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POSITION PAPER

Health and Public Policy to Facilitate Effective Prevention and Treatment of Substance Use Disorders Involving Illicit and Prescription Drugs: An American College of Physicians Position Paper

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Substance use disorders involving illicit and prescription drugs are a serious public health issue. In the United States, millions of individuals need treatment for substance use disorders but few receive it. The rising number of drug overdose deaths and the changing legal status of marijuana pose new challenges. In this position paper, the American College of Physicians maintains that substance use disorder is a treatable chronic medical condition and offers recommendations on expanding treatment options, the legal status of marijuana, addressing the opioid epidemic, insurance coverage of substance use disorders treatment, education and workforce, and public health interventions.

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Substance use disorders pose a heavy societal burden, endangering individual and family health and well-being, tearing through communities, and sapping resources from the health care system. These disorders are common in the general population and occur at even higher rates among those who are incarcerated. Access to care for this condition is limited. In 2014, 22.5 million people in the United States needed treatment for an illicit drug or alcohol use problem but only 18% received any treatment, far below treatment receipt rates for those with hypertension (77%), diabetes (73%), or major depression (71%) (1).

The use of illicit drugs is a drain on the nation's financial resources. In 2007, the indirect and direct cost of illicit drug use was estimated to be about $200 billion related to lost productivity, health care, and law enforcement ($11 billion annually) (2). The medical complications of untreated substance use disorder also drive health care system costs. Hospitalizations for opioid use disorder rose from nearly 302,000 to more than 520,000 from 2002 to 2012, and costs for such care quadrupled to $15 billion in 2012. Charges for hospitalization for opioid use disorder with serious infections also quadrupled over the same time period to $700 million (3). Notably, evidence shows that for every dollar invested in drug prevention and treatment, the nation sees substantial savings (4, 5).

Over the past 40 years, many jurisdictions established rigid punishments for nonviolent drug offenses, including mandatory incarceration. However, there has been growing support for the idea that public policy should be reoriented to emphasize prevention and treatment of substance use disorders through public and individual health interventions rather than excessive reliance on criminalization and incarceration. One example of this shift is the promotion of specialized drug courts by federal, state, and local governments. Drug courts can offer the individual with substance use disorders a path to treatment rather than incarceration, in addition to supporting prevention and early intervention initiatives (6–8). In addition, the United Nations has called for a health-focused direction to the drug problem (9). The public is also supportive of treatment rather than incarceration for drug users. According to a 2014 survey conducted by the Pew Research Center, 67% of Americans say that "the government should focus more on providing treatment for those who use illegal drugs such as heroin and cocaine" (10).

This document focuses on substance use disorders related to illicit drugs and misuse of prescription drugs, particularly opioids (**Appendix**, available at www.annals.org). Although the American College of Physicians (ACP) recognizes that alcohol and tobacco use disorders are a serious public health problem, policies to address such issues are outside the scope of this paper. Recommendation 3 pertains to marijuana and recommendation 4 to opioids, whereas the other recommendations apply to all use disorders associated with illicit and prescription drugs. For purposes of this paper, the term "illicit drug" includes the following categories based on the National Survey on Drug Use and Health: marijuana (including hashish); cocaine (including crack cocaine); heroin; hallucinogens; inhalants; and the nonmedical use of prescription-type pain relievers, stimulants, and sedatives. Although many states have legalized or decriminalized use and sale of medical and/or recreational marijuana, it is categorized as an illicit drug for the purposes of this paper because its use and possession remain illegal under federal law and in many states. Furthermore, the paper offers public policy rec-

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ommendations regarding the prevention and treatment of substance use disorders involving illicit and prescription drugs and not on the clinical aspect of preventing and treating these disorders.

METHODS

This policy paper was drafted by the Health and Public Policy Committee of the ACP, which is charged with addressing issues that affect the health care of the U.S. public and the practice of internal medicine and its subspecialties. The authors reviewed available studies, reports, and surveys on the prevention and treatment of substance use disorder from PubMed, Google Scholar, relevant news articles, policy documents, Web sites, and other sources. The authors largely excluded sources that were more than 10 years old, with the exception of several federal government reports that were included for background purposes. Recommendations were based on reviewed literature and input from the ACP's Board of Governors, Board of Regents, Council of Early Career Physicians, Council of Resident/Fellow Members, Council of Student Members, and Council of Subspecialty Societies and nonmember experts in the field. The policy paper and related recommendations were reviewed and approved by the Health and Public Policy Committee in October 2016 and the Board of Regents in February 2017. Financial support for the development of this position paper comes exclusively from the ACP operating budget.

RECOMMENDATIONS

1. Substance use disorder is a chronic medical condition and should be managed as such.

Substance use disorders are treatable chronic medical conditions that should be addressed through expansion of evidence-based public and individual health initiatives to prevent, treat, and promote recovery. ACP supports appropriate and effective efforts to reduce all substance use, including educational, prevention, diagnostic, and treatment efforts. In addition, ACP supports medical research on substance use disorders, including causes and treatment. ACP emphasizes the importance of addressing the stigma surrounding substance use disorders among the health care community and the general public.

2. ACP supports the implementation of treatment-focused programs as an alternative to incarceration or other criminal penalties for persons with substance use disorders found guilty of the sale or possession of illicit substances.

Treatment for substance use disorders should be made available in a timely manner, including for those in the criminal justice system as an alternative to incarceration and other criminal penalties.

3. Stakeholders should assess the risks and benefits of removing or reducing criminal penalties for nonviolent offenses involving illicit drugs.

ACP calls for policymakers and researchers to carefully assess the arguments and evidence for amending criminal justice laws to remove or reduce criminal penalties (decriminalization, legalization, or offer of treatment as an alternative to criminal justice penalties) for nonviolent users of drugs, including assessing the following:

a. The relative risk that such drugs pose for the individual health of the users, the potential for misuse, and the potential effect on the overall health of the population that might result from decriminalization or legalization.

b. Whether criminalization acts as a barrier to preventing and treating substance use disorders and recurrence of such disorders.

c. The consequences of criminalization on the person with a substance use disorder, including disproportionate adverse effects on persons based on racial, socioeconomic, and ethnic characteristics.

d. Whether decriminalization or legalization leads to more or fewer substance use disorders and the health consequences associated with them.

ACP also calls for research on the individual and public health effects in states that have legalized or decriminalized the use of marijuana and the effectiveness of regulatory structures in those states that may minimize any adverse health impacts especially on children and adolescents.

4. Multiple stakeholders should cooperate to address the epidemic of prescription drug misuse, including the following strategies: implementation of evidence-based guidelines for pain management; expansion of access to naloxone to opioid users, law enforcement, and emergency medical personnel; expansion of access to medication-assisted treatment of opioid use disorders; improved training in the treatment of substance use disorders, including buprenorphine-based treatment; establishment of a national prescription drug monitoring program (PDMP); and improvement of existing monitoring programs.

ACP believes that physicians should work with other stakeholders, including medical and behavioral health care professionals, public health officials, government programs, patient advocacy groups, insurance plans, and law enforcement, to address the prescription drug use disorder epidemic.

To help address the prescription drug use epidemic, ACP makes the following recommendations:

a. Physicians are obligated by the standards of medical ethics and professionalism to practice evidence-based, conscientious pain management that prevents illness, reduces patient risk, and promotes health. ACP strongly believes that physicians must become familiar with, and follow as appropriate, clinical guidelines related to pain management and controlled substances, such as prescription opioids, as well as nonopioid pharmacologics and nonpharmacologic interventions.

b. Lift barriers that impede access to medications to treat opioid use disorder (methadone, buprenorphine, and naltrexone) and to medications for overdose prevention (naloxone). The federal government should consider lifting the cap on the number of pa-

tients who can receive buprenorphine if a physician has been trained in proper prescribing practices. Public and private insurers should remove onerous limits on medications for overdose prevention and medication-assisted treatment, including burdensome prior authorization rules or lifetime limits on buprenorphine that prevent medically necessary care. Oversight and enforcement efforts should be strengthened to protect against misuse, diversion, and illegal sale of buprenorphine and other opioid treatment drugs. Policymakers should evaluate and consider removing restrictions on office-based methadone treatment provided by trained physicians or other health care professionals.

c. Funding should be allocated to distribute naloxone to individuals with opioid use disorder to prevent overdose deaths and train law enforcement and emergency medical personnel in its use. Legal protections (that is, Good Samaritan laws) should be established to encourage use of naloxone and the reporting of opioid overdoses in instances where an individual's life is in danger. Physician standing orders to permit pharmacies to provide naloxone to eligible individuals without a prescription should be explored. Insurance and cost-related barriers that limit access to naloxone should be addressed.

d. Pre- and post-buprenorphine training support and education tools and resources should be made available and widely disseminated to assist physicians in their treatment efforts. Physician support initiatives, such as mentor programs, shadowing experienced providers, and telemedicine, can help improve education and support efforts around substance use treatment.

ACP reiterates its support for the establishment of a national PDMP. Until such a program is implemented, ACP supports efforts to standardize state PDMPs through the federal National All Schedules Prescription Electronic Reporting program. The College strongly urges prescribers and dispensers to check PDMPs in their own and neighboring states (as permitted) before writing and filling prescriptions for medications containing controlled substances. All PDMPs should maintain strong protections to assure confidentiality and privacy. Efforts should be made to facilitate the use of PDMPs, such as by linking information with electronic medical records and permitting other members of the health care team to consult PDMPs.

5. Health insurance should be required to cover mental health conditions, including the evidence-based treatment of substance use disorders, and abide parity rules.

ACP strongly supports parity of mental health and substance use disorders and the coverage of comprehensive evidence-based treatment of substance use disorders. Strong oversight must be applied to ensure adequate coverage of medication-assisted treatment components, counseling, and other items and services. Components of comprehensive drug addiction treatment should also be extended to those in need, including medical services, mental health services, educational services, HIV/AIDS services, legal services, family services, and vocational services.

6. The workforce of professionals qualified to treat substance use disorders should be expanded.

ACP supports policies to increase the professional workforce engaged in treatment of substance use disorders. Loan forgiveness programs, mentoring initiatives, and increased payment may encourage more individuals to train and practice as behavioral health professionals.

7. Training in the treatment of substance use disorders should be embedded throughout the continuum of medical education.

Training in screening and treatment of substance use disorders should be embedded in the continuum of medical education. Continuing medical education providers should offer courses to train physicians in addiction medicine, medication-assisted therapy, evidence-based prescribing, and the identification and treatment of substance use disorders.

8. The effectiveness of public health interventions to combat substance use disorders and associated health problems should be studied.

Public health-based substance use disorder interventions, such as syringe exchange programs and safe injection sites, that connect the user with effective treatment programs should be explored and tested.

CONCLUSION

Substance use disorders have been regarded as a moral failing for centuries, a mindset that has helped establish a harmful and persistent stigma affecting how the medical community confronts addiction. We now know more about the nature of addiction and how it affects brain function, which has led to broader acceptance of the concept that substance use disorder is a disease, like diabetes, that can be treated. Communities across the country are confronting an opioid epidemic that has taken tens of thousands of lives, leading physicians to take a more active role in managing the condition and spurring policymakers to reassess the nation's drug control policy. Physicians can help guide their patients toward recovery by becoming educated about substance use disorders, proper prescribing practices, consulting prescription drug monitoring programs to reduce opioid misuse, and assisting patients in their treatment. Policymakers can mitigate the effects of drug use by permitting harm reduction strategies, such as syringe exchange programs; supporting initiatives to increase the behavioral health workforce; testing evidence-based prevention and stigma-reduction programs; and encouraging treatment of substance use disorders among the incarcerated and diversion programs for those with nonviolent drug arrests.

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Appendix: Definition of Substance Use Disorders

The *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition, combines the terms "substance abuse disorder" and "substance dependence" under an umbrella term, "substance use disorders," and establishes a continuum of mild, moderate, and severe designations (11). Within this category are specific subcategories, including alcohol use disorder and stimulant use disorder. Severity is determined by the number of criteria met by the individual. For example, an individual who meets 6 of the opioid use disorder criteria is diagnosed with severe opioid use disorder (12). According to the Substance Abuse and Mental Health Services Administration (SAMHSA), "Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home" (13). The American Society of Addiction Medicine maintains that it is important to differentiate between at-risk or harmful substance use and addiction. The Society has defined the spectrum of unhealthy substance use as including addiction, harmful use when addiction is not present but use has already led to health consequences, and at-risk or hazardous use only when use increases the risk or likelihood of health consequences that have not occurred and addiction is not present (14).

What Is the Current Science on Addiction or Severe Substance Use Disorder?

Historically, addiction has been considered by some to be a moral disorder or character defect; this thinking informed policies that emphasized punishment rather than treatment of drug addiction. As behavioral science and neuroscience advanced, a different theory about drug addiction emerged. In 1956, the American Medical Association described alcohol as an illness and in 1987 officially called addiction a disease (15). Alan Leshner of the National Institute on Drug Abuse initiated a "paradigm shift" by establishing that addiction was a chronic, relapsing brain disease, with a genetic component that affects behavior, and that long-term use could lead to altered brain structure and function (16, 17). A 2008 National Institute on Drug Abuse report summarizes the evolution in thinking:

When scientists began to study addictive behavior in the 1930s, people addicted to drugs were thought to be morally flawed and lacking in willpower. Those views shaped society's responses to drug abuse, treating it as a moral failing rather than a health problem, which led to an emphasis on punishment rather than prevention and treatment. Today, thanks to science, our views and our responses to addiction and other substance use disorders have changed dramatically. Groundbreaking discoveries about the brain have revolutionized our understanding of compulsive drug use, enabling us to respond effectively to the problem (18).

By establishing that addiction was a disease with consequences for individual and public health, Leshner reasoned, the response to drug addiction should not be incarceration but rather should be treatment and management of the disease, even if the initial decision to use the drug was a voluntary one (19). In 1998, ACP (then the American College of Physicians–American Society of Internal Medicine) released the position paper "Illegal Drug Abuse and National Drug Policy," which included the following position: "Drug abuse should be accepted by health care practitioners, insurers, and employers as a chronic condition and illness, rather than a character weakness" (20). Other authors note that the understanding of addiction as a brain disease has tempered the severity of drug policies (21). The brain disease paradigm has been criticized by some who believe it absolves the addict from accountability, is less substantiated because the disease lacks a biological marker, or distances the problem from the social context (22). Others pose that addictive behavior is a series of choices, rather than a disease-triggered impulse (23, 24). Research also reflects the role of genetics, and its interplay with social exposure, as an important component in the manifestation of this condition (25).

Leshner acknowledged that addiction is "not just a brain disease" and that other factors may play a role in whether a user becomes an addict, using the oft-cited

Appendix Table. Numbers of Illicit Drug Users Among Persons Aged ≥12 Years in the Past Month: 2014

Drug	Users, *n in millions*
Marijuana and hashish	22.2
Pain relievers	4.3
Tranquilizers	1.9
Stimulants	1.6
Cocaine	1.5
Hallucinogens	1.2
Inhalants	0.5
Heroin	0.4
Sedatives	0.3

example of low heroin relapse rates among Vietnam veterans upon their return to the United States. Once removed from the environment where heroin was readily available and its use was relatively common, most veterans maintained their abstinence from the drug. Leshner said that "not only must the underlying brain disease be treated, but the behavioral and social cue components must also be addressed" (19). The American Society of Addiction Medicine, in recognition that addiction must be viewed in a broader perspective than solely a brain disease, reflects a biopsychosocial perspective in its current definition of addiction (26).

Trends in Illicit Drug Use and Substance Use Disorders

According to SAMHSA's 2014 National Survey on Drug Use and Health, 27 million people (10.2%) aged 12 years or older used an illicit drug in the past 30 days, a percentage higher than in each year from 2002 to 2013 (Appendix Table) (27). Of current illicit drug users, 22.2 million are current marijuana users and 4.3 million report current nonmedical use of prescription pain medication. The growth in illicit drug use is mainly the result of rising marijuana use rates; the 2014 rate of nonmedical use of prescription drugs was lower compared with most years in the 2002–2012 period but was similar to the rate in 2013. About 22.5 million people aged 12 years or older needed treatment for a substance use disorder in the past year, with alcohol use disorder being the most common. Less than 20% of this population received any form of substance use disorder treatment, while about 10% received treatment at a specialty treatment facility (hospitals [inpatient only], drug or alcohol rehabilitation facilities [inpatient or outpatient], or mental health centers) (28).

In 2004, the Bureau of Justice Statistics estimated that about 70% of state and federal prisoners reported regular use of an illicit drug and half of the prison population met clinical criteria for substance use disorder. However, fewer than 20% received drug treatment from a trained professional (although approximately 35% in state facilities and 41% in federal facilities participated in "other" drug abuse program, such as self-help groups or peer counseling) (29).

More recently, the National Center on Addiction and Substance Abuse estimated that of the 64.5% of prison and jail inmates who met clinical diagnostic criteria for a substance use disorder in 2006, only 11.2% had received any type of professional treatment since admission (30).

Especially troubling is the rising epidemic of drug overdose deaths, particularly from opioids, such as prescription pain relievers and heroin (31). According to the U.S. Centers for Disease Control and Prevention (CDC), the rate of deaths from drug overdoses has increased 137%, including a 200% increase in the rate of overdose deaths involving opioids, since 2000 (32). In 2014, more people died of drug overdoses than in any previous year on record. During that year, 47 055 people died of a drug overdose in the United States; 28 647 deaths were associated with opioids, greater than the number of deaths attributed to automobile crashes (32, 33). Substance use disorders have a substantial effect on health care costs. In 2016, average private insurance claims costs were nearly $16 000 more for patients with "opioid abuse or dependence" than the per-patient average cost on all patient claims (34).

Twenty-six states and the District of Columbia permit some form of marijuana use. Nineteen states allow marijuana for medical use, and 8 states plus the District of Columbia permit recreational use of the drug (35). Some have speculated that relaxed penalties and reduced perception of harm surrounding marijuana could result in higher use rates (36).

Overview of Treatment Approaches for Substance Use Disorder

Many approaches have shown at least some degree of effectiveness in the treatment of substance use disorder. These include behavioral therapies, medication-assisted therapies, and peer support/12-step fellowship approaches. Behavioral therapy, which is available for all substance use disorders, includes general cognitive–behavioral therapy, contingency management, relapse prevention, motivational enhancement therapy, and combinations thereof (37, 38). Evidence-based medication-assisted therapy approaches are available for the treatment of opioid use disorder (methadone, buprenorphine, naltrexone, and a buprenorphine and naloxone combination), tobacco (nicotine replacement therapy, bupropion, and varenicline), and alcohol (naltrexone and acamprosate). No medication-assisted therapy has yet been determined to be effective for the treatment of substance use disorders related to cocaine or stimulant use (37, 39). The opioid antagonist naloxone is not a treatment for opioid use disorder but is highly effective for reversing acute opioid overdose (40). With these evidence-based treatment approaches, successful outcomes are as

likely for substance use disorder as for such chronic diseases as diabetes, hypertension, and asthma (41).

Policies to Address the Substance Use Disorders

Federal Efforts

Substantial federal-level attention has been directed to the opioid epidemic, specifically on programs to improve access to treatment and train providers on proper opioid prescribing. In October 2015, the Obama administration announced it would direct relevant federal agencies to train federal health care professionals on proper prescribing of opioid medication and identify and address barriers that impede access to medication-assisted treatment of opioid use disorders. In December 2015, President Obama signed a budget agreement that would lift the longstanding federal funding ban on syringe exchange program support, although money cannot be spent on the needles themselves (42). The CDC also finalized a guideline on opioid prescribing for chronic pain in 2016 that was supported by ACP (43). The U.S. Food and Drug Administration has released an Opioids Action Plan to consult expert advisory committees before approving a new drug application for an opioid; improve opioid warning and safety labeling; and adopt more stringent requirements for postmarket data to better understand long-term use effects, increase the number of health professionals who receive training on proper opioids prescribing, and consider options to expand access to naloxone and other treatments, among other provisions (44).

In February 2016, President Obama announced that his fiscal year 2017 budget proposal would include $1 billion in mandatory spending for expanded access and evaluation of medication-assisted treatment for opioid use disorders and National Health Service Corps funding to broaden access to behavioral health providers. The budget proposal also includes increased funding to the Department of Justice and Department of Health and Human Services to help support state-based prescription drug overdose prevention programs, improve access to naloxone, and support enforcement programs. The budget would also support a pilot project for nurse practitioners and physician assistants to prescribe buprenorphine where permitted by state law. As of 2016, the federal government permits physicians with sufficient training and experience prescribing buprenorphine to treat up to 275 patients. Before the rule change, waivered physicians were allowed to prescribe buprenorphine to a maximum of 100 patients.

On a broader level, the 2015 National Drug Control Strategy underscores the importance of integrating behavioral health into the medical setting. The strategy also outlines goals related to increasing access to treatment of and long-term recovery from substance use disorders and emphasizes the need for team-based care, provider education on substance use disorders, and wider access to medication-assisted treatment for opioid use disorder. In 2014, then-U.S. Attorney General Eric Holder expressed support for reducing sentences for nonviolent drug offenders (45).

Congress has recently taken action on legislation for treatment of opioid use disorder. The Comprehensive Addiction and Recovery Act (CARA) was passed by Congress and signed into law by President Obama in July 2016. CARA directs the Department of Health and Human Services and other agencies to 1) convene a task force to develop best practices on pain management, 2) provide grants to increase the availability of life-saving opioid antagonists (such as naloxone), 3) develop treatment alternatives to incarceration programs, and 4) distribute grants to states for comprehensive opioid abuse response initiatives. The law also expands prescription drug take-back programs, authorizes funding for family-based treatment of substance use disorder, and initiates demonstration projects on evidence-based opioid and heroin treatment and interventions, among other activities. Although the legislation authorizes more than $181 million each year for 2 years in new funding to carry out its provisions, the funds must be appropriated every year through the regular appropriations process. This funding provision may prove to be a barrier to implementation of this legislation given the recent trend of Congress toward deficit reduction and use of "pay-fors," wherein appropriated funding for new programs must be obtained through reductions in other current funding. The 21st Century Cures Act, signed into law in December 2016, includes $1 billion for state efforts to fight the opioid epidemic.

Surgeon General's Report on Alcohol, Drugs, and Health

In 2016, the Surgeon General released a report on addiction: "Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health" (46). The report explains the evidence supporting the neurologic basis of substance use disorders and explores the genetic, social, environmental, and behavioral factors that may influence risk for addiction. The report also describes evidence-based prevention programs; approaches to screening, diagnosis, and treatment of substance use disorders and the role that physicians and other health care professionals may have in their delivery; and recovery models, such as mutual aid groups (for example, Narcotics Anonymous). In a chapter devoted to the integration of behavioral and general health care, the report recommends that states adopt licensing and financing policies to incentivize programs that offer care across the full continuum of residential, outpatient, continuing care, and recovery

supports. The report also calls for adequate coverage of behavioral treatments and medications, and it recommends that federal and state governments offer grants and other financial incentives to providers that adopt integration approaches. Other recommendations include requiring or incentivizing clinical professional schools to provide coursework to train students in treating patients with substance use disorders and related health problems and to encourage clinical professional societies to develop continuing education for practicing health care professionals.

Select State Efforts

Like the federal government, states have also focused attention on tackling the opioid use disorder epidemic. According to the National Conference of State Legislatures, many states have established prescription drug monitoring programs to track controlled substance prescriptions; have sought to regulate pain management clinics, developed prescribing guidelines, enacted drug overdose immunity (Good Samaritan) laws, or broadened access to naloxone; and have initiated public education and awareness campaigns (47). Florida saw a 50% decline in opioid overdose deaths after enacting a law that regulated pain clinics (so-called pill mills) and prohibited health professionals from dispensing such drugs from their offices (48). A Kentucky law required licensure of pain clinics and created stringent record-keeping and education requirements for physicians and other health professionals who prescribe controlled substances (49). The law increased the number of physicians using the state's prescription drug monitoring system and reduced the rate of individuals receiving prescriptions from multiple providers (50).

Several states have recently revised sentencing laws for nonviolent drug offenses. In 2009, New York rewrote its mandatory minimum sentencing mandates for certain nonviolent drug offenders and expanded policies that provided access to substance use disorder treatment before incarceration. New Hampshire, Mississippi, and California also expanded or established treatment as alternatives to jail time for certain drug use offenses (51).

Washington and Oregon apply taxes on retail marijuana sales, and some of this revenue is devoted to public health and health care–related activities. In Oregon, the state directs 20% of revenue to mental health, alcohol, and drug services and 5% to the Oregon Health Authority, which works to improve health care quality and control costs, for alcohol and drug use prevention, early intervention, and treatment services (52). Washington devotes a portion of marijuana revenue to activities to prevent and reduce marijuana use among young people, development and support of a marijuana education and public health program, research into the short- and long-term effects of the drug's use, the state's basic health plan trust fund, and health and dental care programs.

Recommendations and Rationale

1. Substance use disorder is a chronic medical condition and should be managed as such

Substance use disorders are treatable chronic medical conditions that should be addressed through expansion of evidence-based public and individual health initiatives to prevent, treat, and promote recovery. ACP supports appropriate and effective efforts to reduce all substance use, including educational, prevention, diagnostic, and treatment efforts. In addition, ACP supports medical research on substance use disorders, including causes and treatment. ACP emphasizes the importance of addressing the stigma surrounding substance use disorders among the health care community and the general public.

Substance use disorders affect public safety, the family, individual and public health, and community cohesion. Whereas previous generations incarcerated drug users, the embrace of the "addiction as chronic disease" paradigm has helped to direct attention toward a therapeutic approach to tackling the problem. Treatment of substance use disorders is similar to the management of other complex chronic diseases and requires coordination among providers, navigation of care systems, and efforts to engage patients in self-management of their illness. As with other behavioral health conditions, a pernicious stigma discourages individuals from seeking care, physicians from treating patients, and lawmakers from considering compassionate and effective policies to addressing the problem. As the opioid epidemic continues to take lives, more policymakers have acknowledged that a new approach must be adopted to suppress the scourge. Given the complexity of addiction, addressing the problem demands coordinated biological, psychological, and social approaches.

Drug use prevention efforts are often aimed at young people and delivered in various environments, including schools and health care settings. According to Faggiano and colleagues, programs focused on individual social skills development (drug knowledge, decision making, self-esteem, and peer pressure resistance) are the most effective school-based interventions to prevent early drug use (53). The Good Behavior Game, a classroom-based prevention program for elementary school children, reduced drug use when students reached the age of 19 to 21 years (46). Primary care–based screening and brief intervention can also prevent substance misuse. Motivational interviewing reduces drug, tobacco, and alcohol use among drug-using college students, as well as amphetamine use

among regular users (54). Tobacco use counseling and interventions and alcohol misuse screening and counseling are recommended by the U.S. Preventive Services Task Force for various populations.

In its 2015 policy paper "Integration of Care for Mental Health, Substance Abuse, and Other Behavioral Health Conditions Into Primary Care," ACP called for policies to address the stigma associated with behavioral health (55). In its report on stigma and behavioral health, the National Academy of Medicine uses the term "stigma" to "represent the complex attitudes, beliefs, behaviors, and structures that interact at different levels of society (i.e., individuals, groups, organizations, systems) and manifest in prejudicial attitudes about and discriminatory practices against people with mental and substance use disorders" (56). Stigma can have a harmful effect on people with substance use disorder, leading to social alienation and higher involvement in risky behaviors, such as needle sharing (57). According to the National Survey on Drug Use and Health, more than 35% of individuals with a perceived unmet mental health need had not received treatment because of social concerns, including not wanting others to find out or because it might affect their job (58). One survey found that the public has a far more negative view of those with substance use disorders than those with mental illness, with respondents far less willing to support a person with drug addiction marrying into their family, working closely with them on a job, or receiving protection from job or housing discrimination (59).

Physicians and other health care professionals are not immune from harboring negative beliefs toward those with substance use disorders, and such attitudes could potentially lead to delivery of lower-quality care or refusal to provide certain services (for example, syringe exchange or such interventions as pharmacotherapy) (57, 60). Evidence shows that internal medicine physicians may hold patients with alcoholism or dependence on narcotic pain medication in lower regard than patients with pneumonia and heartburn (59). For physicians, addiction medicine curricula for residents may be effective in improving attitudes toward patients with substance use disorders (61). Action should be taken to reverse the structural stigma associated with substance use disorders. The National Academy of Medicine recommends that the federal government coordinate an evidence-based multipronged effort to reduce the stigma around mental health and substance use disorders, including developing a research agenda, communication plan, contact-based programs, peer support programs, and other interventions.

2. ACP supports the implementation of treatment-focused programs as an alternative to incarceration or other criminal penalties for persons with substance use disorders found guilty of the sale or possession of illicit substances.

Treatment of substance use disorders should be made available in a timely manner, including making them available for those in the criminal justice system as an alternative to incarceration and other criminal penalties.

As the "addiction-as-chronic-disease" paradigm attains wider acceptance, law enforcement is reevaluating its response to substance use. Some departments are teaming up with the health care sector to link patients who have substance use disorders with treatment or embedding behavioral health clinicians in police departments.

The Police Assisted Addiction and Recovery Initiative was implemented in 2015 by the Gloucester, Massachusetts, police department (62). The program provides police departments with support to encourage opioid users to seek treatment and link opioid users with treatment and recovery resources in their community, distribute naloxone to prevent opioid overdoses, and assist other law enforcement departments in establishing a treatment-focused response to the opioid epidemic. Rather than place people with addictions under arrest, the police department invites those seeking help to come to the police department, where they are taken to a local hospital, screened by an "Angel" volunteer, and immediately linked with a partnering treatment facility (63). Although the program is in its infancy, it has already garnered much attention, with 106 police departments in 24 states partnering with the program. Preliminary data on the program are positive. From June 2015 to March 2016, 376 people accessed treatment through the program, with a 95% direct referral rate (64).

The Arlington, Massachusetts, police department (including the department's mental health clinical responder) works with the local health department to help distribute and provide education about naloxone, has expanded existing drug disposal and take-back programs, proactively reaches out to known people who use opioids to provide naloxone and information on how to access treatment, provides volunteers to help connect addicts with treatment, and engages in relapse prevention strategies. The program represents a community effort with collaboration of law enforcement, health department, schools, faith organizations, and volunteers (65).

As of December 2014, 3057 drug courts were operating in the United States and more than half served adults (66). Drug courts are treatment-focused alternatives to incarceration for individuals arrested for drug violations. Instead of being sent through the traditional criminal justice system, individuals are screened and diverted to closely supervised drug or alcohol treatment programs for a designated time period. Characteristics and populations served by the courts differ by jurisdiction, but generally, the individual's progress is moni-

tored by court officials and if the individual does not complete the treatment program he or she may be sent to prison. A 2011 Urban Institute report found that drug court participants had lower rates of drug use relapse, were less likely to report committing crimes, and had slightly better psychosocial outcomes (such as employment and less need for financial support) compared with similar nonparticipating offenders (67). To encourage the use of drug courts, the report calls for funding, development of evidence-based drug court practice standards, participation by more serious offenders, and expansion to serve more participants. Drug courts could be more effective if they direct individuals to medication-assisted therapy, such as methadone, buprenorphine, or naltrexone, paired with counseling. However, many drug courts do not connect participants with medication-assisted therapy. In a survey of 93 drug courts, 98% reported having opioid-dependent participants but only 56% provided such individuals with medication-assisted therapy, including agonists and naltrexone (68). Reasons for not providing medication-assisted therapy included cost, patients undergoing detoxification before entering supervision, lack of local providers (particularly in rural area drug courts), and court prohibitions on medication-assisted therapy. To address these barriers, SAMHSA recommends that drug court officials become better educated about medication-assisted therapy to address their misconceptions, develop working relationships and regularly consult with medication-assisted therapy prescribers and behavioral health treatment centers, and work with relevant stakeholders to educate the community about opioid use disorders and the need for medication-assisted therapy (69).

A study by RTI International and Temple University concluded that placing people who use drugs in community-based treatment programs rather than the criminal justice system would save billions of dollars and reduce crime rates. The model determined that if 10% of eligible offenders were sent to community treatment-based programs rather than prison, nearly $5 billion would be saved compared with current practices (70). The model also showed a net reduction in crime rates, although it did predict an immediate, short-lived increase in crimes.

3. Stakeholders should assess the risks and benefits of removing or reducing criminal penalties for nonviolent offenses involving illicit drugs.

ACP calls for policymakers and researchers to carefully assess the arguments and evidence for amending criminal justice laws to remove or reduce criminal penalties (decriminalization, legalization, or offering treatment as an alternative to criminal justice penalties) for nonviolent users of drugs, including assessing the following:

a. The relative risk that such drugs pose for the individual health of the users, the potential for misuse, and the potential effect on the overall health of the population that might result from decriminalization or legalization.

b. Whether criminalization acts as a barrier to preventing and treating substance use disorders and recurrence of such disorders.

c. The consequences of criminalization on the person with a substance use disorder, including disproportionate adverse effects on persons based on racial, socioeconomic, and ethnic characteristics.

d. Whether decriminalization or legalization leads to more or fewer substance use disorders and the health consequences associated with them.

ACP also calls for research on the individual and public health effects in states that have legalized or decriminalized the use of marijuana and the effectiveness of regulatory structures in those states that may minimize any adverse health effects, especially on children and adolescents.

Many states and local jurisdictions are reevaluating their marijuana laws because of various factors, including changes in public perception of the risk for marijuana use, the increasing acceptance of medical marijuana, and reconsideration of the effectiveness of harsh penalties for marijuana possession (71). A 2016 Associated Press–NORC Center for Public Affairs Research survey found that 61% of Americans believed that marijuana should be made legal (72).

Legalization refers to the removal of legal sanctions against the use, sale, or manufacture of a substance (such as marijuana) if the action conforms to specified conditions. Under decriminalization, the action remains illegal, but enforcement or penalization is reduced under the defined condition (for example, incarceration is eliminated, and any conviction is generally considered a misdemeanor with limited financial penalty). As of December 2016, Alaska, Colorado, Oregon, Washington, California, Massachusetts, Nevada, Maine, and the District of Columbia have legalized the recreational use of marijuana, at least for the possession of small amounts of the substance. Twenty-one states and the District of Columbia have decriminalized small amounts of marijuana. A total of 25 states, the District of Columbia, Guam, and Puerto Rico now allow for comprehensive public medical marijuana and cannabis programs. An additional 17 states allow use of "low tetrahydrocannabinol, high cannabidiol" products for medical reasons under limited defined conditions (73).

Under federal law, all marijuana use is illegal and the substance remains a Schedule I drug, characterized as having no medical value and having a high potential for misuse. A recent petition to the Drug Enforcement Administration to reclassify marijuana was refused (74). Nonetheless, under the Obama administration, no ac-

tions have been taken against states that have legalized or decriminalized the use of the substance.

The effect of marijuana legalization is unclear at this point. Use rates and attitudes about the drug have been changing over the past decade. The percentage of adults using marijuana and the share of adults who perceive marijuana to be unharmful rose steadily from 2007 to 2014 (75). The numbers of daily or near-daily users have also climbed and are up 7-fold since the early 1990s (76). However, rates of adolescents who have ever used marijuana dropped slightly from 2013 to 2015 (40.7% to 38.6%) (77). Data from a 2015 survey from Colorado indicate that a lower percentage of adolescents reported using marijuana in the past 30 days than in 2009, before the drug was legalized (78). States in which marijuana has been legalized had higher use rates before legalization compared with states where the substance remained illegal, making it difficult to determine the effect of legalization on use rates (79, 80). Legalization may also have a financial effect. Colorado and Washington, 2 states that have established retail marijuana systems, have generated millions of dollars in tax revenue from marijuana sales (81). Legal marijuana may also affect health care costs. One study found reduced prescription medication use under Medicare Part D after states legalized medical marijuana, indicating that therapeutic use of marijuana may help curb health care costs (82).

In part because of cannabis's nebulous legal status and federal restrictions on research funding, the evidence on the health effects of marijuana use is limited and unsettled (83). Evidence supports therapeutic use of marijuana to treat HIV/AIDS cachexia, chemotherapy-related nausea and vomiting, neuropathic pain, and multiple sclerosis spasticity (79). On the other hand, cannabis use may acutely impair memory and learning in adults, but it is unclear whether the substance has lasting effects on cognitive capacity (84). Among adolescents, evidence indicates that cannabis use may have a negative effect on brain development. Other possible associations include lack of motivation and increased risk for psychosis. However, correlation may not equal causation: A report from the RAND Corporation notes that "although marijuana use is *correlated* with many adverse outcomes, it is much harder to ascertain whether marijuana use *causes* these outcomes" (69). Other adverse health system effects in Colorado include an increase in the prevalence of marijuana-related burns, cyclic vomiting syndrome from frequent use of products with high tetrahydrocannabinol concentrations, and emergency department visits due to consumption of edible cannabis products (85). Increased availability of recreational marijuana has led to an uptick in the number of pediatric emergency department visits, as more youths are unintentionally exposed to the substance (86). Additional concerns include the effects of cannabis use on automobile drivers. The most recent report from the Rocky Mountain High Intensity Drug Trafficking Area Program, part of the federal government's National Drug Control Strategy, reflects increases in marijuana-related traffic deaths, driving accidents, and emergency department and hospitalization utilization since the state's legalization (87).

Given what little is known about the effects of marijuana use and the effect of legalization and decriminalization, ACP urges caution in the consideration of policy changes. Furthermore, the federal government, private sector, states, and others should fund and conduct extensive research on the health effects of marijuana and policies to limit use among vulnerable populations, especially children and adolescents. In jurisdictions that have legalized or decriminalized marijuana, revenue should be earmarked for public prevention and education efforts, as well as treatment for those with cannabis use disorder. Strong product and commercial regulations should also be put into place to ensure product safety and to prohibit sales to minors.

4. Multiple stakeholders should cooperate to address the epidemic of prescription drug misuse, including the following strategies: implementation of evidence-based guidelines for pain management; expansion of access to naloxone to opioid users, law enforcement, and emergency medical personnel; expansion of access to medication-assisted treatment of opioid use disorders; improved training in the treatment of substance use disorders, including buprenorphine-based treatment; establishment of a national prescription drug monitoring program (PDMP); and improvement of existing monitoring programs.

ACP believes that physicians should work with other stakeholders, including medical and behavioral health care professionals, public health officials, government programs, patient advocacy groups, insurance plans, and law enforcement to address the prescription drug use disorder epidemic.

To help address the prescription drug use epidemic, ACP makes the following recommendations:

a. Physicians are obligated by the standards of medical ethics and professionalism to practice evidence-based, conscientious pain management that prevents illness, reduces patient risk, and promotes health. ACP strongly believes that physicians must become familiar with, and follow as appropriate, clinical guidelines related to pain management and controlled substances, such as prescription opioids, as well as nonopioid pharmacologics and nonpharmacologic interventions.

b. Lift barriers that impede access to medications to treat opioid use disorder (methadone, buprenorphine, and naltrexone) and to medications for overdose prevention (naloxone). The federal government

should consider lifting the cap on the number of patients who can receive buprenorphine if a physician has been trained in proper prescribing practices. Public and private insurers should remove onerous limits on medications for overdose prevention and medication-assisted treatment, including burdensome prior authorization rules or lifetime limits on buprenorphine that prevent medically necessary care. Oversight and enforcement efforts should be strengthened to protect against misuse, diversion, and illegal sale of buprenorphine and other opioid treatment drugs. Policymakers should evaluate and consider removing restrictions on office-based methadone treatment provided by trained physicians or other health care professionals.

c. Funding should be allocated to distribute naloxone to individuals with opioid use disorder to prevent overdose deaths and train law enforcement and emergency medical personnel in its use. Legal protections (that is, Good Samaritan laws) should be established to encourage use of naloxone and the reporting of opioid overdoses in instances where an individual's life is in danger. Physician standing orders to permit pharmacies to provide naloxone to eligible individuals without a prescription should be explored. Insurance and cost-related barriers that limit access to naloxone should be addressed.

d. Pre- and post-buprenorphine training support and education tools and resources should be made available and widely disseminated to assist physicians in their treatment efforts. Physician support initiatives, such as mentor programs, shadowing experienced providers, and telemedicine, can help improve education and support efforts around substance use treatment.

e. ACP reiterates its support for the establishment of a national PDMP. Until such a program is implemented, ACP supports efforts to standardize state PDMPs through the federal National All Schedules Prescription Electronic Reporting program. ACP strongly urges prescribers and dispensers to check PDMPs in their own and neighboring states (as permitted) before writing and filling prescriptions for medications containing controlled substances. All PDMPs should maintain strong protections to assure confidentiality and privacy. Efforts should be made to facilitate the use of PDMPs, such as by linking information with electronic medical records and permitting other members of the health care team to consult PDMPs.

ACP strongly supports the integration of behavioral health into the primary care setting (55). An integrated practice may be better equipped to serve a patient with behavioral and medical comorbid conditions, encourage treatment adherence, and reduce stigma associated with behavioral health (88). To address the rise of opioid overdose deaths, the CDC recommends (32) that efforts to reverse the trend should include safer prescribing of prescription opioids, expanded access and use of naloxone, better access to medication-assisted treatment paired with behavioral therapies, and integrated prevention services (including access to syringe exchange programs) to reduce the risk for HIV and hepatitis C virus transmission. The agency also calls for better collaboration among public health agencies, medical examiners and coroners, and law enforcement to track and respond to sudden increases in deaths from illicit opioid overdose.

Naloxone

Demand for naloxone, an opioid antagonist that can reverse a narcotic opioid overdose, has risen with the opioid use epidemic. The CARA law authorizes grants to local law enforcement agencies to purchase naloxone and train law enforcement and other first responders in its use. Many states have lifted prescribing requirements on naloxone to increase access among nonprescribers, including family and friends of people who use opioids, who may be present when an overdose occurs. As of August 2016, 37 states and the District of Columbia have adopted legal immunity laws that protect people who use naloxone or call 911 to request medical assistance for an overdosing individual. Forty-seven states and the District of Columbia have passed laws granting immunity to medical professionals who prescribe or dispense naloxone to such "laypeople" (89). Sensible protections should be established to ensure that first responders and others are able to intervene without the threat of legal action.

As the need for naloxone has grown, so has its price. In 2014, Amphastar Pharmaceuticals increased the list price of 10 prefilled, 2-mL syringes from $120 to $330, drawing criticism from police departments, public health agencies, and members of Congress (90). The price of Evzio (Kaléo, Richmond, Virginia) in a user-friendly 2-pack single-use prefilled auto-injector formulation rose from $690 to $4500 from 2014 to 2016 (91). ACP released a position paper that offers recommendations on how to address the rising cost of prescription drugs (92). Additionally, government representatives and private sector entities have partnered to make bulk purchases of naloxone at substantial discounts for state and local jurisdictions fighting the opioid epidemic (93). This and other efforts must be accelerated to ensure that naloxone continues to reach those in need.

Medication-Assisted Treatment

Although such initiatives as the CDC's "Guideline for Prescribing Opioids for Chronic Pain" may stem the number of new patients with opioid use disorder, more needs to be done to educate and promote therapies for patients with existing substance use disorders (94). Medication-assisted treatment using buprenorphine

has an impressive success rate for treating patients with opioid use disorder. According to SAMHSA, "when patients and physicians were surveyed by SAMHSA about the effectiveness of buprenorphine, they reported an average of an 80% reduction in illicit opioid use, along with significant increases in employment, and other indices of recovery" (95). Some evidence also shows that the outcomes rate of buprenorphine office-based opioid treatment is similar to that of methadone, which is delivered in a designated clinic setting (96).

Like other opioids, buprenorphine has misuse potential. A version of buprenorphine contains naloxone to mitigate misuse. Federal law requires physicians to take an 8-hour course on proper prescribing and apply for a physician waiver. Once physicians are granted the waiver, they may treat up to 30 patients with buprenorphine in year 1 and may seek to increase the patient cap to 100 beginning in year 2. However, few physicians have applied for the waiver, and many waivered physicians do not treat patients. Just over 37 000 physicians—less than 4% of prescribers—had been waivered to prescribe buprenorphine as of August 2016 (97, 98). In California, there are only 7 physicians with buprenorphine waivers for every 100 000 residents (99). Buprenorphine barriers cited by Washington state family physicians include lack of institutional support (more likely to be expressed by nonwaivered than waivered physicians), lack of mental health and psychosocial support, time constraints, lack of specialty backup, lack of confidence in their ability to manage opioid addiction, and resistance from practice partners (100). Insurers may also hinder access to buprenorphine. Many Medicaid programs restrict access to the drug because of concerns that it is more dangerous or expensive than alternative treatments, such as methadone; however, a study found that buprenorphine and methadone mortality rates were similar and that mean annual spending for buprenorphine was lower than for methadone. Buprenorphine was associated with more relapse-related services than methadone (101). Some Medicaid programs are reversing access barriers; California's Medi-Cal program no longer requires physicians to have a Treatment Authorization Request before using buprenorphine to treat opioid use disorder (102). Naltrexone, including an extended-release injectable version, is another Food and Drug Administration–approved medication widely used to treat opioid use disorder.

More attention is being devoted to addressing the barriers that discourage medication-assisted treatment. In July 2016, SAMHSA finalized a proposal to permit qualified physicians with buprenorphine waivers to treat up to 275 patients. More attention should be directed to preparing and supporting buprenorphine-waivered physicians to improve confidence and facilitate team-based care. Professional support resources, such as Providers' Clinical Support System, and hub-and-spoke programs, such as Project Extension for Community Healthcare Outcome for Opioid Therapies, can link primary care physicians to specialists and other health care professionals experienced in substance use disorder treatment and can improve physician confidence in buprenorphine prescribing practices (103).

Additionally, policymakers should evaluate and consider lifting restrictions on office-based distribution of methadone. Currently, methadone treatment is administered only by federally licensed treatment facilities. In 1996, Canada began allowing office-based physicians to prescribe and dispense methadone, leading to a substantial increase in access to treatment (104). Stigma concerns may also be addressed if people with opioid use disorder are more comfortable with receiving treatment from an office-based physician than from a methadone clinic.

Finally, policymakers should address the barriers that contribute to the underuse of medication-assisted therapy within the criminal justice setting, with the goal of expanding access (105). These barriers include cost, security concerns, stigma about the use of medication-assisted therapy, specific prohibitions regarding the use of medication-assisted therapy by specific agencies (such as the Federal Bureau of Prisons), and the lack of qualified physicians in these setting to provide the necessary treatment.

PDMPs

Use of PDMPs reduces the number of patients receiving prescriptions from multiple providers and helps to ensure that pain medications are not diverted. A study of PDMPs in 24 states found that PDMP implementation was associated with a 30% drop in the prescribing rate for Schedule II opioids (106). Another study found that PDMPs were associated with a decrease in opioid-related overdose deaths of 1.1 per 100 000 population in the year after implementation; it also showed that states that regularly updated information and monitored at least 4 drug schedules experienced greater reductions in the rate of overdose deaths (107). Several policies must be pursued to reduce administrative burdens associated with PDMPs, including ensuring interoperability with electronic health record systems and permitting other health care team members to consult programs. SAMHSA and other federal agencies have initiated pilot projects and provided funding to states to encourage inter- and intraoperability of PDMPs, but more needs to be done to enhance user-friendliness. Furthermore, physicians and other health care professionals should be allowed to designate other qualified health care team members to consult PDMPs.

5. Health insurance should be required to cover mental health conditions, including the evidence-based

treatment of substance use disorder, and abide parity rules.

ACP strongly supports parity of mental health and substance use disorders and the coverage of comprehensive evidence-based treatment of substance use disorders. Strong oversight must be applied to ensure adequate coverage of medication-assisted treatment components, counseling, and other items and services. Components of comprehensive drug addiction treatment should also be extended to those in need, including medical services, mental health services, educational services, HIV/AIDS services, legal services, family services, and vocational services.

The Affordable Care Act requires all marketplace-based qualified health plans, Medicaid managed care and alternative benefit plans for the expansion population, and nongrandfathered individual and small group health plans to cover an essential health benefit package. Mental health and substance use disorder services, including behavioral health treatment, are among the mandatory coverage categories. However, the law does not define what substance use disorder benefits must be covered; as a result, benefits vary from state to state. States select a benchmark plan, such as 1 of the 3 largest small group insurance plans in the state, on which health plans base benefits. According to a National Center on Addiction and Substance Abuse report, about half of 2017 essential health benefit benchmark plans did not comply with the law's requirement for coverage of prescription drugs for addiction treatment. None of the benchmark plans reviewed provided comprehensive coverage for substance use disorders that included methadone maintenance and residential treatment without treatment limitations, and 88% of plan documents for essential health benefit benchmark plans lacked sufficient detail to determine compliance or adequacy of benefits for substance use disorder (108). Alaska's benchmark plan was particularly concerning, covering medically necessary detoxification but no services associated with addiction diagnosis or treatment. The Trump administration and some members of Congress have indicated their intent to repeal the Affordable Care Act, and thus the continuation of the above referenced protections is in question.

Coverage should also be extended to evidence-based nonopioid and nonpharmacologic pain management services that do not involve potentially addictive medications. The CDC guideline for prescribing opioids for chronic pain states, "Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain. Clinicians should consider opioid therapy only if expected benefits for both pain and function are anticipated to outweigh risks to the patient. If opioids are used, they should be combined with nonpharmacologic therapy and nonopioid pharmacologic therapy, as appropriate" (43). The guideline lists several interventions, such as cognitive–behavioral therapy, physical therapy, and weight loss for knee osteoarthritis, that are proven to alleviate chronic pain. A clinical practice guideline issued by ACP recommends noninvasive treatments for acute, subacute, and chronic low back pain (109).

However, public and private insurance plans often limit coverage of nonpharmacologic or nonopioid pain management services. For example, Medicare imposes caps on physical therapy and does not cover massage therapy, acupuncture, or other services mentioned in the CDC guideline on chronic pain. Some insurance plans establish step therapy (or "fail first") policies that require alternative treatment approaches be proven ineffective before another intervention is covered. The evidence base to support nonpharmacologic and nonopioid pain management interventions should be expanded, and as the effectiveness of interventions is determined, insurance plans must cover them so that the lowest-risk, most effective approach is accessible to the patient.

Under federal law, certain health plans (including large employer-funded plans, nongrandfathered small group plans, Medicaid managed care, and alternative benefit plans/benchmark equivalent plans) must ensure that financial requirements and treatment limitations (such as quantitative visit limits) for mental health and substance use disorder benefits are similar to medical and surgical benefits (110). Some types of insurance, such as self-insured plans and employer-based plans, that demonstrate a large increase in health care costs due to parity are exempt from federal parity laws. Traditional Medicaid fee-for-service coverage does not have to adhere to parity requirements. In addition to mandating parity for financial requirements, the federal law also extends parity to nonquantitative limits, such as prior authorization, network adequacy, and other management techniques.

All states and the District of Columbia have enacted some form of mental health parity; however, the comprehensiveness of such laws varies considerably, and not all states extend parity to substance use disorders (111). Evidence shows that state parity laws have increased access to and use of treatment services for substance use disorders (112).

A systematic review found that mental health benefits legislation (including mental health/substance use parity and coverage mandates) improves financial protection and increases appropriate use of mental health services for mental health conditions. Comprehensive mental health parity legislation was particularly effective (113). Health plan costs of meeting federal parity requirements have been negligible (114).

Despite the parity law, violations persist. Enforcement of parity is under the jurisdiction of multiple federal agencies and state regulators. Some proponents

have expressed concern that regulators are unable to adequately enforce parity laws. Nonquantitative treatment limits, such as disproportionately burdensome prior authorization requirements for substance use treatment services, may be more difficult for regulators to detect than quantitative limits. The Department of Health and Human Services Parity Task Force has received comments that prior authorization is often required for mental health and substance use emergency services but is not mandatory for analogous medical or surgical hospitalization events, and that prior authorizations for generic medications for substance use disorder are often required when generics for chronic physical diseases are not (115). Concerns about burdensome step therapy and utilization review requirements and disproportionately low provider reimbursement rates for mental health and substance use disorder treatment have also been reported to the Task Force (116). Such stipulations add to the physicians' administrative burden and patient frustration. Marketplace-based plans are not immune to parity problems: An analysis of exchange plan documents in 2 states found substantial discrepancies with parity law requirements pertaining to quantitative (including different cost-sharing requirements for out-of-network mental health and substance use disorders services and medical or surgical services) and nonquantitative treatment limits (117).

SAMHSA worked with 7 states to develop best practices for parity enforcement. These include open channels of communication between regulators and health plans; standardization of health plan materials; creation of templates, workbooks, and other tools; implementation of market conduct exams and network adequacy assessments; and collaboration with multiple agencies and stakeholder groups (118). Strong enforcement can help broaden access to substance use disorder treatment. The New York attorney general recently settled with Excellus and required them to, among other things, remove the stipulation that members "fail" outpatient treatment of substance use disorders before entering inpatient treatment (119). Regulators should also ensure that health insurance plans do not use practice guidelines, such as the 2016 CDC guideline for prescribing of opioids for chronic pain, to justify arbitrary limits on pain management.

6. The workforce of professionals qualified to treat substance use disorders should be expanded.

ACP supports policies to increase the professional workforce engaged in treatment of substance use disorder. Loan forgiveness programs, mentoring initiatives, and increased payment may encourage more individuals to train and practice as behavioral health professionals.

Demand for substance use disorder treatment services is rising as a result of the opioid epidemic, the Affordable Care Act's coverage expansion, mental health parity, the behavioral health needs of returning veterans, and the reintegration of the formerly incarcerated. However, the demand for behavioral health care has long exceeded the supply of behavioral health professionals, such as psychiatrists, addiction medicine specialists, psychologists, mental health counselors, and clinical social workers. According to the Health Resources and Services Administration, there are roughly 4500 mental health professional shortage areas in the United States, where the psychiatrist-to-population ratio is at least 1:30 000 (120).

In its position paper on integration of behavioral health into primary care, ACP expressed support for efforts to increase the supply of behavioral health professionals (55). This includes addiction treatment personnel, such as addiction medicine subspecialists. According to health care consulting firm Advocates for Human Potential, there are up to 32 advanced practitioners (psychologists and psychiatrists) and practitioners (including social workers and substance use disorder counselors) potentially available for every 1000 people older than age 17 years with substance use disorder (121).

Counseling is a key component of whole person–oriented medication-assisted treatment. To provide comprehensive care to those with substance use disorder, more behavioral health professionals will need to be trained to meet the demand. The behavioral health workforce is affected by high turnover, low compensation, an aging workforce, and stigma related to mental health and addiction (122). Leadership of facilities for treatment for substance use disorder has also expressed the need for more racial and ethnic diversity in the behavioral health workforce (123). Policy interventions to address the behavioral health workforce shortage include enhanced compensation packages, loan repayment programs, and increasing training attention or changing licensure requirements in high-need disciplines and geographic shortage areas by, for example, training additional master's degree–level behavioral health professionals in designated shortage areas (124). Other strategies include better professional training for students and early-career professionals through internships in high-need settings, encouraging use of technology, and expanded efforts to provide cross-training of staff in primary and behavioral health care to encourage integrated care for people with substance use disorder (122).

7. Training in the treatment of substance use disorder should be embedded throughout the continuum of medical education.

Training in screening and treatment of substance use disorders should be embedded in the continuum of medical education. Continuing medical education providers should offer courses to train physicians

in addiction medicine, medication-assisted therapy, evidence-based prescribing, and the identification and treatment of substance use disorders.

The ACP *Ethics Manual* notes that it is the physician's responsibility to be professionally competent (125). However, many physicians describe themselves as unprepared to treat patients with substance use disorders. A 2000 survey found that only about 20% of primary care physicians said they were "very prepared" to identify alcoholism, 17% felt very prepared to identify illegal drug use, and 30% reported themselves as such for prescription drug misuse (126). Barriers to adequate training in treatment of substance use disorder include "lack of acceptance by faculty and physicians of the medical model for addictive diseases, lack of faculty and physician role models, curricular deficits in medical schools and residencies, lack of parity and physician advocacy in medical education, and personal and family histories of drug and alcohol use and addiction" (127). Polydorou and colleagues found that the literature emphasizes the importance of developing physician role models who have expertise in treatment of substance use disorder and can provide supervised experiences and drive curricula change (128). Other important characteristics of training include interactions with patients who have benefited from treatment of substance use disorder, reimbursement for patient assessment, and providing interactive and clinically relevant training.

In response to the opioid epidemic, many states now require physicians to undergo training in pain management or proper prescribing of controlled substances (129). Evidence shows that education programs, such as the Safe and Competent Opioid Prescribing Education (SCOPE of Pain) program can improve knowledge, attitudes, and confidence in safe opioid prescribing (130). Those who completed the training reported increased confidence in the ability to assess pain in a new patient, assess the potential benefit and risk of opioids for chronic pain in a new patient, communicate and collaborate with patients around opioid initiation, and monitor patients receiving long-term opioid therapy for opioid misuse (including addiction and diversion), among other skills. However, some physicians may express concern about mandated education and express belief that it is too costly and burdensome and would undermine professional independence. One study concluded that physicians are concerned about the undue burden imposed by requirements of risk evaluation and mitigation strategies and speculated that training requirements could decrease opioid prescribing (131). Physician medical societies have questioned whether mandatory continuing medical education on pain management would be relevant to physicians who do not prescribe controlled substances (132). ACP has historically supported voluntary training to ensure competence. Continuing medical education programs related to opioid prescribing and pain management should be rigorously evaluated to ensure effectiveness and continued access to care and should be designed to prevent onerous burdens on patients and physicians.

8. The effectiveness of public health interventions to combat substance use disorders and associated health problems should be studied.

Public health–based interventions for substance use disorder, such as syringe exchange programs and safe injection sites, that connect the user with effective treatment programs should be explored and tested.

Harm reduction initiatives, including syringe exchange programs, were once considered taboo. However, as the opioid epidemic takes more and more lives, policymakers are slowly reconsidering their position (133). Risky injection drug use habits, such as needle sharing, contribute to the spread of HIV, hepatitis C virus, and other blood-borne pathogens. Nine percent of the nearly 40 000 new HIV diagnoses in 2015 were attributed to injection drug use (134). In 2015, Congress reversed its longstanding prohibition on federal funds for syringe exchange programs, although funds cannot be used to buy the syringes themselves. Indiana and Kentucky have also initiated syringe exchange programs in response to the opioid epidemic; Indiana did so after an HIV outbreak among needle-sharing injection drug users in a rural community (135, 136). Syringe exchange programs reduce transmission and mortality due to infectious disease, such as HIV infection (137, 138), and public funding of syringe exchange programs is associated with low HIV incidence rates (139). These programs may also connect individuals with health and social services, such as referrals to substance use disorder treatment, prevention supplies, and health screenings (140). Despite the evidence supporting their success, as of May 2015 only 35 states, the District of Columbia, Puerto Rico, and the Indian Nations have syringe exchange programs (141). The CDC has expressed concern that rural and suburban areas are underserved by syringe exchange programs. The agency identified Kentucky, Tennessee, Virginia, and West Virginia as having "unmet needs" for syringe exchange programs despite rising hepatitis C virus infection rates connected to intravenous drug use (142). As the opioid epidemic increases the number of people who inject drugs, federal and state funding should be directed to communities to prevent the spread of blood-borne diseases, such as HIV infection and hepatitis C, as well as connect people to social and health care services that can provide necessary assistance.

Some communities especially hard hit by the opioid epidemic are considering safe injection facilities (143, 144). Because many people who inject drugs may do so in unsafe environments or in public areas, safe

injection facilities intend to provide a supervised site where health professionals are on hand to distribute clean syringes and connect users to health care and drug treatment services. Most important, health professionals are on hand to deliver naloxone if an overdose occurs. Evidence from a safe injection facility in Vancouver, British Columbia, Canada, shows that these facilities are negatively associated with needle sharing and positively associated with less frequent reuse of syringes, use of clean water for injection, and less outdoor injecting; similar safe injecting practices were reported after the opening of a safe injection facility in Sydney, Australia (145). Clients of a safe injection facility in Copenhagen, Denmark, reported adopting safer behaviors since the opening of the facility, including fewer outdoor injections, discontinuation of syringe sharing, and more frequent cleaning of injection sites (146). HIV-positive clients of Vancouver's InSite safe injection facility reported using the facility for syringe exchange, drug and alcohol counseling, and nursing care in addition to the supervised injection room (147).

Safe injection facilities have a public health benefit without increasing crime or drug use (145); however, legal and political concerns may hinder the establishment of safe injection facilities in the United States. Beletsky and colleagues argue that safe injection facilities could be established as an incremental extension of existing syringe exchange programs (145). Because these have not been tested in the United States, state and local health officials could conduct pilot tests prior to full implementation. At press time, major cities, such as Seattle, Washington, and Boston, Massachusetts, are considering the idea, and safe injection facilities should be rigorously evaluated before widespread expansion occurs. Establishment of safe injection facilities will require a coordinated effort from health officials, government, law enforcement, advocacy, and community groups, among others, to ensure that a diverse array of opinions are considered.

Additional Information on Sources

- U.S. government resources: including relevant reports from Substance Abuse and Mental Health Services Administration, U.S. Department of Justice, White House Office of National Drug Control Policy, CDC.
- Literature databases and search engines: PubMed and Google Scholar.
- Policy and research firms: including RAND Corporation, Urban Institute.
- Scientific and policy journals: including *Annals of Internal Medicine*, *JAMA*, *The New England Journal of Medicine*, *Health Affairs*, *Substance Abuse*, and *Morbidity and Mortality Weekly Report*.
- Association reports: including National Council of State Legislatures, American Society of Addiction Medicine.

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