The Opioid Use Disorder Prevention Playbook

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Acknowledgements

The National Interoperability Collaborative (NIC) Opioid Use Disorder Prevention Playbook was researched and written by Paul Wormeli, a member of the Stewards of Change Institute (SOCI) Board of Directors. It was edited by Adam Pertman, an SOCI senior consultant and NIC’s Coordination and Communications Director. NIC is an initiative of SOCI.

This NIC playbook addresses the most-significant public health emergency in modern U.S. history by focusing on an aspect of the epidemic that we believe has received far too little attention: prevention. This collection of ideas, approaches and strategies – or plays – is derived from the growing number of efforts by practitioners, researchers and policy-makers around the country to “get upstream” of this national crisis, in addition to providing treatment and saving lives.

The feedback from reviewers of earlier drafts of this document has been invaluable in shaping this collection of plays, which we hope will not only focus greater national attention on prevention, but also will provide guidance on specific actions that communities, jurisdictions, governments and organizations can take toward prioritizing that end. We acknowledge and appreciate the constructive contributions to this playbook from the following:

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Sincerely,

Daniel Stein, Co-Principal Investigator of NIC
President, Stewards of Change Institute
Executive Summary

The National Institute on Drug Abuse, using data from the Centers for Disease Control and Prevention, reports that over 70,000 people died of drug overdoses in 2017; about two-thirds of these deaths were related to the use of opioids. Even more alarming is the rate of increase in the availability of synthetic opioids such as fentanyl and carfentanil.

In May 2018, New York City Police charged three individuals with attempting to distribute 100 grams of carfentanil, which could kill up to 5 million people. Just a few months earlier, in January, New Jersey authorities confiscated 45 kilograms of fentanyl, enough to kill 18 million people, or the populations of New York City and New Jersey combined. In two raids in 2018, Massachusetts authorities seized 25 kilos of fentanyl, more than enough to kill the state’s entire population.

“It is clear that vast quantities of opioids with increasing potency are flooding the state and the country,” says a recent report by the Massachusetts Taxpayers Association. “The epidemic has not stalled; in fact, it is poised to accelerate with alarming consequences to our people, our communities, and the health of the state’s economy.”

Against that backdrop, this playbook by the National Interoperability Collaborative (NIC) has four primary aims:

1) to present a clear picture of the state of knowledge on how to better-detect and prevent opioid misuse, overuse and use disorders;

2) to focus greater attention on prevention, because it is essential to the long-term resolution of the opioid epidemic ravaging our country; and most importantly in the near-term;

3) to provide guidance – to federal, state and local practitioners, legislators, as well as engaged executives in nonprofit organizations – about existing “upstream” strategies that can replicated or adapted for real-time use; and

4) to create a virtual community where people and organizations can share and vet “plays” expeditiously and broadly across the U.S.

Toward those ends, this publication offers examples of evidence-informed initiatives and ideas (“plays”) being tried around the country, with as much data as possible relating to their efficacy.

We recognize that any effective prevention approach should be built on a foundation of evidence about the effectiveness of its strategies, along with measures of its outcomes. That foundation is currently lacking, however. Indeed, research for the playbook found an absence of data definition, collection and analysis about opioid use that inhibits movement toward more-informed decisions about how to get to the roots of this national crisis. The playbook also demonstrates that an essential part of any effective prevention approach is improved information-sharing, integration, interoperability and collaboration across the multiple disciplines that must inevitably become a part of the solution to this historic health crisis.

The playbook addresses policies, approaches, initiatives and ideas that illustrate strategies with the potential to prevent opioid misuse, overuse and use disorders from starting or advancing. For each listed strategy – or “play” – this document presents, in a common format, its purpose, objectives, theory of change, useful elements of implementation methodology, evaluation data (when available) and reference materials for further exploration.

Our intent is for any given jurisdiction or community of interest to consider these plays to be candidates as part of a well-conceived, integrated program aimed at preventing the onset and/or spread of opioid use problems for their own population groups or areas of purview. The playbook seeks to provide the information that enables or contributes to the design and execution of such a strategic program, along with suggestions of how to measure its efficacy.

It is important to underscore that the playbook’s contents represent a snapshot in time of our evolving knowledge on how to respond to the opioid crisis, while also identifying the research and evidence-gathering that still must be undertaken in order to make better-informed decisions. Our intent is to regularly update the playbook – most notably its plays – as we learn about new ideas and initiatives, and we welcome comments and contributions to keep it as current as possible. To provide input, please send an email to NIC@stewardsofchange.org.

Many strategies have been proposed and many trials have been conducted as our nation has sought to fight this historic epidemic. We selected the 11 plays briefly summarized below because they appear to have traction by virtue of their perceived or actual positive value/impact. More-detailed versions of each play are in the full NIC playbook.
The Plays – Summaries

1. Remove the stigma. Addiction is a disease. Educating the public, health care professionals, health care systems and plans, community organizations and law enforcement about that reality – and, as a result, about the need for prevention, detection and treatment with a comprehensive team approach – may be the most important component of any program to stem the tide of opioid use disorders.

Efforts aligned with this play will seek to change the culture of interaction with those who have substance use disorders. The specific components include educational programs, small group discussions, seminars and training in specific approaches, as well as language that professionals (police, health care providers, etc.) should avoid.

Example: The Toronto Drug Strategy Implementation Panel has published a report on its initiative to deal with the stigma problem. It includes recommendations for program content.

2. Reduce the risk of developing an opioid use disorder. Research shows that there is a strong, lifelong correlation between adverse childhood experiences (ACEs) – including abuse and neglect – and a broad range of health issues, including substance misuse. In a policy brief, the Campaign for Trauma-Informed Policy and Practice reports a recent study that finds “over 80% of the patients seeking treatment for opioid addiction had at least one form of childhood trauma, with almost two-thirds reporting having witnessed violence in childhood.”

The development of at least one play to address the incidence of ACEs, and their impact on the development of substance use disorders, is therefore a very important component of an effective prevention strategy. The goal is to better-understand, halt and/or reduce the extent to which ACEs influence the development of or lead to substance use disorders. (We want to acknowledge that addressing ACEs themselves will require a long-term, multidisciplinary approach that focuses on childhood, since that is when the trauma usually occurs.)

Example: “Seeking Safety” addresses trauma-related problems and substance use at the same time. It is the most evidence-based model for people with both trauma and addiction.

3. Reduce the use of opioids for pain mitigation. A clear consensus has emerged that one very important way to reduce the use and misuse of legal and illicit drugs is to control and limit opioid prescriptions for pain management. In a real sense, the eventual goal of this ambitious play is to change the culture of pain management. It requires a substantial educational effort for physicians and patients about the risks and cautions in opioid use for this purpose.

Activities that have been successfully implemented (these are from the Chronic Pain Initiative in North Carolina) include promotion of a targeted toolkit for primary care providers, emergency departments and care managers; continuing medical education sessions on pain management; appropriate prescribing and diversion control and continuing education for pharmacists on diversion, forgery and the use of Prescription Drug Monitoring Programs.

Example: The California Statewide Opioid Safety (SOS) Workgroup promotes safe prescribing guide-lines and disseminates educational materials, such as one for health care providers.

4. Reduce the supply of opioids from illegitimate sources. Since most heroin and fentanyl originate outside the U.S., current counter-narcotics programming consists largely of federally driven efforts. This play suggests extending those efforts to the state and local levels by, for example: detecting and disrupting distribution channels for illicit drugs through local or online means; working with the DOJ Opioid Fraud and Abuse Detection Unit to prosecute corrupt or criminally negligent doctors, pharmacies and distributors; and strengthening criminal penalties for dealers of synthetic opioids like fentanyl.

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THE OPIOID EPIDEMIC BY THE NUMBERS
2016 and 2017 Data

- 11.4m People misused prescription opioids1
- 2 million People misused prescription opioids for the first time1
- 17,987 Deaths attributed to overdosing on commonly prescribed opioids2
- 19,413 Deaths attributed to overdosing on synthetic opioids other than methadone2
- 886,000 People used heroin1
- 81,000 People used heroin for the first time1
- 130+ People died every day from opioid-related drug overdoses3 (estimated)
- 42,249 People died from overdosing on opioids2

Sources
2. NCHS Data Brief No. 205, December 2017

Updated September 2018. For more information, visit: Http://www.hhs.gov/opioids/
One way to intensify such interdiction activities is through High Intensity Drug Trafficking Area (HIDTA) task forces. HIDTA, created by the Anti-Drug Abuse Act of 1988, provides assistance to federal, state, local and tribal law-enforcement agencies operating in areas determined to be critical U.S. drug-trafficking regions. There are currently 28 HIDTAs, encompassing about 18 percent of U.S. counties and 66 percent of our population.

Example: Ohio has funded numerous task forces that have been found highly effective in interdicting drug crimes. Information is available in the state’s most-recent annual report.

5. Improve and implement better prescription monitoring programs (PDMPs). Laws in 49 states support the creation of PDMPs, which require pharmacies to report the sale of controlled substances in fulfillment of prescriptions. Most physicians therefore can determine if a patient has gone “doctor shopping” by seeking opioids for the same pain management from more than one physician. However, some doctors are either unaware of the system, unsure of how to use it or have concerns about its accuracy.

The goal of this play is to ensure that doctors know about and use their state system; that they check across states to ensure that a patient is not "doctor shopping;" and that the prescription history for prior medication does not indicate a new prescription should not be written. Greater use of PDMPs can be mandated legislatively, but efforts are also needed to educate and persuade physicians and pharmacists to take full advantage of this effective tool.

Example: The Kentucky All Schedule Prescription Electronic Reporting (KASPER) program is highly regarded. Among the reasons is that it mandates physician and pharmacy compliance.

6. Reduce the involvement of opioid users in the criminal justice system. The value of diverting people from involvement with the criminal justice system has been clear for decades. Central to diversion programs is “the understanding that a criminal conviction – misdemeanor or felony – triggers a cascade of collateral consequences that often severely hamper an individual’s ability to become a productive member of the community,” according to a report by the Center for Health and Justice. Since recidivism is often tied to further substance use, reducing its probability through diversion programs can mitigate substance use disorders.

Finding alternatives to arrest, prosecution and correctional supervision is therefore a reasonable part of any strategy to reduce opioid use. The major intervention points where individuals can be diverted from the criminal justice system are before arrest, before trial and after adjudication. A major focus of diversion programs that has been highly successful across the country is the creation of drug courts, of which there are now over 3,100 nationwide.

Examples: Research into collaboration by police and public health agencies to prevent or reduce opioid use with diversion programs cites numerous examples of successful programs.

7. Provide medication-assisted treatment to inmates. Nationally, 65 percent of all incarcerated offenders meet the criteria for suffering from a substance use disorder. Research has shown that medication-assisted treatment (MAT), including with buprenorphine, methadone and extended-release naltrexone, can decrease opioid use, opioid-related overdose deaths, criminal activity and infectious disease transmission – while also increasing social functioning and retention in treatment.

Numerous studies have shown that the provision of MAT has long-term impacts on preventing both continued substance use disorder and criminal behaviors, thereby both preventing such disorders and reducing crime. In one recent study, a MAT program resulted in a 60 percent reduction in opioid overdose deaths among individuals who were recently incarcerated.

Example: The Medication Assisted Treatment and Directed Opioid Recovery program in Middlesex County, MA, has had striking results, with a non-recidivism rate of 82 percent.

8. Expand treatment programs after incarceration. Abundant research shows greater success for preventing subsequent opioid use disorders for released inmates when medication-assisted treatment (see play #7) is fully integrated with behavioral health treatment, indicating that collaboration between health care providers and behavioral health departments can have a positive effect on preventing the reoccurrence of these disorders.

A play consisting of an integrated substance use disorder treatment program designed expressly for released offenders will need to encompass a breadth of treatments, which may include both behavior modification and MAT. Evaluations of post-release substance use disorder treatments have generally shown positive results for reducing both relapse rates and recidivism.
Example: Virginia and California have both developed expanded post-incarceration treatment programs, and SAMHSA, Substance Abuse and Mental Health Services Administration, offers a guide for improving such programs.

9. Reduce the risk of opioid-based treatment. It is clear that the long-term use of opioids legitimately prescribed for pain management increases the risk of a patient developing a substance use disorder. A fundamental and widespread approach to the mitigation of this risk is to ensure that 1) both the prescriber and the patient fully understand the consequences of taking the drug and 2) the physician and the patient have a clear and unequivocal understanding of the conditions under which the prescription will be continued.

In utilizing this strategy, the first step in reducing risk is to provide physicians and patients with the information they need. Literature, briefings to community groups and handouts in medical offices are all parts of an educational effort to ensure that every party is aware of the guidelines and constraints for using an opioid as a long-term medication. Some organizations are promoting the use of written doctor-patient agreements, which can be controversial.

Example: The NH Board of Medicine has published strict rules requiring the development of written doctor-patient agreements. The NH Medical Society provides sample agreements.

10. Make provisions for safe disposal of unused opioids. An estimated two-thirds of teenagers who have misused prescription drugs get them from their family and friends, so many practitioners believe it is important to clear out medicine cabinets at home that contain unused drugs, particularly opioids. Doing so is not as simple as might be expected, however, as regulations require that law enforcement take custody of discarded controlled substances.

Many communities have organized annual drives during which people can give their unused controlled substances to the police, who then dispose of them in approved ways. Studies evaluating such take-back programs generally show positive outcomes, with recent research showing a more-positive impact for programs that allow drugs to be turned in at any time, rather than just once or twice a year. This play requires a methodology for collection and disposal, as well as a marketing/awareness effort to persuade people to participate.

Examples: A variety of take-back efforts exist around the U.S. The San Diego Police, for instance, have set up boxes for drug drop-offs at any time.

11. Encourage the use of non-opioid formulations for pain management. As it has become clear that long-term pain management using opioids increases the likelihood of substance use disorders, research has intensified on finding effective alternatives. Meanwhile, there are already significant, evidence-based alternatives that physicians are finding useful. The CDC offers recommendations that highlight and underscore the need to utilize alternative, non-opioid pharmacologic therapies to treat chronic pain.

A strategy on this topic involves educating both physicians and patients on the options available and their consequences (strength, side effects, etc.). Health care providers can develop and set guidelines that call for the use of non-opioid alternatives. This strategy would include efforts required to stay current with the emerging research and development of new alternatives for pain management, including from the various aggressive research programs undertaken by the National Institutes of Health and the CDC.

Example: The University of Tennessee Medical Center has developed a protocol of alternative pathways, giving priority to non-opioid treatments. The program is described in a video.

Conclusion

These plays reflect a broad range of current practices and thinking. Not all of them obviously will apply to every jurisdiction, and there will be further developments as innovative approaches are identified or created. It is our hope that this set of plays, as well as others as they are added, will provide ideas on which to base prevention-focused actions appropriate for specific communities. The body of research on this crisis makes it very clear that collaboration across agencies, organizations and sectors/domains is critical to enhancing the prevention of opioid use disorders.

Our intent is to provide this playbook as a starting point, and then for it to become a living online resource and repository that can be refined and updated to provide promising and effective evidence-based ideas, approaches, practices and programs. Your comments and contributions will help to make this goal a reality.