Subpopulation D: Opioid Use to Manage Addiction under Medical Supervision Transitions to Self-Directed Use of Medicinal and/or Schedule I Products

Medicinal opioids are a standard treatment of opioid addiction. Some patients transition to self-directed use.

Primary Prevention

N/A

Secondary Prevention

N/A

Tertiary Prevention

As appropriate:

- Avert craving using behavioral and physiological tactics.
- Ensure transportation access to methadone clinic or other facility that dispenses opioid medications (e.g., physician's office).
- Provide social services support.
- Facilitate childcare assistance to enable accessing drug and nondrug treatment facilities.
- Obtain financial resources subsidy for medications and related treatment.
- Provide a community resident navigator.

+ Incorporate primary, secondary, and tertiary prevention tactics (re: Subpopulations A, B, C) as appropriate.

Prevention in Context of Politics and Policy

The discussion up to this point addressed: (1) etiology of opioid addiction, (2) cost-efficient scalable assessment, and (3) prevention tactics. Because the state has multiple interests (tax revenue, health promotion, protecting public safety, etc.), policies to prevent opioid addiction and its aftermath are unavoidably and intricately connected to politics.

From the standpoint of health promotion, the current constellation of federal and state laws and regulations lack consistency. In Pennsylvania, the state is the monopoly retailer of spirits, yet these beverages can be purchased in sufficient quantity to cause death from intoxication. Marijuana, which

Pennsylvania currently outlaws for recreational use, does not cause death from intoxication. Pennsylvania does not regulate distribution of powder caffeine, even though one tablespoon can be fatal. (This substance is often added to alcohol drinks to offset sedation.) With respect to toxic injury, cigarette smoking, legal at 18 years of age, is responsible for over 400,000 deaths each year in the United States, whereas alcohol, which accounts for about a fifth of this number of deaths, is legal at 21 years of age. Hookah, a coarse tobacco, is almost completely unregulated. Protection of safety effected through laws and regulations thus has consistency gaps and arguably lacks coherence.

The effectiveness of prevention of opioid addiction via laws and regulations is thus doubtful, especially considered in light of U.S. legislative history. The first attempt in the United States to regulate opioid consumption was the 1875 *Opium Den Ordinance Act* in San Francisco. This ordinance, like many statutes since, had racist and nativist sentiments insofar as it was aimed at reducing a perceived threat from Chinese immigrants. Violators were fined and occasionally jailed. Opium use was, however, not curbed. A subsequent law passed in California in 1907 ramped up enforcement, including covert police infiltration of distributors. Whereas consumption did not noticeably decline, opium distribution and consumption were driven underground, thereby establishing a new criminal population defined by using this drug. Once opium use by statute was designated as nonnormative or deviant, individuals with antisocial propensities as well as those with a socially nonconforming lifestyle (hipsters, artists, writers, jazz musicians, etc.) were inclined toward consumption.

During the past three decades, the population of opioid users has expanded by drawing in individuals from the normative segment of the general population. This has occurred for two main reasons: (1) normalization of a wide range of traditionally negatively sanctioned behaviors (e.g., gambling, tattoos, homosexual relationships); and (2) easy availability of opioid medicines that do not carry the stigma of heroin. An expanding spectrum of normative behaviors combined with access to medicinal opioids have thus largely catalyzed an upsurge in consumption. (Other factors that are beyond the scope of this discussion have also been influential.) Medicines do not carry the negativity associated with heroin, hence they most often comprise the first type of opioid consumed by the majority of individuals who subsequently become addicted. Among all illegal drugs, opioid use by youths ranks second only to cannabis.

The first national legislation aimed at curtailing opioids and cocaine use was the Harrison Act in 1914. This statute initially mandated obtaining a license to sell these drugs, but subsequently morphed into a prohibition law.

The Volstead Act, which prohibited the manufacture, distribution, and consumption of alcohol, was passed five years later. Attempts to deter the consumption of alcohol and other addictive substances for the past century have been primarily effected through laws enforced by specialized departments in the federal government such as the Food and Drug Administration, the Bureau of Alcohol, Tobacco, Firearms, and Explosives, and the Drug Enforcement Agency.

Within the guise of protecting public safety, prevention of addiction and prodromal consumption has emphasized control of drug supply. However, because addiction is essentially defined as compulsive drug seeking, it is clear that emphasis must also be given to reducing demand. Policies aimed at preventing consumption solely by eliminating or controlling supply will meet certain failure because individuals with intense demand (compulsive urge to consume the drug) constitute a reliable profitable consumer market for nefarious manufacturers and distributors.

The American Psychiatric Association officially designated addiction as a mental disorder upon publication of the second edition of the Diagnostic and Statistical Manual in 1968. The Supreme Court first ruled in 1963 (*Robinson v. California)* that addiction was a disease, asserting that the Eighth Amendment of the Constitution ("cruel and unusual punishment") protects narcotic addicts from incarceration. Nevertheless, to this day a substantial portion of the U.S. prison population is serving long sentences connected to alcohol and/or drug addiction. The point to be made is that shifting focus from reducing supply to lowering demand also requires a shift from a legal/regulatory framework of prevention to a health framework.

Accordingly, reducing demand for drugs can best be cost-efficiently conducted within a comprehensive health delivery system. The infrastructure and expertise required to provide age-appropriate interventions, spanning gestation to old age, are established. Considering that up to 20% of the U.S. population will develop addiction at some time in life, often with severe manifold co-occurring diseases, shifting emphasis to prevention is consistent with the mission of health providers. However, this shift in intervention resources to prevention must accommodate financial concerns, specifically the loss of future revenue accrued from treatment services.

A proposed solution is to fund all addiction services from a dedicated fund accrued from a small levy on all substances that have empirically documented addictive properties. In addition to prescription analgesics, stimulants, anxiolytics, and hypnotics, this tax would extend to nonprescription "nutrition" supplements, proprietary medicines, alcohol, and nicotine products. One immediate benefit of a dedicated tax is that it focuses attention on

addiction, which, with respect to opioids, constitutes a recently designated national emergency. From the practical perspective, tax on the addictive agent is insurance for the consumer; namely, it ensures that intervention for addiction and concomitant medical conditions will be available. In 2016, almost 45% of the U.S. population over 12 years of age used a prescribed psychotherapeutic drug having addictive properties. Hence, a one-penny tax on each dose, costing up to three dollars/month, would fund most, if not all, addiction prevention and treatment services.

Lastly, it should be noted that treatment of opioid addiction is largely, and not infrequently entirely, confined to long-term (i.e., lifetime) consumption of an opioid. The benefits of "medication-assisted treatment" have been well documented; however, lifetime opioid use for the purpose of forestalling craving and withdrawal is not *recovery*. Because secondary and tertiary prevention may require intensive and potentially long-term intervention, vacated facilities, including former state psychiatric hospitals, can be repurposed.

In conclusion, progress in addiction prevention is contingent on: (1) a shift in emphasis away from law enforcement to health promotion; (2) leadership by elected officials to provide stable funding for services throughout life in a health delivery system; and (3) expansion of educational resources, especially advanced degrees and training in prevention science and practice. It is increasingly obvious that it is not possible to incarcerate all offenders or provide treatment at pace with the growing addiction prevalence. Shifting resources to prevention is the only policy and practical option. From two centuries of public health experience, there is reason to be optimistic that it is feasible to prevent opioid and other addictions.

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