

Improving the Hospital and Emergency Department Response to Substance Use Disorders: A Project ASSERT Case Study

Project ASSERT: To improve **Alcohol & Substance Use Disorder Services, Education and Referral to Treatment**

The Challenge

Boston Medical Center BMC (formerly Boston City Hospital) is the largest safety net hospital and busiest trauma and emergency services center in New England. In the early 1990s, when the nation was in the midst of the HIV/injection drug use epidemic, patients came to the emergency department (ED) with complex needs related to their drug and alcohol misuse. This overwhelmed the care systems in place and led our providers to seek out new ways to meet the needs of these patients. Edward Bernstein, MD, emergency physician and at the time chair of the ED's Quality Improvement committee, began by looking at scientific literature and found two important avenues to explore for intervention: research by Morris Chafetz in the late 1950s at Massachusetts General Hospital Accident Floor that demonstrated that psychiatry residents and social workers could team up successfully to engage middle aged homeless, heavy alcohol consumers in treatment; and Drs. Bill Miller and Steven Rollnick's work on the efficacy of motivational interviewing. In 1993 he and Judith Bernstein, PhD, together with the Boston Public Health Commission and MA Department of Public Health submitted a "critical populations grant" application to the Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Substance Abuse Treatment to improve the quality of care for the diverse patients struggling with substance-use disorders who were coming to Boston City Hospital ED. They were awarded a three year grant that supported hiring a team of outreach workers, recruited from the communities served by the hospital, to work as part of the medical team to identify patients with substance misuse needs, intervene and offer resources. This was the beginning of Project ASSERT - To Improve **Alcohol & Substance Use (Disorder) Services, Education and Referral to Treatment**.

Project ASSERT was the first nationally published program in an ED to deploy peer counselors/educators as motivators and navigators to identify and intervene with patients with unhealthy alcohol and drug use. The Project ASSERT team of outreach workers provided the "in-reach" that the ED staff needed to bridge the gap between what patients needed and what they had the capacity to provide.

Getting at the Root of the Issue

The treatment gap between those who need treatment for substance-use disorders and those who seek and receive treatment contributed greatly to the problem of patients with substance use disorder returning through "the revolving door" of the ED. In an emergency department, the goal of the clinical staff is to address immediate needs rapidly and refer, which is often incompatible with the complex medical and social issues that patients with substance-use disorders bring when they come to the hospital. The ED needed a program to motivate patients to seek out resources aimed at helping them overcome the individual and systemic barriers to accessible, effective treatment. In addition, it was imperative that the hospital and its providers recognize and address the social determinants of the disease of addiction affecting their patients, including disparities, discrimination, unemployment, underemployment, inadequate education, homelessness and traumatized individuals and families. People with substance-use disorders also experience stigma, in the form of social rejection and isolation in the health care system, which interferes with their seeking out and engaging in treatment. These issues, coupled with the need for more access to treatment, make recovery difficult, which can result in losses of opportunity, health and life.

The solution

In 1997, when the original Project ASSERT grant ended, Boston Medical Center demonstrated its commitment to the program by providing salary support for four full-time Health Promotion Advocates (HPAs). Since that time, Project ASSERT has provided patient services from 8 am to 12 am daily,

including holidays, operating under the direction of the social work department. Over the past 23 years, HPA consultations have improved communication between patients and providers and helped providers offer more informed, customized options for patients at discharge from the ED.

They have done this by:

- Bringing knowledge of community conditions and neighborhood life (the social determinants of health) to the emergency medicine practice
- Serving as culture brokers: helping patients understand medical language and constructs, while also helping medical professionals understand the complexity of patients' lives, languages, priorities and choices
- Consulting with providers during daily rounds and engaging patients in respectful, compassionate and informed conversations about their health and safety
- Encouraging and motivating patients to seek help
- Advocating for and facilitating access to an array of hospital and community resources and services.

HPAs utilize in their interactions with patients the [Brief Negotiated Interview \(BNI\) algorithm developed at Boston Medical Center in 1994, together with Dr. Steven Rollnick who served as the consultant on the project](#). By addressing SUDs in the context of other health and safety needs, the team provides patients the opportunity to explore change through a nonjudgmental conversation and can facilitate access to a range of SUD treatment and services.

As the opioid epidemic started to hit in 2009, Project ASSERT collaborated with the South End Healthy Boston Coalition Communities to train patients, family and friends in overdose recognition and appropriate responses, including calling 911, initiating rescue breathing as well as educating about naloxone administration and rescue kit distribution. In 2014, BMC physicians began electronic ordering of naloxone rescue kits, which were distributed by our ED pharmacists between 12 am and 8 am (see Figures 1 and 2).

Today, Project ASSERT staff is comprised of a supervisor and six Massachusetts Licensed Alcohol and Drug Counselors (LADC) Master Level I and Level II. The program has evolved to provide consultation beyond the ED, to inpatient and outpatient services. More recently, Project ASSERT collaborated with BMC's Inpatient Addiction Consult Service, and the Adult and Adolescent Office Based Addiction Treatment Programs that offer medication therapies, such as buprenorphine and oral and injectable naltrexone to patients with substance use disorders. As a result of this collaboration, BMC was awarded a Massachusetts' DPH grant for a Regional Opioid Urgent Care Center/Faster Paths to Treatment. Faster Paths opened in August 2016 and has the Project ASSERT LADCs at its very core, conducting ASAM triage continuum provisional level of care evaluations and intake psychosocial assessments, negotiating a treatment plan – all in addition to their work as motivators and navigators. Project ASSERT and Faster Path now brings together independent silos of care into an expanded network and substance-use disorder care delivery system that offers our patients a broad spectrum of services, which includes medication therapy.

Choosing Partners

Since its inception Project ASSERT recognized the importance of establishing community partnerships in order to provide a continuum of services for patients. Current partnerships include:

- The Boston Public Health Commission, which has syringe exchange and naloxone distribution programs; inpatient and outpatient clinical stabilization, transitional and residential services; and the PAATHS Recovery Specialists program, which provide transportation and assistance to patients to get an RMV ID so they can get their buprenorphine prescriptions filled, as well as access to an array of other services;

- Boston Health Care for the Homeless, which provides primary care and short term respite, mental health services and a buprenorphine program while also providing access to shelters and housing first programs;
- Working with more than a dozen acute treatment/detox programs in Boston and its surrounding area;
- Methadone Maintenance Treatment/Methadone Maintenance providers and Office Based Addiction Treatment (OBAT) in the primary care setting with X-waivered prescribers who prescribe buprenorphine/suboxone and naltrexone/vivitrol;
- Within the BMC system, collaboration with the behavioral health clinic, programs for pregnant women, adolescents, adults and psychiatric patients, as well as with community health centers/FQHCs;
- Informal relations with NA/AA fellowship through Project ASSERT's staff contacts and community partners.

Fruitful Partnerships

Project ASSERT's network of partners was built over many years of face-to-face contact with individuals and agencies that share common values of respectful, hospitable and quality services. Project ASSERT staff take personal responsibility for appropriate referrals and constantly elicit feedback from our partners. Project ASSERT participates in joint staff meetings, community meetings, presents at conferences, and exchanges information, ideas and resources with our colleagues. These on-going collaborations have been helpful to address treatment gaps and to build sustainability. Some partnerships are informal, and others are detailed by memoranda of agreement and funding proposals. The Boston Public Health Commission's Recovery Specialist, working with BMC under a Qualified Service Organization Agreement (QSOA), documents provision of assessments, patient needs, treatment referrals and community support services in BMC's electronic health record.

Reporting Overdoses

If an overdose occurs in the Project ASSERT office, our staff of LADCs call BMC's rapid response team from the ED and the hospital's campus public safety officers and, when possible and necessary, Project ASSERT staff administers nasal naloxone/narcan. All of our Project ASSERT staff carry and are trained to administer naloxone and have been instrumental in saving a number of lives. In the ED, Project ASSERT implements the PEERS protocol (See Figures 1 and 2). We submit the necessary forms to the Massachusetts Department of Public Health Bureau of Substance Abuse Services who provide free naloxone rescue kits to our patients.

Hospital Support

Boston Medical Center offers financial support under the Faster Paths Opioid Urgent Care Center Grant (<https://www.bmc.org/programs/faster-paths-to-treatment>). Project ASSERT also has a grant subcontract with the Boston Public Health Commission for their Recovery Specialist Community Support Services. In addition, BMC and Project ASSERT provide outside agencies/partners with consultation, medical evaluation for safe referrals/ placement and access to medical treatment and medication therapy for their clients.

Metrics for Progress

Project ASSERT receives monthly reports from the BMC's data warehouse and analyzes data from our electronic records. The Project ASSERT leadership supervisor and the medical director actively monitor the number of patients requesting detox/acute treatment as well as those denied and those refusing SUD services (See Figure 3). In addition, the Faster Paths program grant leadership monitor the number of scheduled appointments and no shows, the number of patients receiving intake assessments by an LADC, physician and nurse evaluations, prescriptions and transitions to maintenance office-based treatment, methadone maintenance treatment or other programs. (See Figure 4).

Education to Overcome Stigma

Project ASSERT's biggest challenge, which actually remains as one of the biggest barriers to treatment of substance-use disorders, has been stigma. Initially, there was a lack of understanding of substance-use disorders and treatment options by patients, providers and the community. There was also a lack of capacity in the treatment system, barriers to access such as language, sexual identity, transportation, private insurance authorization, government I.D.s and bed availability.

Project ASSERT also experienced challenges of integrating a peer model into the medical setting and the hierarchical culture of the ED as well as conflicts in collaborating across different departments and disciplines. To overcome the challenges related to stigma, under capacity and resistance to collaboration, the Project ASSERT team patiently worked to build personal relationships with individuals in the network, and within and outside the hospital walls, to better serve our patients. The services provided by Project ASSERT have contributed to patient and staff satisfaction. Project ASSERT staff plays a strong role in advocacy at all levels of government and local agencies on behalf of BMC patients.

In the ED

Project ASSERT and the leadership within the emergency department made it a priority to invest in staff development and wellness with an emphasis on keeping on top of the latest treatment options and keeping an open mind to the needs and preferences of patients. Project ASSERT requires that staff be in compliance with the requirements of the Massachusetts DPH, and thus have provided continuing education opportunities and tuition reimbursement so that staff can meet their re-certification requirements. Some examples of training topics have included: motivational interviewing, maintaining patient confidentiality, boundaries and ethics, ASAM criteria, evidence-based addiction medication treatment, LGBTQ appropriate services and respectful communications, cultural competence, trafficking and military culture and substance use disorder services for those who have served our country.

Project ASSERT also sponsors an annual community tour for incoming emergency medicine residents to get to know the resource and resilience of the communities that BMC's ED serves.

Lessons learned by the Project ASSERT Team

First and foremost, Project ASSERT team learned over and over again that hospitality –a nonjudgmental open door, welcoming approach that promotes hope – was the most successful. The team learned the importance of genuine authenticity, and listening and learning from our patients as a means to building trust, which in turn yields more successful outcomes.

The team learned to listen carefully to our clients about what is happening on the street, and to use this information to stay current and adapt Project ASSERT to address patient needs. Project ASSERT has changed the language the team uses in order to reduce stigma and stopped using language that used to be common when treating patients with SUDs in an emergency department, such as “frequent flyer,” “addicts,” “junkie,” “alcoholics,” “drunk,” and “substance abusers.”

Project ASSERT recognized transportation as a major barrier to treatment access, and BMC's development staff continues to raise funds to help defray the cost of transporting patients to treatment facilities.

Project ASSERT also appreciates the contributions of our IT department in helping to build a robust Electronic Record System/Customized Addiction Templates to facilitate communications and continuity of care for better coordination of care. All patient information is entered into the Electronic Health Record (EPIC templates designed by our hospital IT), which includes: demographics, the ASAM Triage Continuum to determine the provisional level of care, a full alcohol and drug and psycho-social assessment and documentation of placements, referrals made and follow up visits.

Project ASSERT could not have grown - in volume and success – over the course of 23 years without the full support of leadership at BMC and within the ED. And in addition, the team could not provide an

extensive menu of options to meet our patient needs without the ongoing collaboration with the treatment and community partners described above.

What would you do differently today?

While the Project ASSERT team is proud of their progress, there are things that, looking back, could have provided additional support and benefits to patients and providers, including:

- Additional credentialing to increase number of assessments and consultations.
- Offering more community support provider (CSP) services available for BMC ED patients that are more hands-on after they leave the hospital setting and during the transitions from ED/hospital to community-based treatment and social services and from the different levels of SUD treatment back into the community. CSP services can address the social determinants of health and links patients to financial assistance, safe housing, job training and other services needed to incentivize and support recovery.
- Providing more ongoing education for emergency medicine physicians and nurses about the science of substance-use disorders and the role they can play in opioid education, naloxone distribution and the evidence for initiating opioid treatment medication therapy within the ED.
- Implementing and monitoring physician and nursing quality performance measures for substance-use disorders in the same way that quality is measured for heart attacks/chest pain, pneumonia and sepsis.

Acknowledgments: We thank Edward Bernstein MD, Founder and Medical Director and Ludy Young, LADC1, MEd, Supervisor on Behalf of Project ASSERT, and Jenny Eriksen Leary, Associate Communications Director, Media Relations at Boston Medical Center for preparing this case study.

REFERENCES

- Bernstein E., Bernstein J, Levenson S. Project ASSERT: An ED-based intervention to increase access to primary care, preventive services and the substance abuse treatment system. *Ann Emerg Med* 1997; 30:181-189.
- Bernstein, J., Bernstein, E., Tassiopoulos, K., Heeren, T., Levenson, S., Hingson, R. (2005). *Brief Motivational intervention at a clinic visit reduces cocaine and heroin use*. *Drug Alc Depend.* 77:49-59. (PMID: 15607841)
- Bernstein E, Shaw E, Topp D, Girard C, Pressman K, Woolcock S, Bernstein J. A Preliminary report of knowledge translation: Lessons from taking screening and brief intervention techniques (SBI) from the research setting into regional systems of care. *Acad Emerg Med* 2009; 16:1225-1233.
- Van Boekel, L.C, et al. (2013). *Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: Systematic review*. *Drug and Alcohol Dependence.* 131: 23-35. (PMID: 23490450)
- Liebschutz, J.M. et al. (2014). *Buprenorphine treatment for hospitalized, opioid-dependent patients: a randomized clinical trial*. *JAMA Intern Med.* 174(8):1369-76. (PMID: 25090173)
- Dwyer, K., Walley, A.Y., Langlois, B.K., Mitchell, P.M., Nelson, K.P., Cromwell, J., Bernstein, E. (2015). *Opioid education and nasal naloxone rescue kits in the emergency department*. *West J Emerg Med.* 16(3):381-4. (PMID: 25987910)
- D'Onofrio, G., O'Connor, P.G., Pantalon, M.V., Chawarski, M.C., Busch, S.H., Owens, P.H., Bernstein, S.L., Fiellin, D.A. (2015). *Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial*. *JAMA.* 313(16):1636-1644. (PMID: 25919527)
- Bernstein, J., Bernstein, E., Tassiopoulos, K., Heeren, T., Levenson, S., Hingson, R. (2005). *Brief Motivational intervention at a clinic visit reduces cocaine and heroin use*. *Drug Alc Depend.* 77:49-59. (PMID: 15607841)
- Drainoni ML, Koppelman EA, Feldman JA, Walley AY, Mitchell PM, Ellison J, Bernstein E. Why is it so hard to implement change? A qualitative examination of barriers and facilitators to

distribution of naloxone for overdose prevention in a safety net environment. BMC Res Notes. 2016 Oct 18;9(1):465. PubMed PMID:27756427; PubMed Central PMCID: PMC5070095.

- Samuels E, Mello M, Baird J, Kellogg A, Bernstein E. Emergency Department Opioid Harm Reduction: Assessing physician willingness. Acad Emerg Med. 2016 Apr;23(4):455-65. doi: 10.1111/acem.12910. Epub 2016 Mar 22. PubMed PMID: 26816030.
- Samuels EA, Hoppe J, Papp J, Whiteside L, Raja AS, Bernstein E. Emergency Department Naloxone Distribution: Key Considerations and Implementation Strategies. American College of Emergency Physicians (Trauma and Injury Prevention Section White Paper) 2015. Available from <http://www.acep.org/Trauma-Section-Microsite/TIPS-White-Paper-PDF/>
- SAMHSA's National Registry of Evidence Based Programs and Practices: <http://legacy.nreppadmin.net/ViewIntervention.aspx?id=222>

Figure 1. Overdose Education and Naloxone Distribution (OEND)

The PEERS (Page; Evaluate; Educate; Referral; Safe Discharge) Model is used to equip patients with SUD and their families with access to Overdose Education and Naloxone Kit Distribution services as a harm reduction avenue, as well as evaluate and refer patients to services once they are safe to discharge.

Coach or PEERS Model for Overdose Education and Naloxone Kit Distribution

- P Page to bedside
- E Evaluate
- E Educate on overdose and distribute naloxone
- R Referral to Faster Path, detox or other
- S Safe discharge



Figure 2. Opioid Education and Naloxone Distribution ED Data

This figure indicates the number of opioid education and naloxone distribution kits that were provided by BMC's emergency department between the years of 2010 and 2016, broken down by who received the kits (patients, their families and/or friends) as well as who provided them (ASSERT, physician)

BMC ED Opioid Education and Naloxone Distribution by Provider Type, 2010-2016

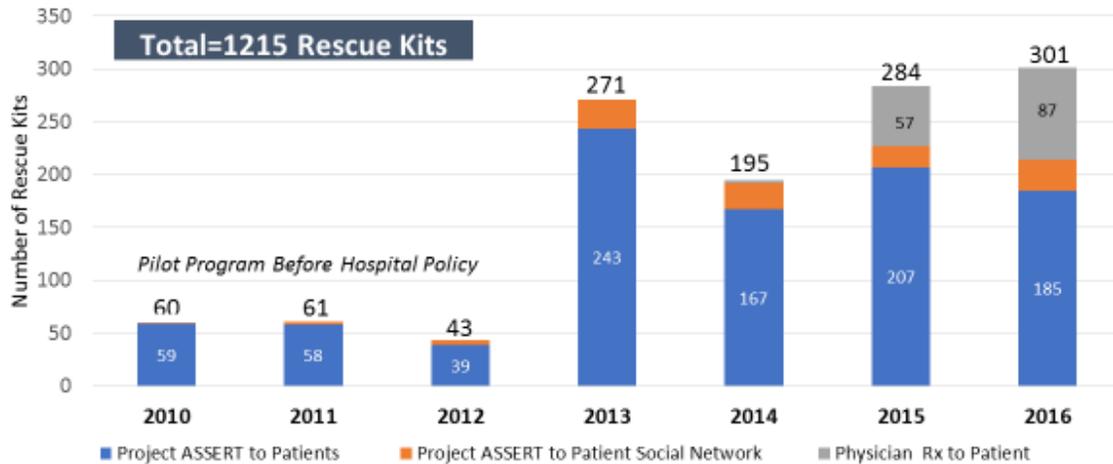


Figure 3. The Acute Treatment Gap

This figure illustrates the number of patients assessed at Boston Medical Center's emergency department, and the number of patients who were placed in detox; who were denied access based on availability or insurance issues; and those who refused detox or treatment.

The ACUTE Treatment Gap (1/1/6 – 12/31/16)

1239 BMC emergency department patients placed out of 2,227 requesting detox (56%)

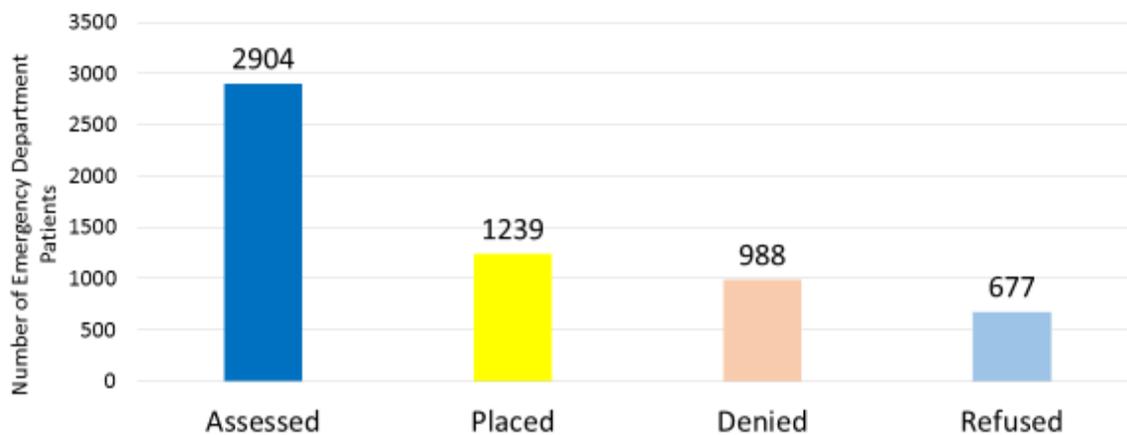


FIGURE 4. Faster Paths/Project ASSERT Combined Data

This figure shows the number of patients served by Boston Medical Center's Faster Paths/Project Assert, and the number of patient visits made by patients, ranging from 1 to 12-35 visits per patient; as well as the number of patients placed in detox treatment; the number of patients who were started on buprenorphine, naltrexone or other; and the number of these patients transferred to BMC's Office Based Addiction Treatment program or other programs at the hospital.

Patients Served by Faster Paths/Project ASSERT, 8/1/16 – 6/30/17

