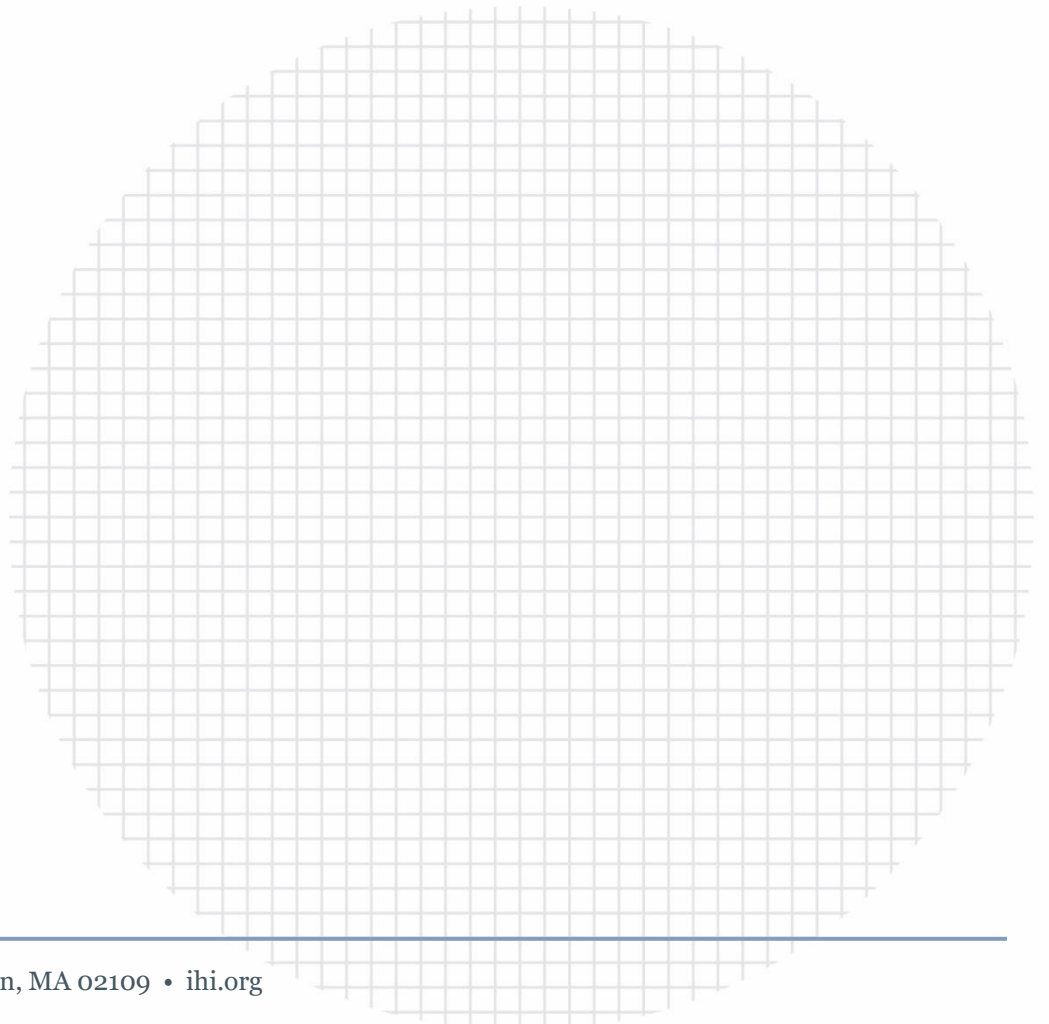




Effective Strategies for Hospitals Responding to the Opioid Crisis



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The Grayken Center for Addiction at Boston Medical Center (BMC) serves as the umbrella for all of BMC's work in addiction and is a national resource for advancing addiction treatment and education, replicating best practices, and providing policy, advocacy, and thought leadership to the field. With more than 25 years of experience developing treatment approaches, teaching medical professionals, and researching new care advances, the experts at Boston Medical Center are proving every day that long-term recovery for people with substance use disorders can be a reality. Learn more at www.bmc.org/addiction.

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Executive Summary

Since the emergence of the opioid epidemic in the United States at the beginning of the 21st century, more than 400,000 Americans have died as the result of an opioid overdose. As of 2018, the Substance Abuse and Mental Health Services Administration estimates that more than two million people have an opioid use disorder. With the rate of opioid-related inpatient stays and the number of opioid-related emergency department visits continuing to rise dramatically in the US, hospitals have the opportunity to make a major impact in reducing morbidity and mortality related to opioid use.

This document provides system-level strategies that hospitals can implement immediately to address the challenges of preventing, identifying, and treating opioid use disorder. Specific improvement ideas for the strategies are accompanied by case examples describing how some hospitals have approached this work, in addition to supporting source literature and resources.

Introduction

Every day, hospitals experience the effects of opioid and substance use disorders. According to the Agency for Healthcare Research and Quality, in 2016 the rate of opioid-related inpatient stays in US hospitals rose to about 300 per 100,000 population — almost double the rate in 2008.¹ At the same time, the number of opioid-related emergency department visits more than doubled from 2008 to 2017.²

In response to the growing volume of inpatient admissions and outpatient visits for individuals with a substance use disorder, hospitals are the primary point of care for many patients in need of comprehensive substance use care. Fortunately, hospitals also have the opportunity to make a major impact in reducing morbidity and mortality related to opioid use, from prevention to screening, to treatment, to engaging with communities to reduce harms. They are also in a position to confront racial and ethnic disparities in care, which is particularly important as the opioid crisis evolves and opioid use patterns and demographics shift.

Five System-Level Strategies

This document provides hospital and health system administrators and leaders with specific improvement ideas for five system-level strategies that address the challenges of preventing, identifying, and treating opioid use disorder.

- Identify and Treat Individuals with Opioid Use Disorder at Key Clinical Touchpoints
- Modify Opioid Prescribing Practices to Minimize Harm and Maximize Benefit
- Train Stakeholders on the Risks of Opioid Use Disorder and How to Reduce Stigma
- Identify and Screen Individuals at High Risk of Developing Opioid Use Disorder
- Reduce the Harms of Substance Use Disorder

The strategies do not provide clinical guidance; rather, they are system-level improvements hospitals can implement immediately. Brief case examples provide an opportunity to learn from other hospitals' approaches. Each strategy includes source literature and additional resources, including cost savings data, where applicable. To arrive at the improvement ideas and case examples, we conducted a literature review of relevant topic areas as well as a synthesis of state, federal, and organizational guidance documents.

¹ Trends in the Rate of Opioid-Related Hospitalizations. Agency for Healthcare Research and Quality. <https://www.ahrq.gov/opioids/map/index.html>

² HCUP Fast Stats: Opioid-Related Hospital Use. Healthcare Cost and Utilization Project (HCUP). Agency for Healthcare Research and Quality; April 2019. www.hcupus.ahrq.gov/faststats/opioid/opioiduse.jsp?radio3=on&location1=US&characteristic1=01&setting1=ED&location2=&characteristic2=01&setting2=IP&expansionInfoState=hide&dataTablesState=hide&definitionsState=hide&exportState=hide

Strategy 1: Identify and Treat Individuals with Opioid Use Disorder at Key Clinical Touchpoints

1A. Identify individuals with opioid use disorder in the emergency department (ED) and provide urgent care treatment and referrals.

Specific Improvement Idea or Project

- Implement screening and referral to treatment protocol in EDs and medication for opioid use disorders (MOUD) initiation where appropriate.
- Where necessary, establish urgent care opioid clinics, providing MOUD until a bridge to further long-term pharmacotherapy or inpatient care is established.
- Providers in the ED should be trained to treat acute opioid withdrawal.

Case Examples

Emergency Department Care

- Yale-New Haven Hospital: Implemented three levels of intervention for patients with an opioid use disorder presenting to the emergency department: 1) screening and referral to treatment; 2) screening, brief intervention, and facilitated referral to community organization; or 3) all of the above as well as an ED-initiated treatment with buprenorphine, and referral to primary care for a 10-week follow up. The results showed that the third-level intervention was most effective in retaining patients in treatment, and after the study the ED continued to use buprenorphine.

D’Onofrio G, O’Connor PG, Pantaloni MV, et al. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: A randomized clinical trial. *JAMA*. 2015;313(16):1636-1644.

- Boston Medical Center Project ASSERT (Alcohol & Substance Use Disorder Services, Education, and Referral to Treatment): 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.

D’Onofrio G, Degutis LC. Integrating Project ASSERT: A screening, intervention, and referral to treatment program for unhealthy alcohol and drug use into an urban emergency department. *Academic Emergency Medicine*. 2010 Aug;17(8):903-911.

Opioid Urgent Care Clinics

- Faster Paths to Treatment. Boston Medical Center. <https://www.bmc.org/programs/faster-paths-to-treatment>
- Substance Use Disorders Initiative. Massachusetts General Hospital. <https://www.massgeneral.org/substance-use-disorders-initiative.aspx>
- Brigham Health Bridge Clinic. Brigham and Women’s Hospital. <https://www.lawrencegeneral.org/uploads/events/Price%20Lawrence%20General%20Healthcare%20Summit.pdf>
<https://brighamhealthvitallines.org/2018/01/03/new-bridge-clinic-to-facilitate-continuity-of-care-for-substance-abuse-patients/>

- ED-BRIDGE: Supports emergency departments throughout California to develop and implement plans for 24/7 access to buprenorphine for patients with opioid use disorder. <https://ed-bridge.org/>

1B. Identify and treat individuals with opioid use disorder in inpatient settings.

Specific Improvement Idea or Project

- Develop an addiction consult service to engage patients during acute hospitalizations to provide screening for opioid use disorder, initiation of MOUD, brief behavioral interventions, counseling, and referrals to treatment.
- Incorporate peer services and case management where needed.
- Connect individuals with a Bridge Clinic (a transitional outpatient addiction clinic for discharged hospital and ED patients who are not yet connected to outpatient care).

Case Examples

- Johns Hopkins Bayview Medical Center Inpatient Addiction Consult Service: With fellows, faculty, and peer support available, the service provides consultation for inpatients identified as having alcohol, tobacco, or other substance use disorder. The service, available in all areas of the hospital (including the medical, trauma, and surgical units), provides brief behavioral interventions and counseling, guidance on clinical management, brief buprenorphine/naloxone bridges, education, and facilitates linkages. An early study found that the Consult Service made patients less likely to have more than three ED episodes and more likely to have more than one ambulatory care visit. https://www.hopkinsmedicine.org/johns_hopkins_bayview/medical_services/specialty_care/addiction_medicine/index.html

O'Toole TP, Pollini RA, Ford DE, Bigelow G. The effect of integrated medical-substance abuse treatment during an acute illness on subsequent health services utilization. *Medical Care*. 2007 Nov;45(11):1110-1115.

- Boston Medical Center: Established an addiction consult service to engage patients in addiction care during acute hospitalizations. A review of relevant care needs concludes that addiction consult services have the potential to decrease readmissions and utilization costs for medical systems, improve substance use outcomes for patients, and increase provider knowledge.

Liebschutz JM, Crooks D, Herman D, et al. Buprenorphine treatment for hospitalized, opioid-dependent patients: A randomized clinical trial. *JAMA Internal Medicine*. 2014 Aug 1;174(8):1369-1376.

Shanahan CW, Beers D, Alford DP, Brigandi E, Samet JH. Seizing a "reachable moment": A Transitional Opioid Program (TOP) for hospitalized opioid dependent patients. *Journal of General Internal Medicine*. 2010;25(8):803-808.

Trowbridge P, Weinstein ZM, Kerensky T, Roy P, Regan D, Samet JH, Walley AY. Addiction consultation services: Linking hospitalized patients to outpatient addiction treatment. *Journal of Substance Abuse Treatment*. 2017;79:1-5.

Weinstein ZM, Wakeman SE, Nolan S. Inpatient addiction consult service: Expertise for hospitalized patients with complex addiction problems. *Medical Clinics of North America*. 2018 Jul;102(4):587-601.

- Massachusetts General Hospital Substance Use Disorders Initiative: Created a multidisciplinary addiction consult team, including peers in recovery, to provide comprehensive evaluation, treatment recommendations, and connections to community resources. Validated substance use disorders screening tools are now part of the hospital’s standardized initial admission assessment. <https://www.massgeneral.org/substance-use-disorders-initiative.aspx>
- Oregon Health Sciences University Improving Addiction Care Team (IMPACT): Created a team-based inpatient addiction consult to assess patient needs and initiate MOUD where needed, as well as developed rapid-access pathways to community services. <https://www.aha.org/system/files/content/17/opioid-ohsu-case-study.pdf>

Englander H, Weimer M, Solotaroff R, et al. Planning and designing the Improving Addiction Care Team (IMPACT) for hospitalized adults with substance use disorder. *Journal of Hospital Medicine*. 2017 May;12(5):339-342.

Englander H, Collins D, Perry SP, Rabinowitz M, Phoutrides E, Nicolaidis C. “We’ve learned it’s a medical illness, not a moral choice”: Qualitative study of the effects of a multicomponent addiction intervention on hospital providers’ attitudes and experiences. *Journal of Hospital Medicine*. 2018 Nov 1;13(11):752-758.

1C. Integrate addiction care into primary care and other care settings, where appropriate.

Specific Improvement Idea or Project

- Encourage primary care providers and infectious disease providers to incorporate MOUD into their treatment options.
- Incorporate nurse care manager models to provide consistent follow up.

Case Examples

Primary Care

- Massachusetts Bureau of Substance Abuse Services (BSAS) and Boston Medical Center (BMC): BSAS worked to disseminate the BMC Massachusetts Model of the office-based opioid treatment with buprenorphine (OBOT-B) for primary care doctors at community health centers in Massachusetts. Employing a collaborative care model with a central role for nursing enabled implementation of effective treatment for patients with an opioid use disorder at community health centers throughout Massachusetts while effectively engaging primary care physicians.

LaBelle CT, Han SC, Bergeron A, Samet JH. Office-based opioid treatment with buprenorphine (OBOT-B): Statewide implementation of the Massachusetts Collaborative Care Model in community health centers. *Journal of Substance Abuse Treatment*. 2016 Jan;60:6-13.

Alford DP, LaBelle CT, Kretsch N, Bergeron A, Winter M, Botticelli M, Samet JH. Collaborative care of opioid-addicted patients in primary care using buprenorphine: Five-year experience. *Archives of Internal Medicine*. 2011;171(5):425-431.

- Boston University School of Public Health and Albert Einstein College of Medicine: Together, these two organizations developed an integration manual for the implementation of office-based buprenorphine treatment delivered in primary care clinics.

Integrating Buprenorphine Treatment for Opioid Use Disorder in Primary Care. Boston University School of Public Health and Albert Einstein College of Medicine; 2017. <http://cahpp.org/wp-content/uploads/2017/06/Buprenorphine-Implementation-Manual-for-Primary-Care-Settings-.pdf>

Infectious Disease

- Beth Israel Deaconess Medical Center: In the *New England Journal of Medicine*, experts from Beth Israel describe how an infectious disease practice is actively providing medication for opioid use disorder (MOUD) to patients hospitalized with infectious complications of injection drug use.

Rapoport AB, Rowley CF. Stretching the scope—becoming frontline addiction-medicine providers. *New England Journal of Medicine*. 2017 Aug 24;377(8):705-707.

- NASEM Action Steps on “Integrating Infectious Disease Considerations with Response to the Opioid Epidemic”: In response to a request from the US Department of Health and Human Services, the National Academies of Sciences, Engineering, and Medicine (NASEM) convened a workshop on integrating infectious disease work into substance use treatment, resulting in five key action steps, including screening, the use of medication, hospital-based protocols, increased training, and increased access to addiction care.

Springer SA, Korthuis PT, Del Rio C. Integrating treatment at the intersection of opioid use disorder and infectious disease epidemics in medical settings: A call for action after a National Academies of Sciences, Engineering, and Medicine workshop. *Annals of Internal Medicine*. 2018 Sep 4;169(5):335-336.

Family Medicine

- Bridgton Family Practice: A rural Maine family practice physician set up MOUD in his primary care practice, paired with counseling or cognitive behavioral therapy.

Gale J. “The Role of Rural Hospitals in Addressing Opioid and Other Substance Use Problems.” National Rural Health Resource Center. SHRT HELP Webinar. January 10, 2018.

<https://www.ruralcenter.org/sites/default/files/Rural%20hospitals%20and%20SU%2017%20SHRT%20HELP%20Webinar.pdf>

- AMA and RIMS Guidance for Family Physicians: In an effort to help family medicine physicians treat opioid use disorder, the American Medical Association (AMA), Rhode Island Medical Society (RIMS), and officials from the Rhode Island Department of Health and the Rhode Island Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals announced a partnership to develop and distribute a statewide educational toolbox for health care providers to help reverse the state’s opioid epidemic. The program is being piloted in Rhode Island and Alabama.

Parks T. Treating substance use disorder as a family physician. American Medical Association. August 17, 2016. <https://wire.ama-assn.org/practice-management/treating-substance-use-disorder-family-physician>

Reversing the opioid epidemic. American Medical Association. <https://www.ama-assn.org/delivering-care/opioids/reversing-opioid-epidemic>

1D. Enhance specialty addiction treatment programming.

Specific Improvement Idea or Project

- Develop connections to specialty addiction treatment programs for certain groups of people, including adolescents, young adults, pregnant women, and new parents or, where necessary, create in-house programs to support these populations.

Case Examples

Pregnant and Postpartum Women and Babies

- Boston Medical Center and Boston University School of Medicine Project RESPECT (Recovery, Empowerment, Social Services, Prenatal care, Education, Community and Treatment): A high-risk obstetrical and addiction recovery medical home in Massachusetts that provides a unique service of comprehensive obstetric and substance use disorder treatment for pregnant women and their newborns. The article referenced below reviews evidence for opioid agonist treatment (OAT) and best practices for comprehensive care of pregnant women.

Substance Use Disorder and Pregnancy. Boston Medical Center.

<https://www.bmc.org/obstetrics/pregnancy/addiction>

Saia KA, Schiff D, Wachman EM, et al. Caring for pregnant women with opioid use disorder in the USA: Expanding and improving treatment. *Current Obstetrics and Gynecology Reports*. 2016;5:257-263.

- Massachusetts General Hospital HOPE Clinic (Harnessing support for Opioid and substance use disorders in Pregnancy and Early childhood): Provides comprehensive care for pregnant women with substance use disorder, their partners, and their infants, from conception through early childhood. <https://www.massgeneral.org/obgyn/services/treatmentprograms.aspx?id=2039>
- Behavioral Treatment at Yale-New Haven Hospital or Bridgeport Hospital: In this pilot study, a behavioral therapy with components of motivational interviewing and cognitive therapy was administered concurrent with routine prenatal care at inner-city maternal health clinics in Connecticut and found feasible.

Yonkers KA, Howell HB, Allen AE, Ball SA, Pantaloni MV, Rounsaville BJ. A treatment for substance abusing pregnant women. *Archives of Women's Mental Health*. 2009 Aug;12(4):221-227.

Adolescents and Young Adults

- Boston Medical Center CATALYST (Center for Addiction Treatment for AdoLescent/Young adults who use SubsTances) Clinic: Provides access to a wide range of services, including primary care, behavioral health, and support resources, for patients up to age 25 and their families. The program directors review evidence in favor of medication treatment for youths and young adults.

<https://www.bmc.org/catalyst-clinic>

Hadland SE, Bagley SM, Rodean J, et al. Receipt of timely addiction treatment and association of early medication treatment with retention in care among youths with opioid use disorder. *JAMA Pediatrics*. 2018 Nov 1;172(11):1029-1037.

- Massachusetts General Hospital Addiction Recovery Management Service (ARMS): Specializes in supporting teenagers and young adults between the ages of 14 and 26 and their parents as they deal with substance use and related problems. <https://www.massgeneral.org/psychiatry/services/treatmentprograms.aspx?id=2090>
 - Boston Children’s Hospital Adolescent Substance Use and Addiction Program (ASAP): Provides national leadership in the identification, diagnosis, and treatment of substance use problems and disorders in children and adolescents. <http://www.childrenshospital.org/centers-and-services/programs/a--e/adolescent-substance-abuse-program>
- Levy S, Mountain-Ray S, Reynolds J, Mendes SJ, Bromberg J. A novel approach to treating adolescents with opioid use disorder in pediatric primary care. *Substance Abuse*. 2018;39(2):173-181.

1E. Enhance provider training and competency to offer evidence-based comprehensive treatment (medications + behavior-based therapy).

Specific Improvement Idea or Project

- Every provider should have baseline knowledge and competencies in: 1) fundamentals of addiction; 2) modern treatment of opioid use disorder, including utilization of buprenorphine; and 3) addressing stigma.
- Educate providers about how to treat substance use disorder, including pharmacotherapy and behavioral support, at every point in their training: medical school, residency, and maintenance through CME courses throughout career.
- Educate providers to provide culturally competent care that is cognizant of how racial or ethnic background may affect the type of care patients receive.
- Expand the availability of medication for opioid use disorder in office-based settings (e.g., buprenorphine/naloxone, naltrexone).
- Establish a plan to incentivize and expand the number of medical providers, medical students, residents, and fellows to take the necessary course to become waived to prescribe buprenorphine for treating opioid use disorder. (Note: Medical students and residents can take the course but cannot be waived until they have a full medical license.)

Case Examples

- Massachusetts General Hospital: Developed a “Get Waivered” training (to help ED physicians obtain a waiver to prescribe buprenorphine to patients with opioid use disorder) and campaign, complete with posters, publicity, and a gold pin to designate and honor those who complete the training. An anonymous donor provided money so that doctors could take the course while at work. <http://getwaivered.com/about/>

Guidance on Treating Individuals with Opioid Use Disorder

- Accreditation Council for Continuing Graduate Medical Education (ACGME): For the first time in 2018, the ACGME accredited several fellowships as certified Addiction Medicine Fellowships. Addiction Medicine Fellowship Training Opportunities. American College of Academic Addiction Medicine. <http://www.acaam.org/applications-accreditation-now-accepted/>
- Addiction Medicine Fellowship Programs 2018–2019. The Addiction Medicine Foundation, University at Buffalo Department of Family Medicine. <http://www.acaam.org/wp-content/uploads/2019/01/Directory-of-Fellowships-2018-19-11-9-18.pdf>

- Apply for a Buprenorphine Practitioner Waiver. Substance Abuse and Mental Health Services Administration. <https://www.samhsa.gov/medication-assisted-treatment/training-materials-resources/buprenorphine-waiver>
- Initiating Buprenorphine Treatment in the Emergency Department. National Institute on Drug Abuse. <https://www.drugabuse.gov/nidamed-medical-health-professionals/initiating-buprenorphine-treatment-in-emergency-department>
- Medication Treatment for Opioid Use Disorder. National Institute on Drug Abuse. <https://www.drugabuse.gov/nidamed-medical-health-professionals/science-to-medicine-medication-treatment-opioid-use-disorder>
- Medical Education Core Competencies for the Prevention and Management of Prescription Drug Misuse and Suggested Education Modules. Massachusetts Medical Society. <http://www.massmed.org/corecomp/#.XQ1A8NJKiUI>

Addiction Consult Service

- Donroe JH, Holt SR, Tetrault JM. Caring for patients with opioid use disorder in the hospital. *Canadian Medical Association Journal*. 2016;188(17-18):1232-1239.

Primary Care

- Kampman K, Jarvis M. American Society of Addiction Medicine (ASAM) national practice guideline for the use of medications in the treatment of addiction involving opioid use. *Journal of Addiction Medicine*. 2015 Sep-Oct;9(5):358-367.
- Korthuis PT, McCarty D, Weimer M, et al. Primary care-based models for the treatment of opioid use disorder: A scoping review. *Annals of Internal Medicine*. 2017;166(4):268-278.

Cost Savings

- Harvey P, Stoler A. “MassHealth Medication Assisted Treatment Analysis.” MAT Commission Presentation (slides 6–9). May 21, 2019. <https://www.mass.gov/files/documents/2019/06/28/MassHealth%20MAT%20presentation%205-21.pdf>
- Rosenheck R, Kosten T. Buprenorphine for opiate addiction: Potential economic impact. *Drug and Alcohol Dependence*. 2001;63(3):253-262.
- Weinstein ZM, Wakeman SE, Nolan S. Inpatient addiction consult service: Expertise for hospitalized patients with complex addiction problems. *Medical Clinics of North America*. 2018 Jul;102(4):587-601.

Strategy 2: Modify Opioid Prescribing Practices to Minimize Harm and Maximize Benefit

2A. Improve opioid prescribing practices for patients with acute and chronic pain.

Specific Improvement Idea or Project

For clinical guidance on opioid prescribing, please refer to the CDC and pharmacy guidelines below.

Acute Pain Management:

- Opioids are not first-line medications for many types of acute pain. Try alternative medications and treatments before prescribing opioids.
- Opioids may be indicated for severe acute pain for a short period of time (i.e., 3 days or less is often sufficient; more than 7 days is rarely needed).

Chronic Pain Management:

- Opioids are not first-line medications for new patients experiencing chronic pain and have limited short-term effectiveness (i.e., up to 3 months). The effectiveness of opioids for more than 6 months has been inadequately studied. Long-term opioids should generally be avoided for chronic pain, especially chronic axial back pain, fibromyalgia, and headaches.
- Other considerations also apply for the management of patients already on high-dose chronic opioids, including shared decision making and focus on risk reduction. Involuntary and abrupt opioids tapers are inappropriate.
- Try multimodal non-opioids and non-pharmacological treatments before starting opioids. Note that these recommendations are for treating adult patients outside of active cancer treatment, palliative care, and end-of-life care.
- When prescribing opioids, employ universal precautions by using patient-provider agreements (i.e., informed consent and plan of care) and monitor for adherence and safety by checking the prescription drug monitoring program, instituting urine drug testing, and conducting pill counts.

Case Examples

- Michigan Opioid Prescribing Engagement Network (OPEN): Founded to develop a preventative approach to the opioid epidemic in Michigan through a focus on acute care prescribing (surgery, dentistry, emergency medicine, and trauma). <http://michigan-open.org>
- Brigham and Women's Hospital (BWH): Created an organizational opioid stewardship program (OSP) to develop a multidisciplinary approach to the opioid epidemic. As part of the OSP, a Prescribing Task Force established safe prescribing guidelines, and a peer review committee addresses high-frequency opioid prescribers. With these elements in place, BWH successfully reduced the number of opioid prescriptions and, in particular, the number of high-dose opioid prescriptions.

Weiner SG, Price CN, Atalay AJ, et al. A health system-wide initiative to decrease opioid-related morbidity and mortality. *Joint Commission Journal on Quality and Patient Safety*. 2019 Jan;45(1): 3-13.

- Duke University Health System: Updated their approach to pain management in many ways, including creating one uniform pain agreement for all patients, providing relevant CME, and hosting workshops to help patients self-manage their pain without opioids. <https://www.dukehealth.org/treatments/pain-management>

- Dartmouth-Hitchcock Medical Center: Studied the number of opioids prescribed after surgery and found that the number prescribed exceeded the number used. After implementing an educational intervention with surgeons, which recommended that surgeons encourage patients to use a nonsteroidal anti-inflammatory drug (NSAID) and acetaminophen before using opioids, the number of initial opioid prescriptions after surgery was significantly reduced.

Hill MV, Stucke RS, Billmeier SE, Kelly JL, Barth RJ Jr. Guideline for discharge opioid prescriptions after inpatient general surgical procedures. *Journal of the American College of Surgeons*. 2018 Jun;226(6):996-1003.

Hill MV, Stucke RS, McMahon ML, Beeman JL, Barth RJ Jr. An educational intervention decreases opioid prescribing after general surgical operations. *Annals of Surgery*. 2018 Mar;267(3):468-472.
- Massachusetts General Hospital/Massachusetts General Physicians Organization Opioid Task Force: Developed best practices for clinicians prescribing opioids for patients with acute or chronic pain. The task force has overseen the hospital-wide distribution and implementation of the guidelines and is developing training for all clinicians prescribing opioids. “The guidelines help clinicians communicate openly with patients about the risks and concerns of opioids, while helping patients manage their pain effectively and responsibly.” <http://mgpo.massgeneral.org/fsp/2016/fsp-201606/OpioidPrescribingGuidelines.pdf>
- Boston University School of Medicine SCOPE of Pain: A series of continuing education activities designed to help effectively manage patients with acute and/or chronic pain, when appropriate, with opioid analgesics. It is intended for physicians, nurse practitioners, registered nurses, physician assistants, nurses, dentists, pharmacists, and allied health professionals whose practices manage acute and chronic pain. Includes modules on a patient-centered approach to opioid tapering, safer postoperative opioid prescribing, optimizing office systems, safer opioid prescribing for dental pain, and naloxone co-prescribing. <https://www.scopeofpain.org/about-us/>

Alford DP, Zisblatt L, Ng P, Hayes SM, Peloquin S, Hardesty I, White JL. SCOPE of Pain: An evaluation of an opioid risk evaluation and mitigation strategy continuing education program. *Pain Medicine*. 2016 Jan;17(1):52-63.
- Southcentral Foundation: Opioid Guidelines describe the components of improving their prescribing practices, including a pain assessment by a behavioral consultant, establishing an opiate review committee, a multidisciplinary pain team, and a medication agreement and wellness plan.

Merrick M, Hartman D. “Opioid Guidelines.” Southcentral Foundation; 2011. <http://dhss.alaska.gov/AKOpioidTaskForce/Documents/meetings/07082016/OpioidsGuideline-SCFpresentation.pdf>
- Partnership HealthPlan of California: Began its Managing Pain Safely program in 2014, implementing prescriber education, particularly for rural prescribers, additional reinforcement for ongoing technical assistance, formulary changes, and new benefits like alternative pain treatment.

Case Studies: Three California Health Plans Take Action Against Opioid Overuse. California Health Care Foundation; June 2016. <https://www.chcf.org/wp-content/uploads/2017/12/PDF-CaseStudiesHealthPlansOpioid.pdf>

2B. Improve opioid dispensing practices.

Specific Improvement Idea or Project

Pharmacy:

- Require checking the prescription drug monitoring program (PDMP) before dispensing opioids and incorporate referral to treatment where appropriate.
- Use existing data (e.g., claims, payment form, location of prescription fills, PDMP) to identify patients, providers, and prescribers who may be inappropriately using or prescribing opioids.
- Empower pharmacists to question prescribing practices (aka, “corresponding responsibility”) and address concerns to prescribing clinician or higher authority (e.g., boards of registration).
- Ensure that patients prescribed opioids for chronic pain have access to naloxone.

Payers:

- Require pharmacies and clinicians to check PDMP to be able to prescribe covered opioids. (Frequency of PDMP checks may be required by state laws.)
- Conduct claims data surveillance to identify patients, providers, and prescribers who may need additional investigation.
- Consider adding “pharmacy lock” so that opioids can only be prescribed by one provider and dispensed from one pharmacy.
- Change reimbursement to cover multimodal non-pharmacologic treatments (e.g., acupuncture, cognitive behavioral therapy, chiropractor services).
- Change reimbursement for different types of opioids (e.g., preference for abuse-deterrent formulations).
- Institute formulary controls for new opioid starts and dose escalation: type of opioid to be dispensed, number of pills per covered prescription, refill frequency.
- Cover payment for safer disposal products like Dispose Rx, Deterra, or other similar bags.
- Support clinician education on safer opioid use for acute and chronic pain.
- Change reimbursement to cover most (if not all) patient costs for naloxone.

Case Examples

- **Geisinger Health System:** Trained pharmacists are already embedded in primary care clinics to become pain management and addiction specialists. After just one year, the pharmacists were able to manage 1,233 patients with chronic, non-cancer pain and reduce ED visits by 20 percent.

Lazerow R, Tyrrell R, Michaelson G. “How Geisinger Is Responding to the Opioid Crisis and Cutting ED Visits in the Process.” Advisory Board Care Transformation Center Blog. April 26, 2018.

https://www.advisory.com/research/care-transformation-center/care-transformation-center-blog/2018/04/opioid-crisis-response-strategy?WT.ac=Inline_ALL_Blog_x_x_x_CTC_2018Dec20_Eloqua-RMKTG+Blog

- **Kaweah Delta Medical Center:** Implemented a pharmacy-directed pain management service (PPMS) to optimize analgesic pharmacotherapy, minimize adverse events, and improve patient experience of pain management. This led to decreases in high-risk opioid medications, total institutional opioid use, and rapid response team (RRT) and code blue events associated with opioid-induced oversedation.

Poirier RH, Brown CS, Baggenstos YT, et al. Impact of a pharmacist-directed pain management service on inpatient opioid use, pain control, and patient safety. *American Journal of Health-System Pharmacy*. 2019 Jan 1;76(1):17-25.

- Boston University School of Medicine SCOPE of Pain: A series of continuing education activities for health professionals designed to help effectively manage patients with acute and/or chronic pain, when appropriate, with opioid analgesics. <https://www.scopeofpain.org/about-us/>
- University of Utah: All adult patients with an appointment for chronic pain who were prescribed >50 morphine milligram equivalents (MMEs) per day had charts reviewed by a pharmacist before each appointment; recommendations were sent electronically to the provider before the appointment. After four months of implementation, each patient’s chart was manually reviewed. When comparing outcomes before and after the intervention, the mean MMEs per day decreased by 14 percent ($P < .001$), with no change in pain scores ($P = .783$).

Cox N, Tak CR, Cochella SE, Leishman E, Gunning K. Impact of pharmacist previsit input to providers on chronic opioid prescribing safety. *Journal of the American Board of Family Medicine*. 2018 Jan-Feb;31(1):105-112.

2C. Prevent diversion of opioids (i.e., the transfer of legally prescribed opioids from the individual for whom they were prescribed to another person for any illicit use).

Specific Improvement Idea or Project

- Educate the public/patients about the risks of becoming addicted to prescription opioids and the link between prescription opioids and future prescription opioid misuse and illicit opioid use.
- Educate the public/patients about the risks of opioid diversion, how to safely store opioid medication, and how to properly dispose of unused medication.
- Pharmacists have locked boxes/bags available to ensure that patients can securely store opioids at home.
- Pharmacists dispense opioids with Dispose Rx, Deterra, or similar devices for safe disposal.
- Install permanent, bin-based safe drug disposal sites in community spaces such as pharmacies, police stations, and social service agency offices.
- Organize and publicize community-wide drug take-back days to encourage people to safely dispose of unused opioids and other medications.

Case Examples

- The Mayo Clinic: Created a new position, the Medication Diversion Prevention Coordinator (MDPC), within the Department of Pharmacy. With input from multiple participants, a “best practices” list was created that identified 77 specific points to create the best possible system to date to prevent controlled substance diversion.

Berge KH, Dillon KR, Sikkink KM, Taylor TK, Lanier WL. Diversion of drugs within health care facilities, a multiple-victim crime: Patterns of diversion, scope, consequences, detection, and prevention. *Mayo Clinic Proceedings*. 2012 Jul;87(7):674-682.

- Washington University School of Medicine and Barnes Jewish Hospital: Researchers found that adult patients who received a new patient education brochure describing safe disposal practices for unused pain pills were twice as likely to properly dispose of their opioids than those who did not receive the brochure.

Hasak JM, Roth Bettlach CL, Santosa KB, Larson EL, Stroud J, Mackinnon SE. Empowering post-surgical patients to improve opioid disposal: A before and after quality improvement study. *Journal of the American College of Surgeons*. 2018 Mar;226(3):235-240.e3.

2D. Enhance the availability of multimodal pain management strategies.**Specific Improvement Idea or Project**

Clinicians:

- Improve clinician training in pain management, particularly for primary care clinicians.
- Increase clinician knowledge about effective, non-opioid treatments for different types of chronic pain such as NSAIDs, acetaminophen, adjuvant therapies (e.g., antidepressants, anticonvulsants), physical therapy, acupuncture, massage therapy, exercise, yoga, and cognitive behavioral therapy (CBT).

Payers:

- Provide adequate benefit coverage and reimbursement for non-opioid pain management options to increase uptake, including the options mentioned above. For specific interventions, see link below for Consortium Pain Task Force White Paper.
- Incentivize use of non-opioid pain treatments.

Case Examples

- St. Joseph's Health: The Alternatives to Opiates (ALTO) program uses targeted non-opioid medications, trigger-point injections, nitrous oxide, and ultrasound-guided nerve blocks to tailor patients' pain management needs and avoid opioids when possible. <https://www.stjosephshealth.org/clinical-focuses/item/1861>

Alternatives to Opiates (ALTO) Program. St. Joseph's Regional Medical Center; 2016.

<https://www.aha.org/system/files/content/16/16behavhealthcaseex-stjosephs.pdf>

- The Mayo Clinic: A review by the Mayo Clinic found that the following complementary approaches for pain management had positive evidence: acupuncture and yoga for back pain; acupuncture and Tai chi for osteoarthritis of the knee; massage therapy for neck pain, with adequate doses and for short-term benefit; and relaxation techniques for severe headaches and migraine.

Nahin RL, Boineau R, Khalsa PS, Stussman BJ, Weber WJ. Evidence-based evaluation of complementary health approaches for pain management in the United States. *Mayo Clinic Proceedings*. 2016 Sept;91(9):1292-1306.

- National Center for Integrative Primary Healthcare (NCIPH): Their purpose is to advance the incorporation of competency- and evidence-based integrative health curricula and best practices into primary care education and practice. They developed core competencies, an educational curriculum open to all providers, and resources for patients and the public. <https://nciph.org/>

Guidance for Limiting the Supply of Opioids

- Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. *MMWR Recommendations and Reports*. 2016 Mar;65(No. RR-1):1–49. <https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm>

See updated letter from guideline authors: Dowell D, Haegerich T, Chou R. No shortcuts to safer opioid prescribing. *New England Journal of Medicine*. 2019 Jun 13;380(24):2285-2287.

See also FDA Drug Safety Communication: “FDA identifies harm reported from sudden discontinuation of opioid pain medicines and requires label changes to guide prescribers on gradual, individualized tapering.” US Food and Drug Administration; April 9, 2019.

<https://www.fda.gov/drugs/drug-safety-and-availability/fda-identifies-harm-reported-sudden-discontinuation-opioid-pain-medicines-and-requires-label-changes>

- *HHS Guide for Clinicians on the Appropriate Dosage Reduction or Discontinuation of Long-Term Opioid Analgesics*. US Department of Health and Human Services; September 2019. https://www.hhs.gov/opioids/sites/default/files/2019-10/8-Page%20version_HHS%20Guidance%20for%20Dosage%20Reduction%20or%20Discontinuation%20of%20Opioids.pdf
- Tick H, Nielsen A, Pelletier KR, et al. The Pain Task Force of the Academic Consortium for Integrative Medicine and Health. *Evidence-based Nonpharmacologic Strategies for Comprehensive Pain Care*. A Consortium Pain Task Force White Paper. December 15, 2017. http://dpbh.nv.gov/uploadedFiles/dpbhnavgov/content/Resources/opioids/Evidence_Based_Nonpharmacologic_Strategies_for_Comprehensive_Pain_Care_White_Paper.pdf
- Pharmacist Resources. National Association Board of Pharmacy. <https://nabp.pharmacy/initiatives/pharmacist-resources/>
- *Advancing the Safety of Acute Pain Management*. Boston: Institute for Healthcare Improvement; 2019. <http://www.ihc.org/resources/Pages/Publications/Advancing-the-Safety-of-Acute-Pain-Management.aspx>
- *State Criteria for Mandatory Enrollment or Query of PDMP*. Prescription Drug Monitoring Program Training and Technical Assistance Center; July 2016. http://www.pdmpassist.org/pdf/Mandatory_conditions.pdf
- *Guidelines for Prescription Opioid Management within Hospitals*. Massachusetts Hospital Association. <http://patientcarelink.org/wp-content/uploads/2017/06/SUDPTTFGuidelinesforPrescriptionOpioidManagementwithinHospitals.pdf>
- *Accelerating Opioid Safety: Ambulatory Care Toolkit*. California Quality Collaborative. http://www.calquality.org/storage/documents/Toolkits/AcceleratingOpioidSafety_Ambulatory_Care_Toolkit.pdf
- Drug Disposal Information. US Department of Justice Drug Enforcement Administration. https://www.deadiversion.usdoj.gov/drug_disposal/index.html
- State Profiles. Prescription Drug Monitoring Program Training and Technical Assistance Center. <http://www.pdmpassist.org/content/state-profiles>

Cost Savings

- Aroke H, Buchanan A, Wen X, Ragosta P, Koziol J, Kogut S. Estimating the direct costs of outpatient opioid prescriptions: A retrospective analysis of data from the Rhode Island prescription drug monitoring program. *Journal of Managed Care & Specialty Pharmacy*. 2018 Mar;24(3):214-224.

Strategy 3: Train Stakeholders on the Risks of Opioid Use Disorder and How to Reduce Stigma

3A. Educate health care professionals, patients, and the public about the risks of taking opioids.

Specific Improvement Idea or Project

- Educate health care professionals on the risks of prescription opioid misuse and developing an opioid use disorder.
- Educate the public, particularly adolescents and young adults, about the risks of opioid use, appropriate usage (e.g., taking opioids in ways other than prescribed carries risks of addiction, overdose, and death), and safe medication storage and disposal.
- Provide clear information on addiction risk to patients prescribed opioids.

Case Examples

- Intermountain Healthcare: Provides a set of opioid patient education documents: before taking opioids; taking opioids for acute care, perinatal care, and chronic care; and guidance on disposal. <https://intermountainhealthcare.org/services/pain-management/patient-education/>
- Boston University School of Medicine SCOPE of Pain: A series of continuing education activities for health professionals designed to help safely and effectively manage patients with acute and/or chronic pain, when appropriate, with opioid analgesics. <https://www.scopeofpain.org/about-us/>

Alford DP, Zisblatt L, Ng P, Hayes SM, Peloquin S, Hardesty I, White JL. SCOPE of Pain: An evaluation of an opioid risk evaluation and mitigation strategy continuing education program. *Pain Medicine*. 2016;17(1):52-63.

3B. Reduce stigma around substance use disorders.

Specific Improvement Idea or Project

- Increase public and provider awareness to reframe substance use disorders as a chronic disease rather than a moral failing, to be managed like other chronic conditions such as diabetes.
- Use clinically indicated rather than judgmental language.
- Use evidence-based approaches to develop stigma reduction campaigns and continuously evaluate efficacy.
- Use diverse imagery and language (using multiple languages, where indicated) to reach different populations.

Case Examples

- Boston Medical Center: Created a list of stigmatizing and non-stigmatizing language around addiction, in addition to a pledge that explains the importance of committing to using clinically appropriate and medically accurate terminology. <https://www.bmc.org/addiction/reducing-stigma>
- Kaiser Permanente: Through ongoing awareness-building by senior leaders and the “Find Your Words” campaign, Kaiser Permanente is aiming to reduce mental health stigma in the workplace. <https://findyourwords.org/>
<https://business.kaiserpermanente.org/insights/reducing-mental-health-stigma-in-the-workplace>

- IHI Open School: The Recover Hope campaign includes a “Change the Narrative Pledge,” a month-long friendly competition to encourage commitment to stop stigma surrounding substance use disorders, and free online resources and trainings, including ideas for taking local action. <http://www.ih.org/education/IHIOpenSchool/Recover-Hope-Campaign/Pages/default.aspx>

Guidance on Training Stakeholders

- Helpful Materials for Patients. Centers for Disease Control and Prevention. <https://www.cdc.gov/drugoverdose/patients/materials.html>
- *Massachusetts Emergency Department Opioid Management Policy: Patient Information Sheet.* Massachusetts Hospital Association; June 2015. <http://patientcarelink.org/wp-content/uploads/2017/06/EmergencyDepartmentOpioidManagemenPatientInformation.pdf>

Strategy 4: Identify and Screen Individuals at High Risk of Developing Opioid Use Disorder

4A. Screen patients at high risk for developing opioid use disorder and provide education on addiction risks.

Specific Improvement Idea or Project

- Screen all patients who are being prescribed opioids for risk of misuse and substance use disorder. Screening efforts should focus on those with a co-occurring substance use disorder, a history of substance use, adolescents and young adults, and those with significant needs regarding their social determinants of health.
- Provide clear information to patients being prescribed opioids about the risk of addiction.

Case Examples

- Christiana Care Health System: Project Engage, an early intervention program, screens people with signs of substance use disorder and connects them with trained specialists. The program led to an increased acceptance of treatment and has been implemented in Christiana and Wilmington hospitals’ emergency departments, Christiana’s patient care units, Christiana Care’s primary care practices, and Christiana Care’s women’s and children’s services. <https://christianacare.org/services/behavioralhealth/project-engage/>

Pecoraro A, Horton T, Ewen E, et al. Early data from Project Engage: A program to identify and transition medically hospitalized patients into addictions treatment. *Addiction Science and Clinical Practice.* 2012 Sep 25;7:20.

- Screening, Brief Intervention, and Referral to Treatment (SBIRT): An evidence-based practice used to identify, reduce, and prevent problematic use and dependence on alcohol and illicit drugs. It can be integrated into primary care. While it is primarily effective for alcohol use disorder, it can also be used for other substance use disorder screening.

Hargraves D, White C, Frederick R, Cinibulk M, Peters M, Young A, Elder N. Implementing SBIRT (Screening, Brief Intervention, and Referral to Treatment) in primary care: Lessons learned from a multi-practice evaluation portfolio. *Public Health Reviews.* 2017 Dec 29;38:31.

Guidance for Identifying and Screening Individuals at Risk for Opioid Use Disorder

- Screening and Assessment Tools Chart. National Institute on Drug Abuse; June 2018. (Evidence-based, for adults and adolescents.) <https://www.drugabuse.gov/nidamed-medical-health-professionals/tool-resources-your-practice/screening-assessment-drug-testing-resources/chart-evidence-based-screening-tools>
- Pain Management & Opioid Abuse Resources. American Academy of Family Physicians. <https://www.aafp.org/patient-care/public-health/pain-opioids/resources.html>
- Chronic Pain Management Toolkit. American Academy of Family Physicians. <https://www.aafp.org/patient-care/public-health/pain-opioids/cpm-toolkit.html>
- Screening and Assessment Tools. TOPCARE at Boston Medical Center. <http://mytopcare.org/resources/screening-and-assessment-tools/>
- Screening Tools:
 - Drug Abuse Screening Test (DAST-10)*. National Institute on Drug Abuse. <https://cde.drugabuse.gov/instrument/e9053390-ee9c-9140-e040-bb89ad433d69>
 - Screener and Opioid Assessment for Patients with Pain (SOAPP)®*. Inflexionn, Inc.; 2018. <https://www.nhms.org/sites/default/files/Pdfs/SOAPP-5.pdf>
 - The Opioid Risk Tool (ORT)*. National Institute on Drug Abuse. <https://www.drugabuse.gov/sites/default/files/files/OpioidRiskTool.pdf>

Strategy 5: Reduce the Harms of Substance Use Disorder

5A. Enhance the availability of supportive social services and connections to long-term, ongoing, comprehensive treatment (medication-assisted treatment + behavior-based therapy).

Specific Improvement Idea or Project

- Collaborate with local communities, private and public addiction treatment facilities, to support the continuum of care.
- Enhance transitions to other levels of substance use care such as Clinical Stabilization Services (CSS), Transitional Support Services (TSS), and residential treatment programs.
- Increase access to and availability of social services often required by those in recovery to support continued recovery and prevent relapse, including affordable housing, employment support, and child care.

Case Examples

- Vermont Hub-and-Spoke Model: Vermont’s five geographic regions each have a “hub clinic” organized around an existing opioid treatment program (OTP) with prescriptive authority to dispense buprenorphine along with methadone (MTD) under its existing OTP licensure. Hub staff assess patients’ medical and psychiatric needs at intake and determine the most appropriate treatment placement (e.g., in the OTP with MTD or buprenorphine, with spoke providers for office-based opioid treatment). Entry points into the hubs also include hospitals and emergency departments (especially after an overdose reversal or medical treatment for injection-related diseases), residential programs, Department of Corrections, and community mental health programs. The hub-and-spoke model supported a substantial increase in Vermont’s opioid use disorder treatment capacity.

Brooklyn JR, Sigmon SC. Vermont hub-and-spoke model of care for opioid use disorder: Development, implementation, and impact. *Journal of Addiction Medicine*. 2017 Jul/Aug;11(4):286-292.

- Cuyahoga County Opiate Task Force: Launched an extensive collaborative, long-term campaign in Ohio aiming to increase awareness of the dangers associated with the misuse of opioids as well as to implement strategies and policies that will have a positive impact. Partners include local health plans and hospitals. <http://opiatecollaborative.cuyahogacounty.us>

Dayton and Montgomery County Community Overdose Action Team: Established in Fall 2016 to address the opioid/heroin epidemic in Ohio's Montgomery County, including a Steering Committee of 60 community leaders from numerous public and private organizations throughout the county. The goal is to reduce the number of fatal overdoses. <https://www.phdmc.org/coat>

- Oregon Health State University Hospital: This three-county collaborative involved 14 hospitals from four health systems, two coordinated care organizations, and four health departments working together to develop a community standard to reduce the use of and addiction to opioids.

Weimer MB, Yackel T. "Our Community Responds to the Opiate Epidemic: Hospitals & Health Systems Impacting the Opiate Crisis." American Hospital Association Webinar. July 22, 2016. <https://www.aha.org/advocacy-webinar-recording/2016-03-28-our-community-responds-opiate-epidemic-hospitals-health>

Foden-Vencil K. "How Oregon Bucked National Trends and Reduced Opioid Deaths." Oregon Public Broadcasting. April 9, 2018. <https://www.opb.org/news/article/opioid-deaths-epidemic-oregon-education-prescription/>

- The Northern Shenandoah Valley Substance Abuse Coalition: Speakers share how this community in rural Virginia coalesced to develop strategies to effectively respond to the challenge of heroin and opioid use. Initiatives include "Breaking the Code of Silence," an educational campaign to highlight awareness; development and access to transitional care after incarceration; establishment of a drug treatment court; and use of a peer recovery network.

Coyne TS, Restrepo NC, Sanzenbacher KL. "The Opioid Addiction Crisis: A Community's Effective Response." American Hospital Association Webinar. October 5, 2016. <https://www.aha.org/webinar-recordings/2017-10-04-addiction-crisis-communitys-response>

- Katherine Shaw Bethea (KSB) Hospital and Dixon Police Department Safe Passage Initiative: An addiction recovery initiative in Illinois that allows people seeking treatment to contact police without fear of arrest, as long as they don't have any outstanding warrants. The hospital and police department partner with treatment centers in and outside of Illinois to coordinate care and treatment for participants. Since September 2015, they've placed more than 60 individuals into treatment and have been able to secure a treatment bed for a participant within two hours. Illinois Medicaid paid for treatment for the majority of participants; scholarships and private insurance also have been utilized.

Schreiner DL. "The Safe Passage Initiative: Hospitals & Health Systems Impacting the Opiate Crisis." American Hospital Association Webinar. May 25, 2016. <https://www.aha.org/advocacy-webinar-recording/2016-03-28-safe-passage-initiative-hospitals-health-systems-impacting>

- Intermountain Healthcare Opioid Community Collaborative: A consortium of community leaders in Utah sponsored and funded by Intermountain to help prevent opioid abuse, has several initiatives, including medication disposal drop boxes, distribution of naloxone rescue kits, increased caregiver training, and adoption of MOUD. <https://intermountainhealthcare.org/about/who-we-are/trustee-resource-center/newsletter/newsletter-archive/intermountain-leaders-address-utahs-opioid-epidemic/>

5B. Develop and promote harm reduction to optimize safety in people with addictions.

Specific Improvement Idea or Project

- Increase prescribing and other access to naloxone kits, including among pharmacists, community and family members, and non-paramedic first responders. Ability to do this varies by state (see resources below). State governments and payers should cover naloxone with little or no cost to the individual.
- Initiate naloxone co-prescribing processes for high-risk patients, for example, when prescribing opioids or buprenorphine.
- Providers offer comprehensive harm reduction services (including syringe exchange, safe use instructions, and harm reduction kits) and preventive care.
- Consider fentanyl testing.

Case Examples

- Massachusetts General Hospital Kraft Center for Community Health CareZONE: A mobile health initiative deploys caregivers to “hotspots” of opioid overdose, providing low-threshold access to treatment-on-demand and a nontraditional combination of clinical and harm reduction services to vulnerable populations. <http://www.kraftcommunityhealth.org/CareZONE>

“The Kraft Center for Community Health at MGH Mobilizes Care for Opioid Use Disorder to Boston’s Most Vulnerable.” Massachusetts General Hospital. January 11, 2018.

<https://www.massgeneral.org/news/press-release/the-kraft-center-for-community-health-at-mgh-mobilizes-care-for-opioid-use-disorder-to-bostons-most-vulnerable>

NYC Health + Hospitals/Lincoln: The health system was the first to distribute naloxone kits to all patients served by the emergency room for behavioral health and chemical dependency, and has now opened a hospital-based naloxone kit distribution center to make naloxone available free to the community at large and without a prescription.

<https://www.nychealthandhospitals.org/lincoln/pressrelease/nyc-health-hospitalslincoln-opens-naloxone-kit-distribution-center-to-combat-opioid-overdose-in-the-bronx/>

- A review of community opioid overdose prevention and naloxone distribution programs: This review investigated publications on the effectiveness of community-based opioid overdose prevention programs and finds suggestive evidence that bystanders (mostly opioid users) can and will use naloxone to reverse opioid overdoses when properly trained, and that this training can be done successfully through opioid overdose prevention programs.

Clark AK, Wilder CM, Winstanley EL. A systematic review of community opioid overdose prevention and naloxone distribution programs. *Journal of Addiction Medicine*. 2014 May-Jun;8(3):153-163.

Walley AY, Xuan Z, Hackman HH, et al. Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: Interrupted time series analysis. *BMJ*. 2013 Jan 30;346:f174.

Guidance on Reducing the Harms of Substance Use Disorder

- *Naloxone: The Opioid Reversal Drug That Saves Lives*. US Department of Health and Human Services. <https://www.hhs.gov/opioids/sites/default/files/2018-12/naloxone-coprescribing-guidance.pdf>
- Prescribe to Prevent. <https://prescribetoprevent.org/>
- Naloxone Overdose Prevention Laws. Prescription Drug Abuse Policy System. <http://pdaps.org/datasets/laws-regulating-administration-of-naloxone-1501695139>

Cost Savings

- Wilson DP, Donald B, Shattock AJ, Wilson D, Fraser-Hurt N. The cost-effectiveness of harm reduction. *International Journal on Drug Policy*. 2015 Feb;26 Suppl 1:S5-11.

Appendix: General Guidance Resources

- *Stem the Tide: Addressing the Opioid Epidemic*. Chicago: American Hospital Association; 2017. <https://www.aha.org/system/files/content/17/opioid-toolkit.pdf>
- *Confronting the Opioid Epidemic: Nine Imperatives for Hospital and Health System Executives*. Advisory Board; April 2018. <https://www.advisory.com/research/health-care-advisory-board/research-reports/2018/confronting-the-opioid-epidemic>
- *Selected Resources: Improving Opioid and Pain Management*. Boston: Institute for Healthcare Improvement; 2019. <http://www.ihl.org/resources/Pages/Tools/Improving-Opioid-and-Pain-Management-Selected-Resources.aspx>
- *Levels of Care for Rhode Island Emergency Departments and Hospitals for Treating Overdose and Opioid Use Disorder*. Rhode Island Department of Health, Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals; 2017. <http://health.ri.gov/publications/guides/LevelsOfCareForTreatingOverdoseAndOpioidUseDisorder.pdf>
- *Levels of Care for Baltimore City Hospitals Responding to the Opioid Epidemic*. Baltimore City Health Department. <https://health.baltimorecity.gov/levels-care>