## USING BUPRENORPHINE TO TREAT OPIOID ADDICTION: AN OPEN SOCIETY INSTITUTE-BALTIMORE BRIEF

ddiction to opioids—from street heroin to prescription painkillers—is a serious national problem. An estimated 517,000 Americans were dependent on heroin in 2013, and roughly 1.9 million were addicted to painkillers.<sup>1</sup> In Baltimore City, heroin addiction is virtually an epidemic: For more than four decades, the city has had one of the nation's highest rates of heroin use. In 2014, an estimated 18,916 people used heroin in Baltimore City;<sup>2</sup> an estimated 11,200 people were addicted to heroin; and 192 died from heroin overdose, a 22% increase from the previous year.<sup>3</sup> And the number of people addicted to opioids continues to grow across categories of age, race, gender, and economic status.

#### THE OSI-BALTIMORE BRIEFS SERIES

Open Society Institute-Baltimore was created as a field office for the Open Society Foundations to test approaches for solving some of the most difficult challenges faced by cities and communities around the country. In keeping with that mission, we offer this set of **OSI-Baltimore Briefs**. The initiatives and projects they describe occurred in Baltimore with multiple partners and stakeholders from both the city and state, but the ideas, insights, and information they contain are useful to people and places across the nation. Our hope is that these examples may be replicated or adapted so that others may benefit from what we have learned about the process, challenges, and successes of addressing some timely and widely shared issues.

**Unfortunately, available solutions to opioid addiction have often been inadequate.** Like other cities, Baltimore historically had three options for treating people addicted to opioids: (1) inpatient detoxification, a short-term intervention often followed by relapse; (2) methadone treatment, which is available only at special clinics, often with long waiting lists, and which often carries social stigma; and (3) medicine-free outpatient counseling programs and/or peer support programs such as Narcotics

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Anonymous, which depend on an individual's ability to bond with the group to break the addiction. A major hindrance to building support and expanding resources for other alternatives for opioid addiction treatment is the misperception that addiction merely represents a bad choice rather than a chronic disease.

<sup>&</sup>lt;sup>1</sup> Substance Abuse and Mental Health Services Administration, *Results from the 2013 national survey on Drug Use and health: Summary of National Findings.* NSDUH Series H-48, HHS Publication No. (SMA) 14-4863. Rockville, MD: Substance Abuse and Mental health Services Administration, 2014,

http://www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHTML2013/Web/NSDUHresults2013.pdf.

<sup>&</sup>lt;sup>2</sup> Baltimore City Health Department, July 2015. "Baltimore Mayor's Heroin Treatment & Prevention Task Force Report," p. 14. <a href="http://health.baltimorecity.gov/sites/default/files/Mayor%20Heroin%20Treatment%20Prevention%20Task%20Force%20Final%20Report%20July%2013%202015.pdf">http://health.baltimorecity.gov/sites/default/files/Mayor%20Heroin%20Treatment%20Prevention%20Task%20Force%20Final%20Report%20July%2013%202015.pdf</a>

<sup>&</sup>lt;sup>3</sup> Maryland DHMH Report, "Drug and Alcohol-Related Intoxication Deaths in Maryland, 2014" released May 2015. http://bha.dhmh.maryland.gov/OVERDOSE\_PREVENTION/Documents/2015.05.19%20-%20Annual%20OD%20Report%202014\_merged%20file%20final.pdf.

**OSI-Baltimore recognizes that addiction is a chronic disease** that should be treated through the medical system, not the criminal justice system. As such, addiction treatment should be easily accessible to patients in a variety of settings. The best way to ensure addiction treatment is widely available (and financially sustainable) is to incorporate it into the primary health care system.

Health professionals attempting to address Baltimore's battle with addiction historically found that—despite a wealth of hospitals, federally qualified health centers (FQHCs), physicians in private practice, and other resources—there were too few substance abuse treatment locations to meet the city's demand. Programs targeted low-income heroin users but missed the middle-income abusers of prescription drugs. The duration of treatment was too short to secure long-lasting recovery. implementation of the Affordable Care Act, addiction treatment programs in Maryland often depended on public health block grants, which are not a reliable or sustainable source of funding. The systems and programs for drug abuse treatment operated apart from those that provide somatic primary health care. And, although proven new treatments existed, especially for opioid addiction, too few physicians knew how to use them.

Baltimore was desperately in need of a more accessible, integrated, and sustainable approach to treat individuals who were opioid-dependent. With support from OSI-Baltimore and other partners in the area, the city identified buprenorphine as a promising solution. Buprenorphine is a medication used to treat opioid addiction and is especially safe and easy to deliver (see sidebar, "Buprenorphine Basics"). Today, the successful

approaches to addiction treatment that OSI-Baltimore and its partners developed attract interest from health professionals and community leaders across the country.

#### I. WHY BUPRENORPHINE?

uprenorphine acts on the part of the brain that responds to opioids, known as the *mu* receptor site. It attaches to this site "just as heroin would and turns [the opioid receptor] on," explains Marla Oros, a consultant and community nursing expert who co-designed part of the buprenorphine treatment effort in Baltimore. Unlike methadone, however, which is a full opioid agonist and thus carries a possibly greater potential for addiction, buprenorphine is only a partial agonist: it activates opioid receptors in the brain enough so that patients do not get sick or have withdrawal cravings, but typically not so much that they experience intoxication or sedation. The buprenorphine preparation used in Baltimore and elsewhere in the United States contains a second

#### **BUPRENORPHINE BASICS**

#### What is buprenorphine?

Buprenorphine is a semi-synthetic drug used at different dosages to treat acute pain, chronic pain, and opioid addiction. The FDA approved two preparations of buprenorphine for treating opioid dependence in October 2002.

#### What does the treatment involve?

In the United States, buprenorphine is given in pill and sublingual film forms. The models of treatment developed by OSI and its partners involve close monitoring of buprenorphine doses accompanied by addiction counseling, case management, and transition to primary health care for long-term maintenance.

### Who can provide buprenorphine treatments to patients?

Any physician can prescribe buprenorphine in his or her office after completing an eight-hour training and obtaining a waiver of his or her DEA license from the Department of Health and Human Services.

#### **PARTNERS AND ROLES**

- OSI-Baltimore was a catalyst for innovation and collaboration among several partners. OSI-Baltimore staff included Dr. Robert Schwartz, who headed OSI's addiction treatment work in Baltimore from 1998 to 2008; Kima Taylor, who now heads the Open Society Foundations' national addiction treatment and policy work; and Tom Cargiulo, who is a registered pharmacist and board-certified psychiatric pharmacist also managed the addiction work until 2013. Along with OSI-Baltimore Director Diana Morris, they provided a steady flow of ideas and expertise and facilitated relationships across the health and substance abuse treatment systems. Meanwhile, OSI grants opened doors and built momentum; examples include separate scans of providers' capacities and Medicaid policies, the convening of a scientific advisory committee on buprenorphine (which other local funders also supported), outreach to educate physicians about the treatment, and pilot tests of treatment models.
- ➤ The **Baltimore City Department of Health's** then-commissioner, Joshua Sharfstein, was a visionary and visible champion of the effort. The Department of Health recruited community health and primary care physicians to provide buprenorphine treatment, recruited hospitals to participate in an expanded pilot program, offered free online training in the treatment modality to physicians, facilitated and tracked physicians' applications for the necessary DEA license waivers, and helped orient health insurance carriers to the treatment model.
- The nonprofit organization formerly known as **Baltimore Substance Abuse Systems**, **Inc.**, is responsible for managing and funding the publicly-supported substance abuse treatment and prevention system. BSAS made grants to community health centers to cover the cost of the doctors and nurses required for the buprenorphine treatment model, the medication used by uninsured patients, liability insurance, medical supplies, and operating costs. BSAS also established requirements for the buprenorphine programs and providers; coordinated bimonthly meetings and an annual summit of buprenorphine treatment providers; funded staff positions for a coordinator, two program consultants, and treatment advocates to help patients enroll in the state's managed-care insurance plan; helped to conduct quality assurance site visits; coordinated physician training in buprenorphine administration; and produced data. In October 2013, BSAS merged with Baltimore Mental Health Systems to become **Behavioral Health System Baltimore (BHSB)**, a single entity that provides funding, education, outreach, and policy advocacy for substance abuse and mental health services.
- ➤ Baltimore HealthCare Access, Inc. (BHCA—now called HealthCare Access Maryland, Inc., or HCAM) is the ombudsman organization created when Maryland adopted a managed care system. It serves as the primary liaison between patients and substance abuse treatment programs, primary care physicians, and medical insurance. Using BSAS dollars (secured from the city health department's addiction treatment budget, federal Substance Abuse and Treatment Block Grants, and OSI), Baltimore HealthCare Access' role was to provide case management, health education, outreach, and insurance eligibility determination to patients; work with health center staff and community physicians to help patients obtain insurance coverage for buprenorphine treatment (both at community health clinics and via ongoing primary health care); help patients transfer from treatment clinics to ongoing medical care; and track patients' progress. BHCA and BSAS jointly established case management requirements, reviewed data, recruited physicians, and resolved Medicaid/managed care issues. Beginning in 2010, BHCA was responsible for determining patients' eligibility for the state's managed care insurance program.
- The Mid-Atlantic Association of Community Health Centers (MACHC) collects and analyzes data, plans and develops pilot programs, and provides technical assistance for community health centers. In addition to conducting an early scan of community health centers' capacity to treat opioid addiction, for several years MACHC funded a staff position at OSI for the coordinator of pilot buprenorphine treatment programs.
- ▶ Behavioral Health Leadership Institute (BHLI) is an independent nonprofit corporation. Its mission is to identify gaps in service delivery to vulnerable populations, create pilot models to alleviate these gaps, develop staff training programs, and connect research with implementation on the ground. With funding from OSI, BHLI expanded the buprenorphine treatment model into addiction recovery centers.

ingredient, naloxone, which is an opioid antagonist that blocks the *mu* receptor site. This makes it unlikely that users will overdose and discourages people from abusing the treatment by crushing the tablets and injecting them intravenously. (For the sake of simplicity, in the rest of this report our use of the term "buprenorphine treatment" actually refers to this combination of buprenorphine and naloxone.)

Unlike methadone, federal regulations allow physicians who are specially trained and certified to prescribe buprenorphine in their private practices. Not only does this expand the potential number of treatment settings available, it helps to de-stigmatize and "normalize" addiction treatment.

#### II. WHAT DID WE DO?

SI-Baltimore and its allies acted quickly and early to find a solution to the lack of opioid addiction treatments available. In partnership with many local organizations (see sidebar, "Partners and Roles), OSI successfully developed a treatment model that provided the proper resources and authority needed to establish a strong integrated base of support and sustainability in the community.

#### AN EARLY, RAPID RESPONSE

**Outreach to familiarize health care providers with buprenorphine** began in Baltimore in the late 1990s, even before the FDA approved the drug for substance abuse disorders. Dr. Robert Schwartz, OSI-Baltimore's director of drug addiction treatment programs, reached out to leaders of community health centers to discuss expanding the addiction treatment system and to bring awareness to buprenorphine's potential as a treatment tool. Until 2000, the drug was approved only to treat pain and was available for emergency use for up to three days at a time. With OSI funding, Maryland's medical society, MedChi, organized experts such as Dr. Christopher Welsh, a psychiatrist and medical director of the University of Maryland Medical Center's Substance Abuse Consultation Service, to travel throughout the state educating other physicians and heads of managed care organizations about the new treatment tool to increase interest. Meanwhile, the city agency in charge of publicly funded drug addiction treatment for low-income and uninsured individuals, then known as Baltimore Substance Abuse System (BSAS), began funding a limited number of detoxification slots at six outpatient substance abuse programs.

OSI supported efforts to gather the best available information and examples from local and national drug treatment efforts. Aware that many heroin users receive their health care from federally qualified health centers, which provide care to low-income individuals, OSI gave a grant to the Mid-Atlantic Association of Community Health Centers (MACHC), an intermediary organization, to conduct a scan of the issues and capacities involved in using FQHCs to provide buprenorphine treatment in Baltimore. "The scan was absolutely necessary, given the fact that the health centers did not have [opioid addiction treatment] as their primary or even secondary mission, there was no shared sense of what the different centers were doing, the drug treatment system was not integrated with what the health centers were doing and the health centers had not met together to think about this issue," Schwartz recalls.

Under Schwartz's leadership, OSI convened a **Scientific Advisory Committee** that would assist BSAS as it developed its treatment system. This group of national experts in addiction treatment and research met twice yearly from 1998 to 2008 to help city leaders identify local treatment gaps, learn about state-of-the-art practices used elsewhere, consider strategies for improving service delivery, identify target outcomes and measures of success, and identify sources of sustainable funding.

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<sup>&</sup>lt;sup>4</sup> In fall 2013, Baltimore Substance Abuse System merged with Baltimore Mental Health Systems to become Behavioral Health System Baltimore (BHSB).

#### **DEVELOPING AND TESTING A MODEL**

In 2003, OSI and selected partners created a pilot project to test the feasibility of providing buprenorphine plus counseling services at federally qualified health centers. Community clinics were selected primarily because, while most low-income patients receive their health care from these providers, the MACHC's landscape scan showed that most community clinics were not participating in the city's publicly-funded drug abuse treatment system for uninsured residents. Adding addiction treatment to community health centers' range of services would strengthen the city's infrastructure by expanding access to venues that "exist parallel to the drug treatment centers," Robert Schwartz reasoned.

OSI-Baltimore made grants to six community health centers to use buprenorphine for three days of detoxification and withdrawal with heroin patients rather than sending them to the hospital. The idea was that after this short-term intervention, patients would be more engaged and motivated to begin addiction treatment. Since up to that moment these six programs had offered only drug-free treatment (i.e., abstinence counseling), they used OSI and BSAS funds to hire doctors and nurses who supervised the detoxification process.<sup>5</sup>

At first, many counselors at the health centers were opposed to treating patients with buprenorphine, even if the clinics were on board. Most of the health centers had long been "drugfree" (counseling only) environments, and many of their counselors were individuals in recovery who believed that people should overcome addiction through counseling, self-control, and hard work rather than by using medication to make the change. To overcome this cultural barrier, consultants Welsh and Oros met with individual clinic administrators and frontline staff to describe the treatment's benefits and the expectation that patients could be stabilized within a couple months. However, some patients left immediately after detoxification without staying for counseling, and they typically relapsed. Others had such inconsistent and chaotic lifestyles that it took much longer than anticipated to counteract their cravings.

BHCA stationed a "treatment advocate" at each of the participating community health clinics to connect buprenorphine patients to health insurance and serve as their case managers. The advocates helped patients submit applications and track their benefits status; connected patients with ancillary support services, such as food and housing; participated in health center staff meetings; and even helped patients obtain photo IDs needed for insurance purposes. The goal was to serve people not just from the perspective of their drug use but also all the other aspects of their lives. Fairly quickly, we found that the slow turnover rate among patients being treated with buprenorphine meant the FQHC-based

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<sup>&</sup>lt;sup>5</sup> It is important to note that international best practices in addiction treatment now focus on the availability of maintenance treatment without the requirement of first participating in detoxification, and without the (unrealistic) expectation that patients will remain completely abstinent during treatment. The purpose of this document is to summarize the development of buprenorphine treatment in Baltimore, with a particular emphasis on the various tools that were helpful in changing policy and practice to increase access to treatment. Given this, we recognize that best practices have changed over time, and that detoxification is no longer regarded as the best path to treatment for all patients. The historical initiatives described herein took place within a federal regulatory context that initially only allowed for buprenorphine's use in detoxification, and a local context in which treatment providers were much less comfortable providing maintenance treatment for patients who had not first gone through detoxification. The focus on detoxification throughout this document, therefore, is provided for the purpose of historical accuracy rather than as a recommendation for future work.

programs could not treat as many patients as expected, however. So OSI and partners looked for ways to expand the treatment intervention.

In 2004 and 2005, OSI gave grants to four Baltimore hospitals to use buprenorphine to detoxify heroin-intoxicated inpatients and then refer them to community-based addiction treatment programs upon release. The idea was to shorten the patients' hospital stays by stabilizing their substance abuse, leaving them well enough to start addiction treatment. This effort was only moderately successful, however. At most sites, patients achieved detoxification but the handoff to treatment failed because the program did not include case management. Still, like the pilot test in community health centers, the hospital program helped to familiarize more medical professionals with buprenorphine as a tool for treating opioid addiction.

#### ADAPTING AND EXPANDING THE APPROACH

In 2006, prompted by then-Commissioner of Health Joshua Sharfstein, OSI joined other partners in developing a continuum-of-care approach in which patients were inducted into buprenorphine treatment through outpatient substance abuse programs, provided with counseling, helped to obtain medical insurance that covered the cost of treatment, and once stabilized, shifted to primary care doctors for ongoing buprenorphine maintenance along with regular health care. Each patient had a case manager to help him or her get the support needed to make treatment work.

The integrated model, which was shaped by a **Buprenorphine Advisory Committee**, extended the length of buprenorphine therapy from 90 days, which was the default period of treatment that physicians had using, to a more realistic long-term, individualized maintenance model needed by many patients. It linked substance abuse treatment with primary care resources, thus creating a sustainable model of care and making it more likely that patients' overall health status would improve. And it reduced the stigma of receiving treatment for drug addiction by lodging treatment within mainstream primary care.

To make the program financially viable, the cost of providing buprenorphine needed to shift from private grants and block-grant funding to the mainstream medical system. State funds continued to cover the cost of counseling. In 2006, the state of Maryland created a new managed care insurance program, Primary Adult Care (PAC), which provided low-income adults with outpatient primary care and

A perfect storm of factors came together: OSI's groundwork to cultivate awareness and acceptance of buprenorphine, the health commissioner's leadership in and commitment to engaging city resources, and a state health insurance program for lowincome individuals that reimbursed the cost of treatment.

pharmacy benefits, though not hospital or specialty care. OSI gave a grant to Baltimore HealthCare Access (BHCA; now called HCAM), the nonprofit organization deputized by the state government to help people obtain health care benefits, to enroll buprenorphine patients in PAC.

The convergence of efforts to promote buprenorphine treatment with Sharfstein's desire to overcome Baltimore's heroin problem represented a perfect storm. Moreover, the state had just introduced its Primary Adult Care program. When patients stabilized through buprenorphine maintenance transferred to primary care doctors for PAC-reimbursed buprenorphine treatment, they freed up slots funded by block grants at the outpatient addiction treatment clinics.

Sharfstein directed Bonnie Campbell, BSAS' Director of Policy and Planning, and Kathleen Westcoat, President and CEO of Baltimore HealthCare Access, to implement the program. They were joined by Marla Oros, RN, of the Mosaic Group, who directed special projects for the state's largest FQHC system, and Christopher Welsh, a consulting psychiatrist at the University of Maryland.

#### In October of 2006, the collaborators developed the Baltimore Buprenorphine Initiative (BBI),

which has these core components: easily accessible clinic- and office-based buprenorphine treatment, integration of substance abuse treatment and primary health care, connections to health insurance, counseling that continues even after patients transfer to primary care, and a commitment to increasing both the duration of buprenorphine treatment and the number of physicians who provide such services.

Physicians at clinics participating in BBI conduct a patient history and physical exam, assess the patient, develop a treatment plan, participate in treatment team meetings, coordinate with nursing and counseling staff, and continue to meet with the patient at least once a month. Nurses or nurse practitioners orient patients to the program, educate them about buprenorphine, administer medication, monitor the response to treatment, and provide psycho-social support.

## GOALS OF THE BALTIMORE BUPRENORPHENE INITIATIVE

- Expand access to and effectiveness of treatment for people who are physically dependent on heroin/other opioids
- Improve health status of patients through integration of primary care and substance abuse treatment
- Create a sustainable model of care that shifts costs from block grant to medical care system
- 4. Increase duration of treatment
- 5. **Increase number of physicians** who provide buprenorphine services

On the addiction treatment program side, it made sense to start BBI with the six community health centers that OSI had already funded to deliver buprenorphine and counseling. Those sites already had doctors and nurses on board, and they were familiar with the medication.

Recruiting primary care physicians for BBI was a more difficult matter. Doctors who do not specialize in substance abuse are often reluctant to take patients with opioid addiction. These patients frequently use multiple substances, and doctors worry they may show up intoxicated—thus upsetting other patients in the waiting room—or miss appointments entirely. These concerns were addressed by:

- Positioning the outpatient substance abuse programs as the beginning of treatment, responsible
  for inducting patients into treatment, stabilizing them, and linking them to medical insurance.
  Patients would not transition to primary care until their risk factors were well under control.
- Developing criteria, protocols, and forms to coordinate and regulate patients' transfers from community-clinic treatment to primary care. BBI's system addresses such topics as how to determine when patients are stable, when to assess patients' readiness for transition, and how (and what) information flows between addiction treatment programs and continuing-care physicians.
- Arranging for BHCA's treatment advocates to support patients for six months after the transition
  to primary care. This includes assistance setting up the first appointment with the primary care
  doctor, trouble-shooting insurance issues, and making sure patients keep their appointments.

- Developing structures and procedures to maintain confidentiality while facilitating information sharing. BBI patients sign a release allowing BSAS, BHCA, and the treatment provider to share selected information so the systems can coordinate effectively without violating confidentiality.
- Conducting individual outreach to physicians specializing in family medicine, internal medicine, psychiatry, and HIV treatment—practices that were most likely to encounter patients with drug addiction—to explain BBI. In meetings with potential primary care providers, Christopher Welsh and Marla Oros leveraged their credibility as medical professionals to persuade physicians that BBI would avoid the problems they feared.

"The system we created guaranteed doctors a stable patient who is not using heroin, has had at least four months of outpatient counseling, is insured, and has a case manager to solve any problems. We could promise that these patients wouldn't look any different from their other patients."

Marla Oros

Facilitating communication among medical professionals. BBI involves staff from outpatient
addiction treatment programs in bimonthly coordination meetings, and BSAS revised its contracts
with clinics to include the expectation that they will communicate and collaborate with Baltimore
HealthCare Access and primary care providers.

#### HELPING PHYSICIANS OBTAIN TRAINING AND CERTIFICATION

Before BBI began, OSI had funded MedChi and its nonprofit affiliate, Center for a Healthy Maryland, to train Baltimore physicians to use buprenorphine and survey physicians on their concerns about prescribing the drug. But as BBI rolled out, the need for trained physicians increased dramatically.

**BBI's developers mounted a physician awareness campaign.** Welsh and Oros developed an orientation for physicians, nurse consultants, and office staff that explained the initiative's protocols, expectations, and resources. Meanwhile, Commissioner Sharfstein and U.S. Rep. Elijah Cummings wrote to every hospital CEO and administrator in the city outlining the extent of Baltimore's opiate addiction crisis, presenting buprenorphine treatment as a solution, asking them to develop a plan for training their doctors in buprenorphine treatment, and requesting a meeting with staff at the hospitals' outpatient clinics so that Sharfstein, Welsh, and Oros could explain BBI's approach.

To further encourage physicians to adopt buprenorphine treatment, Sharfstein committed health department funds to cover the cost of their training (\$125 per person). Sharfstein's office contracted with a commercial vendor to provide the training—in person at first, and later via Internet—to any physician in Baltimore City who promised to take patients stabilized by BBI. In subsequent years, the state took over funding the cost for online training for physicians and expanded eligibility to include any physician in Maryland with an interest in prescribing buprenorphine.

#### **ADDRESSING COST ISSUES**

When the buprenorphine effort began in Baltimore, OSI covered the drug's cost for clinics—an arrangement that made treatment possible but did little to help the programs achieve financial sustainability. So OSI funded MedChi to study Medicaid policy across the country regarding

reimbursement of buprenorphine treatment. The information provided by the study enabled Sharfstein, by then the Maryland State Commissioner of Health, to persuade the Maryland Department of Health and Mental Hygiene to put buprenorphine on the formularies for Medicaid and Ryan White Act funds, so that care of patients covered by either of those programs could be reimbursed. Meanwhile, BSAS prioritized the use of city funds to cover the cost of physicians and nurses involved in buprenorphine treatment for uninsured patients. And in 2008, BSAS helped BBI arrange an ongoing bulk-purchase discount on buprenorphine from the pharmaceutical distributor, which further lowered the cost.

When Maryland's Medicaid Program was expanded to include Primary Adult Care, a limited benefit package for single men and others not previously eligible for full Medicaid, this new public program covered the cost of buprenorphine medication and outpatient counseling. In 2013, Maryland implemented Medicaid expansion as part of the Affordable Care Act, thus eliminating the PAC program. At that point, advocates at HCAM (the ombudsman organization created when Maryland adopted managed care) transitioned from enrolling patients in PAC to enrolling them in Medicaid.

In 2015, Maryland carved out addiction treatment services and mental health services and put them under the administration of Value Options, Maryland's Administrative Services Organization for Medicaid. Value Options funds buprenorphine medication and buprenorphine-related physician visits. Baltimore City is beginning to consider how to best access reimbursement for physician services provided at substance use disorder treatment programs so as to maximize the use of the substance abuse treatment block grant that covers nursing and other buprenorphine program costs.

#### IMPROVING STANDARDS OF CARE FOR BUPRENORPHINE TREATMENT

To help all participating clinics and physicians meet the same high standard of practice, Welsh and Oros developed a written protocol and guidelines for delivering buprenorphine treatment and integrating it with counseling. The guidance, accompanied by standardized forms and in-person orientation to the practices, addresses the induction, transition, and maintenance phases of treatment, including obtaining consent, stabilizing medication dosages, integrating counseling and support services, conducting toxicology tests, assessing patients' readiness to transition to continuing transferring the patient, and case management from the start of treatment to six months after the transfer.

Welsh and Oros supplemented this material in 2009 with a set of clinical guidelines (updated in 2011 and 2013) that contain more practical advice, such as what to do on the patient's first visit and follow-up appointments, how to use withdrawal symptoms to find the right dosage level of buprenorphine, and

## QUALITY INDICATORS FOR BBI TREATMENT PROGRAMS

- 90% of patients will receive their first buprenorphine dose within 48 hours of the patient's first face-to-face visit at the treatment program.
- 90% of patients who screen positive for possibly having a mental health disorder will be referred for mental health evaluation.
- 3. 90% of patients who receive a mental health evaluation recommending treatment will receive ongoing mental health treatment.
- 4. 60% of patients will be retained in treatment for at least 90 days.
- 5. 75% of patients who transition to continuing care physicians will transition within 150 days from the date of admission to substance abuse treatment.

how to assess the patient's recovery from addiction—knowledge that the average primary care doctor might not have. In May 2013, BSAS created two additional guides, *Clinical Guidelines for Continuing Care Physicians in the Baltimore Buprenorphine Initiative* and *Clinical Guidelines for the Use of Benzodiazepines Among Patients Receiving Medication-Assisted Treatment for Opioid Dependence*. Both documents were widely circulated among Baltimore City physicians and placed on BSAS' website.

The revised guidelines reflect a growing awareness that buprenorphine treatment should be individualized to each patient's needs and progress. The community health centers had become accustomed to providing 90 days of treatment to all patients, even those who were ready sooner for the transfer to continuing care. And all patients were being placed in the clinics' intensive therapy programs, which require counseling three times a week—even those who had stable lives and could go directly into treatment through a primary care provider. The new guidelines specified strategies for helping patients progress through treatment, established an option for low-threshold treatments, and emphasized the importance of individualizing treatment.

#### **ENSURING PROGRAM QUALITY AND IMPROVEMENT**

To ensure that the BBI is implemented well, OSI and its partners created a quality monitoring and improvement system that includes:

- A set of quality indicators that participating community health clinics are expected to meet.
- **Technical assistance** to resolve quality issues. For instance, when Oros and Campbell realized some patients were not getting their first dose of buprenorphine until 10, 14, or even 30 days after intake, they reviewed the programs' procedures and worked with directors to cut the wait time to 48 hours.
- Quarterly site visits to participating programs by BBI and BSAS staff to ensure that services meet clinical guidelines and the medical and counseling services are integrated. The visitors meet with program staff, audit patient charts, and assess the program's status on quality indicators.
- A monthly data report that summarizes information on patients (e.g., how many are being treated, insured, transferring to continuing care) and tracks the amount of time it takes to induct new patients, obtain insurance, and transfer to continuing care.
- A quarterly data dashboard that summarizes measures of program quality (e.g., percent of patients medicated within 48 hours) and process data (e.g., number of patients treated and treatment episodes provided, number of discharges).
- Regular quality improvement site visits by Oros and Campbell to review a random selection of
  medical records to assess the program's compliance with the BBI Clinical Guidelines and to provide
  on-site technical assistance and other necessary support.

A grant from the Robert Wood Johnson Foundation supported development of the system for collecting, sharing, and using data to improve BBI's service delivery.

#### **EXPANDING BEYOND BBI**

In 2010, OSI sought to expand buprenorphine treatment to more people than BBI could serve. BBI requires programs to have a full time nurse, and it requires patients to see the nurse daily during the first few weeks. Providers and patients who couldn't make those commitments were falling through the gaps, so OSI funded the Behavioral Health Leadership Institute (BHLI) to adapt the model for addiction recovery centers. Baltimore has three such centers, which offer wellness services such as yoga, peer support meetings like Narcotics Anonymous, mental health counseling, employment services, and connections to other supports. The centers' staff are primarily individuals in recovery from drug addiction who provide peer support—not trained clinicians.

"For many clients this is a way to build a first point of contact with the medical community.

Then we try to get them into a clinic for general health care."

Deborah Agus, BHLI

The **Buprenorphine Project** developed by BHLI Executive Director Deborah

Agus and implemented at two recovery centers brings a part-time physician from a separate medical facility and a part-time nurse hired through a temporary agency into the recovery center, where they work with the center's staff to enroll clients in buprenorphine treatment, help them obtain insurance, stabilize their health status, and transition them to continuing care from a medical provider. Partnering with the centers' staff helps the project earn acceptance from the community.

Patients meet with the physician, nurse, and peer counselor at intake and, if appropriate, begin taking buprenorphine that day. If the patient responds well, he or she receives a prescription the next day. Patients attend peer counseling and check with a nurse daily for the first two weeks, but the check-in can be done by phone rather than in person.

#### III. WHAT HAPPENED?

he effort to introduce and expand buprenorphine treatment in Baltimore has succeeded in many ways. Most notably, access to evidence-based, effective treatment for opioid addiction has expanded. By 2014, the Baltimore Buprenorphine Initiative operated in 10 locations, providing 399 treatment slots. Collectively, the programs admitted 995 patients over the course of the year, served an average of 395 patients per day, and retained almost half (48%) in treatment for 90 days or

## BALTIMORE BUPRENORPHINE INITIATIVE BY THE NUMBERS

- 10 locations
- **399** treatment slots
- 575 Maryland doctors trained and licensed to prescribe buprenorphine
- 217 Baltimore City doctors trained and licensed to prescribe buprenorphine

more.<sup>6</sup> Of the admitted patients, 275 transferred to continuing care; of those, 83% successfully reached the six-month milestone in continuing care.<sup>7</sup> In addition, 575 doctors in Maryland, including 217 in Baltimore City,<sup>8</sup> have completed training and obtained waivers to prescribe buprenorphine—although many of those doctors don't actually provide buprenorphine treatment. Still, several of the federally

<sup>&</sup>lt;sup>6</sup> BHSB Buprenorphine Dashboard, 2014 Q4 and Annual Data, sheet 3.

<sup>&</sup>lt;sup>7</sup> BBI Site Data FY 2014, HealthCare Access Maryland, p. 11.

<sup>&</sup>lt;sup>8</sup> http://buprenorphine.samhsa.gov/pls/bwns\_locator/bup\_providers\_html

qualified health centers now require every physician they hire to obtain a buprenorphine waiver, and the chairman of medicine at one hospital has decreed that all physicians there will have waivers.

Perspectives on treating drug addiction have shifted. Medication-assisted treatment, counseling, case management and other support services, and integration of substance abuse and primary care are now viewed as essential parts of a comprehensive continuum of care for people fighting opioid addiction. Providers who once resisted using medication to treat addiction now realize it is a safe and effective treatment, and many physicians who were reluctant to take opioid-addicted patients now accept them. Internists and family doctors have begun to see addiction treatment as part of their role.

## Systems and practices for treating addiction have changed, with buprenorphine now widely seen as a

reasonable treatment option. Programs that previously did not offer medication began to combine counseling with buprenorphine treatment, and programs that previously used buprenorphine only for detoxification started using it for addiction treatment and maintenance. Medical and counseling staff who had worked in isolation were merged into team-based care, integrating outpatient treatment with ongoing primary care. One-size-fits-all protocols gave way to more individualized treatment.

# **Funding streams have been tapped to create a financially sustainable model** for buprenorphine therapy. With the help of treatment advocates from HCAM (formerly BHCA), almost all patients who enter a BBI program without insurance have obtained coverage. Buprenorphine treatment has been added to the state's Medicaid formulary, and the state Medicaid office and managed care organizations streamlined the authorization process for buprenorphine prescriptions.

**Success didn't come without challenges, however.** Until trust grew, some treatment providers worried that the BHCA's treatment advocates would "steal" their clients, while others didn't want medication in formerly drug-free settings. Primary care physicians' reluctance to accept individuals in recovery for continuing care has diminished but remains an obstacle. More doctors have received training than are actually prescribing buprenorphine, and some will only take so-called "perfect" transfer patients.

Restrictions on the use of buprenorphine limit its potential impact. Initially, federal law limited each physician to 30 buprenorphine patients at a time. (The cap was raised to 100 patients for physicians with at least one year of treatment experience, but slow turnover of patients still creates a bottleneck.) Physicians must be certified to prescribe buprenorphine, and nurse practitioners cannot prescribe it at all. These restrictions mean that the demand for buprenorphine exceeds capacity in Baltimore. Programs often have waiting lists and must continually recruit and train new doctors.

**Funding restrictions** pose obstacles, too. Maryland's Medicaid system reimburses the cost of addiction counseling and continuing primary care, but Medicaid doesn't reimburse the costs of nurses and doctors who treat buprenorphine patients "offsite" at substance abuse centers or recovery clinics. Value Options, Maryland's Administrative Services Organization for behavioral and mental health services,

## BALTIMORE BUPRENORPHINE INITIATIVE IN 2014

- 995 patients admitted
- 395 patients served per day, on average
- 48 percent of patients retained in treatment for 90 days or more
- 275 transferred to continuing care
- **83 percent** of transferred to continuing care reached 6-month milestone

reimburses providers well for inducting patients into buprenorphine treatment but not for providing maintenance services, so BHSB and BHLI must cover those costs through grants.

**Negative press coverage and public misconceptions** about buprenorphine require constant management. In 2012, inflammatory statements about buprenorphine by the Center for Substance Abuse Research led to damaging reports in the *Baltimore Sun*, which required a time-consuming response from OSI.

#### IV. WHAT DID WE LEARN?

hat lessons from Baltimore could help other cities and communities interested in using buprenorphine to combat opioid addiction? OSI staff, co-funders, system and program leaders, researchers, and other partners offer this advice:

Early in the process, scan the landscape and convene key stakeholders and potential leaders to build knowledge, support and commitment. Include all of the players with resources and activities committed to treating your target population. In Baltimore's case, this included substance abuse programs, community health centers, hospitals, physicians in private practice, the city's health and mental health department(s), and the medical society. Consult national experts to familiarize them with the local situation, seek their advice, and learn about similar efforts in other places.

**Figure out what motivates allies in different sectors.** Understand what will bring them to the table and how they will gauge success. They may be motivated by policymaking, public health improvement, or individual health outcomes. An elected official whose city faces a drug crisis needs to reduce the overall addiction rate, while a public health administrator has to consider cost-effectiveness and other factors, such as diseases that may spread through drug use. Hospitals may fear the loss of federal funding if they become accountable for a patient who can't overcome addiction, and primary care physicians have practical concerns about intoxicated patients who could disrupt the waiting room.

**Find courageous leaders** who will own the issue, set clear expectations for addressing it, and use their authority to move others forward while also giving employees leeway to make tough changes. The buprenorphine effort in Baltimore benefited from the city's long history of political leaders who supported treatment for substance abuse, including former mayors Kurt Schmoke and Martin O'Malley and former health commissioners Peter Beilenson and Joshua Sharfstein. OSI-Baltimore had strong relationships with all of these leaders, so when the time came to push for buprenorphine treatment they were receptive.

Introduce physicians to the buprenorphine modality early in their career, before they develop preconceptions about people with addiction. The University of Maryland Medical Center's Substance Abuse Consultation Service now trains all psychiatry residents in buprenorphine treatment during their last two years of residency, for example, and the Medical Center's division of community psychiatry expects all of its psychiatrists to obtain the buprenorphine waiver. Internists and primary care doctors could be another target audience for early training.

**Understand the state and local funding context,** especially how the medical assistance system covers addiction treatment and how uninsured patients are handled. Advocate for regulatory changes when possible, but consider adapting the model when necessary. For example, a program that

dispenses buprenorphine directly to patients requires full-time nursing staff to educate and monitor patients—a more expensive approach than just having doctors write buprenorphine prescriptions during office visits.

**To change a system, start with a pilot.** Test the best protocol possible and revise it if it doesn't work. Include metrics for success, so you know quickly whether the approach works. Once the pilot has proven its value, allow time for the system(s) to incorporate changes; it takes more than a year or two to change practices, policies, and norms on a large scale. Private funding may be needed to bridge this period—especially to build the capacity of small organizations that interact with the system.

**Invest time and effort in developing and managing partnerships.** Expect excellence from everyone. Encourage a culture of problem solving, and identify and remove barriers that prevent partners from achieving goals. Engage small, nonprofit organizations as well as large institutions, and invest in building their capacity. Seek input from partners, make decisions transparently, and collaborate—but be prepared to end partnerships that do not work. Create processes that help partners connect and communicate (such as BBI's treatment advocates and bimonthly coordination meetings for program staff). It also helps to have an outside party coordinate and convene partners.

**Support clients so they have a strong shot at success.** Go into the community and talk to potential clients to learn what they need and want in the program, including where they will be most receptive to receiving treatment. Provide case management to address all of the problems that could interfere with treatment or recovery—food, housing, and transportation as well as medical insurance. Educate patients so they understand how the treatment works and what is expected of them.

#### V. WHY DOES IT MATTER?

eroin use is expanding in cities like Baltimore, where it reached epidemic status decades ago, and in new places across the state and the country, where prescription opioid users are switching to heroin for the first time. With increased use we can clearly expect to see a higher death rate. Nationally, overdoses from prescription opioid pain relievers climbed to 16,200 annually in 2013,<sup>9</sup> while deaths from heroin-related overdoses nearly quadrupled between 2002 and 2013.<sup>10</sup> Between 2013 and 2014, the number of overdose deaths associated with heroin increased by 21% in Maryland (from 464 to 578) and by 28% in Baltimore City (from 150 to 192).<sup>11</sup> Buprenorphine has become a powerful tool for treating opioid addiction. Now, several factors make this an opportune time for more cities to expand use of this effective treatment modality.

Health care reform is causing state and local policymakers to rethink how they provide and pay for drug addiction treatment. The Affordable Care Act required coverage of substance abuse treatment, including prescription drugs, rehabilitative, prevention, and wellness services, at parity with coverage of other medical services. It created incentives for providers to coordinate addiction services, mental health counseling, and primary care. It expanded Medicaid coverage of community-based services for people battling addiction. It required substance abuse treatment providers to offer medication as a

<sup>10</sup> Centers for Disease Control and Prevention, <a href="http://www.cdc.gov/vitalsigns/heroin/index.html">http://www.cdc.gov/vitalsigns/heroin/index.html</a>.

<sup>&</sup>lt;sup>9</sup> http://www.hhs.gov/news/press/2015pres/09/20150917a.html

<sup>&</sup>lt;sup>11</sup> Maryland DHMH Report, "Drug and Alcohol-Related Intoxication Deaths in Maryland, 2014" released May 2015. http://bha.dhmh.maryland.gov/OVERDOSE\_PREVENTION/Documents/2015.05.19%20-%20Annual%20OD%20Report%202014\_merged%20file%20final.pdf.

form of treatment. And it provided enhanced Medicaid payments to states with case management services that are based on the individual patient's best interests.

In September 2015, the U.S. Department of Health and Human Services moved to expand access to medication-assisted treatment by making \$1.8 million in grants to rural communities to reduce opioid addiction through better access to treatment. Noting that fewer than 1 million of the 2.5 million people nationally who need opioid addiction treatment receive medication-assisted treatment, HHS Secretary Sylvia Burwell also said her agency would revise regulations to increase the number of patients physicians are allowed to treat with buprenorphine, <sup>12</sup> a statement that drew positive, bipartisan support from members of Congress.

The health care reforms come at the same time as changes to drug policy:

- In August 2013, the U.S. Department of Justice directed prosecutors of drug cases to pursue referrals to treatment more frequently as an alternative to incarceration for low-level infringements.
- Over the course of his presidency, Barack Obama commuted 76 prison sentences for low-level drug offenses, as part of his effort to reform the criminal justice system.<sup>13</sup>
- A bipartisan bill under consideration in the U.S. Senate in 2015, the Smarter Sentencing Act, would
  give federal judges more discretion in sentencing people convicted of non-violent drug offenses; a
  similar bill in the House of Representatives would reduce the mandatory minimum sentencing for
  controlled substance offenses.

What do these trends and changes hold in store for substance abuse treatment and health care? Health care reform is expected to expand buprenorphine services, which could reduce waiting lists and perhaps engage populations that did not previously seek treatment. In states where Medicaid is expanding, a potentially large number of previously uninsured individuals with addiction, such as some returning from prisons, will gain coverage; however, that could increase demand for services. Addiction treatment providers who previously were funded only through federal block grants or the criminal justice system will need to learn to work with Medicaid. Many of the new patients will not be easy for conventional clinics to accommodate until they are stabilized, so it will be important to continue expanding and supporting the continuum-of-care approach to addiction management.

Early studies indicate that the Affordable Care Act's impact on buprenorphine treatment has been uneven, due to variation among physician practices and in state Medicaid policies. Although the number of individuals with health insurance has grown, some buprenorphine prescribers do not accept insurance. While the average state has 82 buprenorphine-prescribing physicians per 1 million residents, the ratio varies widely by region. Moreover, states that expanded Medicaid and states that established health insurance exchanges, like Maryland, have significantly more buprenorphine-prescribing physicians than states that declined to expand Medicaid or defaulted to the federal insurance exchange, according to researchers at the University of Kentucky.<sup>14</sup>

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<sup>&</sup>lt;sup>12</sup> http://www.hhs.gov/news/press/2015pres/09/20150917a.html.

https://www.washingtonpost.com/world/national-security/obama-commutes-sentences-of-46-non-violent-drug-offenders/2015/07/13/b533f61e-2974-11e5-a250-42bd812efc09\_story.html

<sup>&</sup>lt;sup>14</sup> Knudsen, H., and Thomas, E. "Access to buprenorphine treatment for opioid use disorders in the context of health reform." Presentation of findings at American Public Health Association annual meeting, November 2014. Available at <a href="https://apha.confex.com/apha/142am/webprogram/Paper299530.html">https://apha.confex.com/apha/142am/webprogram/Paper299530.html</a>

Since there already is more demand for buprenorphine treatment than treatment slots, the current (but soon to be increased) 100-patient limit imposed on physicians who prescribe buprenorphine is a barrier, as Secretary Burwell acknowledged. It also may be time to extend buprenorphine prescribing privileges to nurse practitioners. And as incentives increase for primary care physicians to coordinate patient care with substance abuse treatment providers, policies and funding streams will have to be established to support integration and reward collaboration. Temporary detoxification should be funded only as the front end of enrollment in a maintenance model of care, while support groups for maintenance must be expanded. Similarly, ongoing maintenance treatment should be available without the requirement of first participating in detoxification, and without an expectation of total abstinence on the part of the patient.

What opportunities lie ahead in Baltimore? OSI and its collaborators will continue working to make sure more people have access to effective addiction treatment. Key concerns include:

- Learning why more doctors with waivers aren't prescribing buprenorphine;
- Enhancing ancillary services for buprenorphine patients, including mental health services, to address the many issues that affect recovery;
- Strengthening links between existing detoxification and maintenance programs;
- Increasing the number of program staff qualified to provide addiction counseling;
- Getting a larger number of stable patients through 90 days or more of treatment, and getting struggling patients to specialized services faster;
- Further individualizing the model; and
- Learning more about which patient characteristics result in barriers to enrollment in treatment programs, and when and why people fall out of the programs without completing treatment, so that services can be improved.

The Behavioral Health Leadership Institute is creating new treatment sites for the Buprenorphine Project, potentially including such nontraditional locales as shelters for homeless people and victims of domestic abuse. BHLI's Deborah Agus also is developing a new recovery group model that embraces medicine as a key element of recovery. "As we look to the future, it's important to determine the key elements that define quality without requiring rigid adherence," she says. "We also want to build a coordinated, continuous treatment system that reaches from the most vulnerable people to those who are able to quickly engage in treatment, and we need to determine how best to integrate detoxification and maintenance services."

In 2015, the Mosaic Group completed a feasibility study of providing buprenorphine induction and stabilization at mental health clinics. The model appears to have potential for treating an underserved population, and BHSB is considering funding several pilot mental health program sites in 2016.

In July 2015, the Heroin Treatment and Prevention Task Force convened the previous year by Baltimore Mayor Stephanie Rawlings-Blake recommended that the city take several actions, including:

- Develop a data "dashboard" for monitoring real-time data on substance abuse and treatment;
- Implement a city-wide heroin overdose plan that includes targeted treatment, prevention, and interventions for people at risk of overdose (including widespread dissemination of naloxone);
- Develop and publicize a centralized, easy-to-access intake system available around the clock;

- Increase data-driven, high-impact options for treatment such as universal case management and buprenorphine treatment;
- Ensure "treatment on demand";
- Develop voluntary certification and review for substance use treatment providers based on core standards of care;
- Facilitate partnership and collaboration to pilot programs, test incentives, and discuss integration with state and federal systems of care;
- Develop standardized good-neighbor agreements between treatment providers and community members:
- Coordinate the efforts of treatment providers and law enforcement; and
- Educate and inform residents, businesses, and other key stakeholders about substance addiction to help reduce fear and combat stigma.

Also in 2015, Baltimore City Health Commissioner Leana Wen set the reduction of overdose deaths as a top priority. Baltimore City's plan for reducing overdose deaths includes a focus on expanding access to buprenorphine among other types of treatment.

These developments build on the solid foundation laid by OSI and its partners to make opioid addiction treatment more accessible, to more people, in more settings. Although this work is neither perfect nor complete, it has already helped countless people reclaim their lives. Just as importantly, the choices, actions, and lessons captured here offer a starting point for leaders in other communities to carry this promising work far beyond Baltimore's borders, and to save many more lives in the process.





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The Open Society Institute-Baltimore's Drug Addiction Treatment Program seeks to ensure universal access to treatment services for all in need regardless of income or insurance status.

#### **PRIORITIES**

Using the opportunity of health care reform to help Baltimore City and Maryland as a whole reach universal access to a comprehensive, high-quality public treatment system.

The most overarching opportunity, and challenge, to the field has been the passage of national health care reform. Although Maryland identified essential health benefits that include substance use treatment, we still have much work to do to ensure that these benefits are actually available to those in need. Health care reform implementation has changed the way health care is provided in this country in substantial ways and created some new challenges for behavioral health providers. To make the most of this changing landscape, providers, hospitals, government officials, and health care advocates have to continue to be nimble and forward thinking. OSI-Baltimore initiatives support education, advocacy, and communication efforts that ensure meaningful access to substances use disorder services.

Ensuring access to high quality public substance use disorder services for those that remain uninsured after the 2014 health care reform implementation.

Health Care Reform can ensure a massive expansion of treatment availability. But, despite the great promise of reform there remain many people who cannot afford or are unable to obtain health coverage. For this reason, the Open Society-Institute Baltimore supports education and advocacy efforts that seek to preserve the current state and federal block grants that provide access to treatment for those that are uninsured or underinsured.

Facilitating the creation of and help to sustain a strong, diverse addiction treatment advocacy community, inclusive of those most affected by substances use disorder services policies.

The initiative supports the establishment of a diverse advocacy community that includes directly impacted individuals who have first-hand knowledge of how policies that discriminate against people with substance use disorders lead to the breakdown of families and disintegration of our communities.