

# Opioid Use & Misuse Disorders



Abt Associates has taken bold action to help prevent opioid misuse and overdose. Our work has helped address the supply and demand of illegal drugs and the misuse of legal substances for federal, state and local agencies, as well as other key stakeholders. We've pioneered research strategies to estimate the worldwide supply of illegal drugs, led research on drug-trafficking organizations, generated methods to estimate the demand for illegal drugs in the U.S., and evaluated the effectiveness of substance use disorder treatment programs. Our team of multidisciplinary experts brings critical insight and approaches to help access the hard-to-reach and at-risk substance-using populations.

## Selected Projects

### **Controlled Drug Prescribing and Diversion Studies – National Institute on Drug Abuse (NIDA)**

#### **Nationwide Epidemiological Study of Controlled Drug Prescribing and of Diversion for Non-Medical Use (2009–2012)**

With funding from the NIH/National Institute on Drug Abuse, Abt staff conducted several epidemiological studies of controlled drugs. Abt obtained data sets containing information on an estimated 250 million prescriptions of 25 different controlled drugs dispensed by retail pharmacies in the U.S. Through linked prescription records, we examined patterns suggestive of drug diversion such as “doctor shopping”—or filling multiple prescriptions for similar drugs from different doctors at different pharmacies within a short period of time.



### **Prescription Drug Monitoring Programs Studies – Department of Justice (DOJ) and Centers for Disease Control and Prevention (CDC)**

#### **Formative Evaluation of Prescription Drug Monitoring Programs (2004)**

The Department of Justice contracted with Abt to conduct an early assessment of prescription drug monitoring programs (PDMPs) operating in various states and to explore the feasibility of conducting a systematic evaluation of their effectiveness. The Department of Justice was especially interested in determining if PDMPs reduce inappropriate

prescribing practices and/or diversion of drugs having a high likelihood of abuse. The Department was also interested in determining if these programs have unwanted effects on physicians' prescribing or pharmacists' dispensing practices. Abt surveyed all existing PDMPs, characterized their structures and operations, and outlined research designs to evaluate their effectiveness.

### **A Randomized Controlled Trial of Proactive Reporting by Prescription Drug Monitoring Programs (2011–2013)**

For CDC, Abt tested the effectiveness and cost effectiveness of retrospective reviews of prescription data obtained by Nevada's PDMP. This practice sought to identify patients at risk of over-utilizing controlled/scheduled drugs, including opioids, and to notify these patients' dispensers and prescribers. All prescribers and dispensers used by experimental subjects during the prior 180 days were notified of the patients' prescription purchasing activity—including types and amounts of drugs obtained, dates of purchase, and 'prescribers and dispensers' names and addresses. To estimate program effectiveness, we tracked subsequent prescription drug purchases following assignment using PDMP prescription data. Statistical comparisons of outcomes experienced by both groups were developed to estimate the effectiveness and cost-effectiveness of proactive identification and unsolicited notification.

### **Evaluating Prescription Drug Monitoring Programs' Effects on Physicians' Opioid Prescribing (2013–2016)**

Abt used data from a national survey to assess the effects of PDMPs on the prescribing of opioid analgesics and other pain medications in ambulatory care settings in twenty-four states from 2001 to 2010. We found that the implementation of a PDMP was associated with more than a 30 percent reduction in the rate of prescribing of Schedule II opioids. This reduction was seen immediately following the launch of the program and was maintained in the second and third years afterward.



## **Prescribing Guidelines, Policy Impact Evaluations, Technical and Implementation Packages – CDC and Centers for Medicare and Medicaid (CMS)**

### **Supporting CDC’s Development of Opioid Prescribing Guidelines (2016)**

To support safe prescribing and reduce the adverse consequence of opioid use, CDC sought to develop guidelines for prescribing opioids for chronic pain. Abt provided research support, including conducting literature reviews, synthesizing research, assembling evidence tables, and providing editorial support for draft clinical recommendations. We conducted rapid literature reviews to supplement reviews already in the published literature. Topics included harms associated with opioid use for chronic and acute pain, including in special populations such as pregnant women and the elderly; harms of combining opioids with alcohol, other prescription drugs, and illicit drugs; effectiveness of non-opioid treatments for pain; patient and provider values and preferences specific to opioids; cost-effectiveness of opioid therapy for chronic pain; and the impact of prescription drug monitoring programs on prescribing behavior and patient outcomes. The final guidelines were issued by CDC in March 2016.

### **Medicare Part D Opioid Policy Impact Evaluation (2013–2016)**

In response to the epidemic of prescription opioid misuse, CMS implemented a policy in January 2013 to improve controls on opioid prescribing and dispensing. The aim of this policy is to reduce the number of beneficiaries at high risk of misuse and overdose. CMS developed a surveillance system that scans Part D prescription claims to identify Medicare beneficiaries who obtain opioids in excess of 120 mg morphine equivalent daily doses for 90 consecutive days or more, beneficiaries who use more than three prescribers and dispensers for opioids during a one-year period, and beneficiaries who meet both of these criteria. Working under a subcontract with L&M Policy Research LLC, Abt conducted quantitative analyses to evaluate the effects of this policy. Statistical comparisons of differences before and after policy implementation estimated the effects of this policy on prescribers, patients and health plans.

### **Development and Evaluation of a Technical Package on Coordinated Care for Chronic Opioid Therapy (2014–2017)**

The CDC National Center for Injury Prevention and Control contracted with Abt to develop and pilot test a coordinated care plan (CCP) for safe opioid prescribing. This included several components commonly used in CCPs for chronic opioid therapy, such as upper limit dosing thresholds; cautions for co-prescribing certain medications; attention to drug-drug and drug-disease interactions; urine testing for drugs; and use of medication-assisted treatment. Abt partnered with MedStar Health to pilot test the CCP. Nine of MedStar’s outpatient primary care sites in Maryland were chosen at random to serve as demonstration sites, and nine others were chosen for comparison/control sites. Our evaluation is assessing the extent to which the demonstration sites are able to implement the safe prescribing procedures specified in the CCP. The guide will

be revised to reflect the lessons of this demonstration and will then be disseminated to clinicians and administrators of health care systems throughout the United States.

### **An Opioid Clinical Improvement Implementation Package for Large Healthcare Systems: Activities to Support Guideline Dissemination and Implementation (2016–2019)**

CDC funded Abt and its partners from Kaiser Permanente Washington Health Research Institute, University of Washington, and Change Management Consultants to support implementation of the CDC Opioid Prescribing Guidelines into primary care practices. The project consists of three key tasks: 1) developing and refining opioid quality improvement (QI) measures that map to the guideline recommendations, 2) developing an implementation package on the guidelines and QI measures to support health care system implementation, and 3) supporting a QI collaborative among six large health care systems to implement the guidelines and QI measures to monitor progress and improvements towards the guideline recommendations.



## **Medication and Medication-Assisted Treatment Educational Materials – Substance Abuse and Mental Health Services Administration (SAMHSA)**

### **Know Your Rights Brochure – Medication-Assisted Treatment (2009)**

Abt and its partner the Legal Action Center developed the “Know Your Rights” brochure and webinars to train and educate the public and those in recovery about the rights of individuals in recovery from alcohol or drug problems under federal and state laws. The information covers laws prohibiting discrimination against people with disabilities in the areas of employment, housing, public accommodation, and government benefits and services. It also covers the rights of individuals with criminal conviction histories and individuals in medication-assisted treatment.

### **Implementing Evidence-Based Practices in State Medicaid Systems: Medication Assisted Treatment (2012)**

To improve knowledge of mental health and substance use disorder services in Medicaid, SAMHSA's Center for Mental Health Services contracted with Abt to conduct an array of activities to educate Medicaid directors and staff. The project included the development of a report, "Implementing Evidence-Based Practices in State Medicaid Systems: Medication Assisted Treatment." This report demonstrates how successful implementation of MAT requires collaborations across general health, substance use disorder (SUD) and other social service systems (e.g., corrections, child welfare), as well as across individuals with different ideological perspectives on the nature of recovery from SUDs.

### **Buprenorphine Outreach and Information Dissemination (2004–2009)**

In December 2002, SAMHSA's Centers for Substance Abuse Treatment launched New Paths to Recovery, a nationwide education program aimed at informing physicians about the availability of buprenorphine as a treatment option for opioid addiction. To support that program, Abt and its partners conducted eight forums in communities with high rates of opiate use. The first four were held in largely rural communities; the remaining forums were held in large cities. This contract also supported the development and production of Buprenorphine: A Guide for Nurses, which was published by SAMHSA in 2009 as a technical assistance paper.

### **Medication-Assisted Recovery (MAR) Paper (2016)**

The SAMHSA Bringing Recovery Supports to Scale Technical Assistance Center Strategy project convened an expert panel to make recommendations on expanding and improving the quality of MAR care. Abt developed a background paper for panelists that detailed key aspects of MAR, including the available medications and service settings, the effectiveness of medications used in MAR, the need for MAR, and the barriers in accessing MAR. This paper guided the panelists as they developed recommendations to expand services and quality of care for people with substance use disorders.

### **Surgeon General's Report on Alcohol, Drugs, and Health (2015–2017)**

Abt supported the development of the first-ever Surgeon General's Report on Alcohol, Drugs, and Health, a seminal project that will have major implications for how the U.S. addresses not only the epidemic of opioid misuse but also public health problems associated with alcohol and other substances. This report discusses the growing relationship between prescription drug misuse and heroin use, and provides evidence-based strategies for addressing the opioid epidemic.



### **Service Delivery Improvement: Quality Measures, Service Tools, Service Pilots – SAMHSA and the Commonwealth of Massachusetts**

#### **Service Delivery Improvement: Quality Measures, Service Tools, Service Pilots – SAMHSA and the Commonwealth of Massachusetts**

To improve the quality of treatment for individuals with opioid use disorders, Abt conducted an environmental scan of medication-assisted treatment (MAT) clinical quality measures (CQMs) for SAMHSA. CQMs are a mechanism for assessing treatment, processes, experience, and/or outcomes of patient care. Establishing measures is a part of the federal government's meaningful use requirements for Electronic Health Record (EHR) intensive programs. As part of the MAT CQM project, Abt conducted a feasibility assessment for each measure to categorize the difficulty of converting the measure from a paper-based format to an electronic eMeasure format so measures can be more easily interpreted by EHRs. In total, the scan resulted in 62 measures, three of which were viable candidates for determining the feasibility of retooling, and ultimately one measure was identified as a strong candidate.

### **Massachusetts Health Policy Commission Behavioral Health and Substance Use Disorder Recommendations (2015)**

Charged with conducting a study of substance use disorder treatment, the Massachusetts Health Policy Commission contracted with Abt to examine aspects of the opioid addiction crisis in the Commonwealth and to provide recommendations to address the crisis. The study involved laying out for the legislature a plan to define a set of system specifications, including considerations of financing and return on investment, provider capabilities, quality metrics, and workforce development, followed by a gap analysis between these system characteristics and current capabilities.

### **Massachusetts Health Policy Commission Behavioral Health and Substance Use Disorder Recommendations (2015)**

Charged with conducting a study of substance use disorder treatment, the Massachusetts Health Policy Commission contracted with Abt to examine aspects of the opioid addiction crisis in the Commonwealth and to provide recommendations

to address the crisis. The study involved laying out for the legislature a plan to define a set of system specifications, including considerations of financing and return on investment, provider capabilities, quality metrics, and workforce development, followed by a gap analysis between these system characteristics and current capabilities.

### **Opioid Treatment Program Service Continuity Project (2015)**

Through a subcontract with FEi, Abt was contracted by SAMHSA to evaluate a project that leveraged health information technology to support opioid treatment continuity. Opioid treatment is vulnerable to both unplanned service disruptions (e.g., natural disasters) and planned service disruptions (e.g., patient travel to another state). The purpose of the project was to assess the feasibility of a technology designed to enable patients to control the sharing of their opioid treatment information with other providers via a Health Information Exchange and a patient portal in compliance with state and federal regulations, including 42 CFR Part 2. Abt's evaluation detailed the challenges and solutions associated with developing the solution, the extent to which SAMHSA's goals for this pilot were met, lessons learned, and recommendations for future applications of these findings.

### **Text Message Library for Individuals with Behavioral Health and Opioid Use Disorders (2014–2017)**

Abt led for SAMHSA the development of a text messaging library to support individuals with opioid use disorders. Abt conducted stakeholder interviews with SAMHSA grantees who expressed interest in using text messaging services, and subject matter experts with direct experience developing and implementing text messaging libraries and technology-based services for the behavioral health community. Abt developed and tested 150 text messages targeted to individuals in various stages of recovery and supporting implementation materials for the library.



### **Coordinate the Development of Innovative Health IT Tools Relevant to Opioid Use Disorder (2016)**

Under its Behavioral Health Information Technology Strategy contract, Abt supported SAMHSA in launching technology challenges to spur developers to create solutions that provide additional recovery support to patients receiving outpatient medication-assisted treatment for opioid use disorder. As an example, an app was developed that can be used as part of a comprehensive treatment plan that supports access to resources, educational materials, and support for people in outpatient recovery from opioid use disorder.

### **Contact**

**Scott Novak, PhD**, Principal Associate/Scientist  
Health & Environment

Office: 919.294.7702 | [Scott\\_Novak@abtassoc.com](mailto:Scott_Novak@abtassoc.com)

**Melanie Whitter**, Principal Associate  
Behavioral Health Practice Lead

Office: 301.634.1712 | [Melanie\\_Whitter@abtassoc.com](mailto:Melanie_Whitter@abtassoc.com)

**Abt Associates** is a mission-driven, global leader in research and program implementation in the fields of health, social and environmental policy, and international development. Known for its rigorous approach to solving complex challenges, Abt Associates is regularly ranked as one of the top 20 global research firms and one of the top 40 international development innovators. The company has multiple offices in the U.S. and program offices in more than 60 countries.

