State regulators have primary enforcement responsibility for MHPAEA as it applies to most commercial group health plans and health insurance issuers in the group and individual markets. The Department of Labor and the Internal Revenue Service are responsible for enforcing MHPAEA in private employer-sponsored group health plans; the Department of Health and Human Services is responsible for enforcing MPHAEA in non-federal government health plans.
    - Enforcing MHPAEA requires monitoring health insurance plans' compliance with the law and creating channels for people to report MHPAEA violations, ideally ensuring anonymity and/or providing whistleblower protection.
    - Medicaid managed care and alternative benefit plans must also comply with MHPAEA. These plans must offer newly eligible individuals and families addiction care benefits comparable to treatment for other health conditions by including addiction prevention and treatment as part of their benefits package.

- **Expanding Medicaid enrollment through the ACA.** The ACA gives states the option to expand Medicaid eligibility to include childless adults with incomes up to 133 percent of the federal poverty level. In addition to providing coverage to previously uninsured individuals, expanding Medicaid eligibility may increase the number of people who can access medications to treat addiction. Treatment providers who accept Medicaid are more likely to offer effective, evidence-based practices for addiction treatment than providers who do not accept Medicaid:
  - One study found that addiction treatment programs with a greater proportion of Medicaid patients were more likely to adopt pharmaceutical therapies for substance use disorders than programs with fewer Medicaid patients.[4] Similarly, other research has found that the more treatment providers rely on Medicaid for payment, the more likely they are to offer pharmaceutical therapy for addiction.[5]

- **Ensuring that the services covered by insurance providers--including government, private and self-insured plans--align with best practices.**
  - There are many tools that public payers and private health insurance companies can use to ensure that the care delivered by health care providers aligns with best practices. These include contract terms, quality assurance measurements, pay-for-performance contracting and other incentives, which encourage participating providers and facilities to adopt evidence-based practices, institute quality-improvement measures and assess patient outcomes.
  - Government grants and contracts for treatment create an opportunity to influence the quality of care provided.
  - As a condition of reimbursement, contracts between insurers and providers should require that:
    - Addiction treatment be provided, supervised or managed by qualified health care professionals.
    - Addiction treatment providers utilize evidence-based addiction care services, including pharmaceutical and psychosocial therapies, provided by health care professionals who are trained and licensed in the core competencies of addiction treatment.
    - Addiction treatment facilities generate positive and measurable long-term patient outcomes.

- **Having health plans contract with an adequate network of addiction treatment providers to meet patient demand.** An adequate number of "in-network" providers helps to ensure that patients in a health plan have timely access to the benefits that are covered, including primary care, specialty care and other health care services. People will only be able to access addiction services if their health plans contract with a sufficient number of providers who are trained to treat the disease.
  - Some states have laws requiring all health plans to have an adequate network of addiction treatment providers ("network adequacy laws"). Such laws should define specific standards for measuring adequacy, such as acceptable travel times, distances and appointment waiting times, as well as affordable cost-sharing requirements for primarily out-of-network services. These laws also should require plans to maintain directories of in-network providers that are accurate and up to date. The best approach combines network adequacy laws with thorough network adequacy reviews and strongly enforced network adequacy requirements.

NETWORK ADEQUACY STANDARDS

The ACA requires covered (qualified) health plans sold in state marketplaces to ensure that their networks contain a sufficient number and type of providers, including those who specialize in addiction and mental health care, so that services will be accessible without unreasonable delay.[6] However, the rules do not define what constitutes sufficient or unreasonable, leaving it to states or insurance plans to interpret and enforce the standard. Covered plans also are required to publish directories of in-network providers that indicate whether the providers are accepting new patients, but there is evidence that these directories frequently are wrong or outdated.[7] Medicare and Medicaid each has requirements regarding what is considered an adequate network. For Medicare and many state Medicaid plans, the network adequacy requirements are very specific; for example, dictating minimum enrollee-to-provider ratios or travel times to the closest provider. Private insurance plans not covered by the ACA are regulated by the states. Many states require insurance companies to have adequate networks of providers, but often there are no specific requirements.

- **Adopting the home- and community-based services waiver (Section 1915i)** within state Medicaid programs can expand access to recovery support services for Medicaid beneficiaries. Under this waiver, states can offer case management, day treatment, partial hospitalization and psychosocial rehabilitation services to individuals with mental illness or addiction.

- **Eliminating Uniform Accident and Sickness Policy Provision Laws (UPPL)**, which allow insurance providers to deny coverage for injuries sustained by a person who was under the influence of alcohol or other drugs at the time of the injury. These laws impede screening and appropriate care of patients at risk for a treatable disease. As of January 2014, such laws were in effect in 25 states.[8]

- **Encouraging health care providers to use Screening, Brief Intervention, and Referral to Treatment (SBIRT) billing codes.** These codes are used to bill for reimbursable services under state Medicaid plans in insurance claims and in reimbursement reporting to private and public health insurance systems. Universal use of these codes can foster uniformity in language (e.g., utilizing the same terms when reporting specific components of addiction treatment) which can help to increase the reliability of national data collection efforts (such as for tracking how many individuals use these services).[9]

Prevention and Early Intervention

Prevention is the key to reducing the prevalence and costs associated with risky substance use and addiction. It must start early: adolescence is *the* critical period for the onset of substance use and its consequences. Because the brain continues to develop into young adulthood, addictive substances adversely affect young people to a greater extent than adults, interfering with brain development, impairing judgment and heightening the risk of addiction. In fact, the vast majority of adults with addiction first used an addictive substance prior to age 18.[10]

In the medical context, prevention entails community-wide health promotion efforts through public and individual patient education as well as routine screening for tobacco/nicotine, alcohol and illicit drug use and the misuse of controlled prescription drugs among all individuals who come into contact with the health care system. Individuals who screen positive for risky use of any of these substances should be given evidence-based interventions, typically in the form of brief, office-based counseling sessions. Individuals with signs of addiction should receive a comprehensive evaluation, a formal diagnosis and be

offered or referred to professional treatment, when needed. Effective addiction prevention also involves physician training on appropriate interventions for diagnosed mental health conditions (e.g., mood, anxiety, conduct and attention deficit/hyperactivity disorders) that often co-occur with and can increase the risk of substance use and addiction.

Screening and brief intervention for tobacco/nicotine and risky alcohol use rank among the top most cost-effective prevention services available, higher than cervical cancer (Pap smears), cholesterol, obesity, depression or diabetes screenings.[11] A substantial body of research attests to the effectiveness of screening and brief intervention for identifying and reducing tobacco and risky alcohol use;[12] however, the evidence of effectiveness with regard to illicit and prescription drugs is less strong.[13] Screening and brief interventions, when conducted in a range of health care settings, can reduce the consequences of risky substance use, including visits to emergency departments, hospitalizations, high-risk injection drug use, criminal activity and certain mental health conditions.[14] Providing screening and brief interventions in routine health care practice is particularly effective because people tend to be more receptive to health messages once they are in a health care setting; patients view additional screening, information, brief intervention or referral to treatment as part of the health care they sought initially.[15]

Prevention of risky substance use and addiction also involves appropriate prescribing of controlled medications. Physicians who are unaware of the risk of misuse and diversion of certain controlled prescription medications can inadvertently facilitate their occurrence by prescribing too high of a dose, too lengthy of a prescription or too many medications; failing to monitor patients' outcomes to determine whether they are improving with treatment; and failing to determine whether patients are receiving prescriptions for medications from multiple sources (i.e., "doctor shopping"). Uninformed or negligent prescribing of controlled prescription medications can result in a surplus of prescription drugs in medicine cabinets and elsewhere that is easily accessible to young people seeking to misuse them. Excessive prescribing also conveys to patients of all ages, and young people in particular, that controlled prescription medications are invariably safe or safer than illicit drugs.[16]

MEDICAL EDUCATION MATERIALS FOR PRIMARY CARE

For more information about providing education, screening, interventions and treatment services, please see Medical Education Materials for Primary Care, available on our website [http://www.casacolumbia.org/health-care-providers/addiction-resources-tools].

The following are specific actions for improving substance-related prevention and early intervention within the health care system:

Improve Public Awareness by:

- **Developing and implementing public information and awareness campaigns.** Population-wide information and awareness campaigns, as well as campaigns targeted to population groups more susceptible to risky use and addiction, are effective public health strategies.[17] Public awareness campaigns should inform and educate the public about:
  - The evidence regarding the risks and consequences of substance use;
  - The science of addiction and why adolescence is the critical time for intervention;
  - Effective means of preventing risky substance use and addiction; and
  - Common signs and symptoms and where to get help if needed.

  Campaigns should be objectively and scientifically evaluated to ensure that they are effective and should be modified and updated as needed.

- **Incorporating patient education about risky substance use and addiction into routine medical and mental health practice.** Health care practices and systems should ensure that all patients receive accurate information about the health risks and consequences of substance use, particularly the risks of use initiated during childhood or adolescence and the available options for reducing substance use and its negative health consequences.

Improve Providers' Knowledge and Practice by:

- **Incorporating addiction prevention training in all professional health care curricula and in licensing, board certification and continuing education exams.** To facilitate effective addiction care practice, health care training institutions (including medical, graduate and professional schools and teaching hospitals), accrediting organizations and state professional boards should include the following core clinical competencies in health care curricula and professional licensing, board certification and continuing education requirements:
  - What constitutes risky substance use, the harms of such use to health and safety and the importance of reducing risky use;
  - The causes and correlates of addiction;
  - How to screen for risky substance use; and
  - How to conduct brief interventions and refer to specialty treatment, when necessary.

  These core competencies should be required of all health care providers, including physicians, physician assistants, nurses and nurse practitioners, dentists and clinical mental health professionals (psychologists, social workers, counselors).

- **Including addiction prevention in accreditation standards.** Agencies that accredit health care organizations should develop and promote standards related to addiction prevention. In 2012, the Joint Commission announced voluntary performance measures addressing tobacco/nicotine and alcohol screening and cessation counseling.[18] The performance measures address screening, brief interventions, treatment, discharge planning and follow up.[19] Hospitals that choose to implement these measures are held accountable for collecting data and measuring their performance.[20] Other accrediting bodies should develop similar measures and promote or require their application.

- **Training prescribers in appropriate and safe prescribing of controlled prescription medications and in monitoring patients who take these medications.** All prescribers should be required to receive specialized education and training in prescribing and administering controlled prescription drugs, monitoring patients who take these drugs and identifying cases of misuse and diversion.
  - These skills should be incorporated into the curricula of all medical schools, medical residency and fellowship training programs, dentistry programs and clinical psychology and nurse practitioner/advanced practice registered nursing programs in states that allow these providers to prescribe controlled substances.
  - Accrediting organizations and state professional boards should require that, as a condition of licensure, board certification and continuing education requirements, health care professionals who prescribe controlled substances complete training in addiction prevention and the legal regulations and responsibilities related to the prescribing and dispensing of controlled drugs.
  - National professional boards (medical, dental, nursing, pharmacy, veterinary) should establish, publicize and enforce national standards of practice related to the prescribing, administering and monitoring of controlled prescription drugs and the prevention of the misuse and diversion of these drugs.

- **Incorporating patient screening and brief intervention for risky substance use into routine medical and mental health practice.** Health care practices and systems should ensure that all patients receive:
    - Routine screening for the risky use of tobacco/nicotine, alcohol, illicit drugs and controlled prescription drugs, both at initial visits to a primary or specialty care provider and routinely thereafter, and upon entry into a hospital, emergency department, trauma center or clinic. Screening can be conducted by a broad-range of credentialed providers with general training in addiction and specific training in how to conduct and respond to the results of such screens.
    - Evidence-based brief interventions by qualified and trained health care professionals, as needed. Brief interventions generally include feedback about the extent and effects of patients' substance use and recommendations for how they might change their behavior. These interventions often involve motivational interviewing techniques and substance-related education, with the approach differing depending on the target population and severity of the problem. Brief interventions can be provided by health professionals--licensed graduate-level medical or mental health clinicians--trained to provide these services.

MEDICAL ASSOCIATIONS' ENDORSEMENT OF SCREENING AND BRIEF INTERVENTIONS

The American Society of Addiction Medicine (ASAM) has identified screening and brief interventions as an effective method for detecting substance-related problems early and preventing the development of addiction. ASAM encourages medical and insurance professionals to redesign their primary care and funding practices to accommodate these programs.[21]

The American Medical Association (AMA) recommends that physicians:

- Ask all adolescents annually about their use of tobacco/nicotine, alcohol and other drugs, including over-the-counter drugs, controlled prescription drugs and anabolic steroids;[22]
- Ask all patients about their use of tobacco/nicotine products, counsel those who use tobacco/nicotine to quit and refer patients to community smoking cessation programs, if necessary;[23]
- Obtain an alcohol history from their adolescent and adult patients and refer patients to treatment, if necessary;[24]
- Routinely screen pregnant women and those of childbearing age, and respond appropriately with targeted interventions or referral to treatment, when necessary;[25] and
- Be properly trained in prescribing controlled substances and screening patients for drug use.[26]

The American Academy of Pediatrics (AAP) encourages pediatricians to screen all patients for all substance use at annual medical examinations and, if possible, at other medical visits; provide brief interventions; and refer patients, when necessary, to treatment or specialty care.[27]

The American College of Obstetricians and Gynecologists (ACOG) Committee on Ethics declared that obstetrician-gynecologists have an ethical obligation to conduct substance-related universal screening, brief intervention and referral to treatment for their patients.[28]

Improve Prescription Drug Monitoring Programs

The overprescribing or inappropriate prescribing of opioid medications profoundly increases the risk of addiction involving opioids, both prescribed and illicit, and overdose deaths.[29] Prescription drug monitoring programs (PDMPs) are a promising strategy to reduce inappropriate prescribing of controlled medications to patients[30] as well as death from prescription drug overdose.[31]

PDMPs are state-run electronic databases used to track the prescribing and dispensing of controlled prescription drugs to identify suspected misuse, doctor shopping[*] or diversion. These programs can be designed to reduce the misuse of controlled prescription drugs and identify individuals who may benefit from treatment,[32] while permitting the enforcement of federal and state laws in a manner that is least disruptive to medical and pharmacy practice.[33] Currently, 49 states and Washington D.C.[†] have passed legislation to implement PDMPs; however, not all PDMPs are actively operating.[34] Because PDMPs are state created and run, they can vary considerably.[35] As of July 2013, only 16 states require prescribers to use the PDMP,[36] and evidence suggests that these programs are significantly underutilized by health care providers due to a variety of factors, including the cumbersome nature of accessing the system and privacy concerns.[37] The state-by-state patchwork of PDMPs also makes coordination between states difficult, which can undermine the ability to prevent cross-state doctor shopping.

The following measures can improve the utility and efficacy of PDMPs and help to reduce opioid misuse, addiction and diversion:

- **Funding the development of model state legislation for PDMPs** and providing financial incentives for states to develop and operate PDMPs in accordance with national standards. This should include a way for PDMPs to be interoperable between states and networks such as within the U.S. Department of Veterans Affairs (VA).[38] This is especially important given that research has found that approximately 30 percent of those who engage in doctor shopping obtain prescriptions for controlled medications in multiple states.[39]

- **Ensuring that every state has an actively operating PDMP**.

- **Mandating the use of PDMPs in clinical practice**, while investing in outreach and education to encourage providers to incorporate their use into routine medical and pharmaceutical practice and enhance their ease of access and use.[40] One study found that states that mandated prescribers to use the PDMP before prescribing controlled drugs saw declines in opioid prescribing and in doctor shopping.[41]

- **Assuring physicians' and pharmacists' access to patient data through PDMPs.**[42]

- **Providing law enforcement officials with access to PDMP data based on probable cause**, including evidence of physician malpractice or criminal diversion, or the intentional diversion by patients engaged in the illegal sale or distribution of prescribed controlled drugs. Evidence of individual misuse of controlled prescription drugs should be addressed via a health rather than a punitive/criminal approach.

[*] When patients obtain prescriptions for controlled drugs from multiple health care providers.
[†] Legislation is pending in Missouri.

- **Requiring PDMPs to adopt recommended practices** such as those put forth by the National Alliance for Model State Drug Laws (NAMSDL), which include:
  - Monitoring all scheduled controlled substances and certain non-scheduled drugs that are misused;
  - Providing de-identified data for research purposes;
  - Requiring authorized users to undergo training regarding the PDMP;
  - Allowing for interstate sharing of PDMP data;
  - Maintaining data confidentiality;
  - Mandating enrollment in the PDMP; and
  - Evaluating the PDMP and making improvements as needed.[43]

PROMISING PROGRAMS AND POLICIES

Washington Screening, Brief Intervention, and Referral to Treatment (WASBIRT)
Between 2003 and 2009, more than 104,000 adult patients were screened by addiction professionals in nine hospital emergency departments. Receiving at least a brief intervention was associated with significant reductions in the use of alcohol and other drugs, anxiety, depression, homelessness, death rates and medical costs, and with increased abstinence and employment. Medicaid costs among working age, disabled clients were $366 lower per member per month for those who received at least a brief intervention.[44] For patients who received a brief intervention only and no addiction treatment in the year before or after the screening, the estimated reduction in per member, per month Medicaid costs was $542.[45]

Project Share
Sansum Clinic, a community-based group practice with seven clinics in Santa Barbara, CA, initiated Project Share in 2005. The program identified patients aged 60 and older who engaged in risky drinking and offered an intervention that involved personalized reports, education materials, physician advice during office visits and brief interventions delivered by health educators via telephone. After 12 months, compared to a control group, patients who received the intervention reduced their risky drinking and had fewer physician and emergency department visits. The costs of the program ($31 for screening and $79 for the intervention) appeared to have been offset by reduced utilization rates, although a full analysis of the cost-effectiveness of the program was not conducted.[46]

NIDAMED
The National Institute on Drug Abuse's NIDAMED is an online physician outreach initiative aimed at encouraging doctors to screen patients for risky substance use, including tobacco/nicotine, alcohol and other drugs. NIDAMED offers free screening tools and prevention and treatment research and information that physicians can share with their patients. It also offers curriculum resources to provide scientifically accurate information to medical students, residents and faculty about substance use, addiction and its consequences.[47] There is some evidence that those who have participated in NIDAMED have demonstrated improved knowledge in the prevention of opioid misuse.[48]

Oregon's Strategy for Reducing Prescription Opioid Misuse
Oregon's governor appointed a task force to respond to prescription opioid misuse, addiction and overdose deaths. The task force developed a strategy consisting of five steps: 1) reducing the number of prescription opioid pills in circulation; 2) educating prescribers and the public on risks of opioid use; 3) promoting safe disposal of unused medication; 4) providing treatment for opioid addiction; and 5) continued leadership from the governor, health plans and health professionals. Although outcome data are not available, this example of a multi-pronged approach to the opioid problem can serve as a model for leadership in other states.[49]

PROMISING PROGRAMS AND POLICIES (CONTINUED)

New York State's Managed Addiction Treatment Services (MATS) Program
Beginning in September 2006, the state of New York implemented a $25 million chronic care management program for high treatment-cost Medicaid recipients with substance use disorders. The program, a Medicaid reform initiative created by the New York State Office of Alcohol and Substance Abuse Services (OASAS), was designed for those in the top 90th percentile of addiction treatment costs paid by Medicaid, a group that accounted for approximately half of all state spending on addiction treatment. The goal of the intervention was to reduce Medicaid costs that are due to inappropriate or inefficient use of high-cost crisis services by connecting clients to appropriate levels of care and to mental health, medical and social support services. A 12-month outcomes study of the program found that it was successful in recruiting individuals with high cost needs and in engaging them in outpatient addiction treatment, but significant challenges remain in locating and recruiting the highest cost and most socially disconnected Medicaid recipients.[50]

Treatment and Disease Management

Effective treatment for addiction not only saves lives but also reduces the tremendous health, social and economic costs associated with the disease. Yet only 1 in 10 people with addiction involving alcohol or drugs (other than nicotine) receive any form of treatment, and most people who do receive treatment do not get evidence-based care.[51] Policy efforts can improve access to acute treatment and chronic disease management and ensure that the care provided reflects evidence-based practice. Providing effective care for addiction not only improves health outcomes but also significantly reduces the health care costs associated with risky substance use and addiction.[52]

HEALTH CARE COST SAVINGS

A longitudinal study of patients treated for addiction in Kaiser Permanente's Medical Care Program found an average reduction of 30 percent in medical costs three years post treatment; significant declines were seen in areas such as the number of inpatient hospital days and emergency department visits, which are high-cost services.[53]

An analysis of data on patients receiving addiction treatment in California found a benefit-cost ratio of more than seven to one: the average cost of treatment was $1,583 and the benefits were $11,487. Most of the savings were attributed to reduced crime and increased employment.[54]

The following are evidence-based practices for improving addiction treatment and management within the health care system:

Improve Public Awareness by:

- **Educating the public about the effectiveness of addiction treatment and how to access it.** To narrow the treatment gap, it is important that people with addiction, and those who are helping them, understand that addiction can be treated effectively with the right care. People who need addiction treatment face serious challenges in navigating the treatment system. Some providers offer misinformation and false claims and the public generally is not equipped to evaluate the quality of care offered. To help increase access to effective care:
  - Develop public service messages that educate the public that addiction is a treatable disease.
  - Provide the public with information about patient outcomes and quality of care at treatment programs in their state or region.

- Educate patients and their families about what program and provider features to look for when accessing addiction treatment options.

Improve Providers' Knowledge and Clinical Practice by:

- **Incorporating addiction treatment training into all professional health care curricula and in licensing, certification and continuing education exams.** Inadequate clinical training in addiction care within the medical system is a significant barrier to effective treatment. To facilitate effective addiction care practice, health care training institutions (including medical, graduate and professional schools and teaching hospitals), accrediting organizations and state professional boards should include the following core clinical competencies in training curricula and professional licensing, certification and continuing education requirements for health care providers, including physicians, physician assistants, nurses and nurse practitioners, dentists, and clinical mental health professionals (psychologists, social workers, marriage and family therapists, counselors):
  - How to diagnose addiction, evaluate disease severity and recognize the presence of co-occurring disorders;
  - How to collaborate with and manage a multidisciplinary team of providers;
  - How to provide or supervise psychosocial and pharmaceutical treatments and disease management for addiction;
  - How to arrange for and connect patients with auxiliary support services; and
  - How to determine the need for specialty care and connect patients with such care when needed.

- **Incorporating assessment, diagnosis, treatment and disease management for addiction into routine medical practice.** Health care practices and systems should ensure that all patients who screen positive for addiction receive the following services, or are referred for specialty care, as needed:
  - A comprehensive assessment and diagnosis;
  - Stabilization (e.g., detoxification), when necessary, as a precursor to treatment;
  - Patient placement evaluation to match individuals with the right setting, level and duration of care;
  - A treatment plan that is tailored to the patient;
  - Evidence-based addiction treatment, including pharmaceutical and/or psychosocial therapies, accompanied by treatment for co-occurring conditions;
  - Disease management, continuing care or aftercare; and
  - Connection to peer support and auxiliary services including legal, educational, vocational/employment, housing and family supports, as well as nutrition and exercise counseling.

  Addiction treatment services should be provided by qualified health care professionals with specialized and supervised clinical training in addiction care. Auxiliary services can be provided by a range of professional and paraprofessional personnel. Peer support, often an important component of the larger treatment plan, can be provided by those in recovery.

- **Incorporating tobacco/nicotine cessation services into all addiction treatment and mental health treatment programs and facilities.** Tobacco/nicotine cessation services are not commonly implemented in addiction treatment settings or in psychiatric treatment settings. The reluctance to provide cessation services to patients receiving addiction treatment stems in part from an unfounded concern that it might jeopardize patients' ability to abstain from alcohol or other drug use. In fact, research shows improved addiction treatment outcomes among patients

who receive cessation services, including reduced risk of relapse following treatment and improved outcomes. Making tobacco/nicotine cessation a key component of addiction treatment programs would go a long way toward improving treatment outcomes as well as the long-term health of patients with addiction. Tobacco/nicotine use rates are high not only among those who use other addictive substances, but among individuals with mental health disorders as well. Historically, patients with co-occurring disorders have not received adequate cessation services and have been excluded from many smoking cessation studies. Practice guidelines for smoking cessation underscore the importance of providing cessation services to patients with co-occurring mental health disorders. In implementing these services, care must be taken to ensure that interventions are tailored to the clinical needs of the patient and that such interventions do not contraindicate other treatments the patient might be receiving for his or her mental illness.

- **Establishing national licensing and accreditation standards for addiction treatment facilities and programs that reflect evidence-based care.** There are no clearly delineated, consistent national standards that stipulate who may provide addiction treatment in the U.S. The staff primarily responsible for patient care in addiction treatment facilities is comprised largely of addiction counselors who have variable levels of education and supervised clinical training in evidence-based therapies for addiction. Improving the quality of addiction treatment also requires greater oversight of addiction treatment programs. Licensing requirements for addiction treatment facilities and programs vary greatly by state and some are entirely exempt from regulation.[*] [55] The tremendous variability in government regulations regarding addiction treatment programs jeopardizes patients' health and safety and leads to a system of uneven availability and quality of care. Better regulation of addiction treatment facilities and programs, through the following measures can help to ensure that patients receive clinically-indicated quality care:
  - All addiction treatment facilities and programs should be subjected to the same mandatory licensing processes as other health care facilities.
  - Qualified addiction treatment facilities should be dually licensed to provide both mental health and addiction treatment services, as there is abundant evidence that addiction and mental health conditions co-occur and are best addressed in an integrated manner.
  - As a condition of licensure, addiction treatment programs should be required to seek accreditation from one of the national accrediting organizations: The Commission on Accreditation of Rehabilitation Facilities, The Joint Commission, The Council on Accreditation, The National Committee for Quality Assurance or The National Commission on Correctional Health Care.

  In addition to state licensure, addiction treatment facilities and programs also should be accredited by a national accreditation organization. Accreditation standards should require:
  - All facilities to have an addiction physician specialist to serve as medical director;
  - All individual providers to be credentialed in their field of practice;
  - All facilities to provide evidence-based treatment for addiction, tailored to the patient and his or her co-occurring conditions; and
  - All facilities to collect and report comprehensive quality assessment data, including process and outcome measurements related to screening, intervention, treatment and disease management.

[*] While the federal government does not regulate addiction treatment facilities or programs (with the exception of those that provide opioid maintenance therapy), it does impose certain conditions through the federal health insurance programs including Medicare, Medicaid and TRICARE.

Improve Access to Treatment and Disease Management by:

- **Expanding the addiction medicine workforce.** There is a shortage of physicians who specialize in addiction medicine, which is a significant barrier to integrating addiction care into the health care system and to providing expert treatment to those with severe cases of addiction. Addiction medicine physicians and addiction psychiatrists are two medical specialties with advanced training in addiction and the capability to provide expert consultation and evidence-based treatment, especially for more acute cases of the disease.[56] The following measures will help to expand the workforce of qualified addiction physician specialists:
  - Expand the availability of addiction medicine training programs and training opportunities within addiction psychiatry to ensure that such specialty care is accessible across the country.
  - Allocate a designated portion of the federally-funded (primarily through Medicare) medical residency training positions to residency training in the specialties of addiction medicine and addiction psychiatry.
  - Allocate residency training slots through the U.S. Department of Veterans Affairs and the Indian Health Service to addiction medicine to help ensure the availability of specialty care for veterans and Native Americans.

- **Expanding access to medication-assisted treatment (MAT) for opioid addiction** by eliminating barriers to providers for prescribing effective medications. MAT can help to prevent many of the health effects of opioid addiction, such as the spread of HIV, hepatitis B and C and overdose.[57] Coupled with psychosocial therapy and other support services, the use of medications such as methadone, buprenorphine and naltrexone have proven to be effective in treating opioid addiction and reducing adverse health outcomes.[58] MAT for opioid addiction blocks or minimizes the effects of more addicting opioid drugs, alleviating cravings and withdrawal symptoms and largely protecting the patient from inadvertent overdose.

FINDING A BUPRENORPHINE PRESCRIBER

Local providers can be identified using the Substance Abuse and Mental Health Services Administration's (SAMHSA) Opioid Treatment Program Directory, dpt2.samhsa.gov/treatment/, and Buprenorphine Physician and Treatment Program Locator, http://buprenorphine.samhsa.gov/bwns_locator/.

Despite the effectiveness of MAT, only a small proportion of those with opioid addiction have received these medications due, in part, to strict prescribing requirements.[59]

To expand access to MAT:

- Reduce the limits set for physicians on the number of patients they can treat with buprenorphine. In September 2015, the U.S. Department of Health and Human Services announced that it will revise the regulations around prescribing limits to expand access to MAT.
- Require or provide incentives to physicians who routinely prescribe opioid medications to obtain the waiver to treat patients who become addicted to these drugs. In October 2015, the White House announced that national provider organizations have committed to doubling the number of waived physicians over the next three years.[60]
- Require health plans to cover all forms of MAT, which would reduce some of the cost barriers for patients. Also in October 2015, the White House issued a Memorandum instructing all Federal agencies and departments that facilitate health benefits to identify barriers to MAT and to develop action plans to address those barriers.[61]

BARRIERS TO ACCESSING MAT FOR OPIOID ADDICTION

The most studied medication for opioid addiction is methadone, which under federal regulation only can be prescribed in separate, specially-licensed facilities.* Methadone clinics are subject to complex legal and regulatory requirements and strict oversight. Patients must travel to a methadone clinic daily to receive treatment. Not only is this requirement onerous, but methadone clinics may not be geographically accessible for many patients.

Buprenorphine, a newer medication, can be dispensed or prescribed in a doctor's office by qualified physicians who have received the required training and a waiver from the Drug Enforcement Administration (DEA).† [62] The law currently limits the number of patients a physician can treat with buprenorphine to 100. Only a small proportion of physicians registered with the DEA to prescribe controlled substances have obtained the required waiver to prescribe buprenorphine in office-based settings,[63] and the majority of physicians with the waiver are located in urban areas.[64] Buprenorphine can be prescribed in methadone clinics, but the same onerous requirements that apply to methadone must be followed for buprenorphine, including that the medication must be administered in person daily. Requiring the patient visit the clinic each day negates one of the advantages of buprenorphine. Another barrier to accessing MAT is cost. Insurance coverage for the treatment varies and some state Medicaid programs do not cover methadone. Under the ACA, states must cover at least one form of opioid addiction treatment in their state exchange plans and Medicaid managed care plans; however the treatments are not interchangeable and covering only one medication does not provide sufficient access to MAT.

- **Expanding access to medications that reverse the effects of opioid overdose.** Naloxone is a prescription medication that reverses the effects of overdose from heroin and prescription opioids. As of November 2014, 27 states and the District of Columbia have implemented a law or developed a pilot program to allow the administration of naloxone (Narcan,® Evzio®).[65] To increase the accessibility of this potentially life-saving medication:
  - Law enforcement should routinely be trained in the administration of naloxone. Evzio® is the first naloxone product labeled for pre-medical, layperson administration. It is a hand-held auto-injector that requires limited training to administer and that directs those who administer it to contact medical services following the injection.[66] Although research has shown a hesitancy in contacting 911 for overdose emergencies,[67] perhaps due to fear of police involvement, law enforcement often are the first to respond in medical emergencies and already undergo first aid training, making them ideal candidates to respond to opioid overdoses.[68]
  - Increase prescriptions for naloxone to family members and caregivers of individuals with opioid addiction.[69] Several states are now working with retail pharmacies to educate pharmacists about naloxone and some are beginning to dispense naloxone without requiring an individual prescription.[70]
  - Implement state laws to allow non-health care professionals to administer the drug to individuals experiencing an opioid overdose. Such laws include:

* Unless a patient has been hospitalized for another medical condition.

† Becoming qualified to prescribe and distribute buprenorphine involves an eight-hour approved program in treating opioid addiction, an agreement that the physician/medical practice will not treat more than 30 patients for opioid addiction with buprenorphine at any one time within the first year and up to 100 thereafter, and assurance that the trained physician will refer patients to necessary supplemental psychosocial services. Physicians who meet the qualifications are issued a waiver by the Substance Abuse and Mental Health Services Administration (SAMHSA) and a special identification number by the DEA.

- Rescue Drug Laws, which encourage the prescribing of naloxone to those at risk of an overdose;
- Good Samaritan Laws, which protect those who administer naloxone in an emergency from civil or criminal repercussions; and
- Amnesty to individuals found in possession of controlled substances who call emergency services for themselves or on another person's behalf.

COMPREHENSIVE ADDICTION AND RECOVERY ACT OF 2015[71]

Several United States Senators have introduced a bill to Congress that would encourage local and state governments to address opioid addiction in a comprehensive manner using evidence-based strategies. The bill seeks to authorize the Attorney General to award grants to address heroin and prescription opioid misuse and addiction. The Act is supported by many organizations including the National Association of State Alcohol and Drug Abuse Directors, the National District Attorneys Association, the National Council for Behavioral Health, and the Major County Sheriffs' Association. If enacted, this legislation would:

- Cultivate prevention and education with a special focus on teens, their parents and other caretakers to prevent initiation and promote treatment and recovery;
- Increase availability of naloxone, a medication that can reverse the effects of an opioid overdose, to first responders, including law enforcement;
- Expand resources to utilize science-based strategies for identifying and treating incarcerated individuals with addiction;
- Expand safe disposal opportunities to discard unwanted prescription medications;
- Establish and expand evidence-based prescription opioid and heroin treatment programs; and
- Strengthen prescription drug monitoring programs.

PROMISING PROGRAMS AND POLICIES

The American Board of Addiction Medicine (ABAM) and the Addiction Medicine Foundation. ABAM was created in 2007 to develop a specialty area of medical practice for the prevention, treatment and management of addiction. In February of 2015, the American Board of Preventive Medicine began the formal process of bringing addiction medicine into the American Board of Medical Specialties (ABMS) as a sub-specialty available to diplomates of all ABMS boards. The Addiction Medicine Foundation (formerly the ABAM Foundation) is focused on developing this specialty workforce by establishing addiction medicine fellowship training programs in medical schools and teaching hospitals accredited by the Accreditation Council for Graduate Medical Education. To date, there are 33 addiction medicine fellowship training programs in the U.S. and three in Canada (Accredited Fellowships). The goal of the Addiction Medicine Foundation is to establish a fellowship program or department of addiction medicine at every medical school in the country by 2025.[72]

Department of Defense (DoD). In 2013, the DoD reversed its policy of excluding opioid treatment medication in its TRICARE program, which serves Uniformed Service members and their families. The change was based on recognition that "medication assisted treatment, to include drug maintenance involving substitution of a therapeutic drug with addiction potential for a drug of addiction, is now generally accepted by qualified professionals to be reasonable and adequate as a component in the safe and effective treatment of substance use disorders treatment services…"[73]

Massachusetts Medicaid. Massachusetts' *Tobacco Cessation and Prevention Program*, implemented in 2006, allows Medicaid beneficiaries to obtain FDA-approved smoking cessation medications for a nominal co-payment along with up to five free counseling sessions from the state's quit line. A 2010 evaluation of the program found that, since its implementation, approximately 37 percent of smokers enrolled in Medicaid used the benefit, and that the rates of hospital admissions for heart conditions among participants declined significantly (a 46 percent annual decrease in hospitalizations for heart attacks and a 49 percent annual decrease in cases of coronary atherosclerosis). The smoking rate among Medicaid beneficiaries decreased from 38 percent to 28 percent during the program's first two and a half years.[74] A more recent evaluation found that each dollar spent on the program was associated with an average reduction of $3.12 in Medicaid expenditures for cardiac-related hospital admissions.[75]

Colorado Medicaid. In 2006, the Colorado Medicaid Program implemented a benefit to provide outpatient addiction treatment services to all Medicaid beneficiaries. A performance audit found that the program cost $2.4 million over the course of three years, while medical costs for patients receiving services under this program declined by approximately $3.5 million.[76]

Washington Medicaid. In 2005, Washington State expanded addiction treatment services for adults with disabilities who received Medicaid or General Assistance. The expansion was associated with savings of $160-$385 per member, per month, approximately three years after implementation of the policy. In 2008, total savings were $16.8 million for Medicaid and General Assistance clients with disabilities, across medical care, inpatient mental health and long-term care expenditures.[77]

New York Attorney General MPHAEA Enforcement. New York reached a settlement with MVP Health Care after investigating claims that the company violated federal and state parity laws in rejecting claims for residential addiction treatment. The settlement requires the health insurer to reform its behavioral health claims review process, cover residential addiction treatment and charge the lower primary care co-payment for outpatient visits to most addiction treatment providers.[78]

PROMISING PROGRAMS AND POLICIES (CONTINUED)

Project Engage. Wilmington Hospital and the state of Delaware developed a program to reduce recurrent emergency department (ED) visits and hospital admissions by identifying and treating individuals with addiction. Medical and surgical inpatients with signs of risky substance use (e.g., alcohol and other drug-related admission or diagnosis, positive blood test, self-reported use) were offered screening and brief interventions and, if indicated, were referred to treatment. A review of insurance claims for 25 patients who received services in 2010 demonstrated a 58 percent decrease ($68,422) in inpatient medical admissions and a 12.7 percent decrease ($3,308) in ED visits.[79]

Project Lazarus. This community-based opioid misuse and overdose prevention program in Wilkes County, North Carolina reduced overdose deaths in the area by 69 percent between 2009 and 2011.[80] Wilkes County had one of the highest drug overdose death rates in the U.S., and a high chronic pain burden due to physically demanding jobs and work-related injuries.[81] The program was able to reduce overdose deaths without significantly reducing the number of residents taking opioid medications for pain. The intervention included encouraging providers to use opioid treatment agreements and the state's prescription drug monitoring program, one-on-one provider education, hospital-based continuing medical education programs, a reduction in the number of pills prescribed in EDs, medication "take back" programs and an expansion of addiction treatment services in the area.[82]

Massachusetts' Naloxone Distribution Pilot. In 2007, the Massachusetts Department of Public Health implemented an overdose education and naloxone distribution program. The program provided training for those who use drugs and their friends and family members regarding how to reduce the risk of overdose, recognize signs of an overdose, access emergency medical services and administer naloxone. As of 2012, this program trained over 10,000 individuals and prevented over 1,100 opioid overdose deaths.[83] Nationwide, opioid overdose prevention programs reported training and distributing naloxone to 53,032 persons and preventing 10,171 overdose deaths, as of 2010.[84]

Angel Project of the Gloucester, Massachusetts Police Department. The Gloucester Police Department has begun an innovative program to help citizens with drug addiction access detoxification services and treatment in exchange for turning in their drugs and drug paraphernalia to the police station, without fear of arrest. Implemented in June 2015, the program relies on approximately 40 volunteers ("angels") who guide participants to detoxification and treatment. To date, more than 100 participants have been sent to approximately 20 different treatment centers in six states.

Chapter IV
Specific Measures for the Education System

Addiction is a disease that often originates with substance use in adolescence. Three out of four adolescents have used an addictive substance--including tobacco/nicotine, alcohol and other drugs--in their lifetime and almost half have done so in the past month.[*] [1] In 2013, 14.0 percent of college students reported current cigarette smoking, 63.1 percent reported current drinking and 22.5 percent reported current use of illicit drugs or misuse of controlled prescription drugs.[2]

THE EARLIER SUBSTANCE USE BEGINS,
THE GREATER THE LIKELIHOOD OF DEVELOPING ADDICTION

- Nine out of 10 people with addiction started smoking, drinking or using other drugs before age 18.
- Individuals who first used an addictive substance before age 15 develop addiction at a rate 6½ times higher than those who did not begin until age 21 or older.
- The average age at which high school students report starting to use an addictive substance is between 13 and 14 years.[3]

Preventing risky substance use, providing early interventions for students showing signs of risk, referring those with addiction to quality and appropriate treatment and ensuring long-term disease management for those with more severe, chronic or relapsing cases of addiction should be a priority for all educational institutions.

Schools should take a health-based approach rather than a punitive approach to substance use prevention and intervention. Punitive policies that result in removing students from academic, social, health and other support services should be avoided. Although students should be held accountable for their choices and behavior, the emphasis should be on safeguarding students' short- and long-term health and safety rather than depriving them of pro-social activities and opportunities.

Addiction Prevention and Care in the Education System

Policies and programs can play a significant role in addressing risky substance use and addiction. To be effective, they should take a comprehensive approach that involves prevention and early intervention for those students who have not initiated substance use or who are using at risky but non-clinical levels, and effective treatment and disease management for those whose substance use is more severe and meets the clinical criteria for a substance use disorder.

Prevention and Early Intervention

Research shows that educational institutions--from elementary schools to colleges and universities--should have in place a broad based prevention strategy, geared toward the entire student body and aimed

[*] Also referred to as "current use."

at preventing initiation of and continued engagement in substance use.[*] [4] Given the broad array of influences in a young person's life that can increase or decrease the risk of substance use--including biological, psychological, family, peer and media factors--a narrowly focused, intermittent, single curriculum approach tends to have only a limited impact on students' substance-related attitudes and behavior. Instead, to make a real difference, a comprehensive approach is needed that includes the following key elements:

- Initiatives that reduce students' exposure to addictive substances and to the marketing, advertising and promotion of addictive substances in and around the school's environment;
- Implementation of awareness and education programs for which evidence of effectiveness has been demonstrated through controlled research studies;
- Repeated and consistent preventive messages that are age, gender, racially/ethnically/culturally sensitive and appropriate and that are well-integrated into the academic curriculum and student life;
- Efforts to bolster and cultivate those factors that are known to protect young people from risk, such as strong bonds to family, peers, school and the community; psychological resilience; and the availability of social and academic supports;
- Intensified and targeted preventive measures during key transition points when substance use risk tends to increase, such as the transitions from elementary to middle school, middle to high school and high school to college;
- Intensified and targeted measures for students at risk, including appropriate screening and early intervention services; and
- Routine monitoring of progress and implementation of needed adjustments to programs and policies to improve results.

The following are specific measures that can help to prevent and reduce student substance use:

Reduce Students' Exposure to Addictive Substances by:

- **Banning all tobacco/nicotine, alcohol and marijuana products and use on all school campuses, including college campuses.** Prohibiting the use of all addictive substances on school property can help to reduce student exposure to addictive substances and encourage positive adult modeling. This should pertain to all students regardless of age and the legality of the substance. It is critical to enforce bans to increase student compliance.[5] Strategies for implementing tobacco/nicotine-free policies on campus include identifying key stakeholders (including students), creating publicity around the issue and drafting and enacting clear and consistent enforcement policies.[6] One study found that using several different strategies for enforcing a smoking ban, such as placing cigarette receptacles outside the 25-foot smoke-free zone and delineating the smoke-free zone with prominent ground markings, helped increase student compliance with the policy.[7] With regard to alcohol, research shows that students attending colleges that ban alcohol are less likely to engage in alcohol use and other health risk behaviors.[8] It is important that instances of individual violations of the ban that do not endanger the public safety or involve criminal behavior are responded to with evidence-based and health-promoting prevention and early intervention initiatives rather than disciplinary or punitive action.

[*] This form of prevention is often referred to as "primary prevention" in education and public health. What is referred to here as "early intervention" for those at risk for substance use or who already show symptoms of substance use often is referred to as "secondary," "targeted" or "indicated" prevention.

- **Prohibiting all tobacco/nicotine and alcohol advertisements, sponsorships and promotions on college campuses, including at athletic events.**

- **Working with communities surrounding school campuses--property owners, neighborhood organizations, local government and retailers--to limit the availability of tobacco/nicotine, alcohol and other drugs to students.** Surrounding businesses should be encouraged to comply with age restrictions on sale of tobacco/nicotine and alcohol (and marijuana in those states where it is legal) by checking the identification of all customers.

Promote Pro-Health, Anti-Substance Use Campus and Home Environments by:

- **Creating a safe, nurturing academic environment that offers positive adult role models, fosters school connectedness and encourages protective health behaviors.** Young people who have the guidance of positive adult role models and the companionship of positive peer influences are at reduced risk of substance use,[9] as are those who are engaged in pro-social extracurricular activities. This can be accomplished by:
  - Providing opportunities for student engagement in academic, extracurricular, service and other civic activities: research has shown that young people who participate in these activities are at reduced risk for substance use.[10]
  - Offering appealing substance-free social and recreational opportunities as alternatives to activities where addictive substances may be involved.
  - Effectively addressing the underlying motivations for student substance use, such as academic stress and difficulty with time and workload management, by offering accessible student counseling and support services.

- **Training all administrators, teachers, coaches, counselors, nurses and other school staff to spot the signs of student substance use and know how to respond.** Training should be provided through undergraduate and graduate education programs, in-service training and new staff orientation. State qualification exams for educators should include questions about how to identify substance use risk in students and what to do when faced with it.

- **Educating families about the need to create a safe, nurturing home environment that offers positive adult role models, fosters communication and encourages protective health behaviors.** Schools should educate families about the need to provide students of all ages with consistent anti-substance use messages that help to prevent initiation of substance use or reduce substance use and raise awareness about the importance of getting help for students who may be at risk. Parents should be informed about the importance of modeling anti-substance use attitudes and behaviors and limiting their children's exposure and accessibility to tobacco/nicotine products, alcohol, marijuana, other illicit drugs and controlled prescription drugs.

SCHOOL-BASED HEALTH CENTERS (SBHC)

SBHCs establish a link between the health and education systems to help ensure that underserved young people have access to specialized health care services.[11] SBHCs typically are school-based programs in which schools partner with community health organizations to deliver health care to youth at a fixed location, usually on school property.[12] As of 2011, there were a total of 1,930 programs and centers connected with schools across the nation.[13] Although SBHCs have yet to achieve widespread implementation due to funding constraints, and evaluations of such centers are limited, preliminary results suggest an overall increase in accessing care, an improvement in health and educational outcomes, and high levels of satisfaction with the centers and their services.[14]

Implement Evidence-Based, Comprehensive and Tailored Prevention Programs by:

- **Offering school-based prevention programming early, with continued programming throughout a student's academic career, and providing individualized, targeted messaging to students at higher risk.** School-based prevention programming should begin early, continue in similar intensity throughout a student's education with age-appropriate modifications, and have elements that are tailored to specific student characteristics known to relate to substance use risk (e.g., sex, age, race/ethnicity, sexual orientation, poverty, other forms of adversity such as trauma and severe stress).

- **Providing prevention programming that is comprehensive, well rounded, and not funded by the tobacco, alcohol or pharmaceutical industries.** Substance use and addiction are driven by many complex factors within multiple life domains. Simplistic, isolated programming that focuses only on one or a narrow range of risk factors cannot successfully address the full spectrum of influences on a young person that can lead to substance use.[15] Prevention programs should address all the key factors influencing a student's likelihood of engaging in substance use, including personal challenges, family and social pressures, mental health stressors and pro-substance use media messages. These programs should be designed to foster an environment where substance use is understood as a health-risk behavior that is of critical concern to youth, parents, schools and the larger community.

- **Using programs that have been scientifically evaluated (preferably in a controlled study) and shown to have a positive effect on targeted behavior.** Prevention initiatives should be based in science, implemented with fidelity to the tested program, carried out by trained prevention specialists and connected with the school curriculum rather than relegated to isolated events or lessons. Anecdotal evidence and hunches regarding what should work in prevention are not adequate for selecting a prevention program. Some popular programs and curricula that have been assumed to be effective and that have been implemented widely have proven to be ineffective or even counter-productive once they were subject to rigorous evaluation.[16] Schools should abandon those programs that have no proven efficacy in reducing student substance use and replace them with programs or elements of programs that work.

Institute Fair, Consistent, Health-Promoting and Non-Punitive Substance-Related School Policies by:

- **Putting in place health-promoting policies that are clearly communicated, that have clearly defined consequences and that are enforced consistently and fairly.** Establishing, communicating and enforcing clear rules regarding substance use in a manner that is consistent for all students and school personnel can help to prevent substance use, in part by giving students a clearly articulated and powerful reason not to use. Students should be held accountable for their behavior while promoting the message that student health is the priority and that the use of addictive substances interferes with good health, academic success and general adaptive functioning.

- **Avoiding zero-tolerance policies, which typically are punitive rather than health promoting.** Zero-tolerance policies mandate predetermined consequences or punishments--ranging from suspension to expulsion--for specific substance-related offenses, regardless of the severity of the offense or the circumstances.[17] Despite their popularity, the U.S. Department of Education recommends against implementing zero-tolerance policies.[18] Although these policies can send a strong message to students and parents about substance use and help to identify student substance

users, the consequences often are severe, which may discourage staff, parents and peers from identifying (and helping) students who engage in substance use. After more than 20 years of implementation of zero-tolerance policies in schools, there are very few empirical studies that test the relationship between such policies and student behavioral outcomes, including substance use.[19] If administrators adopt a zero-tolerance policy, the consequences for substance use should focus on therapeutic interventions and treatment rather than suspension or expulsion.

- **Avoiding random drug searches, which may be inconsistent with the goals of comprehensive and health-promoting prevention.** Some schools conduct searches of students' possessions on school property in an effort to identify those who violate school anti-substance use policies. There are two types of drug searches: for-cause, in which students are searched on the basis of suspicion or reasonable cause, and random, in which large numbers of students are searched with no specific suspicion or cause.[20] Drug searches have been contested in court, with most courts upholding the right of schools to conduct both random and for-cause searches.[21] However, some research suggests that these searches can be detrimental, fostering mistrust between faculty and students and adversely affecting student morale.[22] Research on the effectiveness of drug searches in addressing student substance use is limited and inconclusive.[23] Until research is more conclusive regarding their efficacy, their use should be limited. If a school chooses to conduct drug searches, it should strike a balance between creating a safer, healthier school environment and respecting students' privacy rights. Further, the consequences of a positive search should be health promoting rather than punitive.

- **Avoiding school-based random drug testing of students.** Student drug testing has been used to identify students with substance use problems and to help deter student substance use.[24] In 1995, the U.S. Supreme Court ruled that public schools may conduct random or suspicionless drug testing of student athletes[25] and, in 2002, expanded it to students wishing to participate in any extracurricular activities,[26] but the Court has not addressed the constitutionality of random drug testing of all students in the student body.[27] The available research regarding the effectiveness of random drug testing of students in a school setting is scarce and inconsistent.[28] Some studies indicate that it can serve as a deterrent and be effective in preventing student substance use,[29] while others find that it either has no impact[30] or that its effects are short-lived or confounded by other factors such as school climate.[31] Even though random drug testing does not necessarily have to result in punitive measures in the face of a positive test, it often does.[32] Punitive approaches to student substance use may undermine a school's ability to create a healthy and positive school environment, which has been found to be a protective factor in relation to student substance use.[33] Given the inconsistent findings regarding the effectiveness of random drug testing as a prevention tool, and the availability of alternative proven prevention strategies, such testing is not recommended within schools. However, if a parent or physician is concerned about a student's substance use, such testing can occur within a health care setting to help ensure appropriate therapeutic interventions.

AMERICAN ACADEMY OF PEDIATRICS (AAP)
POSITION ON STUDENT DRUG TESTING

"Given the modest (and short-term) effect size in reducing substance use, high cost, and significant potential for adverse outcomes, the AAP concludes that research evidence does not support the initiation or expansion of school-based drug testing programs at this time. The AAP supports targeting available resources toward cost-effective substance use interventions with low potential risk. Schools choosing to engage in drug testing should use positive test results as an indication of the need for immediate assessment and treatment by trained specialists rather than instituting only punitive measures."[34]

Be Vigilant for Signs of Risk by:

- **Using evidence-based screening to identify students at risk.** Conducting routine screening of students of all ages for substance use and related risky behaviors helps to identify students who might require additional assessment and intervention. Such students are those who have initiated substance use or are at increased risk for substance use or addiction due to family history; emotional, psychological or behavioral problems; academic or social difficulties; or membership in groups prone to substance use (e.g., college freshmen, members of the college fraternity/ sorority system, student athletes).[35] Although only a few validated screening instruments are available for adolescents and young adults, and most focus only on alcohol and/or other drugs (not tobacco/nicotine), it is important to screen for all forms of substance use, since multiple substance use is very common and the use of one type of addictive substance increases the risk of other substance use.[36]

- **Educating faculty, staff, parents and students about how to identify and address student substance use.** Faculty, staff, parents and students should be informed about:
  - How to identify students at risk: Risk factors or signs of risk may include poor academic performance or changes in performance, low self-esteem, depression or anxiety, learning or conduct problems, disordered eating, sensation seeking or impulsivity, early sexual activity, poor coping skills, trauma or other difficult family or social circumstances, low perceptions of risk or harm regarding substance use and inaccurate knowledge about the effects of substance use.
  - How to intervene if a student is identified as being at risk: School administrators and counseling staff should maintain a list of accessible and qualified providers who can provide professional interventions and treatment if necessary and make families and students aware of the availability of these resources. As with any health condition, instances of student substance use should be kept confidential. Schools should strive to create an environment where students feel that they can report suspected peer substance use without being concerned about punitive or embarrassing consequences.

Provide Early Interventions to Students Who Need it by:

- **Providing special prevention programming for high-risk students and times of higher risk.** Target science-based intervention and treatment services to students at risk. Target additional prevention services to times of increased vulnerability for substance use. For example, among college students, such times include the beginning of freshman year, weekends, athletic events, 21st birthday celebrations, spring break and holidays. Colleges also should hold Friday morning and afternoon classes and exams to reduce the extension of weekend drinking into the school week.[37]

- **Providing or arranging for brief interventions for students identified as being at risk.** Evidence-based brief interventions can help to reduce the risky use of addictive substances by influencing students' attitudes, beliefs and expectations regarding tobacco/nicotine, alcohol and other drug use and their motivations to change their behavior.

AN EXAMPLE OF AN EARLY INTERVETION PROGRAM FOR RISKY DRINKING: BRIEF ALCOHOL SCREENING AND INTERVENTION FOR COLLEGE STUDENTS (BASICS)

The BASICS program targets risky drinkers (defined as those who drink heavily and are at risk for or already have experienced problems related to alcohol use) between the ages of 18 and 25. College students are identified for participation in the program through screening or through referral from medical, housing or disciplinary services. The program consists of two one-hour interviews and a brief online assessment survey about drinking habits and history, as well as beliefs and attitudes, while giving instructions for monitoring one's own drinking between interviews. In the second interview, students receive personalized face-to-face feedback about their alcohol use compared with peer norms, consequences of and risk factors for drinking and strategies for reducing alcohol use and related problems. BASICS is an effective and cost-effective program.[38]

Monitor Progress and Adjust Programs and Policies as Needed to Improve Results by:

- **Periodically measuring rates of student substance use.** It is important for schools to have an accurate account of the prevalence of substance use among their students in order to best determine the extent and nature of the programs and policies that may be required. Schools should periodically measure students' substance use via confidential surveys and track changes in overall rates of use and in the use of particular types of substances over time.

- **Being aware of emerging best practices in school-based substance use prevention and intervention and adjusting programs and policies accordingly.** Schools often rely on outdated or discredited prevention measures, including state-provided instructions that may not be based on evidence.[39]

HEALTH EDUCATION INSTRUCTIONS FREQUENTLY MISS THEIR MARK

States write health education instructions that are mandated or otherwise intended to guide public schools in their substance use prevention programming. These instructions should be based on the evidence regarding what works best in prevention. Unfortunately, a recent review found that two-thirds of all states did not provide instructions on par with evidence-based care, making these instructions a salient target for policy changes and efforts toward promoting evidence-based programming in schools.[40]

SELECTING AN EVIDENCE-BASED PREVENTION OR INTERVENTION PROGRAM

When looking for potential prevention programs, a good starting point is the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Registry of Evidence-Based Programs and Practices (http://www.nrepp.samhsa.gov/Index.aspx). This database is not an exhaustive list and program developers or sponsors may self-nominate their programs for inclusion, but it provides research-based guidance on effective programming.

Recently, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) developed a guide for colleges to help them choose potential research-based interventions to address underage drinking among college students. The "college alcohol intervention matrix," known as CollegeAIM, can be found at http://www.collegedrinkingprevention.gov/CollegeAIM/EnvironmentalStrategies/default.aspx.

Treatment and Disease Management

Students who already demonstrate signs or symptoms of addiction typically require clinical treatment and disease management. These services require the involvement of a trained health professional and schools should either have on staff a health professional able to provide appropriate interventions or a reliable and up-to-date list of qualified and accessible addiction treatment providers for referral. Unfortunately, of adolescents who receive needed treatment for addiction, only 11.2 percent are referred by their school. In comparison, nearly half (48.2 percent) of adolescents are referred by the criminal justice system,[41] a clear sign that increased awareness and earlier interventions are needed.

The following are effective policies and programs that help connect students with substance use disorders to needed services:

Connect Students who have Symptoms of Addiction to Effective and Accessible Health and Treatment Services by:

- **Supporting students and their families in accessing qualified treatment services.** All schools should develop working relationships with trained health care professionals to provide necessary assessment, intervention and treatment services.

- **Ensuring that families are informed about health insurance options for treatment coverage, including :**
  - All young people in low-income families should be eligible for Medicaid or the Children's Health Insurance Program (CHIP). Medicaid managed care plans and all CHIP plans are required to comply with the Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008, which prohibits financial requirements and treatment limitations on mental health and addiction services that are more restrictive than those placed on medical or surgical benefits.
  - Under the Patient Protection and Affordable Care Act (ACA), children may stay on their parents' insurance plans until age 26. Addiction treatment benefits vary by plan.
  - If employer-sponsored health insurance is not available, state health insurance marketplaces offer a range of insurance plans that may cover addiction treatment. These plans must follow MHPAEA and offer essential health benefits, which include mental health and addiction treatment benefits.

A COMPREHENSIVE APPROACH TO PREVENTION AND EARLY INTERVENTION OF STUDENT SUBSTANCE USE AND ADDICTION ACROSS THE EDUCATIONAL SPECTRUM[42]

Promote a Healthy, Substance-Free School Climate

- Provide age-appropriate, culturally-sensitive and evidence-based prevention programming throughout students' academic careers, from elementary school through college
- Incorporate into the academic curriculum relevant information about substance use and addiction
- Set clear substance use polices that cover all addictive substances
- Enforce policies, penalties/sanctions fairly and consistently
- Ban all tobacco/nicotine and alcohol products and use on school grounds. For colleges and universities, ban alcohol in dorms, in common areas, at on-campus student parties and at sporting events
- Avoid punitive zero-tolerance policies, random drug searches and random drug testing of students
- Help students cope with stress and with time and work management
- Provide targeted prevention messages during times of high risk
- Increase opportunities for student engagement
- Offer substance-free recreational activities
- Allocate sufficient funds to substance use prevention, intervention and treatment
- Prohibit tobacco/nicotine and alcohol advertising, sponsorships and promotions on campus and, for colleges, at NCAA events
- Work with neighborhood organizations, local governments, property owners and retailers to limit accessibility of tobacco/nicotine, alcohol and other drugs; assure enforcement of laws, regulations and policies; and increase access to treatment

Involve Students and Their Parents/Families

- Educate students and parents about school policies and enforcement
- Engage parents in prevention
- Educate families about the need for positive adult role models, communication and protective health behaviors

Address Needs of High Risk Students

- Identify high risk students (e.g., students with a family history of addiction, those with mental health problems and, in college, those who used in high school, fraternity/sorority members, freshmen, athletes) and provide targeted preventive programming to these students
- Train all administrators, teachers, coaches, counselors, nurses and other school staff to spot the signs of student substance use and know how to respond
- Use campus and school health centers to screen routinely and provide necessary services for substance use and co-occurring health (including mental health) problems

Monitor Progress and Improve Results

- Monitor student substance use patterns and rates and adjust programs accordingly
- Scientifically evaluate efficacy of strategies and programs and adjust accordingly

Chapter V
Specific Measures for the Justice System

Effectively addressing addiction should be a priority for our nation's justice system. Rates of substance use and addiction among justice-involved individuals are very high, and there is a documented link between continued substance use, criminal activity and recidivism.[1]

SUBSTANCE USE AND ADDICTION IN THE JUSTICE SYSTEM

- The majority (84.8 percent) of adult incarcerated individuals in the United States are substance-involved.[*]
- Nearly two-thirds (64.5 percent) have a history of alcohol or other drug use disorders.
- Forty-four percent of young people in the juvenile justice system meet clinical diagnostic criteria for a substance use disorder, as do 52.4 percent of juveniles in the adult corrections system. Among juvenile or youthful incarcerated individuals in state prisons and local jails, half (52.4 percent) have an alcohol or other drug use disorder.[2]
- Only 3.6 percent of substance-involved juvenile arrestees receive any form of treatment.[3]
- Individuals in the criminal justice system who are substance-involved have significantly higher recidivism rates than those who are not substance-involved (52.2 percent vs. 31.2 percent).[4]

Left unaddressed, substance use and addiction cost the justice system billions of dollars. In 2005,[†] states spent a total of $51.3 billion on justice-related programs in adult corrections, juvenile justice and the judiciary; $41.4 billion (80.7 percent) of total spending was linked to substance use and addiction. Justice system costs, including substance-related costs of incarceration, probation, parole, juvenile justice and criminal and family court, account for an estimated 13 percent of total substance-related federal and state government spending. While federal, state and local governments spent an estimated $74 billion on substance-involved adult and juvenile offenders in 2005, only $632 million--less than one percent--was spent on prevention and treatment.[5] A more recent analysis of data from 2007--which examined the economic costs to society of illicit drugs use in particular--estimated that federal, state and local criminal justice system costs (those associated with the impact of illicit drug use on police protection, adjudication and correctional activities) total $56.4 billion.[6]

Despite the fact that federal, state and local governments are constitutionally required to provide health care to incarcerated individuals,[7] there is an enormous treatment gap.[8] Of the estimated 65 percent of incarcerated individuals who met diagnostic criteria for a substance use disorder in 2006,[‡] only 11 percent received any type of professional treatment since admission. Of those who did receive treatment, few received evidence-based services.[9]

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[*] Defined as having a history of using illicit drugs regularly, meeting clinical criteria for addiction, having been under the influence of alcohol or other drugs when committing the crime, having a history of alcohol treatment, having been incarcerated for an alcohol or other drug law violation, having committed the offense to get money to buy drugs, or some combination of these characteristics

[†] The most recent year for which relevant data are available.

[‡] The most recent year for which relevant data are available.

Addiction Prevention and Care in the Justice System

To improve how we address substance use and addiction across the justice system, the justice system should take a health-based, rather than a punitive, approach that:

- **Promotes, funds and facilitates the development of evidence-based prevention** initiatives that target young people at risk for criminal involvement.

- **Encourages early intervention initiatives**, including alternative sentencing, diversion and drug courts for justice-involved individuals with substance use problems who are eligible to be diverted from incarceration.

- **Ensures access to evidence-based treatment and disease management** at all points of contact with the justice system, from arrest to incarceration and reentry.

Prevention and Early Intervention

Adolescents who use addictive substances in harmful ways frequently face a cluster of problems, such as co-occurring mental health disorders, living in unsafe neighborhoods, having limited access to health care and low attachment to school. These problems compound the risk that substance use poses for becoming involved with the justice system.[10]

Preventing substance use and providing timely and appropriate therapeutic interventions for those at risk for criminal involvement and for individuals in the criminal justice system who are substance-involved can improve health outcomes and reduce crime, recidivism and prison overcrowding, and save taxpayer money.[11]

Unfortunately, identifying substance-related problems and providing needed care too often occur only once an individual is involved in the justice system. The sources of referrals to treatment programs highlight the tendency to wait too long to address substance-related problems, particularly among youth.[12] More adolescents who receive treatment are referred by the criminal justice system (48.2 percent) than any other source; only 4.7 percent are referred by a health care provider.[13] Similar statistics apply to the adult treatment-seeking population.[14]

The following policies and practices can help to prevent and reduce substance use and addiction among those at risk for involvement with the criminal justice system and those in the criminal justice system.

Prevent Juvenile Substance Use and Delinquency

There are many contributing factors to juvenile substance use and delinquency. As such, a comprehensive model is necessary for prevention. A comprehensive approach includes efforts to strengthen families and neighborhood resources, address the issues of poverty and crime in disadvantaged communities, reduce the availability and accessibility of addictive substances, effectively treat childhood psychiatric disorders, increase school engagement and reinforce positive peer attachments. The earlier prevention efforts start, the more likely they are to succeed.[15] Key prevention approaches include:

- **Strengthening families.** The best approach to preventing youth substance use, addiction and crime is to strengthen families. Strong and positive families can help to reduce youth substance use, increase school bonding and academic performance, address conduct disorders and reduce juvenile crime.[16] The most crucial family characteristics for prevention are parental supervision

and monitoring and parental care and support.[17] Interventions designed to reduce family conflict and increase family involvement and parental monitoring have been shown to reduce youth substance use and crime.[18] Elements of effective family prevention approaches focus on the family as a whole, begin early, last long enough to make a difference, are culturally and developmentally appropriate, involve trained staff and connect the youth and family to community resources.[19]

- **Strengthening neighborhood resources.** Neighborhood crime, ready availability of alcohol, drugs and firearms, and community norms that are conducive to substance use all can put young people at risk for delinquency and substance use, as can low neighborhood attachment, poor community organization and economic deprivation.[20] Communities can help reduce delinquency and substance use among youth by enforcing underage smoking, drinking, drug and gun laws;[21] providing after-school programs for youth and adult mentoring programs;[22] considering curfew programs that offer a range of services;[23] involving youth in community activities;[24] engaging local police in identifying and diverting high-risk youth;[25] and raising public awareness.[26]

SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ASSOCIATION'S STRATEGIC PREVENTION FRAMEWORK PARTNERSHIPS FOR SUCCESS STATE AND TRIBAL INITIATIVE

Communities need proper funding and resources to create a sustainable infrastructure capable of guaranteeing the availability and accessibility of necessary services. For example, SAMSHA's Strategic Prevention Framework Partnerships for Success State and Tribal Initiative funds several states in efforts to prevent substance use and addiction across the nation. Grant sub-recipients are community coalitions and centers that work directly with community members and other organizations to prevention substance use among youth in their neighborhoods.[27]

- **Placing limitations on alcohol outlet establishments.** Alcohol is a factor in the incarceration of at least half of prisoners in the United States,[28] and alcohol availability in the neighborhood is linked to violent crime.[29] Independent of other neighborhood factors typically associated with criminal activity--such as poverty and unemployment--as the availability of alcohol increases, so does the incidence of violent crime.[30] Policy initiatives can counteract this by:
  - Setting minimum distances between alcohol outlets;
  - Limiting new licenses in areas with a high amount of outlets;
  - Not issuing new licenses if an establishment closes; and
  - Permanently closing outlets that violate alcohol laws such as selling to underage persons.[31]

- **Enhancing school engagement.** Schools can play a significant role in substance use and delinquency prevention. School is the primary institution, aside from the family, with extended and consistent access to the youth population; low engagement and poor academic performance are strongly associated with substance use and delinquency.[32] Principles of effective school prevention include starting early,[33] fostering student attachment to school,[34] setting clear and consistent expectations of student behavior,[35] identifying high-risk students and times of higher risk,[36] involving parents, training staff,[37] reinforcing positive peer relationships,[38] reducing gangs and bullying[39] and encouraging students' personal development.[40]

Identify Those at Risk and Provide Needed Intervention Services by:

- **Screening all justice-involved individuals for substance use, and providing evidence-based services to those who screen positive.** Research shows that screening, comprehensive assessment and connection to appropriate evidence-based care is effective for addressing substance use and addiction among individuals involved in the justice system. Trained personnel should be required to screen each individual for substance use and to know how to respond for those who screen positive. The results of the screening should inform decision-making in regard to pretrial supervision, sentencing, eligibility for diversion and treatment needs. Correctional facilities should periodically re-assess individuals to track their progress in treatment and to alter the treatment plan as needed. A final assessment should be conducted prior to release to identify any potential treatment needs and to facilitate re-integration into the community.

- **Connecting justice-involved individuals to appropriate ancillary services**. Individuals involved in the justice system should be offered and encouraged to participate in literacy, education, job training and parenting programs, and should have access to religious, spiritual and mutual support services.

- **Requiring training in evidence-based practices for identifying and providing services to substance-involved individuals in the justice system.** Provide training on substance use issues to all professionals who work with justice-involved individuals, including police; prosecutors; public defenders; judges; corrections, parole and probation officers; medical directors of prisons and jails; and other justice personnel.

- **Training law enforcement professionals to address addiction as a public health and safety issue, rather than a criminal issue.** Law enforcement officials should be educated and trained about addiction as a health condition and should be provided tools to intervene with substance-involved individuals in a manner that assures they receive needed health care. Law enforcement also should be prepared to intervene and handle situations involving an individual with a co-occurring mental illness.

- **Properly addressing the need for tobacco/nicotine bans and cessation support.** Prison inmates are nearly twice as likely to be current smokers compared to non-institutionalized adults.[41] One survey found that 70 percent of incarcerated individuals who smoke report a desire to quit.[42] Banning tobacco/nicotine product use in prisons without offering cessation support is insufficient for eliminating such use or for maintaining abstinence after release.[43] Research suggests that effective policies are those that:
  - Promote tobacco/nicotine free correctional facilities:
    - Keep jails, prisons and other correctional housing and facilities free of tobacco/nicotine products.
    - Educate staff about enforcement of the ban and the provision of cessation support. Staff members should understand that quitting may be more difficult for certain populations, including black and female smokers[44] and those with a chronic mental illness,[45] and that these populations may need more intensive services.
    - Offer cessation support to staff members to improve their overall health and the health and cessation efforts of incarcerated individuals, since staff members who use tobacco/nicotine products may be less likely to enforce or support bans.[46]

- Train health care professionals working in the context of the criminal justice system to:
  - Screen every arrestee or convicted individual for tobacco/nicotine use, and provide cessation support.
  - Offer free nicotine replacement therapy and access to behavioral smoking cessation support.
- Ban all tobacco/nicotine product use in all government-funded criminal justice institutions.
  - Banning use helps to reduce smoking rates among incarcerated individuals and eliminate exposure to secondhand smoke, but only if the ban is implemented in conjunction with effective cessation programming.
  - Ensure that the ban is comprehensive and well enforced and that it applies to incarcerated individuals and staff, as well as indoor and outdoor facilities.

THE NATIONAL INSTITUTE OF JUSTICE'S CRIME SOLUTIONS DATABASE

The Office of Justice Programs division within the National Institute of Justice maintains the Crime Solutions database, which rates different prevention programs and includes research-based guidance on effective programming (www.crimesolutions.gov).

Treatment and Disease Management

Criminal justice systems have a dual mission to protect public safety and the health and well-being of those who are involved in the justice system. Given the high rate of substance use problems among justice-involved individuals and the costs associated with untreated addiction, including recidivism, providing effective addiction treatment should be a top priority throughout the criminal justice system. There are multiple points of contact, from the point of arrest to reentry into the community post-release, to identify substance use and addiction and to respond appropriately with health-based rather than punitive approaches. A health-based approach to substance use and addiction should pervade the justice system, regardless of the severity of the infraction. Whether it is a case of substance-related impaired driving, domestic violence or murder, each individual has a Constitutional right to receive treatment for addiction alongside whatever penalty is deemed appropriate for the crime.

Research shows that the following policies and practices can improve treatment and aftercare for substance-involved criminal justice populations:

Provide Access to Evidence-Based Treatment

Evidence-based treatment is not standard practice within the criminal justice system. Only 16.6 percent of facilities offer addiction treatment in specialized settings, segregated from the general prison population, which produce better outcomes with regard to drug use and post-release arrests.[47] Only 66.4 percent of residential facilities, 55.7 percent of community corrections facilities and 19.7 percent of local jails offer treatment for justice-involved youth.[48] The following policies and practice can help to expand treatment for substance-involved individuals in the criminal justice system:

- **Having health care professionals who work with substance-involved justice populations offer evidence-based care, consisting of:**
  - A comprehensive assessment to determine the individual's health and social circumstances and an individualized treatment plan to document these needs and identify treatment goals.

- Treatment, including psychosocial and pharmaceutical therapies, as indicated.[49]
  - Interventions for substance-involved youth in the justice system should incorporate family-based therapy, which is an evidence-based approach for this population.[50]
  - The use of medication-assisted treatment (MAT) is especially important for justice populations with opioid addiction.

- Support services including community supervision, case management, peer support, and educational, vocational and employment services. These services are necessary for building and maintaining skills to ensure better transition into the community after release.
- Disease management comprised of monitoring substance use and relapse episodes followed by adjustments to treatment services, as needed. Relapse to opioids is especially dangerous at post-release because physiological tolerance to drugs typically declines while an individual is in prison or jail, putting those recently released at increased risk of overdose should they engage in drug use.

MEDICATION-ASSISTED TREATMENT (MAT)
IN THE JUSTICE SYSTEM

Initiation of MAT while incarcerated can increase the likelihood of engaging in aftercare upon release,[51] in turn decreasing re-arrest and recidivism rates.[52] MAT also reduces the risk of death for incarcerated individuals with opioid addiction; overdose is a significant risk upon reentry for those whose opioid addiction has not been adequately treated or managed.[53] Despite the social, health and economic benefits of providing MAT to individuals involved in the criminal justice system, it has not been routine practice to do so.[54]

MAT should be incorporated as standard practice for participants in drug courts and other alternative to incarceration programs who have opioid addiction. Drug courts that receive federal funding are prohibited from requiring participants to discontinue MAT, and some states are introducing similar laws. Programs that do not allow the use of MAT during participation restrict access to a potentially life-saving evidence-based therapy for otherwise eligible justice-involved individuals with opioid addiction, and this practice also may violate anti-discrimination laws. Use of MAT should not prevent someone from participating in or completing their drug court or other justice requirements.

In September 2015, New York Governor Andrew Cuomo signed legislation to prohibit the removal of defendants with opioid addiction from judicial diversion programs (drug courts) on the basis of their use of MAT. This legislation will prohibit drug court judges from forcing defendants with opioid addiction to terminate their use of MAT as a condition of participation in diversion programs.

- **Recognizing that those entering the criminal justice system may already be actively engaged in treatment**, and working with other professionals in the justice system and in community-based treatment to adapt treatment to prison settings. In particular, individuals with opioid use disorders may be taking methadone or buprenorphine as part of treatment. Do not force incarcerated individuals to withdraw from medication-assisted treatment.

- **Evaluating programs and therapies to measure their effectiveness.** Only use treatment approaches that are grounded in science and implemented with fidelity.

- **Conditioning federal funding for treatment provided within the federal justice system on the implementation of comprehensive, evidence-based services**. Federal grants, such as Second Chance Act grants that provide funding for agencies to improve the lives of those returning to communities after incarceration, should require that these agencies provide evidence-based treatment or refer individuals to treatment providers that offer evidence-based services.

- **Requiring the accreditation of prison- and jail-based treatment programs and providers** through organizations such as the American Correctional Association (ACA), the Center for Substance Abuse Treatment (CSAT) at SAMHSA or the National Commission on Correctional Health Care (NCCHC). Such accreditation should require adherence to best practice standards and include periodic performance reviews by independent experts.

- **Providing access to tailored treatment for special populations.** Within the criminal justice system, there are special populations that require specialized treatment and care, including:

    - **Individuals with co-occurring mental health disorders:** Individuals with co-occurring mental illness and substance use disorders have a higher rate of re-incarceration, suggesting that the underlying causes of their criminality are not being adequately addressed in the current system.[55] Almost two-thirds (64.5 percent) of the U.S. incarcerated population meet diagnostic criteria for an alcohol or other drug use disorder and one-third (32.9 percent) have a diagnosed mental illness. About a quarter (24.4 percent) of individuals in prison and jail have both a substance use disorder and a co-occurring mental health problem.[56]
        - Incarcerated individuals with diagnosed co-occurring mental health and substance use disorders require an integrated, evidence-based treatment approach that appropriately addresses both disorders.[57] Efforts to continue integrating the historically siloed mental health and addiction treatment approaches into one comprehensive behavioral health model is necessary to address the multifaceted needs of this population.
    - **Veterans:** Veterans with undiagnosed or untreated substance use and mental health problems are at increased risk of involvement with the criminal justice system. One in 10 federal, state and local incarcerated individuals are veterans. Although justice-involved veterans are less likely to be substance-involved, they are more likely to have co-occurring mental health problems, including post-traumatic stress disorder (PTSD) and depression, and to be arrested for an alcohol law violation.[58] Drug treatment courts specifically for veterans have been designed to meet the needs of veterans and help to avoid future contact with the justice system.[59]
    - **Juveniles in the Adult Corrections System:** Half (52.4 percent) of juvenile or youthful incarcerated individuals in state prisons and local jails who have been tried in adult court met diagnostic criteria for an alcohol or other substance use disorder in 2006. These youthful offenders are more likely than non-youthful offenders to have co-occurring mental health and substance use disorders.[60] Integrated treatment approaches that address both the mental illness and the substance use disorder are imperative to effectively target juveniles involved in the adult corrections system.

EXAMPLES OF INTERVENTIONS FOR SUBSTANCE-INVOLVED YOUTH IN THE JUSTICE SYSTEM[61]

Multisystemic Therapy (MST). MST is an intensive family- and community-based program that attempts to modify risk factors in the environments of chronically violent, delinquent or emotionally disturbed substance-involved youth, aged 12-17. This therapy aims to promote positive social behavior and decrease antisocial behavior, criminal activity, substance use, incarceration and out-of-home placement. MST has been associated with reduced substance use, psychiatric symptoms, long-term re-arrest rates and long-term out-of-home placement, as well as improved family relations, family functioning and school attendance.[62]

Multidimensional Treatment Foster Care (MTFC). MTFC is a program in which trained families provide supervision and support for children who are at risk for placement or who are currently placed outside the home in child welfare, mental health or juvenile justice systems. Families that house foster children are recruited and screened prior to providing care and are monitored, trained and supervised regularly. This intervention provides services to the children and their biological families while also maintaining contact between the youth and their parents so that they can return home following the intervention. Treatment families, with the help of a case manager, maintain connections with the youth's school or other systems that he or she is involved in.[63] Research indicates that MTFC participants, compared to youth in other interventions, have fewer arrests, less violent criminal activity, less drug use and lower rates of recidivism.[64]

- **Women:** Justice-involved women often initiate substance use for different reasons than their male counterparts. Women are more likely than men to have a co-occurring substance use and mental health disorder,[65] and women's substance use disorders and problems typically are influenced by mental health issues and trauma experiences (women with a history of abuse are three to four times more likely than other women to have a substance use disorder).[66] Historically, treatment for addiction has been based largely on men's experiences with addiction.[67] These models do not capture women's unique experiences and therefore do not address the underlying issues that may contribute to substance use.
  - Interventions should be gender-specific and trauma-informed. Utilizing these approaches lays the foundation for engagement with treatment, which increases adherence to treatment, reduces recidivism and decreases substance use.[68]
- **Other Special Populations:**
  - Special considerations should be made for incarcerated women and men with minor children.
  - Substance-involved individuals with three or more repeat offenses are more likely to have a substance use disorder than those with one or two prior incarcerations or those with no prior prison or jail sentences. Specialized treatment for this population could significantly reduce recidivism.[69]

Implement Alternative to Incarceration Programs

Alternative to incarceration programs, also known as diversion models, are criminal justice innovations typically offered to defendants as an alternative to probation or short-term incarceration.[70] They prioritize treatment, establish collaboration between justice authorities and treatment providers and hold the justice-involved individual legally accountable for treatment compliance. Such programs have been found to

reduce re-arrest and recidivism rates.[71] Diversion may occur before conviction or post-plea, both with the chance to have charges dropped or sentences reduced upon successful completion of the program.[72] The use of treatment alternatives to incarceration has gained momentum in recent years as witnessed by a rapid expansion of drug courts, prosecutorial diversion programs and treatment interventions supervised by probation and parole; the accumulation of evaluation studies demonstrating their efficacy;[73] and the emergence of advocacy coalitions for treatment alternatives. As of September 2014, there were 2,619 drug court programs operating in the U.S.[74] Yet, despite the encouraging growth of diversion and treatment opportunities and evidence of their cost effectiveness, only a fraction of substance-involved individuals who are in the criminal justice system have benefited from these programs. Improving the availability and effectiveness of alternative to incarceration programs involves:

- **Expanding the use of treatment-based alternatives to incarceration**, including drug courts and prosecutorial diversion programs, for substance-involved criminal justice populations.

- **Eliminating mandatory sentences** that prevent the possibility of alternative sentencing and/or parole.

- **Assigning interested and committed judges to drug courts.** The most successful programs are run by judges who are committed to addressing and resolving the health concerns and problems associated with substance-involved criminal justice populations and who are committed to ensuring that evidence-based treatment is delivered.

- **Involving trained medical professionals**, preferably those with training in addiction medicine, in the development and implementation of the treatment plans to help ensure that interventions are consistent with evidence-based practices.

- **Scheduling frequent hearings with drug court participants to monitor progress.**

- **Employing incentives for drug court participants to encourage compliance.** Incentives may include dropping charges upon successful graduation from the drug court, rescinding probation or reducing original sentences. Possible incentives for juvenile drug court participants include reductions in sanctions, along with prizes or tickets to earn prizes, participation in recreational events, social recognition and praise from judges.[75]

- **Recognizing reasons for dropout among drug court participants, especially youth, and working to improve outcomes.** About 50 percent of adolescent participants graduate from drug court. Reasons for non-completion among juvenile participants include a failure to form strong therapeutic alliances with mentors, a lack of positive family involvement in treatment, negative attitudes towards therapy and family financial problems.[76]

- **Not conditioning drug court funding upon exclusion of those with violent offenses.** Drug court admissions generally are restricted to those with nonviolent offenses. Federal funding for drug courts prohibits those with violent offenses from enrolling in drug courts,[77] despite some evidence that drug courts work for individuals with more serious and violent offenses when they are allowed to enroll.[78] The largest cost benefits often are found in reductions in serious crime, which can be maximized by enrolling higher-risk individuals and those who have committed more serious offenses.[79]

Ensure Effective and Appropriate Disease Management and Aftercare Services by:

- **Providing comprehensive pre-release planning** for incarcerated individuals with substance use disorders to assure transition to a broad range of integrated reentry services, including addiction treatment and management, mutual support programs, other health care services, education and training and family support. Reentry programs should offer appropriate evidence-based addiction treatment and management services.

- **Contracting with community-based treatment providers and probation and parole agencies** using performance-based contracting to ensure that providers implement evidence-based services.

- **Connecting released individuals with community-based medication-assisted treatment (MAT) opportunities**, such as office-based buprenorphine treatment or clinic-based methadone maintenance treatment to reduce the risk of relapse, overdose and re-arrest following release.

- **Expanding the use of supervised release**, which allows justice-involved individuals to rejoin the community and engage in treatment while maintaining regular contact with the justice system.

- **"Opting out" of the federal policy in the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA)**, which bans individuals with drug felony convictions from receiving federal benefits such as Temporary Assistance for Needy Families (TANF) and the Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps). Ensure access to these and other benefits (e.g., public housing, education assistance) for justice-involved individuals reentering the community if they have successfully completed their sentences and are making satisfactory progress in addiction treatment. See The Legal Action Center's Advocacy Toolkit for more information on the "opt out" and the PRWORA.

- **Funding research to evaluate treatment approaches for parolees and probationers.** More research is needed to determine whether addiction-related interventions are delivering their intended results for justice-involved individuals.

Provide Addiction Treatment Insurance Coverage for Justice Populations

The Patient Protection and Affordable Care Act (ACA) of 2010 expands health insurance options for individuals and their families. The law gives states the option to expand their Medicaid programs to cover low-income adults without children (who previously were not eligible for Medicaid in most states), and it establishes marketplaces where individuals and families can buy affordable, quality health plans. These options for health insurance coverage can help justice-involved individuals gain access to addiction treatment, often for the first time.

People transitioning into and out of correctional facilities have high rates of mental health and substance use disorders. Upon release from prison or jail, most of these individuals are uninsured, making it difficult for them to access needed treatment. Enrolling these individuals in health insurance and facilitating their access to community-based care will yield better health outcomes and more successful transitions, and may also reduce recidivism.[80] Ensuring adequate coverage can be accomplished by:

- **Suspending rather than terminating incarcerated individuals' Medicaid coverage, where applicable.** Recognize that some of those entering the justice system may be enrolled in the state's Medicaid program. Terminating their eligibility for Medicaid can create gaps in health care access, especially following release when rates of relapse, overdose and criminal recidivism

are high. Medicaid eligibility should be suspended rather than terminated for those currently enrolled in Medicaid who are sentenced to prison or jail.

- **Upon release, assisting eligible individuals in enrolling in Medicaid and accessing care to facilitate their re-integration into the community.** Prisons and jails should provide outreach and education about health insurance coverage options as well as direct enrollment assistance either through on-site staff or through external consultants.

- **Offering transitional services to incarcerated individuals reentering the community.** Transitional services, including case management, employment assistance and social service linkage, are especially critical for incarcerated individuals reentering into the community.

- **Establishing community infrastructure to support reentry.** Successful re-integration into the community can only occur when community support systems are in place. A sustainable and comprehensive community network must be maintained by ensuring adequate funding, resources and qualified professionals. Such systems have to be equipped to address the many challenges that substance-involved individuals face upon release, including those related to addiction, housing, employment, and financial obligations. Without such support, there is an increased risk of recidivism.

PROMISING PROGRAMS AND POLICIES

Residential Addiction Treatment. The U.S. Department of Justice's Bureau of Justice Assistance funds local and state correctional facilities to develop and operate Residential Substance Abuse Treatment (RSAT) programs. During April-September of 2012, jail- and prison-based RSAT programs had an overall completion rate of 66 percent, and the completion rate for aftercare programs was 54 percent.[81] A review of RSAT found that the programs were associated with significant reductions in re-offending.[82]

Medication-Assisted Treatment in Prison. Randomized clinical trials have found both methadone and buprenorphine to be effective treatments for inmates with opioid addiction. Six months following release from prison, inmates who started methadone treatment before leaving prison, and who were referred to counseling and a methadone clinic upon release, spent more time in community-based treatment compared to those who only received counseling referrals (100 days vs. 14 days, respectively). Methadone patients also reported participating in half as many days of criminal activity as their peers (an average of 29 days vs. 57 days).[83]

Therapeutic Communities. Therapeutic communities are residential-based groups that use peer influence and mentoring sessions to support substance-involved individuals. Mentors oversee a variety of activities and therapies designed to help residents integrate back into society, including group and individual therapy sessions, group peer sessions, role-playing and confrontation, and they help residents to progress through treatment stages until release.[84] Some research indicates that prison-based therapeutic communities are associated with reduced rates of recidivism and substance use among residents.[85] Therapeutic communities are particularly effective if they begin while individuals are in prison and include aftercare following release.[86]

Drug Treatment Alternatives to Prison (DTAP) is an intervention that provides nonviolent, substance-involved individuals, aged 18 years or older, facing a felony charge (that will probably result in conviction) and one prior felony an opportunity to receive a clinical screening and assessment. If an individual is identified as having a substance use disorder during the clinical assessment, he or she will be admitted into the program. This program uses a deferred-sentencing model: those who are accepted into the program plead guilty to the felony charge, but go to a residential treatment facility while their sentence is deferred. Those who complete treatment can withdraw their guilty plea and their case will be dismissed. Those who do not complete treatment will have to appear in court to be sentenced on the guilty plea. There is some promising evidence of the effectiveness of this program in reducing recidivism rates.[87]

Substance Abuse and Crime Prevention (SACP) programs are based on the Substance Abuse and Crime Prevention Act (SACPA) of 2000, which was a California statewide initiative to provide alternatives to incarceration for substance-involved individuals in the justice system.[88] Eligibility was based on past criminal history and the current offense,[89] such that those with first or second time nonviolent drug possession offenses could be diverted from incarceration to addiction treatment. Years after SACPA went into effect, program evaluations found reduced prison admissions for drug possession.[90] SACPA demonstrated that the positive impact of diverting substance-involved individuals to treatment is greater than the impact of using incarceration to prevent drug-related crime. SACPA saved California $173 million on the first-year cohort alone through reduced jail and prison admissions, and increased tax revenues.[91] The state spent about $2,300 less on each of 42,000 justice-involved individuals who received addiction treatment services rather than serving time in jail or prison, and even though there was an offset by an increase in treatment costs, savings were still achieved, mainly through reduced post-conviction incarceration costs.[92] This program ended in 2010 due to funding restrictions, but it serves as a valuable example of how state criminal justice systems can reduce costs by funding addiction treatment for those with nonviolent drug offenses.

PROMISING PROGRAMS AND POLICIES (CONTINUED)

Treatment Accountability for Safer Communities/Treatment Alternatives for Safe Communities (TASC) provides clinical assessment, treatment or referral to treatment and case management services to substance-involved criminal justice populations. TASC and similar programs are individualized, integrated systems of care that attempt to meet the needs of participants, treatment facilities and the justice system. TASC works with drug courts and corrections to help justice-involved populations with substance use problems access treatment and aftercare.[93]

New Jersey implemented a prerelease residential addiction treatment program for individuals with repeated involvement in the criminal justice system. One year post-release, average criminal activity costs (including costs associated with arrest, conviction, incarceration and wage loss and victim loss) for those who received treatment were $4,307 less than total costs for an average individual who did not receive treatment. Rates of re-arrest, re-conviction and re-incarceration were also lower among those who received treatment compared to those who did not receive treatment.[94]

New York passed Rockefeller Drug Law Reform in 2009, eliminating mandatory prison sentences for some drug offenses and reducing minimum sentence length for other offenses.[95] The law also expanded the discretion of judges to connect individuals to treatment through drug courts. There was a 77 percent increase in court-ordered treatment between the one-year periods before and after the law went into effect in 2009. The net cost savings from judicial diversion over five years were estimated at $5,144 per participant.[96]

Hawaii's Opportunity Probation with Enforcement (HOPE) program requires those who are on probation to submit to random and regular drug testing and mandates addiction treatment only for those who continue to test positive. A randomized controlled trial found that, one year after the program, HOPE participants were 55 percent less likely to be arrested for a new crime and 72 percent less likely to use drugs compared to probationers in a control group.[97]

Chapter I
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Chapter IV
Notes

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Chapter V
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