



A Continuum of Care Approach:

Western Pennsylvania's
Response to the Opioid Epidemic



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Glossary

All definitions are from the Allegheny County Health Department's "Opiate-Related Overdose Deaths in Allegheny County: Risks and Opportunities for Intervention" and the University of Pittsburgh School of Pharmacy's Program Evaluation and Research Unit's (PERU) "Technical Assistance Center (TAC) Manual."

Abstinence: Nonuse of alcohol or any illicit drugs, as well as non-illicit medications normally obtained by prescription or over the counter.

Act 139 and the Good Samaritan Clause: Senate Bill 1164 was signed into law by Governor Tom Corbett in late September 2014, as Act 139 of 2014. This legislation allows first responders (e.g., law enforcement, firefighters, emergency medical services, or other organizations) to administer naloxone. The law also allows individuals who may be in a position to assist a person at risk of experiencing an opioid-related overdose (e.g., friends, family members) to obtain a prescription of naloxone. Additionally, Act 139 provides immunity from prosecution for those responding to and reporting overdoses, otherwise known as the Good Samaritan provision.

Addiction: A chronic, relapsing disease characterized by compulsive drug seeking and use, despite serious adverse consequences, and by long-lasting changes in the brain.

Agonist: A chemical entity that binds to a receptor and activates it, mimicking the action of the natural substance that binds there.

Antagonist: A chemical entity that binds to a receptor and blocks its activation. Antagonists prevent the natural substance from activating its receptor.

Benzodiazepines: A class of drugs primarily used for treating anxiety; also known as tranquilizers (e.g., Valium, Xanax).

Buprenorphine: Generic name of Suboxone®, a treatment medication for opioid-use disorder used in medication-assisted treatment (MAT).

Disease: A condition that results in medically significant symptoms in a human; a disorder with recognizable signs and often having a known cause. In the context of addiction, some people reject the fact that addiction is a disease, despite corroboration from top medical organizations.

Diversion: A voluntary option which provides an alternative to criminal-case processing for a defendant charged with a crime; ideally, upon successful completion of an individualized program plan, diversion results in a dismissal of the charge(s).¹

Dopamine: A brain chemical, classified as a neurotransmitter, found in regions that regulate movement, emotion, motivation, and pleasure.

Drug-collection box/take-back event: Mechanisms to remove unused medications from the community through a secure collection location or event.

Fentanyl: A narcotic that is sometimes abused for its heroin-like effect.

Hard handoff: An involuntary (court ordered) committal to treatment only used as a last resort for addicts when they appear to be putting their own life in imminent danger or they are a risk to other people, such as individuals who have survived an opioid/heroin overdose. This process can involve commitment to a health care facility for 72 hours for medical observation and stabilization and SBIRT evaluation. Involuntary committal laws vary from state to state.

Heroin: Heroin (diacetylmorphine) is an opioid drug that is synthesized from morphine, a naturally occurring substance extracted from the seed pod of the Asian opium poppy plant. Heroin is a full opioid agonist.

Medication-Assisted Treatment (MAT): The use of medication in combination with therapy to treat SUD.

Methadone: Treatment medication for opioid-use disorder.

Naloxone hydrochloride: Generic name for the opioid overdose antidote; known as naloxone.

Naltrexone: Also known as Vivitrol®. A medication used in MAT for opioid-use disorder.

Opioid: A compound or drug that binds to receptors in the brain involved in the control of pain and other functions (e.g., morphine, heroin, hydrocodone, oxycodone).

Relapse: Breakdown or setback in a person's attempt to change or modify a particular behavior; an unfolding process in which the resumption of compulsive substance use is the last event in a series of maladaptive responses to internal or external stressors or stimuli.

Remission: A period of time in which the signs and symptoms of the addiction have disappeared.

SBIRT: Screening, Brief Intervention, and Referral to Treatment. A method for early identification to identify, reduce, and prevent problematic use of and dependence on alcohol and illicit drugs.

SCA: Single County Authority, assigned by the Pennsylvania Department of Drug and Alcohol Programs to plan, coordinate, programmatically and fiscally manage, and implement the delivery of drug and alcohol prevention, intervention, and treatment at the local level. In Allegheny County, the SCA is housed within the Department of Human Service's Office of Behavioral Health (OBH).

Suboxone®: A brand-name opioid treatment medication that contains buprenorphine and naloxone.

Substance-use disorder (SUD): A broad term that includes dependence on drugs and/or alcohol or using drugs in ways other than their intended purposes.

Tolerance: A condition in which higher doses of a drug are required to produce the same effect achieved during initial use; often associated with physical dependence.

Vivitrol®: Brand name of injectable form of naltrexone.

Warm handoff: A process for transitioning a substance-use disorder patient from an intercept point, such as a physician or law-enforcement officer, directly to a treatment provider through an in-person transition immediately following interaction at the intercept point.

Withdrawal: Symptoms that occur after chronic use of a drug is reduced abruptly or stopped.

Foreword

The opioid problem in Western Pennsylvania and across the United States is a public health and public safety emergency. As reflected in the statistical information set forth in this report, overdose is the leading cause of accidental death, and heroin and opioids are involved in the majority of those cases. The direct and indirect costs of this epidemic to victims and families are staggering. The problem is terribly complicated and requires urgent attention, new ideas, and a solution.

Since I became U.S. Attorney in 2010, my office and I have tried to be attentive and creative as we prioritized heroin and opioid abuse as the number one problem facing Western Pennsylvania. We modified our enforcement efforts to bring large-scale “community impact prosecutions.” In areas of disproportionate violence, investigators saturated the regions to identify, disrupt, and dismantle drug-trafficking organizations that use violence as an instrument to terrorize citizens and exploit those suffering from the disease of addiction. We proceeded systematically community by community to identify the worst of the worst offenders and, by removing violent drug dealers from our streets, helped to return the peaceful enjoyment of neighborhoods to law-abiding citizens.

Through that process, we learned that despite effective enforcement, we could not prosecute or incarcerate our way out of the opioid problem. We needed to develop a demand strategy: policies and programs that focus on SUD research, prevention, and treatment with the goal of reducing the use of illicit drugs, to complement our supply-disruption work.

We began this demand-side work in 2012 with a Prescription Pill Summit at Washington & Jefferson College to increase awareness among health care providers and law enforcement, as well as to educate the community at large about this problem. Soon thereafter, we faced the first of at least three acute fentanyl outbreaks, during which drug users died by the dozens in proximate locations due to extremely potent fentanyl-laced heroin, which was killing users upon single exposure or ingestion. The total number of those who died remains unclear because of a combination of antiquated reporting protocols and the stigma associated with opioid abuse.

Building from that initial summit, I developed a working group in 2014 called the U.S. Attorney’s Working Group on Drug Overdose and Addiction. The result of this work included a list of nine short-term and 29 long-term recommendations for local, state, and national action. The report received national recognition from the U.S. Department of Justice, and I was subsequently asked to chair the National Heroin Task Force in 2015. The task force released its report and recommendations in December 2015. As part of that work, the group partnered with the University of Pittsburgh and others to develop OverdoseFreePA, a Web site designed to be a one-stop resource for addicts, families, and the community to get help and support.

Two other important events frame our experience with this issue, and they relate to important steps taken by President Obama to address the problem. In January 2015, President Obama included a request for \$140 million to fund new prevention and treatment initiatives. I was asked and honored to present the rationale for these initiatives to the national press along with Office of National Drug Control Policy Director Michael Botticelli. In January 2016, the President expanded those initiatives by requesting of Congress \$1.1 billion to confront the crisis—a nearly ten-fold increase. Much of what the President requested was previewed in an Executive Order in October 2015, issued when the President went to Charleston, W.Va., to highlight the opioid crisis.

In April 2015, I was asked to co-chair, on behalf of the U.S. Department of Justice, a National Heroin Task Force, together with the Office of National Drug Control Policy, to develop and submit a report to Congress identifying the federal efforts to curb this epidemic. The work involved participation of virtually every federal component, as well as White House supervision and participation. As part of that work, the Drug Enforcement Administration announced a comprehensive “360 Strategy” and picked Western Pennsylvania as one of four pilot sites to develop a new enforcement/prevention/diversion model to replicate across the nation. The final report of the National Heroin Task Force was issued in December 2015. In summary, the report called for scientific and data-driven solutions; the marriage of public health and public safety efforts; and the expansion of available, accessible, and affordable treatment capacity to solve an identified deficit.

The opioid problem in Western Pennsylvania and across the United States is a public health and public safety emergency.

What's Next?

In late 2015, I asked the University of Pittsburgh Institute of Politics to partner with us to help us capture university and health care research and training efforts and assess our community-based demonstration model along a continuum of care, with the purpose of effectively increasing intervention points to divert opioid addicts. In my opinion, this is the next frontier in the effort to address the opioid crisis, which is a combined public health and safety challenge that we can neither prosecute nor medically treat our way out of. We need to integrate public health and public safety, taking into account all of the present challenges, to build an effective and sustainable model which can be replicated in other towns, cities, and states, one that can be used in both urban and rural settings. This is the next logical step if we are to productively slow and hopefully stop this growing problem.

It is essential to add that, although we have worked with the University of Pittsburgh to build this demonstration model, it is neither intended nor expected that we will be exclusive in partnering with the University or its components. To the contrary, we plan to invite and include all regional stakeholders to participate.

Conclusion: What Lies Beyond?

What follows is a community-based continuum of care model that demonstrates how we in Western Pennsylvania are moving forward to merge public health and public safety in an effort to address the opioid crisis. We propose this ambitiously and modestly. We believe it will work and can be replicated. We believe it will allow us to measure results, as well as make modifications and improvements as needed.

We know that we have not solved this difficult problem but believe we have identified a series of coordinated and complementary steps which, taken together, will set in motion a public health and public safety partnership to significantly increase productive interventions. Additional steps will no doubt come, and I predict that they may include the following.

- Public and private collaboration to dramatically increase the treatment platform
- Growth and community acceptance of recovery corridors and sober communities
- Community- and hospital system-based demonstrations of integrated continuum of care programs
- Expansion of diversion and amnesty programs like the Gloucester, Mass., Angel Program.

These are just a few examples, and I expect that Western Pennsylvania stakeholders will continue to lead the way with their signature collaborative, can-do approach.

My gratitude to those who have partnered with us on this journey knows no bounds; my hope that we can decrease the number of victims knows no limits.



David Hickton
U.S. Attorney
Western District of Pennsylvania

Preface

Dear colleagues:

David Hickton, the United States Attorney for the Western District of Pennsylvania, has performed a great service, both for this region and for the country, through his sustained and determined efforts to develop effective responses to the opioid addiction overdose epidemic. That epidemic has reached the point that it can fairly be labelled a national health emergency, and our home region is among the areas of the country that has been hardest hit. In 2014, Mr. Hickton used the authority of his office to convene a working group that examined the regional challenges presented by addiction and proposed responses to them. Largely as a result of that work, he was named co-chair of the national heroin task force, and even while that work still was underway, he reconvened his regional working group, recognizing that the situation was getting worse, not better.

As Mr. Hickton has indicated in his foreword to this report, in late 2015, the Institute of Politics was asked to join him in this effort, a request that was entirely consistent with the Institute's 25-year history of helping to develop innovative solutions to challenging regional problems. We were asked more specifically to participate in U.S. Attorney Hickton's regional working group, and simultaneously to convene our own working group to provide complementary ideas and perspectives. That group was composed of faculty members from each of Pitt's health science schools, as well as its schools of law and social work; UPMC experts in addiction, pain management, and health insurance; and the directors of the county's health and human services departments. Later, we were asked to assume the further role of reporting on combined efforts of these two groups.

We were pleased to be included in this important initiative and quickly discerned that our region, with its wide array of distinctive resources—including engaged local, regional, and national law-enforcement officers; nationally respected leaders in human services, medicine, pharmacy, public health, dental medicine, and social work; one of the nation's leading public research universities; one of the nation's largest and strongest academic medical centers, which includes its own insurance company; a small army of talented researchers and clinicians devoted to the cause; and a regional culture characterized by its commitment to cooperating and working together to advance the common good—is uniquely poised to be a national leader in responding to this national emergency. We quickly discovered that a great deal of good work already is being done in our region and concluded that, with improved

communication and coordination, our collective efforts could provide the foundation for an integrated public health and public safety continuum-of-care response to this crisis.

It is our shared hope, then, that this report will provide the foundation for an action plan that engages hospitals and health systems, prescribers and other medical personnel, pharmacies and pharmacists, public health workers, county and state drug and alcohol program leaders, treatment providers, researchers and universities, first responders of all types, district attorneys and other justice personnel, elected officials, friends and family, those in recovery, and other key community leaders. As noted, the framework of that plan is the continuum of care, and the report provides examples of both public health and public safety strategies in the areas of prevention, treatment, and maintenance/recovery. Recognizing that challenges and resources vary from community to community and believing that the broadest possible array of ideas should be shared, an appendix to the report provides an extensive inventory of efforts already underway in Western Pennsylvania. The exercise of engaging key stakeholders, learning more about existing efforts, and identifying gaps naturally gave rise to recommendations for improving our collective effort.

To be clear, though, and as trends in overdoses and overdose deaths so clearly show, there is much more work to be done. This report seeks to deliver a framework for moving forward together. It is our hope that the information provided not only will benefit the people of this region but also serve to inform other communities and regions as they work to address the heroin and opioid epidemic, and also provide the foundation for communities to address similar, but currently unforeseen, challenges that may arise in the future. Everyone who is even reasonably well-informed about this crisis knows that a long struggle lies ahead, and we look forward to learning from the experiences of other communities as we press forward with our critical efforts to save lives, protect families, and enhance the health of our communities.

Sincerely,



Mark A. Nordenberg
*Chair, Institute of Politics
Chancellor Emeritus and
Distinguished Service Professor
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Terry Miller
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Introduction

Defining the Problem

The United States is facing an unprecedented public health crisis—the opioid epidemic. Opioids are a class of drugs that produce pain relief and euphoria when taken. They include powerful prescription pain relievers such as oxycodone, hydrocodone, and morphine, as well as the illegal drug heroin. Regular use of this type of drug can create drug dependence, resulting in a substance-use disorder (SUD).²

In 2014, 21.5 million Americans 12 years or older suffered from SUD; almost 2.5 million people had an SUD involving pain relievers or heroin.³ SUD, especially involving opioids, brings with it the chance of overdosing. According to the Centers for Disease Control and Prevention (CDC), more people died from drug overdoses in 2014 than in any year on record.⁴ Most (61 percent) overdose deaths involve the use of an opioid. Since the year 2000, overdoses involving an opioid have tripled.⁵ Approximately 78 people die daily from an opioid-related overdose, and every day another 3,900 people initiate a nonmedical use of a prescription opioid.⁶ These numbers are staggering and clearly indicative of a widespread public health epidemic currently affecting communities large and small across the nation.

Pennsylvania, particularly the state's western region, has suffered severely. In 53 percent of Pennsylvania's overdose deaths in 2015, an opioid was found in the toxicology test results; of those deaths, more than 79 percent of victims tested positive for heroin.⁷ In 2014, Pennsylvania had the third-highest number of opioid deaths in the country (2,732), behind only California (4,521) and Ohio (2,744).⁵ That same year, Western Pennsylvania had six of the ten counties with the highest drug-related death rates per 100,000 people in Pennsylvania.⁷ Within Western Pennsylvania, Allegheny, Westmoreland, and Washington counties represent 55 percent of the overdose deaths in the region.⁷

Public health and public safety officials across the country are increasing their efforts to address this growing epidemic. There is hardly an area of the country where opioid overdoses are not a cause for concern. While there is already a great deal of work being done, opioid-related deaths continue to rise, illustrating the need for even greater collaboration and investment.

Public health and public safety officials across the country are increasing their efforts to address this growing epidemic.

Goals of the Report

The purpose of this report is to examine successful and innovative initiatives undertaken within Western Pennsylvania to address the heroin and opioid epidemic. This report also attempts to identify gaps in existing protocols and programs across the public health and safety sectors. Finally, to address these gaps and to build upon Western Pennsylvania's successes combating the heroin and opioid epidemic, this report advances recommendations for public health and public safety organizations across the region to collaborate more closely and build effective solutions to the epidemic.



Guiding Principles

The work surrounding the development of this report and its recommendations was driven by several guiding principles, including the following.

SUD is a brain disease that responds to treatment:

Opioids, including heroin, are chemically related and interact with opioid receptors on nerve cells in the brain and the nervous system to produce pleasurable effects and relieve pain.⁹ As a result, SUD is a primary, chronic, and relapsing brain disease characterized by an individual pathologically pursuing reward and/or relief by substance use and other behaviors.⁹ Although SUD is a brain disease that is potentially fatal, research shows that it also is treatable.¹⁰ The disease is best treated through a holistic approach along the continuum of care, where SUD can be addressed through prevention, treatment, and ongoing maintenance/recovery to prevent relapse. Critical to the treatment of SUD is addressing both the treatment needs of the person suffering from SUD and also the needs of the victim's family. Families can provide important support for the victim and also require services to address the collateral harms of having a loved one suffering from SUD.

When possible, public health and public safety efforts should be integrated: It is the goal of this collaborative to develop a framework to address the opioid/heroin epidemic by unifying public health and public safety policies, practices, and protocols in an effort to reduce fragmentation of existing systems and services. Ultimately, by developing more continuity along the continuum of care, public health and safety organizations can reduce fragmentation within opioid epidemic responses in the region. This reduction would allow for an upstream focus on the causes and consequences of drug use, misuse, abuse, and dealing, while also addressing downstream issues in a comprehensive, cross-discipline manner.

Recommended strategies should be scalable, transferable, and sustainable: Western Pennsylvania is home to several assets that make it uniquely positioned to address the opioid epidemic, including a large university research community, a world-renowned medical system, and robust information technology data systems. Nonetheless, the Opioid Epidemic Collaborative has worked to identify strategies within Western Pennsylvania that have application not only for the populations and areas in which they were developed, but also throughout the region and, potentially, the country. To assess the effectiveness of these strategies, we must measure them against a range of relevant metrics, including:

- Decreased overdose deaths
- Increased access to naloxone
- Increased opportunity for/access to treatment for people suffering with SUD
- Increased number of available beds at treatment centers
- Increased quantity and enhanced quality of recovery programs for various populations, including pregnant mothers and newborns
- Increased engagement of family, peers, and friends in treatment protocols.



Continuum of Care Response

The Western Pennsylvania continuum of care wellness response recognizes that there are critical junctures and opportunities for proactive, effective intervention to address the disease of SUD. This systemic response should inform regional decision making around prevention, treatment, and maintenance/recovery.



The continuum of care places SUD sufferers at the center of all intervention efforts and wraps strategies around them, their friends and families, and their communities. This wellness approach mindfully marries the efforts of community coalitions; county public health and public safety agencies; and anchor institutions, such as the University of Pittsburgh, UPMC (University of Pittsburgh Medical Center), and the UPMC Health Plan. This coordination helps to identify what is being done well and where improvement is needed. For example, provider education, warm handoffs, use of naloxone, and the need for medication take-back boxes are recognized as critical issues, so the continuum of care approach includes public health and safety strategies to address those issues in each community.

The continuum of care model is also a community- and patient-centered model that recognizes multiple opportunities to address the opioid epidemic.

This framework provides a number of benefits. As a highly visible project, it serves as a demonstration of an effective mechanism for forging partnerships to address a national emergency with an interdisciplinary approach. It views addiction as a disease, in keeping with the American Medical Association (AMA) and American Society of Addiction Medicine (ASAM), and serves to destigmatize SUD and those suffering with it. The continuum of care model is also a community- and patient-centered model that recognizes multiple opportunities to address the opioid epidemic. This approach demonstrates the importance of bringing together the tools of both public health and public safety to address the issue and developing benchmarks to encourage continual assessment of the programs and strategies being used.

Western Pennsylvania's continuum of care response to the opioid epidemic is broad and in some areas robust, especially as it relates to research, education, and community intervention strategies. The model also shows that there is still significant work to do in the areas of acute and long-term treatment and recovery support for those suffering with SUD and their families. Western Pennsylvania, with its interdisciplinary partnerships, is well positioned to evaluate current efforts, make realignments where necessary, integrate evidence-based practices where feasible, and continue to incrementally build on a continuum of care response strategy.

The following sections define prevention, treatment, and maintenance/recovery within the continuum of care model and provide examples of how those strategies are being applied in Western Pennsylvania. Each section also has a short case study demonstrating how jurisdictions can implement some of these practices. A full compendium of efforts underway in Western Pennsylvania is included in Appendix III.



Prevention

Prevention relates to policies, programs, and practices that are designed to reduce the occurrence of opioid-related SUD, as well as its associated health, behavioral, and social problems. These strategies are typically directed at a broad population that has not experienced the serious negative consequences of SUD. Prevention is divided into three categories: universal, selected, and indicated. These three types of strategies are differentiated by the types of populations they address. Universal prevention is directed at the general public, whereas selected prevention strategies are directed at specific subpopulations, and indicated preventions are directed at individuals at high risk of SUD.

Universal Prevention

Universal prevention views an entire population (nation, state, community, school, or neighborhood) as being at risk. The purpose of universal prevention is to deter the onset of SUD by providing an entire population with the information and skills necessary to prevent drug use.

Examples

- ▶ **OverdoseFreePA Web site**
(University of Pittsburgh Program Evaluation and Research Unit [PERU]):
The OverdoseFreePA Web site, developed by the University of Pittsburgh School of Pharmacy's PERU, establishes a centralized, meaningful, evidence-based resource that can effectively support existing multidisciplinary efforts within participating counties to reduce overdose and overdose deaths. The data provided on the OverdoseFreePA Web site aim to increase community awareness and knowledge of overdose and overdose-prevention strategies, as well as to support initiatives aimed at decreasing drug overdoses and deaths within the participating counties.
- ▶ **Strengthening Surveillance Systems and Activities**
(Allegheny County Office of the Medical Examiner):
The Allegheny County Office of the Medical Examiner is working to provide long-term, proactive, large-scale, objective, "real-time" drug overdose data on the precise analysis of drugs within the office's jurisdiction and the emergence of new drugs within the county to law enforcement, EMS, emergency departments, the SUD community, and treatment providers. The work provides an opportunity to bring together public health (epidemiologic methods of surveillance of the condition) and public safety (law enforcement—arrests, prosecutions, and removal of agents from the community).
- ▶ **Fusion Center**
(Federal Bureau of Investigation):
In order to improve the speed of responses to overdoses, especially deadly "batches" of fentanyl-adulterated heroin, information and intelligence must be routinely reported, consolidated, and analyzed. Led by the Federal Bureau of Investigation (FBI), and with support from the U.S. Drug Enforcement Agency (DEA) and other state and local partners, Western Pennsylvania in January 2016 established a Fusion Center to receive reports of heroin overdoses and seizures. Fusion Center investigators have standardized the collection of evidence related to heroin overdoses and have trained law enforcement across the region on the overdose protocol. By centralizing and standardizing overdose intelligence, the Fusion Center enables law enforcement to respond more rapidly. Submissions to the Fusion Center have already resulted in investigative leads and enabled prosecutors to link distributors, telephone numbers, and stamp bags (small wax bags used for the distribution of heroin) for more enhanced and coordinated investigation.



Selective Prevention

Selective prevention interventions target subsets of the population that are at higher-than-average risk for substance abuse. Individuals are identified by the magnitude and nature of SUD risk factors to which they are exposed. These types of measures target the entire subgroup population regardless of the degree of risk of any individual within the group. Families are one such identified group needing further education and involvement.

Examples

▶ **Center of Excellence for Childhood Substance Use Prevention and Early Intervention
(Children’s Community Pediatrics):**

The Center of Excellence for Childhood Substance Use aims to prevent opioid use and addiction in children and adolescents. A key aspect of the center’s work is the development of a Substance Use Prevention model. This model trains pediatricians to evaluate their patients for risk of addiction and refer patients and families to on-site, specially trained behavioral health specialists for necessary intervention and treatment. When specialists are within the practice, children are able to receive behavioral health treatment without the inconvenience and stigma of receiving treatment at the Behavioral Health Clinic at the Children’s Hospital of Pittsburgh of UPMC.

▶ **Research
(University of Pittsburgh Graduate School of Public Health):**

The University of Pittsburgh Graduate School of Public Health is examining the opioid epidemic from a number of perspectives. (A list of opioid-related Graduate School of Public Health studies appears in Appendix III.) One study examines the social and ecological contexts of opioid use and overdose in Pennsylvania. The aims of this pilot proposal are to: (1) Investigate hospital discharges due to opioid abuse and dependence and poisoning (overdose) spread across space over time in Pennsylvania, and assess the relative contribution of ecological factors to the growth in opioid-related hospital discharges; (2) Identify high-risk ZIP codes in Pennsylvania; and (3) Use a community-engaged needs-assessment approach to involve local key stakeholders in identifying and illustrating resources, risk factors, and intervention opportunities within the highest risk regions. These data served as pilot studies for a National Institute on Drug Abuse proposal focused on elucidating the social ecological contexts of opioid use and overdose, with an eye to developing ecologically valid preventive interventions. They also enabled Graduate School of Public Health researchers to apply for and receive funding for a planning research grant focused on opioid drug abuse, dependence, and overdose and associated comorbidities (Hepatitis C and HIV) in the Northern Appalachian Region of Southwestern Pennsylvania.

Indicated Prevention

Indicated prevention strategies are focused on people with identified risk factors that suggest a higher-than-average risk of developing SUD. These types of strategies focus on reducing opioid harm and/or dependence. Indicated preventions often occur at key intercept points, including the health care system (primary care physicians and/or emergency departments); mental and behavioral health treatment; law enforcement; and community-based organizations such as faith-based organizations, human service agencies, and friends and family.

Examples

▶ The UPMC Insurance Division:

The UPMC Insurance Division, which includes the UPMC Health Plan and Community Care Behavioral Health, has created a series of interventions with its members and providers to address the opioid overdose crisis. The UPMC Health Plan has worked to improve providers' opioid training and procedures and members' access to treatment, including:

- Creating a toolkit for providers to support effective pain-management and care-management strategies to support individuals with SUD and those at risk
- Screening routinely for SUD
- Supporting strategies to enhance the distribution of naloxone
- Designing a program to enhance members' access to medication-assisted treatment (MAT)
- Building and designing a mechanism for "warm handoffs" of at-risk persons, including referring overdose survivors and families suffering with this problem to ongoing care and community supports.

Similarly, Community Care Behavioral Health, which manages behavioral health services for about a million Medicaid members in Pennsylvania, has:

- Worked with the Pennsylvania Department of Human Services, counties, providers, and advocacy organizations to develop a series of strategies to enhance the range of services available to individuals with SUD, including a recovery-oriented system
- Developed programs to enhance provider clinical skills, such as motivational interviewing
- Created a set of treatment guidelines for the use of buprenorphine, as well as methadone programs.

▶ Prevention Point Pittsburgh:

Prevention Point Pittsburgh (PPP) is a nonprofit organization that provides new syringes and other harm-reduction services to addicts. The organization has also begun to provide naloxone. In 2015, PPP dispensed 866 new prescriptions of naloxone. Needle exchanges are an important intercept point to engage with heroin SUD sufferers. Exchanges can establish relationships between people suffering from SUD and those who want to help them, which can later provide a route for victims to start treatment.



Case Study:

► Westmoreland County's Warm Handoff System

The Westmoreland Drug and Alcohol Commission, Inc. (WeDAC) is a not-for-profit organization that oversees the development and implementation of necessary operational activities in regard to the planning, organization, direction, and administration of the drug and alcohol service-delivery system. This system includes intervention, prevention, treatment, case management, and recovery support services. WeDAC also oversees all funds for the administration and provision of services under the authority of the Single County Authority (SCA).

In response to the growing heroin/opioid epidemic in Westmoreland County, one of the most populous counties of Western Pennsylvania and one of the hardest-hit in terms of overdoses, WeDAC worked with partners in the community, specifically the local hospital system, to develop a robust warm handoff procedure for patients with SUD who present in emergency rooms.

In 2012, Excelsa Health Westmoreland Hospital began to see a noticeable increase in patients with SUD presenting at the emergency room. Although some required treatment for physical or mental health complications, others did not need to be admitted, and the hospital staff was unsure what to do for them, other than provide a telephone number for drug and alcohol recovery services.

Well before the state mandated that SCAs develop and engage in a warm handoff process, WeDAC began to convene community meetings with its provider, SPHS Behavioral Health, with whom WeDAC subcontracts to provide drug and alcohol case-management services in Westmoreland County. The intent of the meetings was to identify pathways

to treatment through the hospital emergency room. Participants concluded that the best way to intercept people would be to embed a mobile case manager in the hospital.

The next step was to approach the hospital. After many initial meetings with the director of the emergency department, the director of nursing, and the behavioral health unit, WeDAC worked out a system that the agency believed would not be overly cumbersome for the hospital staff to implement. As a result of their efforts, by June 2014, one mobile case manager was embedded at the hospital during what were considered to be peak times for overdose survivors to present.

Referrals to the mobile case manager initially came frequently from doctors and other medical staff, but they slowed significantly after only a few months. WeDAC went back to the drawing board to determine why. The agency discovered that physicians and nurses weren't necessarily the right people in the hospital to do the handoffs; instead, the agency needed to work directly with the hospital's medical RN case managers and medical social workers.

After the system was retooled and referrals picked up again, WeDAC decided to make mobile case managers available around the clock. They established a dedicated phone line for hospital personnel to call to make referrals. When contacted, the mobile case manager responds in person (or, in rare cases, by phone) within 15 minutes to perform a screening and assessment. Once an assessment is complete, the nursing staff is notified of the outcome, and, if warranted by the assessment, the mobile case manager attempts to locate a treatment bed for the patient.

Additionally, WeDAC has recorded data on all referrals made since the program's inception. For example, the agency can provide information regarding the number of individuals referred to treatment, the types of insurance those patients have, the type of additional care they received at the hospital before referral, and the length of time it took for them to be transferred from the hospital to treatment. Since the program began, 267 patients have been identified through the program, 190 assessments have been completed, and 61 patients have successfully completed the recommended level of care.

Key contributors to the success of this program include:

- The availability of additional funding through the Health Choices program, which could be redirected to hire the mobile case managers
- The 24/7 availability of case managers, which means that hospital staff never have to worry about not receiving a response, and no patient slips through the cracks
- WeDAC's persistence in working with the hospital staff to get them to agree to the program initially and to find a solution to problems that came up during the program's implementation
- The hospital staff's acceptance of the mobile case managers as part of their system; the case managers went through mandatory hospital staff training, have their own credentials, and have their own "color" (red) in the hospital's color-coded uniform system.

However, WeDAC believes that the program could have been implemented more quickly and more successfully at the outset with early buy-in and support from the state and the hospital association.

Next steps include continuing to monitor progress of the current process, with the hope of implementing on-site availability at Excelsa's remaining two Westmoreland hospital campuses (Frick and Latrobe).





Treatment

Similar to other major chronic diseases, such as heart disease and diabetes, addiction changes the functioning of the brain and body and is caused by a combination of biological, behavioral, and environmental factors. Like other chronic conditions, addiction frequently results in cycles of relapse and remission. Without the aid of treatment or other recovery activities, addiction can result in disability or premature death. There are two stages of treatment strategies: case identification and standard treatment for known disorders.

Case Identification

Case identification focuses on the screening process for determining whether people are suffering from SUD. There are an array of drug and alcohol assessment and screening tools, including Screening, Brief Intervention, and Referral to Treatment (SBIRT). This tool is an approach to screening and early intervention for SUD and people at risk for developing SUD. SBIRT emphasizes combining the efforts of screening and treatment services as part of a cooperative system of early intervention. SBIRT is a preferred screening tool for health professionals and has been effectively deployed and evaluated in health care systems across Pennsylvania. Following the SBIRT process, most if not all SUD patients must also be matched to a proper level of treatment through a clinical tool, such as ASAM or CCBHO, based on the severity of their illness.

Examples

▶ **The Pennsylvania SBIRT Medical and Residency Training Program (SMaRT):**

The SMaRT program is a statewide initiative, funded by the Substance Abuse and Mental Health Services Administration Center for Substance Abuse Treatment (SAMHSA-CSAT), to provide SBIRT training to approximately 750 medical residents across four health care systems (UPMC and the Veterans Affairs [VA] Healthcare System in Pittsburgh, Albert Einstein Medical Center in Philadelphia, and Susquehanna Health-Williamsport Hospital and Medical Center in Williamsport, Pa.). This training will impact rural, suburban, and urban populations and include residents working in the fields of family medicine, general and internal medicine, emergency medicine, obstetrics and gynecology, and pediatrics.

▶ **SBIRT Training (University of Pittsburgh School of Pharmacy):**

Funded by SAMHSA, this training initiative provides SBIRT training and evaluation support to four SBIRT Health Professionals Interdisciplinary Training Programs in Western Pennsylvania, Philadelphia, and Atlanta, Ga. Examples of this training initiative include the School of Pharmacy's partnership with the Allegheny Singer Research Institute for the Professional and Organizational SBIRT Implementation with Training (POSITive) program and a partnership with Chatham University, the University of Science, and Morehouse College around SBIRT Health Professions Student Training. The POSITive program is designed to train almost 3,000 medical residents and medical, nursing, dental, and pharmacy students in SBIRT.

Standard Treatment for Known Disorders

With Standard Treatment for Known Disorders strategies, treatment occurs within the continuum of care framework. Determining the type of treatment center where a person suffering from opioid SUD should be placed during a crisis requires careful evaluation and consideration. SUD professionals use evaluation criteria known as ASAM PPC-2 (American Society of Addiction Medicine, Patient Placement Criteria, Revised) to determine what treatment services are needed for an individual. The ASAM PPC-2 model takes the following areas into consideration.

- Acute substance intoxication and/or withdrawal potential
- Biomedical conditions/complications
- Emotional, behavioral, or cognitive conditions/complications
- Readiness to change
- Relapse, continued use, or continued problem potential
- Recovery/living environment

Each of these areas is assessed for severity, and a level of care is determined, ranging from outpatient services to intensive inpatient treatment services. Key intercept points also play a role in how and where individuals with SUD are referred. At each intercept point, personnel should be aware of available treatment options, then utilize intervention strategies to reduce harm, promote treatment, and save lives.



Examples

► Neonatal Abstinence Program (The Children's Institute of Pittsburgh):

The Children's Institute of Pittsburgh's Neonatal Abstinence Syndrome (NAS) Program provides high-quality care for mothers and infants when the baby has been exposed to drugs in the womb before birth. Drug exposure, often a result of the mother taking opioids during pregnancy, can cause a variety of problems for the baby, including withdrawal, low birthweight, and seizures.

From before the baby is born until developmental support is no longer needed, the experienced doctors, nurses, and therapists at The Children's Institute address the needs of both the mother and the child. The program includes multiple parts: care coordination services before and after birth, inpatient services including medical care and 24/7 nursing care and support, feeding evaluation and support, and outpatient developmental pediatric services after the baby goes home. In collaboration with Allegheny County and other surrounding counties, care coordinators and health coaches work with families to make sure that the child and family get necessary services until the child is at least five, and the family receives support throughout each stage of the journey following the birth of a drug-exposed baby.

Standard Treatment for Known Disorders *(continued)*

Examples

▶ **Magee-Womens Hospital of UPMC:**

Magee-Womens Hospital of UPMC has developed a Pregnancy Recovery Center with a medical “health home” model approach to strengthen families. The recovery center opened in 2014, and it offers outpatient, office-based buprenorphine treatment in an integrated setting, with routine obstetric services and prenatal care. In collaboration with Addiction Medicine Services of Western Psychiatric Institute and Clinic (WPIC) of UPMC, the program offers support and behavioral counseling. Magee also offers inpatient methadone conversion for pregnant women struggling with opioid dependency and has a Cuddler Program through which trained volunteers soothe babies who show symptoms of withdrawal. The hospital believes women are highly motivated and more active in seeking recovery during pregnancy.



▶ **Project Safe Landing**

(Allegheny County Overdose Prevention Coalition):

The Allegheny County Overdose Prevention Coalition has developed the Safe Landing initiative, which is designed to improve identification of patients who are overdosing or are at increased risk for overdosing, then facilitate access to support and/or treatment services when patients affirm willingness. Safe Landing uses the evidence-based approach of SBIRT to identify and intervene with persons who are at elevated risk of harm from the use of alcohol and other drugs. The Pennsylvania Department of Human Services and a collaborative of local Medicaid and commercial payers who have implemented SBIRT (in some cases for the purpose of this pilot) engaged in a study of adjudicated hospital claims and local behavioral health encounter data to determine whether the interventions provided via Safe Landing resulted in fewer unnecessary 30-day readmissions and reduced health care costs compared with emergency department services in a control hospital. The results of this evaluation were used to model programs, such as Safe Landing, and to implement SBIRT commercial and public billing codes in other Pennsylvania emergency departments.

Standard Treatment for Known Disorders *(continued)*

Examples

▶ **MAT Pilot Program**

(Allegheny County Department of Human Services and Allegheny County Jail):

Allegheny County is piloting a program to help reduce the rate of overdose among people with opioid-use disorders who exit the county jail and to assist them onto the path to recovery. The county is using a clinical decision support tool to determine each person’s most effective course of treatment after he or she leaves the jail, then linking that person with that treatment (including evidence-based MAT) and other services, through case management.

To prepare these participants for release from the jail, the program provides education on overdose prevention and the use of naloxone; rapidly enrolls them in medical assistance; and coordinates housing, transportation, and other services that are essential to their healthy return to the community. Also, pregnant women in the jail receive a medical examination and access to methadone until delivery. The program ensures that participants leave the jail with naloxone (this element of the program is not currently in effect) and the support of a program specialist who helps to ensure that they begin and follow their course of treatment and receive the services they need for recovery. Because of the limited availability of evidence-based MAT in the county, this program also is working to increase providers’ capacity to offer MAT.

The county is in the process of applying to the state for funding to extend this pilot by providing MAT within the county jail. It continues to seek ways of making treatment, education, and support the protocol for people with opioid-use disorders in jail and after release.

▶ **Allegheny County Standing Order for Naloxone Distribution and Use**

(Allegheny County Department of Health):

In May 2015, the Allegheny County Department of Health issued a standing order for naloxone. The standing order allows any licensed pharmacy in the county which chooses to participate to dispense naloxone to individuals at risk of a heroin or opioid-related overdose or those who may witness an overdose. The standing order was made possible by Pennsylvania Act 139. The act allows first responders, including law enforcement, firefighters, EMS, and other organizations, to administer naloxone to people experiencing an opioid overdose. The law also allows members of the general public, such as friends or family members who may be in a position to assist a person at risk of experiencing an opioid-related overdose, to obtain a naloxone prescription. Act 139 provides immunity from prosecution for those responding to and reporting overdoses. The Commonwealth issued a similar standing order for naloxone statewide in October 2015.



Case Study:

► Gateway Rehab and the MAT Experience

Physicians from Gateway Rehab have engaged in several initiatives to promote MAT for opioid use disorders, including reaching out to first responders to encourage the administration of naloxone to overdose victims. In addition, Gateway Rehab has initiated an MAT program utilizing Suboxone and Vivitrol. Gateway physicians, in partnership with local SCAs, engaged with the community and trained professionals to increase acceptance of the use of naloxone and other medications in order to achieve more positive outcomes for people with opioid use disorders.

Naloxone

Following the release of the report from the U.S. Attorney's Working Group on Drug Overdose and Addiction, Washington County's SCA and representatives from Gateway, in keeping with the report's recommendations, attempted to train Washington County first responders, including police officers and firefighters, on the use of naloxone, an opioid overdose antidote, to respond to opioid overdoses. Their initial efforts were met with pushback from first responders. However, the Washington County SCA, the Washington County District Attorney, and representatives from Gateway engaged in educational outreach to first responders across the county. Over the course of the outreach campaign, 600 first responders received education regarding the use of naloxone. The training has proven critical in addressing cluster overdoses, and, at the time of publication, 60 overdoses have been reversed in Washington County alone.

Since the initial round of outreach, some first responders have expressed frustration after using naloxone multiple times to revive the same person. Some of this frustration has been overcome by publicizing successes and showing that overdose reversal can be a meaningful experience for both overdose victims and first responders. Additional engagement will be necessary to continue to support this effort.



Suboxone

Like most SUD treatment centers, Gateway Rehab traditionally operated in an abstinence-only model. This policy changed in early 2015 when Gateway introduced Suboxone as part of a comprehensive MAT program. Suboxone is the trade name of a well-known product containing buprenorphine and naloxone.

Some members of the Gateway Board of Directors and several therapists resisted Gateway's introduction of MAT primarily because of their own experience with and orientation to an abstinence-only model of recovery. Over time, the initial resistance on the part of some of the therapists was gradually overcome as better clinical outcomes occurred with the use of Suboxone. As the use of Suboxone has increased, evidence has shown that the administration of Suboxone unaccompanied by therapy is a recipe for failure. Many of Gateway's patients have been involved previously with "Suboxone clinics" that provide little in the way of ongoing therapy or accountability. In many cases, the patients have learned maladaptive ways of using Suboxone, which has significantly undermined its utility. Such patients require a significant amount of therapy and ongoing support in order to remain adherent to the MAT program.

Vivitrol

Vivitrol is an injectable form of naltrexone that blocks opioid receptors for between 30–45 days. By blocking opioid receptors, Vivitrol makes it nearly impossible for patients to experience a high from opioids unless they use opioid drugs in extremely large quantities. Unlike with Suboxone, drug and alcohol treatment providers generally have a positive view of using Vivitrol as part of an MAT program. Many of Gateway's therapists actively promote the use of Vivitrol for their patients, and its use is consistent with an abstinence-only model.

Although approximately 20% of the patients who receive Vivitrol report a significant decrease in cravings, many people do not experience any significant reduction in cravings. Such patients often resort to the use of other classes of drugs to deal with ongoing cravings. Unless patients are strongly motivated to continue to receive Vivitrol for personal, employment, or criminal justice-related reasons, they often do not return for subsequent injections.

Treatment providers can be lulled into a false sense of security when their patients are given injections of Vivitrol. However, after even a relatively short period of Vivitrol use, tolerance diminishes, and the risk of overdose after resuming opioid use is great. As a result, patients receiving Vivitrol require as much, if not more, ongoing therapy than patients receiving Suboxone, especially during the period just prior to receiving additional injections, when many patients rationalize discontinuation of the injections.



Maintenance/Recovery

In the continuum of care framework, maintenance/recovery strategies are designed to help SUD patients manage the symptoms of their disease over the long term following treatment. Traditionally, maintenance/recovery has required long-term abstinence from alcohol and other drugs, but some maintenance/recovery programs for more addictive substances, like opioids, require MAT to at least begin the maintenance/recovery progress. MAT programs use both behavioral therapy and medications to manage SUD. The use of medications during treatment and maintenance/recovery has been met with resistance from traditional SUD treatment and support communities because it goes against the abstinence-only model these communities support.

Compliance with Long-Term Care

In order to be successful in long-term care, SUD patients need not only continued support, but also lifestyle changes around healthy living, wellness, and productive engagement. Support can be received from many people and places, including friends, family, and community programs. There are a variety of community programs, including spiritual, religious, and secular recovery programs, to assist people after treatment. These types of recovery programs often use peer-to-peer networks to support the long-term care needs of people in recovery from SUD. Continued success during the maintenance/recovery period requires ongoing character development and hard work to prevent relapse.

Examples

▶ MAT-12:

The MAT-12 model of support is a maintenance/recovery, community-based program that engages SUD patients utilizing MAT in a recovery community. MAT-12 respectfully recognizes that MAT has been proven to improve the likelihood of abstinence from opioids, boost retention and engagement in treatment and post-treatment recovery, reduce cravings for opioids, and lower relapse rates.

▶ POWER House (POWER):

POWER works to help women reclaim their lives from the disease of addiction to alcohol and other drugs, as well as reduce the incidence of addiction in future generations. POWER operates the POWER House, a 25-bed halfway house, which offers an inpatient environment where SUD sufferers can heal. During the six-month stay in the POWER House, women receive treatment and work on establishing healthful lifestyles to maintain sobriety.



Continuing Care

Continuing care and recovery support services provide case coordination and peer recovery support during treatment, service termination, or other critical junctures, such as release from a hospital, detoxification program, or jail. Continuing care provides treatment levels adapted to the person’s changing needs. In addition to peer support, those moving into the continuing care phase of the continuum also may need assistance with family and child care services, vocational assistance, mental health services, housing and transportation services, ongoing medical care, connection to fellowships or other peer support groups, and/or financial and legal services. A robust, comprehensive continuing care program will provide a combination of these therapies and peer support services to meet SUD patients’ needs.

Examples

► **Bridge to Hope:**

The Bridge to Hope organization is a focused support group whose mission is to provide a refuge for families of those affected by SUD by offering continuing care services within the continuum of care framework. Bridge to Hope provides families with encouragement, peer support, reinforcement, empathy, education, coping strategies, and problem-solving skills.

Case Study:

► **Washington SCA Certified Recovery Specialists**

Washington County’s SCA provides training and hires certified recovery specialists (CRSs) to offer peer-to-peer support for individuals currently engaged in SUD treatment, those being discharged from services, or those voluntarily seeking services. A unique aspect of Washington County’s CRS program is that the specialists themselves are in long-term recovery, which offers several benefits to those receiving services. Because they are in recovery themselves, the CRSs are able to provide relatable personal experiences in navigating the treatment/recovery system, serve as a neutral support, and advocate on behalf of the clients. The CRS program is also beneficial to the CRSs themselves. Taking on the CRS role actually aids in the CRS’s own recovery; it provides a sense of purpose and fulfillment through helping others, and it provides the necessary self-care through continued engagement with the local recovery network.

CRSs help people in treatment/recovery by assisting them in navigating outpatient appointments and finding or accessing transportation. Washington County’s SCA also provides up to two months of rental assistance for people engaged in treatment. CRSs are helpful in providing a warm handoff between treatment and recovery options, and they also are available throughout the individual’s

entire continuum of care. When an individual is discharged from treatment, a referral is made to Washington County or the county to which the patient is returning for treatment and recovery.

The SCA currently has CRSs embedded at intercept points throughout the county, including Washington County Children and Youth Services, local hospitals, and the Washington County criminal justice system. The SCA is hoping to expand the CRS program in the county jail as well. With CRSs embedded within these systems, staff and administration have developed a better understanding of SUD. The CRSs have opened their host organizations to cross-system collaborations and training opportunities.

A key contributor to the SCA’s expanded use of CRSs has been the Medicaid expansion as a result of the Affordable Care Act. Because more people have insurance, the SCA does not have to spend as much for uninsured and underinsured people, which has allowed the county to reinvest cost savings into additional case management and recovery support, including CRSs.

Similar CRS services are available in several Western Pennsylvania counties, including Armstrong, Crawford, Indiana, Lawrence, and Westmoreland.



Gaps

The preceding examples highlight only a few of the many efforts currently under way to address the heroin/opioid epidemic in Western Pennsylvania. (A more inclusive summary can be found in Appendix III.) These efforts represent significant work in creating a seamless, sustainable, and successful continuum of care.

However, there are still a number of vulnerabilities along the continuum; those that have been identified are highlighted on the following pages.

Creating a reliable, shared data system can provide a big-picture view of the current problem and ultimately enable key players in the region to work more effectively toward the common goal of saving lives.

Inconsistent Data Collection and Dissemination

One of the greatest potential tools for combatting the opioid epidemic that is not yet at our disposal is the effective identification, collection, and use of comprehensive data. Because this epidemic stretches across regions, classes, and sectors, unique opportunities exist for partnerships among organizations seeking to address it. Coordinating among these stakeholders in order to collect, manage, analyze, and disseminate reliable data in a useful manner, however, is challenging. In addition, data often exist in silos, making it difficult for entities to collaborate and nearly impossible for anyone to locate data gaps. With numerous stakeholders around the nation collecting various types of data, it is important to ensure cooperation.

Federal

Entities such as the CDC and SAMHSA collect and use data to make recommendations and guidelines for stakeholders across the country. For example, the CDC releases weekly morbidity and mortality reports that catalog deaths occurring from various types of opioids, and SAMHSA conducts annual surveys that examine illicit drug use among the U.S. population. Meanwhile, federal law-enforcement agencies, often working in conjunction with state and local officials, collect data on illicit drug activity, seizures, and related criminal behavior. However, because these data are not often shared across agencies, stakeholders have to visit multiple sources to collect and assemble information or, all too often, are unable to obtain the data at all despite their efforts.

State

State policymakers, agencies, and health-related professional licensure organizations collect and/or use data to create guidelines for medical practitioners and others across the Commonwealth. For example, the recently created Pennsylvania Department of Drug and Alcohol Programs is responsible for inspecting drug and alcohol treatment facilities statewide. As a result, the department maintains data on client capacity and services provided.

Also, Pennsylvania's Prescription Drug Monitoring Program (PA PDMP) went live on August 25, 2016. Although dispensers are required to post information to the database within 72 hours after filling a prescription for a controlled substance, prescribers are only required to consult the database the first time they prescribe a qualifying prescription to a patient, or if they have reason to believe that the patient is abusing or diverting the medication.

Local

At the county level, coroners assemble data on causes of death, and county health departments collect data on various public health issues. In addition, many first responders, including police, fire, and EMS personnel, now have data on individuals who have been revived with naloxone. However, a joint report from the Allegheny County Health Department and Department of Human Services stressed the continued critical need for real-time overdose survivor data.

Additionally, SCAs and other entities require data on the treatment side. SCAs and other organizations referring people to treatment do not know the true capacity of treatment centers and the number of available slots, which makes referrals complicated. Additional factors complicate referrals to treatment, including limited space for publicly funded patients, lack of information regarding payer mix by provider, and the fact that treatment facilities contract with multiple SCAs.

Private sector

Pharmaceutical companies, insurers, and health care providers have data along the spectrum of prescription opioid use and abuse. Human services agencies and other nonprofit entities collect data on the individuals they serve and may have information relating to a person's SUD. Due to privacy laws and other regulations, however, this information is not readily available to other stakeholders working to combat abuse and prevent addiction.

These various data sources, when analyzed collectively, form the backbone of successful public health and public safety prevention, intervention, and treatment strategies. However, with so many moving parts, it is no wonder that the collection—never mind management, analysis, and dissemination—of reliable data is challenging. Though daunting, this challenge provides an opportunity for Western Pennsylvania partners to address gaps in and silos of data. Creating a reliable, shared data system can provide a big-picture view of the current problem and ultimately enable key players in the region to work more effectively toward the common goal of saving lives.

Excessive Supply

In 2010, the CDC reported that enough opioids had been sold to medicate every adult in the United States with 5 mg of hydrocodone every four hours for a month.¹¹ Although evidence shows that prescriptions for opioids have waned slightly since peaking in 2011, efforts to curb supply remain an essential part of combatting the opioid epidemic.¹²

Underutilization of Warm Handoffs

A critical element of successfully addressing the opioid epidemic is ensuring smooth transitions to or from treatment services for individuals identified with SUD. This requires a knowledge of key intercept points ensuring that mechanisms are in place that allow for smooth transitions, or warm handoffs. Warm handoffs at intercept points, such as emergency departments, physician offices, law enforcement, discharge from treatment centers, or a release from jail, give those dealing with SUD a better pathway to treatment and recovery.

Limited Treatment and Recovery Options

Even when stakeholders in the community are ready to make a warm handoff, they often encounter barriers in referring someone with an SUD to treatment. There may not be enough open beds, or the beds available may be reserved for patients with a particular type of insurance.

Also, the programs and 12-step groups in existence today may not be sufficient to address the continued and anticipated increase in people recovering from SUDs going forward. In addition to more of the same programs, new programs need to be developed, particularly for individuals recovering from heroin/opioid addiction and their families.

Persistence of Silos

With so many stakeholders engaged along the continuum of care for those with SUD, it is no wonder that the region is seeing myriad responses to the epidemic. However, these efforts will be at best only moderately effective and at worst in vain if they are not coordinated with those of other stakeholders. Efforts need to be made to ensure that stakeholders along the continuum of care are informed about what others are doing, to enable one group to pick up where another has left off and to ensure that there are no gaps in care.

Lack of Community Buy-in

Although the heroin/opioid epidemic has begun to receive attention in the broader media, especially over the past year, the community-at-large is only slowly learning how pervasive this problem is. It will take some time for the public to come to terms with the fact that this epidemic is not localized to one geographic area and that it affects people from all demographic sectors. As a result, all resources need to be utilized to communicate information to make prevention efforts effective and to ensure that responsible and reliable treatment and recovery programs gain community-wide acceptance.

Case Study:

► Gaps in the Continuum of Care

Joan Ward works with Bridge to Hope, a group established over a decade ago to provide support to families of those suffering from SUD. Bridge to Hope offers an alternative structure to Al-Anon and other 12-step or faith-based programs, and the group meets weekly in the North Hills of Pittsburgh.

As a participant in Bridge to Hope and in a number of other related initiatives, Ward has identified a number of gaps in service that individuals with SUD and their families have experienced firsthand in navigating through the system. One of the first challenges families face is the business-model structure of the current treatment system. Often, referrals to treatment are available only during normal business hours (9–5 Monday through Friday); however, the need for treatment is not so conveniently timed. If a person decides to seek help in an emergency room, the medical facility often does not have a warm handoff procedure in place, and individuals who have what's considered a non-medical emergency may leave the hospital with only a phone number and no care plan in place. Also, Ward recognized the need for more places like the Resolve Center in Allegheny County, where detox beds are paired with mental health treatment, for people with dual diagnoses. She notes, "We need to build a system where treatment facilities serve as first responders, not as stand-alone facilities."

We need to build a system where treatment facilities serve as first responders, not as stand-alone facilities.

Even once a treatment provider is identified, insurance can be another barrier. Often families do not understand how payment for treatment works. They may apply for Medicaid first and then wait to contact an SCA until their Medicaid is approved, assuming they even know to contact the SCA for financial assistance in the first place. Individuals with private insurance also face challenges, as their insurance is not always accepted at all treatment providers, or it may not cover all of the treatment they need.

Another dangerous gap for individuals with SUD is the period between treatment and recovery. While individuals may leave treatment with a plan for continuing care in place, recovery options well-suited to them and their needs may not be available to them. Without an adequate support structure in place, which ideally would include support from family members, an individual's chances for success in recovery are diminished.

In order for family members to effectively serve in a support role, they need to have tools, training, and support themselves. Ward references a program called CRAFT (Community Reinforcement and Family Training). Developed by the Partnership for Drug Free Kids, a national foundation, the program trains people to be engaged partners in their family members' recovery. This evidence-based method could be expanded and would help add to the support structure for individuals with SUD.

Finally, Ward echoed the need for real-time data on program effectiveness following implementation. She recounted a story of a program that was designed to provide warm handoffs for people with SUD who presented in a local emergency room. Unfortunately, when the daughter of one of the Bridge to Hope members presented at that emergency room, she was given a list of phone numbers and Web sites instead of receiving an assessment and a direct referral to treatment. Ward was able to provide that information to the researcher in charge of the program, who worked to correct the problems in the implementation. She uses that to illustrate how essential end-user feedback is in improving existing programs and/or developing new ones. Critical to this is ongoing data collection, as opposed to an annual evaluation.

Recognizing that all of these segments operate separately as opposed to as one continuum of care, Ward calls for the creation of an ombudsman who could help shepherd individuals and families along the continuum of care through the processes of intervention, treatment, and recovery.



Recommendations

Virtually all stakeholders recognize the need to supplement the regional initiatives already under way with additional efforts to address the gaps discussed in the previous section. Designed within the guiding principles articulated earlier in this report, the following slate of community-based recommendations, if implemented, would help to strengthen our comprehensive continuum of care aimed at stemming the tide of opioids/heroin in our communities, educating and engaging professionals and the public, reducing overdose deaths, and providing SUD patients with quality treatment options and pathways to full recovery.

The Institute of Politics recommends that strategic community partners, including the Allegheny County Health Department, the Allegheny County Department of Human Services, the Westmoreland and Washington County Drug and Alcohol Commissions, along with law enforcement, researchers, academic institutions, behavioral and physical health care providers, and pharmacies, work in a defined and coordinated manner to ensure the efficient and effective implementation of the recommendations put forth in this report.

Each of the recommendations has clearly identified action steps and timeframes. The timeframes for implementing the recommendations are as follows:

- **Immediate Action Item:** recommendations that can and should be accomplished now
- **Short-Term Goal:** recommendations that can be accomplished by December 2017
- **Mid-Term Goal:** recommendations that can be accomplished by June 2018
- **Long-Term Goal:** recommendations that can be accomplished in June 2018 and beyond

Periodic evaluation of programs is a critical step to determine their success in addressing the opioid epidemic. Opioid programs and this report's proposed reforms should be judged by their ability to improve the health of the region when assessed against key metrics, such as:

- Decreased overdose deaths
- Increased access to naloxone
- Increased opportunity for people to receive treatment
- Increased number of detox beds
- Increased recovery programs for pregnant mothers and newborns suffering from SUD
- Engagement of family, peers, and friends in treatment protocols for themselves and loved ones.

Overdose Death and Overdose Survivor Data

Overdoses affect every community in our region. This stark reality is especially difficult to accept because SUD is preventable and treatable. Providing data to professionals in both the public safety and public health arenas will help to inform and improve policies and practices.

Through the University of Pittsburgh School of Pharmacy's PERU program and the OverdoseFreePA Web site, stakeholders have access to near-to-real-time overdose data submitted by county coroners' and medical examiners' offices from around the Commonwealth of Pennsylvania. Although overdose death data serve an important purpose in prevention and intervention efforts, there also is a great need for overdose survivor data. In alignment with the recommendations put forth by the Quality Improvement, Adverse Events, and Interdiction Committee of the U.S. Attorney's Working Group on Drug Overdose and Addiction, an overdose database should be established and made available to local communities and community leaders. Data on overdose episodes which do not result in a death also should be collected from EMS and hospital emergency departments and possibly integrated into the same database. This information would be helpful in analyzing what enables people to survive overdoses.

- ▶ **Immediate Action Item:** Identify legal, administrative, and operational barriers to the implementation of protocols needed to obtain real-time overdose survivor data.
- ▶ **Short- to Mid-Term Goal:** Implement cross-disciplinary protocols to collect real-time overdose survivor data. Put into place protocols for all first responders, emergency room doctors, and non-EMS responders in the region to ensure that overdose survivor data are sent to SCAs and entered into a database that is also available to the Department of Health at the state level (and at the county level if a county has a health department).
- ▶ **Mid- to Long-Term Goal:** Create a centralized data warehouse that can provide real-time information on perceived threats and risks to public safety and public health in the region. Establishing a data warehouse requires investigating the legal parameters of collecting overdose survivor data to inform its creation. In this warehouse and communication system, evidence-based intervention instructions must be accurately communicated to all stakeholders, and proper education on intervention techniques must be a part of the communication process.

This action item should utilize the ongoing research and efforts already underway at the University of Pittsburgh, UPMC, and the Allegheny County Data Warehouse to integrate real-time data from across the region and state. A critical component in obtaining the data will be to provide resources to sending organizations, like the SCAs, treatment providers, hospitals, and law enforcement, to enable them to have the sufficient capacity to collect and send the data to the warehouse.

Tracking Treatment Availability

SCAs have expressed a need for a uniform tracking system for open beds and outpatient slots that operates in real time, with the hope that such a system would eventually operate statewide.

The University of Pittsburgh School of Pharmacy PERU program's OverdoseFreePA Web site is currently recording and reporting, in as real time as possible, available treatment slots for each participating county in Western Pennsylvania. This work began on August 1, 2016, and will be built out one county at a time until treatment availability in all participating counties is integrated. The following recommendations would help to move toward that goal.

- ▶ **Immediate Action:** Encourage treatment providers to regularly update treatment availability through the Department of Drug and Alcohol Programs (DDAP) and PERU Web sites by including language to that effect in their contracts with SCAs.
- ▶ **Immediate to Mid-Term Goal:** Collect and analyze information on the treatment provider payer mix (private versus government insurance) to streamline the client referral process.
- ▶ **Mid- to Long-Term Goal:** Require all treatment providers statewide to share treatment bed availability to be posted on the DDAP Web site. Currently, providers share this information only voluntarily.

Establish Real-Time Rapid Response within Counties

In a true integration of public health and public safety, rapid response teams should be created in every county to respond to spikes in overdoses. The teams should include first responders, law enforcement, public health professionals, health care professionals, forensic laboratory analysts, and medical examiners. Each county should examine a representative sample of overdoses through a root cause analysis and develop a solution that will lead to potential replicable models. However, these analyses should not identify individuals and should be used only for system refinements.

▶ **Immediate Action Item:** Convene cross-disciplinary leaders to establish protocols to initiate countywide and region-wide rapid-response teams to proactively address opioid-related crises in local communities.

▶ **Immediate Action Item:** Initiate “public health alerts” to warn law enforcement, first responders, and the public when surges of potentially contaminated heroin lead to increases in overdose events. Alerts would also communicate the intention and safeguards of Act 139, indicate where the public can access and administer naloxone, provide access to training on how to recognize an overdose, identify where to contact emergency medical services, provide access to treatment availability information, and communicate about drug take-back events and locations.

▶ **Short-Term Goal:** In alignment with recommendations put forth in the report by the U.S. Attorney’s Working Group on Drug Overdose and Addiction, establish rapid and reliable lines of communication about drug trends and overdose events across public health and public safety organizations and provide real-time reporting systems for overdose events, with proactive measures to avert upsurges in use of particular trending substances.



Emergency Care—Warm Handoffs

Individuals in the throes of SUD present to emergency departments for pain treatment or as overdose survivors. With their 24-hour accessibility and capacity for complex care, emergency departments can potentially serve as a hub for effective, patient-centered care for people living with SUD, enabling physicians to do more than just “treat and street.” If systems were in place, patients who were ready for treatment or those transported by first responders could receive care and be referred to treatment. A warm handoff is a critical next step to assist SUD patients in moving seamlessly and successfully from a variety of potential intercept points, such as a health care provider, a human services organization, or a jail, to treatment and then into recovery.

In this region, this process began in June 2015, when two of the Pittsburgh region’s largest health systems, the Allegheny County Department of Human Services and Allegheny HealthChoices, Inc. (AHCII), launched a two-year pilot program addressing SUD as an underlying cause of hospital admissions. The program, one of the first of its kind in the nation, is supported by a grant from the Centers for Medicare & Medicaid Services. Known as Coordinating Care for Individuals with SUD, Allegheny Health Network’s Allegheny General Hospital and three UPMC hospitals (UPMC East, UPMC McKeesport, and UPMC Mercy) are collaborating with five managed care organizations (Aetna Better Health, Community Care Behavioral Health Organization, Gateway

Health, United HealthCare Community Plan of Pennsylvania, and UPMC for You, Inc.), the Allegheny County Department of Human Services, and AHCI to link individuals with SUDs to appropriate treatment. The project seeks to improve health outcomes; increase opportunities for recovery for individuals with SUD in Allegheny County; and reduce avoidable emergency room visits, repeat hospitalizations, and overall costs. Also, Westmoreland County implemented a warm handoff process in 2014 (as noted in the Prevention case study).

- ▶ **Short-Term Action Item:** Building on the Coordinating Care for Individuals with SUD program, convene pilot project partners, regional SCAs, recovery peer support networks, treatment providers, and law enforcement and first responders to assess best practices and other lessons learned through the Coordinating Care initiative and discuss warm handoff protocols (including SBIRT, physician-initiated buprenorphine treatment, and facilitated referral to treatment).
- ▶ **Mid-Term Goal:** Explore research funding for clinical trials to test financially feasible treatment opportunities.
- ▶ **Mid- to Long-Term Goal:** Building upon Pennsylvania's existing Centers of Excellence, use the patient-centered medical home model to ensure that patients' care, including treatment, is linked to and conducted in coordination with their primary care teams. In 2011, the Institute of Politics Health and Human Services Committee identified patient-centered medical homes as an integral part of a high-quality primary care system, because they are designed around patient needs and recognize the existence of and value in long-term relationships between patients and their primary care professionals. Because patients with SUD often experience additional physical and/or mental health complications, this coordination of care across all providers is critical to ensuring continued recovery and well-being.
- ▶ **Mid- to Long-Term Goal:** Establish drug courts in all 25 counties in Western Pennsylvania. As of 2016, drug courts existed in the following counties in Western Pennsylvania: Allegheny, Blair, Butler, Clarion, Erie, Indiana, Lawrence, Warren, Washington, and Westmoreland.

A warm handoff is a critical next step to assist SUD patients in moving seamlessly and successfully from a variety of potential intercept points, such as a health care provider, a human services organization, or a jail, to treatment and then into recovery.

Emergency Care—Hard Handoffs

With the increased use of naloxone to revive overdose victims, first responders administering the drug are encountering a new challenge. Many police, fire, and EMS personnel report that the satisfaction they experience in saving a life is mitigated somewhat by the frustration they feel at having to return to the same locations multiple times in a week or even a day to administer naloxone, sometimes even to the same individual. This is particularly a problem for EMS personnel, especially those in rural areas, where overdose victims face longer transport times and less access to medical facilities.¹³ First responders may be encouraged that their efforts are not in vain if they were required by law to transport a patient to an appropriate facility following the individual's revival with naloxone. Additionally, hard handoffs would help to ensure that people suffering from SUD receive the treatment and support they need.

- ▶ **Short-Term Action Item:** Determine what other states are doing in terms of involuntary, court-ordered committals of overdose victims, and examine the roles of family, friends, courts, and physicians.
- ▶ **Mid-Term Goal:** Institute a hard handoff protocol for people revived by first responders following an overdose. The hard handoff would require the overdose survivor to spend 72 hours under monitored care while receiving medical treatment.

Care for Families

SUD affects not only the people going through it, but also their families. A critical element of a successful recovery is having a strong network in place to provide social, emotional, and financial support. Family support centers can provide services that address the needs of families dealing with SUD and training that empowers families to better support their loved ones.

- ▶ **Mid-Term Goal:** Develop or enhance programs in communities that:
 - Address the interdependent nature of family relationships
 - Educate families about SUD
 - Learn from families about what they view as working and not working in terms of treatment protocols for SUD patients; i.e., hotlines, warm handoffs, treatment availability, etc.
 - Educate families on the emotional, psychological, financial, and physical impact of SUD on family members. Connect these families to established supports, e.g., Al-Anon, Nar-Anon, Bridge to Hope, and Sage's Army
 - Develop family training groups that offer evidence-based "non-enabling" strategies in dealing with family members with SUD
 - Involve family members in SUD treatment and continuing care plans for SUD patients
 - Encourage families to become engaged in treatment even when the family member with SUD is not ready
 - Develop special programming for children of individuals with SUD
 - Expand current treatment offerings, including integration of mental health and behavioral health programs.
- ▶ **Mid-Term Goal:** Expand evidence-based clinical and treatment programming at regional mental and behavioral health and healthcare facilities to include families and children living with SUD.

A critical element of a successful recovery is having a strong network in place to provide social, emotional, and financial support.

Increase Access to Naloxone

In May 2015, Karen Hacker, MD, director of the Allegheny County Health Department, issued a standing order for naloxone across the county. In October 2015, Pennsylvania Physician General Rachel Levine followed suit and issued a statewide standing order. In addition, education and prevention efforts have been under way to educate and train public health and public safety officials and the general public on the intentions, protections, and misconceptions of Act 139 of 2014 (the Good Samaritan Law), with the aim of increasing the use of naloxone to save lives.



Despite these efforts, many police and other first responders do not carry naloxone, and many pharmacies do not stock it. Political, administrative, fiscal, and structural barriers exist to implementing programs that would increase availability and save lives. In response, programs that have demonstrated success in overcoming these barriers must be replicated in order to ensure more universal access to naloxone.

- ▶ **Immediate Action Item:** Identify and convene first responder and independent/chain pharmacy leadership to understand barriers to training programs, procedures, and stocking of naloxone kits.
- ▶ **Short- to Mid-Term Goal:** Increase first responder utilization and pharmacy dissemination of naloxone through targeted outreach to and/or training for those groups.

Drug Diversion—Drug Take-Back Program

With increased public awareness about opioid addiction and misuse, efforts are being made by communities, law-enforcement organizations, and medical professionals to educate consumers about the best methods of disposal of opioids when they are no longer needed for treatment. Drug-disposal facilities, DEA drug take-back days, and mail-back programs exist in many communities across the nation to ensure environmentally responsible removal of these drugs.

Opioid Supply Reduction Efforts (Self-Reported by Counties)¹⁴

County	Drug Take-Back Days (per year)	Drug-Collection Boxes
Allegheny	Unknown	4
Armstrong	3	4
Beaver	2	2 (plans for 9 more)
Butler	1	8
Fayette	2	0
Indiana	3	4
Lawrence	Unknown	3
Washington	2	26
Westmoreland	5	23

- ▶ **Immediate Action Item:** Convene appropriate regional authorities, including the DEA, law enforcement, county officials, and others, to assess the strengths and weaknesses of the current community drug-diversion efforts to inform the development of a regional plan for a more robust and uniform drug and needle take-back and disposal program.
- ▶ **Mid-Term Goal:** Expand the use of drug mail-back programs and increase the number of pharmacies offering prescription mail-back programs. Early efforts will target CVS and Giant Eagle.
- ▶ **Long-Term Goal:** Explore ways in which pharmaceutical companies can play a larger role in combatting the opioid epidemic.



Providers: Stemming the Tide

It is now commonly accepted that the wide availability of prescription opioids has contributed to the heroin/opioid epidemic. Recently, both the federal government and the state issued guidelines regarding the safe prescribing of opioids. Although many medical professionals have decided to take independent action to adhere to these guidelines, health systems, states, and professional licensure organizations are taking steps to ensure that all prescribers are adopting best practices in order to reduce the number of people who develop SUD as a result of prescription opioids.

- ▶ **Immediate Action Item:** Require providers to adhere to federal and state guidelines for safe prescribing of opioids.
- ▶ **Short- to Mid-Term Goal:** Work with statewide public and private agencies to require the use of and broaden the scope of use of the Prescription Drug Monitoring Program.
- ▶ **Short- to Mid-Term Goal:** Develop and implement cross-discipline (medicine, dental medicine, pharmacy, nursing, public health, social sciences) mandatory drug and alcohol training programs.
- ▶ **Mid-Term Goal:** Ensure that every provider in Western Pennsylvania completes comprehensive prescriber education/training on safe and competent use of opioids.



Conclusion

In the past five to ten years, the 25 counties of Western Pennsylvania have seen a dramatic increase in the number of accidental deaths due to heroin/opioid overdoses. The problem has now reached epidemic proportions.

As U.S. Attorney Hickton has noted, we cannot incarcerate our way out of this problem. Addressing the epidemic requires a complex system that effectively marries public health and public safety strategies along a continuum of care that takes into account all possible intercept points. The region's successful emergence from this epidemic truly depends on stakeholders' ability to interact with and treat people at all points in the system: at hospitals and health care providers' offices, in jails and other areas of the criminal justice system, in the community at churches or human service agencies, and at schools and places of employment. Such a system should include:

- **Access to data across sectors (health, law enforcement, government) and among levels (federal, state, and local governments, as well as the private sector)**
- **Effective lines of communication for the purpose of reporting data, sharing information, conducting training, and ensuring adherence to best practices**
- **Trained stakeholders at all known intercept points who have a basic understanding of addiction and where to send someone for help.**

The strategy put forth in this report is designed to provide a structure that can be used by stakeholders in Western Pennsylvania and beyond to build upon strengths and assets and create a system that will effectively stem the tide of opioid-related overdoses and deaths. Researchers at the University of Pittsburgh and other entities will continue to play a large role in moving the region forward as they make new discoveries that improve the efficiency and effectiveness along the continuum of care. This work, coupled with the foundation that has been built by regional leaders noted in this report, makes overcoming this epidemic a challenging but not insurmountable goal.

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Finding 1:

Public safety and public health strategies in response to opioids must be integrated and complementary.

- 1.1 Recommendation:** Prevent opioid misuse and abuse by ensuring safe and appropriate prescribing.
 - a. Require practitioners (such as physicians, dentists, and others authorized to prescribe) who request DEA registration to prescribe controlled substances to be trained on responsible opioid prescribing practices as a precondition of registration.
 - b. States should consider adopting or recommending uniform prescribing guidelines.
 - c. Patients should be informed and empowered so they can actively participate in their pain management and make informed decisions.
 - d. Consistently and proactively enforce safe prescribing practices.
- 1.2 Recommendation:** Integrate data management, reporting, and analysis.
 - a. Support interstate interoperability and use of Prescription Drug Monitoring Programs.
 - b. Disrupt supply and focus prevention, treatment, and intervention resources through coordinated, real-time sharing of accurate data.
- 1.3 Recommendation:** Reduce the excessive supply of opioids through strategic enforcement mechanisms with assistance from community partnerships.
 - a. Prioritize prosecution of medical professionals who improperly prescribe opioids.
 - b. Prioritize prosecutions of heroin distributors, especially when the drug causes death, and enhance investigation and prosecution techniques for targeting the drug supply chain.
 - c. Encourage and promote safe drug disposal.
- 1.4 Recommendation:** Enlist pharmaceutical companies to address the harms associated with prescription opioids.
- 1.5 Recommendation:** Look to examples of promising robust public health–public safety partnerships to inform development of effective strategies.
- 1.6 Recommendation:** Prevent overdose deaths through the effective use of naloxone, real-time communication, and Good Samaritan laws.
 - a. Ensure access to naloxone.
 - b. Provide immediate and comprehensive care to those administered naloxone.
 - c. Consider state limited-liability laws to shield those who administer naloxone and Good Samaritan laws for witnesses seeking medical help.
 - d. Develop public safety and public health real-time rapid-response strategies for overdose events.

Finding 2:

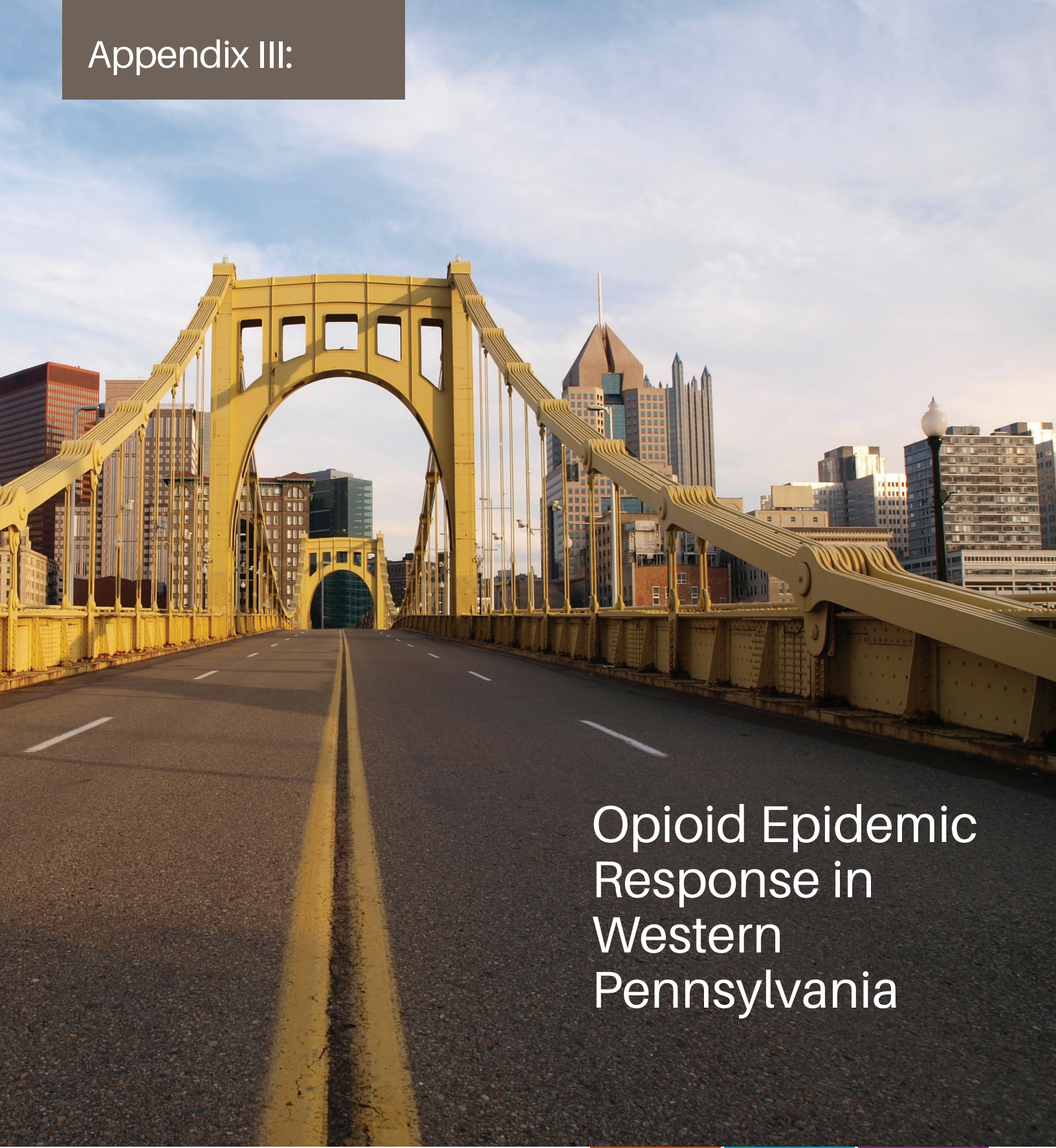
Policies regarding opioid and heroin use must be grounded in scientific understanding that SUD is a chronic brain disease that can be prevented and treated, leading to recovery.

- 2.1 Recommendation:** Provide linkages to services at the first sign of an opioid-use disorder.
 - a. Apply a continuum of care approach to the problem of opioid-use disorder.
 - b. Implement screening, assessment, and linkage to treatment.
- 2.2 Recommendation:** Make effective treatment for opioid-use disorder, including MAT, readily available and as accessible as other chronic disease treatments.
 - a. Make evidence-based MAT readily available.
 - b. Incorporate treatment for opioid-use disorder, including MAT, into the criminal justice system.
- 2.3 Recommendation:** Support the availability of long-term treatment and recovery services.

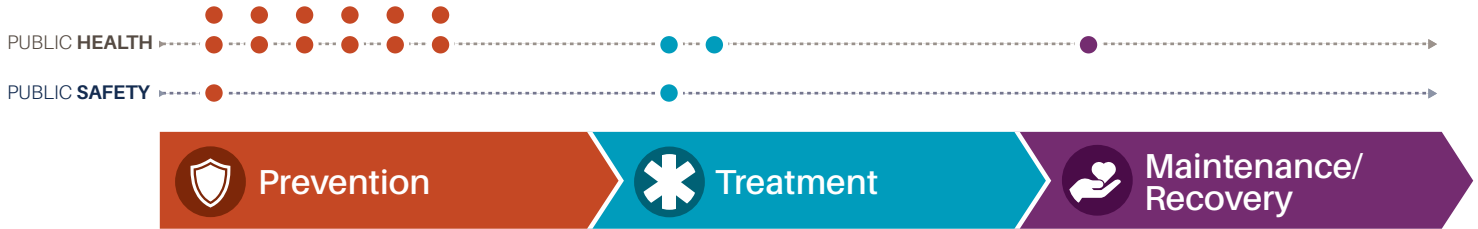
Finding 3:

Visible community-based recovery supports must be available, affordable, and accessible.

- 3.1 Recommendation:** Implement coordinated community responses to promote prevention at the local level.
- 3.2 Recommendation:** Improve opioid training and expertise of public and private health care providers.
 - a. Ensure greater availability of SUD and recovery support specialists throughout the country.
 - b. Improve training and expertise of all health care professionals on treatment options for SUD.
- 3.3 Recommendation:** Take steps to mitigate public health and public safety consequences of injection-drug use at the local level.



Opioid Epidemic Response in Western Pennsylvania



University of Pittsburgh

Preventing SUD before it happens is a common-sense, cost-effective approach to promoting a safe and healthy campus community. Preventing drug abuse—including prescription-drug abuse—improves quality of life; increases students’ chances of living productive, healthy lives; improves academic performance; and lowers health care costs.

Although few data indicate that any one program is particularly effective in preventing substance abuse on campus, research has indicated that incorporating multiple approaches involving several stakeholders may be most effective. Successful drug-abuse prevention programs help students act in a responsible manner and create an environment that supports healthy behaviors.



STUDENT EDUCATION PROGRAMMING

Student-Focused Prevention Programs

PUBLIC HEALTH

The University of Pittsburgh has recognized the need to educate students about the risks of prescription-drug use to counteract common misperceptions. Many young adults perceive prescription drugs as safer than illicit drugs, but both are dangerous when abused. To improve student understanding about the risks of prescription drugs, the university has implemented several programs to educate students about safe alcohol and drug consumption and the consequences of risky substance-use behaviors. Part of this awareness campaign led by university experts and students promotes safe use, storage, and proper disposal of medications. The University of Pittsburgh Student Pharmacy also sells over-the-counter naloxone kits, including an educational insert, with each opioid prescription. The university will also provide funding and promote substance-free events on campus.

Recovery Programs

PUBLIC HEALTH

Collegiate Recovery Programs (CRPs) offer support, opportunity, and hope for students in recovery from addiction. The university is creating a dedicated gathering space with supportive staff and programming; identifying a dedicated housing option; and recruiting support from faculty, staff, and alumni to establish a CRP on campus. As part of this initiative, the university will work to streamline the referral process for treatment, invite addiction experts to provide continuing medical education for staff, and evaluate the feasibility of providing holistic services such as acupuncture and acupressure.

STUDENT CLINICIAN AND PHYSICIAN PROGRAMMING

PUBLIC HEALTH

The University of Pittsburgh will educate clinicians on safe opioid prescribing. This education and training will establish clear prescription guidelines for opioid medications that consider alternative medications and treatment options when appropriate, increase and document patient education when an opioid is prescribed (such as the “Talk Before You Take” initiative), expand training in regard to recognition and emergency treatment of an opioid overdose and withdrawal (including naloxone administration), expand patient assessment in the university’s Student Health Service to better identify the dependence-producing potential of patients and adjust treatment options accordingly, and prepare clinicians for the implementation of Pennsylvania’s prescription monitoring program.

UNIVERSITY FACULTY AND STAFF PROGRAMMING

Law and Policy Enforcement— Review Responsible Action Protocol

PUBLIC SAFETY

University law enforcement will make efforts to identify prescription-drug abuse and diversion programs, receive education and training as a potential liaison for referral to medical and treatment services, carry and utilize naloxone, and promote student awareness about the legal consequences of prescription-drug abuse.

Employee Assistance Program

PUBLIC HEALTH

The university provides education and outreach opportunities regarding prescription-drug SUD for staff and faculty. As part of this program, the University of Pittsburgh Staff Association Council (SAC) hosted an Opioid and Heroin SUD lecture to university staff and faculty in May 2016. The session provided resources and outreach support to increase awareness within the university and community.

Department of Psychiatry

PUBLIC HEALTH



The Department of Psychiatry's Addictions Fellowship program is designed to provide training to future leaders of the multidisciplinary teams needed for effective addiction treatment. Fellows will function as fully integrated team members at both WPIC and the VA Pittsburgh Healthcare System.

The department is also now offering an Accreditation Council for Graduate Medical Education–accredited fellowship in addictions psychiatry at WPIC and the VA Pittsburgh Healthcare System. Fellows will have a comprehensive understanding of the pharmacology of all commonly used substances, as well as the actions of pharmacological agents used to treat these conditions.

Pain Management and SUD Interdisciplinary Training Programs

PUBLIC HEALTH



The university's pain management and SUD interdisciplinary training programs provide interprofessional health sciences students with enhanced training in primary, secondary, and tertiary prevention strategies regarding prescription drug use, misuse, and abuse. With a strong foundation in identifying SUD and referring patients to appropriate treatment, students are better prepared to enter residency training and to provide improved patient care as future physicians.



University of Pittsburgh School of Medicine

PUBLIC HEALTH



University of Pittsburgh medical students learn about the opioid epidemic, pain management, opioids, addiction, and related subjects starting in their first year and continuing throughout their four-year curriculum. Sessions include a range of perspectives, from the cellular and molecular level, to behavioral considerations, to the impact on society. The core curriculum on these subjects includes:

- Patient-physician communication skills, including SBIRT and motivational interviewing
- Physiology of pain and pain perception
- Pharmacologic and non-pharmacologic treatment approaches
- Safe prescribing practices
- Addiction and treatment
- Treatment of acute complications, including intoxication, overdose, and withdrawal
- Encounters with standardized patients, simulations, and online interactive modules, plus typical lectures and case discussions.

Medical students learn about addiction and the opioid epidemic through a longitudinal curriculum. The overall experience establishes a solid foundation in generalizable principles, then helps students develop specific patient care skills in screening, counseling, prescribing, and related aspects of treatment. Ultimately, students are well-prepared for their subsequent experiences as resident physicians, when they will continue to cultivate knowledge and skills in safe prescribing and patient care as they train in their chosen clinical specialties. Beyond classroom training, medical students are taught and assessed on these subjects in numerous standardized patient cases spread across the four-year training program.

SCHOOL OF PHARMACY

American Association of Colleges of Pharmacy: Taking the Pledge

PUBLIC HEALTH



Beginning in the fall 2016 semester, 54 U.S. colleges and schools of pharmacy began to educate student pharmacists about life-saving overdose interventions, including naloxone, and demonstrate how to counsel patients, individuals, and families who may encounter persons at risk from opioid overdose.

Program Evaluation and Research Unit (PERU)

PUBLIC HEALTH



The School of Pharmacy is also working to prevent overdoses in the community through the OverdoseFreePA Web site developed by PERU. The School of Pharmacy is using the Web site to establish a centralized, meaningful, evidence-based resource that can effectively support existing multidisciplinary efforts within participating counties to reduce overdoses and overdose deaths.

PERU also established the new Pennsylvania Heroin Overdose Prevention Technical Assistance Center (TAC). The TAC will help communities develop viable coalitions that can effectively address overdoses and overdose deaths using evidence-based strategies. The center expands the resources of the current OverdoseFreePA Web site to include additional community pages, a compendium of evidence-based practices presented in an evidentiary hierarchy, resources communities can use to develop and maintain healthy and effective coalitions, and more county-specific death data after the data have been cleaned according to a protocol developed by the Allegheny County Medical Examiner.

SBIRT Training Initiatives

PUBLIC HEALTH



Funded by SAMHSA, this training initiative provides SBIRT training and evaluation support. This training initiative includes the School of Pharmacy's partnership with the Allegheny Singer Research Institute for the POSITIVE program and a partnership with Chatham University, the University of Science, and Morehouse College regarding SBIRT Health Professions Student Training.

Allegheny County Overdose Prevention Coalition

PUBLIC HEALTH



The Allegheny County Overdose Prevention Coalition (ACOPC) is an independent collaboration of organizations and individuals with the mission to reduce overdose deaths in Allegheny County. ACOPC implements prevention, intervention, and treatment strategies in a variety of locations and settings that target individuals at varying levels of risk for overdose.

ACOPC has developed the Safe Landing initiative, which is designed to (a) improve identification of patients who are overdosing or are at increased risk for overdosing and (b) facilitate access to support and/or treatment services when patients affirm willingness. Safe Landing uses the evidence-based approach of SBIRT to identify and intervene with persons who are at elevated risk of harm from the use of alcohol and other drugs.

Clinical Standards Committee

PUBLIC HEALTH



The Clinical Standards Committee represents stakeholders in Pennsylvania for the purpose of helping the committee develop policies and products to support optimal SUD treatment outcomes.

SCHOOL OF DENTAL MEDICINE

PUBLIC HEALTH



Dentists largely focus their professional practice on prevention, control, and relief of pain associated with oral diseases and conditions. Thus, pain management is emphasized in dental education. Throughout their four-year curriculum, dental students learn about pain management, opioids, addiction, the opioid epidemic, and related topics. The University of Pittsburgh's School of Dental Medicine's course work covers material from a cellular and molecular level, individual behaviors, and the current opioid epidemic. Preclinical and didactic courses with clinical components are included.

In 2012, School of Dental Medicine educational researchers were funded to establish a Center of Excellence for Pain Education (COEPE). The COEPE's major activity is to develop interdisciplinary, interactive online case modules addressing pain management. Health professional students from dentistry, medicine, nursing, and other schools use the modules throughout their curricula. Among the seven case topics, two are particularly relevant to the opioid epidemic: "Opioid Misuse Following Third Molar/Wisdom Teeth Extraction" and "Metastatic Cancer Pain."



SCHOOL OF NURSING

PUBLIC HEALTH



The School of Nursing requires its undergraduate students to take several courses that address opioids, SUD, and pain management. Students learn about SUD in adults, adolescents, and nurses. Additionally, students examine treatment options for acute and chronic pain. During a required obstetrics course, nursing students also learn about substance abuse during pregnancy, pain management during labor, and newborns' exposure to opioids. Nursing students also learn about the opioid epidemic and naloxone treatment for opioid overdoses.

Beginning in the fall 2016 semester, the School of Nursing began requiring advanced practice registered nursing students to take some form of prescriber education by the time they graduate, in line with the CDC's Guideline for Prescribing Opioids for Chronic Pain.

OPIOID RESEARCH

Clinical and Translational Science Institute

PUBLIC HEALTH

Research

In July 2016, the National Institutes of Health awarded the Clinical and Translational Science Institute (CTSI), a collaboration between the University of Pittsburgh Schools of the Health Sciences and UPMC, a \$46 million grant to help launch the Precision Medicine Initiative's (PMI) Cohort Program. The PMI Cohort Program is a longitudinal research study that will engage more than one million participants nationwide, tracking them to gather a wide range of health, environment, and lifestyle information. As part of the information-collection process, participants will also contribute information on substance use, misuse, and abuse. Participants may be given mobile applications or devices to use for data collection.

Locally, CTSI is leading the local effort for this project, called the Precision Approach to healthCARE (PA CARES). This effort will launch 11 enrollment sites across Western Pennsylvania. PA CARES will enroll 175,000 individuals over five years. Information collected by PA CARES and other organizations across the United States will be used to revolutionize research and clinical care through both the massive comprehensive collection of participant information and advanced big-data analytics.

School of Medicine

PUBLIC HEALTH

Research 

The University of Pittsburgh School of Medicine is engaged in a variety of research projects regarding opioids and potential treatment options. As part of this work, in 2014, the University of Pittsburgh created the Brain Institute, which aims to unlock the mysteries of normal and abnormal brain function and use this new information to develop novel treatments and cures for brain disorders. The goal of the institute is to enable investigators to perform high-risk, high-impact neuroscience that will transform lives. Other opioid research initiatives of the School of Medicine include the following.

Title	School	Description
<i>Growth Factor Inhibition to Treat Chronic Pain and Addiction</i>	Anesthesiology	This study will determine whether RTK inhibitors will block opiate addiction and/or relapse in addicts. The second phase will determine whether RTK inhibitors reduce opioid use, side effects, and addiction liability in chronic pain patients.
<i>The Role of RTK Signaling in Opioid Tolerance</i>	Anesthesiology	Researchers have discovered that clinically used RTK inhibitors can completely eliminate opioid tolerance. These studies will further determine the mechanisms underlying this profound effect.
<i>Regulation of Protein Kinase C-Mediated Dopamine Transporter Endocytosis In Vivo</i>	Medicine Biology	This work explores the role of a specific enzyme involved in cellular communication in controlling the function of the dopamine transporter, a regulator of dopamine nerve impulses that is responsible for re-uptake of dopamine back into the pre-synaptic neuron. Results could eventually lead to the identification of new therapeutic targets for controlling dopamine signaling in psychiatric disorders and disease.
<i>Improving Linkage to Outpatient Services for Emergency Department Patients Seeking Treatment for Opioid Abuse Using a Novel Text Message Program</i>	Emergency Medicine	This program will facilitate access to rehabilitation programs for adults with opioid problems after they present to an emergency department and will provide ongoing (daily) text-message contact after they are discharged.
<i>Variations in Physician Opioid Prescription Habits Based on Patient Risk</i>	Emergency Medicine	This is a retrospective chart review to compare emergency department physician analgesic prescribing with patient opioid abuse risk based on the Opioid Risk Tool.
<i>Individual Differences in Response to Pain Treatment in the Emergency Department</i>	Emergency Medicine	This research will use quantitative sensory testing to determine response or lack of response to acute pain treatment in the emergency department, with a focus on effectiveness of opioid analgesics.
<i>Drug-Related EMS Calls and Pathways to Overdose Cardiac Arrest</i>	Emergency Medicine	This work examines regional EMS data to determine incidence and outcomes of paramedic encounters for overdose, with attention to identifying factors that lead some cases to progress to cardiopulmonary arrest.
<i>Epidemiology and Prehospital Electrophysiology of Overdose Out-of-Hospital Cardiac Arrest</i>	Emergency Medicine	This work examines a very large database of prehospital electrocardiograms and links to patient care reports to understand best treatment of overdoses that progress to cardiopulmonary arrest.
<i>Pathways to Adult Substance Use and Abuse from Childhood ADHD in the MTA (Multimodal Treatment Study of Children with ADHD)</i>	Medicine Psychiatry	This project studies the risk of SUD in children with attention-deficit/hyperactivity disorder (ADHD). The results will document the magnitude of the risk, the types of substances that are problematic, the ages at which this risk becomes apparent, and the reasons for the risk (factors that increase and decrease the risk).

Other opioid research initiatives of the School of Medicine *(Continued)*

Title	School	Description
<i>Training Program in the Neurobiology of Substance Use and Abuse</i>	Medicine Psychiatry	This grant will establish a program that will provide enhanced training in the neurobiology of substance use and abuse. The overarching goal is to produce research scientists with a broad base of knowledge in this area, as well as the skills needed to succeed as independent investigators.
<i>Development of Substance Use in Girls</i>	Medicine Psychiatry	This renewal application for the Pittsburgh Girls Study, a large community sample (N = 2,451) of Caucasian and African American girls, will provide for five further annual substance-use assessments, covering ages 15–22, a period of peak risk for the development of substance use and HIV risk behaviors in girls.
<i>Identifying Mediated Pathways of Risk for Substance Use in Sexual Minority Girls</i>	Medicine Psychiatry	The primary goal of this study is to identify specific mediated pathways of risk for substance use among sexual minority girls. Recent meta-analysis results showed that the odds of adolescent substance use for this population were 400% higher than they were for heterosexual girls. However, no studies to date have articulated and tested mediated pathways of this disparity, and no intervention studies have been conducted.
<i>Stress Reactivity and Substance Use among Sexual Minority Girls</i>	Medicine Psychiatry	The central goal of this study is to examine physiological and emotional reactivity to social stressors among sexual minority girls, as well as their prospective associations with substance use and abuse.
<i>Buprenorphine for Late-Life Treatment-Resistant Depression</i>	Medicine Psychiatry	Up to one-half of older patients with major depression develop late-life treatment-resistant depression (LL-TRD). Consequences of LL-TRD include suicide, worsened medical conditions, increased caregiver burden, and higher all-cause mortality. Targeting the opiate system in LL-TRD tests a novel approach to this public health problem. Buprenorphine is an opioid with possible antidepressant effects. This project will examine the safety and clinical effect of low-dose buprenorphine in LL-TRD and provide mechanistic information about how buprenorphine affects the brain.
<i>Role of NPAS2 in the Nucleus Accumbens in Drug Addiction</i>	Medicine Psychiatry	This proposal will help uncover the molecular mechanisms in reward-related brain circuits that regulate drug reward and help determine the optimal targets for future therapeutic treatments.
<i>Appalachian Tri-State Node</i>	Medicine Psychiatry	This funded application will improve the quality of drug-abuse treatment throughout the country by conducting studies of behavioral, pharmacological, and integrated treatment interventions in rigorous, multisite clinical trials to determine effectiveness across a broad range of treatment settings and diversified patient populations; it will also ensure the transfer of research results to physicians, clinicians, providers, and patients.

School of Arts and Sciences

PUBLIC HEALTH

Research

The University of Pittsburgh School of Arts and Sciences is engaged in the following research regarding opioids.

Title	School	Description
<i>Glial-Mediated Synaptic Remodeling in Drug Addiction</i>	Arts and Sciences	This research will determine how NAc excitatory synapses are refashioned in cocaine- and morphine-exposed mice by glia-mediated synaptogenesis or synaptodegeneration. It will also determine the behavioral consequences of drug-induced, glia-mediated synapse and circuitry remodeling using the mouse model of incubation of cue-induced drug craving.
<i>National Institutes of Health (NIH) Pain Consortium Centers of Excellence in Pain Education</i>	Domestic Higher Education	The NIH Pain Consortium has funded eleven health professional schools designated as Centers of Excellence in Pain Education. The centers will act as hubs for the development, evaluation, and distribution of pain-management curriculum resources for medical, dental, nursing, pharmacy, and other schools to enhance and improve how health care professionals are taught about pain and its treatment.
<i>University of Pittsburgh Center of Excellence in Pain Education: Pain Challenges in Primary Care</i>	Domestic Higher Education	This is a collaborative project to develop interactive virtual cases of opioid misuse in cases ranging from extraction of wisdom teeth to widespread pain and fibromyalgia.

University of Pittsburgh Center for the Neural Basis of Cognition and Carnegie Mellon University BrainHub Neuroscience Initiative

PUBLIC HEALTH

Research

Research by the University of Pittsburgh Center for the Neural Basis of Cognition and Carnegie Mellon University BrainHub Neuroscience Initiative aims to elucidate how receptor localization changes in response to pain and medication represent a different way to address the challenge of developing a non-addictive analgesic drug. Scientists seek to learn how to control what happens to the receptor once activated by the drug in hopes that they can learn how to better control the body's response to opioids.





Health Policy Institute

PUBLIC HEALTH

Research

The Health Policy Institute's Comparative Effectiveness Research Center will lead a \$14 million clinical trial to determine how well an intervention that helps people better understand their back pain early works toward promoting recovery and keeping the pain from becoming chronic in the future. The center bridges the University of Pittsburgh's Schools of the Health Sciences and UPMC, providing a multidisciplinary platform and research infrastructure for patient-centered comparative effectiveness research across all of the health sciences. UPMC will be the first in the trial to offer the intervention, followed by four other academic medical centers nationwide.

The study will examine the transition from acute lower back pain to chronic lower back pain and compare two approaches that can be delivered in a primary care office. The first approach allows physicians to do what they think is best, which is termed "usual care." The second approach teams up physicians with physical therapists to deliver cognitive behavioral therapy, a specialized therapy designed to help patients put their lower back pain in perspective, allowing them to identify and overcome barriers to recovery.

Graduate School of Public Health

PUBLIC HEALTH

Research

The Graduate School of Public Health is engaged in a series of research initiatives regarding the opioid epidemic. Experts from the Graduate School of Public Health are:

- Compiling hospital discharge data to identify ZIP codes with high rates of overdose to assess what factors correlate with addiction.
- Working with Prevention Point Pittsburgh to identify factors that prohibit or improve access to naloxone.
- Utilizing public repository of mortality records to identify data that can assist law enforcement and treatment providers in targeting individuals likely to overdose; locating high-trafficking areas; and identifying users' neighborhoods. This information might identify risk factors to help distinguish prescription-opioid users from heroin users.
- Developing thresholds to identify over-use of prescription opioids.
- Utilizing public user profiles on social media sites to track drug-related conversations in real time.
- Developing predictive computational modeling using real-time data, mathematics, and computer science to study the opioid epidemic.

Additional studies are listed on the following page.

Title	School	Description
<i>An Examination of Individual-Level Overdose Mortality in Pennsylvania, 1999-2015</i>	Public Health	This proposed project will expand upon previous analyses of accidental poisoning (overdose) mortality data in the Commonwealth of Pennsylvania by examining measurements of built solutions and recovery capital by each community as they address their problem.
<i>Can Social Media Be Used as a Real-Time Surveillance System for Opioid and Heroin Drug Abuse?</i>	Public Health	This application explores the use of social media “big data” as a means for real-time surveillance of opioid and heroin use, which could be used for more accurate and timely allocation of critical drug-related health services.
<i>Developing Optimal Criteria for Identifying Overuse of Prescription Opioids in Pennsylvania Medicare and Medicaid</i>	Public Health	The goal of this project is to develop optimal thresholds to identify overuse of prescription opioids.
<i>Community-Engaged Research and Agent-Based Modeling to Improve Narcan Distribution and Reduce Opioid Overdose Deaths</i>	Public Health	This proposed study is a collaborative effort between Graduate School of Public Health faculty and Prevention Point Pittsburgh to identify which specific strategies are likely to increase the distribution and use of Narcan to the extent necessary to significantly decrease opioid-related overdose deaths.
<i>Social Ecological Contexts of Opioid Use and Overdose in Pennsylvania: A Mixed-Methods Study</i>	Public Health	The aims of this pilot proposal are to: (1) investigate whether hospital discharges due to opioid abuse and dependence and poisoning (overdose) spread across space over time in Pennsylvania, as well as assess the relative contribution of ecological factors to the growth in opioid-related hospital discharges; (2) identify high-risk ZIP codes in Pennsylvania; and (3) use a community-engaged needs assessment to involve local key stakeholders in identifying resources, risk factors, and intervention opportunities.
<i>Use of Linked Data to Investigate Opioid-Related Hospitalizations and Mortality in Pennsylvania</i>	Public Health	This study will describe the demographic and geographic (socioeconomic status, rural versus non-rural) characteristics of individuals who have been admitted to a Pennsylvania hospital for one or more incidents of opioid overuse/overdose for 2000-2014. It will assess the temporal trends of fatal and nonfatal opiate overuse/overdose by age, race, and geographic area.
<i>Enhancing the Access and Quality of MAT for Individuals with Opioid-Use Disorder in Rural Pennsylvania’s Medicaid Primary Care Practices</i>	Public Health	This project will implement and evaluate an intervention targeting primary care practices in 23 rural counties with high opioid-overdose rates to boost access to MAT among Medicaid enrollees.
<i>Is Risk of Neonatal Abstinence Syndrome Different among Infants Exposed to Buprenorphine or Methadone In Utero after Accounting for Prescribing Preferences?</i>	Epidemiology	These researchers are using a retrospective cohort of women delivering at Magee-Womens Hospital to assess the association of methadone and buprenorphine with neonatal abstinence syndrome in women being treated for opioid dependence.
<i>Prevalence and Patterns of Opioid Prescribing after Delivery among Medicaid-Enrolled Women</i>	Health Policy and Management	This project will examine the prevalence of opioid prescribing for pain management after delivery among Medicaid-enrolled women, as well as determine the extent to which opioid prescribing is explained by patient- or provider-level characteristics.

The University of Pittsburgh School of Pharmacy is engaged in the following research initiatives.

Title	School	Description
<i>Detecting Prescription Opioid Users at Risk for Opioid Dependence</i>	Pharmaceutical Sciences	This study will detect individuals who are receiving opioid medicine and are vulnerable to developing dependence for routine screening in the pharmacy.
<i>Effect of Opioid Maintenance Therapy on Cytotrophoblast Function</i>	Pharmaceutical Sciences	This study will evaluate cytotrophoblast function and syncytialization in opioid maintenance therapy during pregnancy.
<i>Metabolism and Transport of Buprenorphine in Human Hepatocytes</i>	Pharmaceutical Sciences	This study evaluates the factors that regulate metabolism and transport of buprenorphine using human hepatocytes.
<i>Physiologically Based Pharmacokinetic Modeling of Buprenorphine</i>	Pharmaceutical Sciences	This study aims to develop a physiologically based pharmacokinetic model for buprenorphine in order to predict factors that impact its exposure in patients.
<i>Impact of Pregnancy on Buprenorphine Pharmacokinetics and Pharmacodynamics</i>	Pharmaceutical Sciences	This study evaluates the impact of pregnancy on dosing requirements of buprenorphine, a therapeutic option for opioid addiction.
<i>Increasing Access to MAT in Rural Primary Care Practices</i>	Pharmacy and Therapeutics	This project will implement and disseminate MAT for opioid-use disorders within existing SUD treatment centers in several rural counties in Pennsylvania.
<i>Transforming the Medication Regimen Review Process of High-Risk Drugs Using a Patient-Centered Telemedicine-Based Approach to Prevent Adverse Drug Events in the Nursing Home</i>	Pharmacy and Therapeutics	Telemedicine will be used to enhance communication between pharmacists and residents in nursing homes to improve the current medication regimen review process and optimize prescribing of high-risk medications (i.e., opioids), thus reducing adverse drug events.
<i>PA-SBIRT</i>	Pharmacy and Therapeutics	Evaluation of SBIRT procedures in seven primarily rural primary care and community clinic sites in Pennsylvania.
<i>SBIRT in the Emergency Department</i>	Pharmacy and Therapeutics	Results of this emergency department-based SBIRT initiative demonstrated significantly reduced downstream health care costs and health care utilization compared to three control groups.
<i>Drug Abuse Vulnerability: Mechanisms and Manifestations</i>	Medicine Pharmacology	This research will contribute to the design and implementation of preventions based on an understanding of the etiology of SUD.
<i>Longitudinal Modeling of SUD Etiology</i>	Medicine Pharmacology	This project will improve detection of youths at high risk for addiction to target age-appropriate preventions.
<i>National Institute on Drug Abuse Center of Excellence of Computational Drug Abuse Research</i>	Medicine Pharmacology	This proposes a Computational Drug Abuse Research Center as a joint initiative between the University of Pittsburgh and Carnegie Mellon University. The center will consist of three cores, which will leverage expertise in computational chemogenomics, computational biology, and computational genomics to facilitate basic and translational research into drug abuse and medication.
<i>Quantifying and Tracking Risk for SUD</i>	Medicine Pharmacology	Commensurate with the perspective of basic science informing practical application, this project will derive and validate an instrument—the Liability Index—to quantify SUD risk on a continuous scale ranging from 0–1 based on 19 years of empirical research into SUD etiology.

School of Dental Medicine

PUBLIC HEALTH

Research 

The University of Pittsburgh School of Dental Medicine is engaged in the following research initiative.

Title	School	Description
<i>A Review of the Opioid Prescribing Practices of the University of Pittsburgh School of Dental Medicine</i>	Restorative Dentistry and Comprehensive Care	This research reviewed the opioid prescribing habits at the University of Pittsburgh School of Dental Medicine from July 2008–May 2016.

School of Health and Rehabilitation Sciences

PUBLIC HEALTH

Research 

The University of Pittsburgh School of Health and Rehabilitation Sciences is engaged in the following research initiative.

Title	School	Description
<i>Targeted Interventions to Prevent Chronic Low Back Pain in High-Risk Patients: A Multisite, Pragmatic, Randomized, Controlled Trial</i>	Physical Therapy	This study will compare two approaches for preventing the development of chronic low back pain, including an assessment of the impact of the intervention on opioid use.

School of Social Work

PUBLIC HEALTH

Research 

The University of Pittsburgh School Social Work is engaged in the following research initiatives.

Title	School	Description
<i>Optimizing Pregnancy and Treatment Interventions for Moms (OPTI-Mom) Study</i>	Social Work	This study will demonstrate the feasibility and acceptability of a patient navigation intervention for opioid-dependent pregnant women. This study will also generate preliminary data regarding substance-use reductions, treatment adherence rates, and engagement with psychosocial services for opioid-dependent pregnant women.
<i>The Influence of Formulary Management Strategies on Opioid Medication Use</i>	Social Work	This project will evaluate patterns of problematic opioid consumption and overdose in Medicaid patients and will test the effects of formulary tools on slowing or reducing problematic opioid consumption and overdose.



UPMC Health Systems

UPMC offers a comprehensive approach that begins with childhood prevention and extends through a lifetime of intervention and treatment. With the understanding that opioid use and addiction are a chronic illness, UPMC specialists are as focused on prevention and treatment as they are on education and research.

UPMC provides intervention at multiple levels. At UPMC Mercy, there are medically managed inpatient detoxification services; WPIC’s Emergency and Intake Services support substance users in crisis, and an inpatient psychiatric unit serves people with co-existing SUD that requires detoxification; and at UPMC’s re:solve Crisis Network, trained counselors answer calls, serve walk-ins, and travel to those in need with around-the-clock service.

Immediate medical care for opioid use/abuse in a UPMC hospital emergency department is only a first step. With time constraints and limited resources, emergency physicians can provide little more than pressing medical care. As a result, patients often are discharged with no follow-up support in sight. The Pittsburgh Poison Center is in discussions with the Allegheny County Health Department to implement a program that will enable emergency department physicians to refer patients as they are discharged from the emergency room to local treatment facilities and other community resources throughout Allegheny County. The door from the emergency department will lead to necessary ongoing treatment. With funding, the Pittsburgh Poison Center will be able to implement a similar process throughout the Commonwealth.

Children’s Community Pediatrics

PUBLIC HEALTH



In a significant move to keep children and adolescents from opioid use and addiction, Children’s Hospital and Children’s Community Pediatrics launched the Center of Excellence for Childhood Substance Use: Prevention and Early Intervention. A key component of this pediatric center is the development of the Substance Use Prevention Model, which trains pediatricians to evaluate their patients for risk of addiction and allows them to refer their patients and families to on-site, specially trained behavioral health specialists for necessary intervention and treatment. Placing specialists in practices increases the likelihood that children will receive behavioral health help.



Addiction Medicine Services

PUBLIC HEALTH



UPMC offers a full range of treatment services for those suffering from substance use/abuse. WPIC’s Addiction Medicine Services (AMS) offer individualized treatment for substance use and mental health problems and provide screening, prevention, assessment, intervention, education, and research. AMS programs include ambulatory detoxification; the Center for Psychiatric and Chemical Dependency Services; and the Narcotic Addiction Treatment Program’s outpatient, methadone maintenance, and buprenorphine programs. This initiative also includes the Prevention and Student Assistance Program, which provides prevention and intervention services to youth and families through schools, professional organizations, community organizations, and churches. Finally, through its Peer Navigator Program, AMS employs people who have gone through recovery services to provide screening, intervention, and referral to treatment for patients in each hospital.

Magee-Womens Hospital of UPMC

PUBLIC HEALTH



Magee-Womens Hospital of UPMC has developed a Pregnancy Recovery Center with a medical “health home” model approach to strengthen families. The recovery center opened in 2014, and it offers outpatient, office-based buprenorphine treatment in an integrated setting, with routine obstetric services and prenatal care. In collaboration with Addiction Medicine Services of WPIC, patients receive support and behavioral counseling.

UPMC Insurance Services Division

PUBLIC HEALTH



The UPMC Insurance Division, which includes the UPMC Health Plan and Community Care Behavioral Health, has created a series of interventions with its members and providers to address the opioid overdose crisis. The UPMC Health Plan has worked to improve providers’ opioid training and procedures and members’ access to treatment, including:

- Creating a toolkit for providers to support effective pain-management and care-management strategies to support individuals with SUD and those who are at risk of those disorders
- Screening routinely for SUD
- Supporting strategies to enhance the distribution of naloxone
- Designing a program to enhance members’ access to MAT.

Similarly, Community Care Behavioral Health, which manages behavioral health services for about one million Medicaid members in Pennsylvania, has:

- Worked with the Pennsylvania Department of Human Services, counties, providers, and advocacy organizations to develop a series of strategies to enhance the range of services available to individuals with SUD, including a recovery-oriented system.
- Developed programs to enhance provider clinical skills, such as motivational interviewing.
- Created a set of treatment guidelines for the use of buprenorphine, as well as methadone programs.

Division of Pain Medicine

PUBLIC HEALTH



UPMC has developed the UPMC Pain Strategy, which is aligned with the newly released NIH National Pain Strategy and the CDC Opioid Prescribing Guidelines for Primary Care. The UPMC Pain Strategy is a system-wide approach to improving pain care, such as improving opioid prescribing for pain to model best practices and enhancing treatment resources for patients with an opioid-use disorder.

Highlights of the UPMC Pain Strategy:

- In alignment with the NIH National Pain Strategy, the CDC Opioid Prescribing Guidelines, and the recommendations of the 2015 National Heroin Task Force Report, UPMC has mandated that primary care and advanced practice providers complete online Risk Evaluation and Mitigation Strategy (also known as REMS) training. This is continuing medical education to safely and effectively prescribe opioids for chronic pain. Thus far, 2,250 providers have completed the training.
- UPMC is preparing and embedding decision support “tools” into the electronic medical record used system-wide to assist providers in proactively addressing pain-management medication issues with patients. These decision-support tools will be coupled with an opioid treatment best practices pathway required of primary care physicians. This pathway operationalizes the CDC guidelines in daily treatment decisions regarding pain and opioid care.
- In collaboration with the UPMC Health Insurance Plan, UPMC has identified providers who are heavy prescribers of opioids, defined as those who have a number of patients prescribed at least 90 mg morphine equivalents for at least 90 consecutive days. These providers are targeted for individualized intervention and mentorship regarding how to better deliver high-quality pain care.
- UPMC has expanded access to intranasal naloxone through embedded decision-support tools in the electronic outpatient and inpatient medical records. This initiative is designed to help health care providers identify those at higher risk of opioid overdose and prescribe naloxone, including patient and first responder instructions for administration.
- UPMC plans to expand multidisciplinary pain care by expanding psychology, psychiatry, addiction medicine, and physical and occupational therapy access in UPMC Pain Medicine clinics. This treatment approach addresses the complex interaction of biological, psychological, and social factors in the perception and management of pain. It is a program of comprehensive research, clinical, and educational components committed to the evaluation and treatment of the entire range of pain, disability, and rehabilitation concerns.

Pain Management

UPMC has had a strong focus on the appropriate use of pain medications for several years. In 2014, the UPMC Pain Medicine Steering Committee for a Pain Medicine Service Center held a “Pain Summit,” with the mission “to create a unit focusing on the integration and coordination of pain care through quality improvement and innovation, which will better serve the needs of patients, providers, and the UPMC health care system.”

The committee’s goals include: catalog pain and addiction resources, develop more multidiscipline pain centers, and improve hospital pain resources with an available hotline for inpatient and outpatient questions. To meet these goals, UPMC has implemented several initiatives, including: a mandatory education module, distribution of mandated CDC guidelines to all primary care physicians, identification of physicians who are outliers for opioid prescribing, EpicCare-generated (electronic outpatient) reports for opioid prescriptions, and targeted education intervention for primary care physicians identified as over-utilizers in back pain reporting and opioid prescribing.

The Pain Medicine Service Center’s other single biggest improvement to pain/opioid/addiction care will come by embedding social workers with addiction training and behavioral medicine psychologists in both primary and specialty care medical clinics.

In addition, UPMC leadership from the UPMC Insurance Division and UPMC Health Plan are leading efforts to enhance real-time monitoring of opioid prescribing and medication fills.



Allegheny County

Allegheny County Health Department



In response to the overdose crisis, the Commonwealth of Pennsylvania and Allegheny County have developed and are implementing a number of plans to reduce opioid-related overdose fatalities. Among these initiatives is the Allegheny County Health Department’s 2015 Plan for a Healthier Allegheny, which through community partnerships seeks to improve overdose surveillance and health care strategies and increase distribution of naloxone.

The Allegheny County Health Department has worked with other county health departments to provide technical assistance in complying with Pennsylvania’s standing order for naloxone. The department, in partnership with the University of Pittsburgh School of Pharmacy and the Duquesne University School of Pharmacy, is working with more than 100 pharmacies in high-risk neighborhoods to increase naloxone access. Furthermore, the department has purchased naloxone and monitored inventory for the Department of Human Services and the treatment providers with which it contracts.

As part of a State District Attorneys Association–funded initiative, the Allegheny County District Attorneys office worked with the Allegheny County Health Department to procure and assemble free naloxone kits for police departments across the county. At the time of this report, three departments have made use of this free resource since the initiative launched in late September 2015. The May 2016 drug take-back event collected 6,473 pounds of unused prescription drugs in Allegheny County alone. The Allegheny County Health Department is currently working with the Allegheny County Department of Human Services and the Allegheny County Police Chiefs Association to secure more permanent drug take-back locations.

Allegheny County Health Department *(Continued)*

The health department has also partnered with the Department of Human Services to examine regional data to better understand risk factors for opioid overdose in Allegheny County, identify opportunities for intervention, assess the impact of strategies currently in place to save the lives of those at risk of fatal overdose, and provide recommendations for policy-makers and other cross-system overdose initiatives in the region, based on available data. The data-driven analysis identified high-risk communities for overdose deaths, high-risk periods, and known intercept points. Recommendations put forth in this report in the areas of high-risk communities, the Good Samaritan law, expansion of the use of naloxone, MAT, community-based behavioral health, and treatment protocols within the criminal justice system align with recommendations put forth in the December 2015 National Heroin Task Force Report.

The Allegheny County Health Department has hired an executive fellow to help implement some additional initiatives, including:

- Supporting provider efforts to identify people at risk for addiction at the point of prescription and elevate best practices among them
- Working with the Department of Human Services and multi-stakeholder collaboratives like the U.S. Attorney's working group in order to decrease obstacles to treatment, including making treatment resources easier to navigate, diversifying the types of treatment available, and making sure that treatment plans are customized to individual needs
- Preventing new addiction by better understanding how it begins and what interventions have the strongest evidence bases behind them, such as public and community education, clinical interventions, and changes to prescribing behavior
- Building on the findings of the 2016 joint report with the Department of Human Services, focusing overdose-prevention efforts on known high-risk periods after abstinence from opioid use, including release from incarceration and completion of or dropout from treatment.



Allegheny County Office of the Medical Examiner

PUBLIC HEALTH

Research

The Allegheny County Office of the Medical Examiner is working to provide long-term, proactive, large-scale, objective, “real-time” drug overdose data on the precise analysis of drugs within the office’s jurisdiction and the emergence of new drugs within the county to law enforcement, EMS, emergency departments, the SUD community, and treatment providers. The work of the Office of the Medical Examiner provides an opportunity to bring together public health (epidemiologic methods of surveillance of the condition) and public safety (law enforcement—arrests, prosecution, and removal of agents from the community).



Law Enforcement

Western Pennsylvania law enforcement recognizes that halting the heroin epidemic is going to take a multidisciplinary approach—one in which public health and law enforcement work together to reduce the availability of, as well as the demand for, opioids. Law enforcement at all levels continues to share intelligence, personnel, and other assets to target and prosecute heroin and prescription-pill trafficking organizations.



Federal Law Enforcement

Federal law enforcement has forged a community impact prosecution strategy targeting trafficking organizations and has collaborated with other law-enforcement components locally, statewide, and internationally to stem the supply. However, this problem cannot be solved through prosecution or incarceration alone. To reduce overdose deaths, law enforcement must recognize that addiction is an illness that can be treated, and there is a need to eliminate the stigma surrounding substance abuse and treatment.

Interstate and international drug trafficking organizations and gangs are being targeted through the Western District of Pennsylvania's Organized Crime Drug Enforcement Task Force (OCDETF). OCDETF combines the resources and unique expertise of numerous federal agencies in a coordinated attack against major drug-trafficking and money-laundering organizations under the guidance of the U.S. Attorney's office. Through this program, the DEA, the FBI, the Bureau of Alcohol Tobacco Firearms and Explosives, and the U.S. Marshals Service employ active task forces that utilize state and local officers who have proven adept at developing intelligence and sources upon which larger cases can be built. OCDETF has funded many wiretap investigations into drug-trafficking organization in Western Pennsylvania, successfully surging resources to execute targeted, community-impact prosecutions in communities in the City of Pittsburgh, such as Homewood and the North Side; communities outside city limits, including Braddock, Homestead, Clairton, and McKeesport; as well as rural towns along the Monongahela River Valley.

To ensure a multidisciplinary approach, the U.S. Attorney assigned Assistant U.S. Attorneys to each of the 25 counties in the Western District of Pennsylvania to convene countywide Heroin Overdose Teams. Federal, state, and local law-enforcement officers and prosecutors, working in conjunction with the county coroners, review every overdose as a potential criminal investigation and prosecution. They analyze records and review toxicology reports; they conduct undercover purchases and surveillance operations; they debrief witnesses; and they use other established investigative techniques to build strong, provable cases that can be prosecuted in the appropriate court. Federal law imposes a 20-year mandatory minimum term of imprisonment upon drug traffickers when death or serious bodily injury results from the use of the illegal substance, 21 U.S.C. 841(b). Since July 2015, fifteen individuals have been charged under this statute.

Federal law enforcement continues to prioritize the problem of prescription drug abuse by targeting the illegal supply chain at every level. Just as they pursue illegal traffickers, they are equally committed to identifying, investigating, and vigorously prosecuting health care providers who illegally prey upon the addicted and threaten community safety.

To reduce overdose deaths, law enforcement must recognize that addiction is an illness that can be treated, and there is a need to eliminate the stigma surrounding substance abuse and treatment.

In order to target rapid overdose responses, especially to deadly "batches" of fentanyl-adulterated heroin, information and intelligence must be routinely reported, consolidated, and analyzed. Led by the FBI, and with support from the DEA and other state and local partners, Western Pennsylvania in January 2016 established a Fusion Center to receive reports of heroin overdoses and seizures. Fusion Center investigators have standardized the collection of evidence related to heroin overdoses and have trained law enforcement across the region on the overdose protocol. By centralizing and standardizing overdose intelligence, this Fusion Center enables law enforcement to respond more rapidly. Submissions to the Fusion Center have already resulted in investigative leads and enabled prosecutors to link distributors, telephone numbers, and stamp bags for more enhanced and coordinated investigation.

Recently, the U.S. Attorney's Office convened a working group on fentanyl and opioids. This effort aims to intercept and detect the importation of fentanyl and other precursor chemicals which are often mixed with heroin and lead to overdose deaths. Participating agencies include the DEA, FBI, U.S. Postal Inspection Service, U.S. Department of Homeland Security/Homeland Security Investigations, U.S. Food and Drug Administration's Office of Criminal Investigations, Allegheny County Medical Examiner's Office, and Pennsylvania Attorney General's Office.

In November 2015, the DEA designated Pittsburgh as a pilot site for its 360 Strategy, a comprehensive and collaborative partnership composed of law-enforcement agencies, treatment and prevention entities, community coalitions, educators, and faith-based groups, working jointly to combat the deadly cycle of prescription opioid and heroin abuse. The goals of the 360 Strategy include stopping the deadly cycle of heroin and opioid SUD by eliminating drug-trafficking organizations and gangs fueling distribution and violence on the streets; partnering with the medical community and others to raise awareness of the dangers of prescription opioid misuse and the nexus to heroin; and strengthening community organizations best positioned to provide long-term help and support for building drug-free communities. The 360 Strategy is built upon three pillars: law enforcement, diversion control, and community outreach.

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The 360 Strategy law-enforcement pillar works to coordinate prosecutorial and investigative efforts spurred by overdose scene intelligence gathering and digital data transfer and analysis. The DEA has been responsible for 182 heroin- and opioid-related arrests, which have resulted in seizures of \$511,000; 27 firearms (including assault rifles); thousands of pharmaceuticals; and 3,200 bricks of heroin. Additionally, in collaboration with county coalitions, DEA national drug take-back events have collected and safely removed 12,669 pounds of material—a 78.6 percent increase over the previous year. Finally, the Tactical Division Squad’s targeted investigation of an Ohio-based drug-trafficking organization resulted in the arrests of those responsible for 18 pharmacy burglaries. More than 50,000 stolen pharmaceuticals were seized during the arrests.



The 360 Strategy diversion pillar engages drug manufacturers, wholesalers, practitioners, and pharmacists through diversion control to increase awareness of the opioid epidemic and encourage responsible prescribing practices and use of opioid painkillers throughout the medical community. Currently, the Pittsburgh District Office has 20,505 active DEA registrants within 25 counties. The Pittsburgh District Office hosted pharmacy diversion awareness programs with pharmacy, medical school, and public health students focused on the education and tools necessary for the next generation of professionals to combat the growing heroin/opioid epidemic.

Finally, the 360 Strategy community outreach efforts endeavor to prevent future heroin and opioid overdoses through prevention and education strategies. As part of this initiative, the DEA has offered prevention and education training to more than 2,600 participants in Pittsburgh-area schools, faith-based organizations, civic associations, the UPMC network of hospitals, Ohio Valley Hospital, Allegheny County General Hospital, and local family support groups. Furthermore, the DEA established two Web sites, Just Think Twice Pittsburgh and Get Smart About Drugs Pittsburgh, specifically designed for middle school and high school students and parents. Just Think Twice Pittsburgh focuses on the impact of drugs on the body and academic performance and links visitors to the DEA/FBI documentary “Chasing the Dragon: The Life of an Opioid Addict.” Get Smart About Drugs offers information on significant drug seizures, overdoses, arrests, and homicides. Drug-awareness publications, community coalition partners, and a listing of heroin and opioid treatment facilities in the greater Pittsburgh region are also provided.

Federal Law Enforcement *(Continued)*

The FBI Pittsburgh Division and its Citizen Academy Alumni Association have partnered with key community stakeholders—including educators, law enforcement, treatment and rehabilitation facilities, and members of the media—to form the Heroin Outreach Prevention and Education (HOPE) initiative. This group is focusing its efforts on proactive solutions, particularly in the areas of education, prevention, and awareness. The HOPE initiative is supported by three working groups: 1) a youth action working group focused on engaging youth (tweens and teens) in creative and innovative ways to raise awareness of the dangers of prescription opioid abuse and heroin use; 2) an education working group engaging leaders in the education and school administration sectors of the community, with specific emphasis on developing opioid-specific curriculum at the middle school and high school levels; and 3) a community coalition working group engaging all interested community members, with particular emphasis on parents, coaches, teachers, medical professionals, and youth, to raise awareness of the most vulnerable populations through community outreach, education, and training.

The U.S. Attorney's Office continues to work with the University of Pittsburgh PERU to establish a Web site that can post real-time information about particularly lethal batches of heroin. The Web site, www.overdosefreepa.pitt.edu, is a valuable tool for SUD education, prevention, and recovery efforts in Pennsylvania and beyond.



State Law Enforcement

Heroin and opioid overdoses are the leading cause of accidental deaths in Pennsylvania, killing more individuals than fatal motor vehicle accidents. Because Pennsylvania State Police are often the first on the scene of an overdose, every state police patrol car is equipped with two naloxone doses. The state police worked with the state Department of Drug and Alcohol Programs and other partner agencies to become trained in the use of the important life-saving overdose-reversal drug. State police personnel have attended training sessions offered by the U.S. Attorney's Office, FBI, and DEA.

Municipal Law Enforcement

Heroin overdoses have historically been treated as medical events rather than serious crimes. First responders have received training on how to process the overdose scene, collect evidence, and mine cell phone call history. In Western Pennsylvania, the Office of the U.S. Attorney has offered multiple trainings to first responders from each of the 25 counties. To date, hundreds of police officers in Western Pennsylvania have received training on overdose response; the investigation of physician overprescribing; how to exploit cell phones found at the crime scene for maximum evidentiary value; and the importance of naloxone in saving the lives of those who have overdosed, and, as importantly, in preserving the lives of first responders who may unwittingly come into contact with pure fentanyl or other dangerous opioids. Throughout Western Pennsylvania, some police are reluctant to carry naloxone. The Office of the U.S. Attorney continues to work through the Western Pennsylvania Chiefs of Police Association to break down barriers and dispel myths.

DDAP, in partnership with the Pennsylvania Commission on Crime and Delinquency and the Pennsylvania District Attorneys Association, is working with local communities to provide grants that facilitate the installation of secure and permanent prescription-drug drop-off boxes throughout Pennsylvania. Local police departments are encouraged to set up these take-back boxes for the collection of unused, unwanted, or expired prescription medications.

The Allegheny County Sheriff has implemented an initiative to help residents safely eliminate unused and expired narcotic medications. Through Project D.U.M.P., short for the Disposal of Unused Medications Properly, Allegheny County citizens can contact a Sheriff's Office Evidence Custodian, who will report to a residence and take possession of any unwanted medications.

SCAs

Single County Authorities

PUBLIC HEALTH



Pennsylvania's SCAs were established to plan and evaluate community drug and alcohol prevention, intervention, and treatment services. The SCAs determine a person's eligibility for service funding, assess the need for treatment or other services, and make referrals to appropriate programs to match treatment and/or service needs. With the surge in opioid/heroin-related overdoses and overdose deaths in Pennsylvania, SCAs are on the front lines in addressing this epidemic. SCAs are working with law enforcement to implement the community-based recommendations put forth in the 2015 National Heroin Task Force Report.

The SCAs from Western Pennsylvania are part of the U.S. Attorney's Working Group on Drug Overdose and Addiction, which seeks to end opiate-related overdoses in Western Pennsylvania. To achieve this, regional efforts will identify and create paths of intervention, prevention, treatment, case management, and recovery support services. These efforts will be grounded in local needs, with informed oversight driven by evidence-based best practices.

PA PDMP

PA Prescription Drug Monitoring Program

PUBLIC HEALTH



The PA PDMP went live in August 2016. The PA PDMP Web portal enables Pennsylvania prescribers to easily look up their patients' controlled-substance prescription history (schedules II-V) before prescribing. The database will also allow prescribers to identify pharmacy error or fraudulent use of their DEA numbers. Prescribers using the PA PDMP can examine new patients' prescription histories and proactively assess whether there is a pattern of questionable use of controlled substances. The PA PDMP is designed to improve patient well-being by reducing the risk of controlled-substance misuse, abuse, diversion, and overdose.

Pharmacies (including mail-order and Internet pharmacies), in addition to health care practitioners who dispense schedule II-V controlled substances, will be required to electronically report prescription dispensing information to the PA PDMP. When a controlled substance is dispensed, the information must be reported to the system within 72 hours. The information being collected by the PA PDMP is safeguarded in both its collection and distribution. By state law, the data are confidential and not subject to disclosure.

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