Advancing emergency department–initiated buprenorphine

Kristen Huntley PhD1 | Emily Einstein PhD2 | Terri Postma MD, CHCQM4 | Anita Thomas PharmD5 | Shari Ling MD5 | Wilson Compton MD, MPE3

1 Center for the Clinical Trials Network, The National Institute on Drug Abuse, Bethesda, Maryland, USA
2 Office of Science Policy and Communications, The National Institute on Drug Abuse, Bethesda, Maryland, USA
3 Office of the Director, The National Institute on Drug Abuse, Bethesda, Maryland, USA
4 Center for Medicare, Centers for Medicare & Medicaid Services, Baltimore, Maryland, USA
5 Center for Clinical Standards and Quality, Centers for Medicare & Medicaid Services, Baltimore, Maryland, USA

Correspondence
Kristen Huntley, PhD, Center for the Clinical Trials Network, The National Institute on Drug Abuse, Bethesda, Maryland, USA.
Email: huntleyk@mail.nih.gov

Kristen Huntley’s spouse is eligible for a defined benefit plan (pension) through Pfizer from previous employment. Wilson Compton reports long-term stock holdings in General Electric Co., 3M Companies, and Pfizer Inc. unrelated to this manuscript.

Funding and support: By JACEP Open policy, all authors are required to disclose any and all commercial, financial, and other relationships in any way related to the subject of this article as per ICMJE conflict of interest guidelines (see www.icmje.org). The authors have stated that no such relationships exist.

Abstract
Opioids are the main driver of drug overdose deaths in the United States, and there has been a marked increase in opioid-related overdoses during the COVID-19 public health emergency. Many emergency departments (EDs) across the country are implementing ED-initiated buprenorphine programs, and this is a method to address and prevent opioid overdoses. Resources are available to overcome barriers and take action.

KEYWORDS
ED-initiated buprenorphine, medication for opioid use disorder, opioid use disorder, treatment engagement

1 | EMERGENCY DEPARTMENT–INITIATED BUPRENORPHINE

In 2019, 70,630 drug overdose deaths occurred in the United States.1,2 Provisional data show that approximately 86,001 drug overdose deaths occurred in the 12 months ending in July 2020.3 Emergency departments (EDs) are in a prime position to address the overdose crisis, and a key intervention is establishing community referral partners for follow-up care and starting medication for opioid use disorder (MOUD) in the ED.

Treatment of opioid use disorder (OUD) with buprenorphine is associated with a lower risk of overdose and better outcomes.4,5 The 1-month (1.1%) and 1-year (5.5%) mortality rates of patients treated in the ED for nonfatal opioid overdose are high. The first month, and particularly the first 2 days after overdose, is the highest risk period (0.25% died within 2 days).6

ED initiation of buprenorphine/naloxone and referral to treatment for patients with moderate to severe OUD has been shown to improve engagement in treatment, resulting in less self-reported opioid use and less use of inpatient services at 30 days compared with brief behavioral intervention or usual care.7 ED-initiated buprenorphine (EDIB) is cost-effective8 and has an ongoing impact; more patients who receive medication for OUD in the ED are engaged in treatment at 2 months.9
2 | THE TIME IS NOW

People are dying of opioid overdoses at a staggering pace, so EDs should not wait to act. The need to treat OUD is even more acute because of the COVID-19 pandemic. Use of non-prescribed fentanyl, cocaine, heroin, and methamphetamine has significantly increased since before COVID-19 was declared a national emergency in the United States on March 13, 2020.10,11 Overdose deaths have increased, and experts are concerned about the impact the pandemic is having on mental health and substance use.12–14 Many individuals with substance use disorders have chronic illnesses or behaviors that are risk factors for developing or worsening a COVID-19 infection, and individuals with OUD are especially at risk for adverse COVID-19 outcomes.15–17

3 | WIDESPREAD SUPPORT AND IMPLEMENTATION

Initiation of buprenorphine in the ED has received support from major professional associations,18 and an increasing number of EDs treat patients with OUD with buprenorphine and dispense take-home naloxone to at-risk patients and their companions.19 The American College of Emergency Physicians (ACEP) has developed a Pain and Addiction Care in the ED Accreditation Program. The program ensures that patients receive quality pain management and provide the tools for an ED to initiate treatment for patients with OUD.20,21 In 2018, Massachusetts passed legislation requiring all EDs to have the capability to initiate medication for OUD. Efforts are in motion to implement EDIB across the country, and large federally funded EDIB implementation and effectiveness research projects are underway.22–29

4 | RESEARCH IS INFORMING IMPLEMENTATION

Surveys of clinicians indicate concerns that include (1) limited training; (2) access to follow-up care, insurance coverage, and prior authorization requirements; (3) scope of practice and competing priorities; and (4) patient transportation limitations for follow-up care, perceptions of limited patient interest in treatment, and patient preference for alternative treatments.30–32 Initial misgivings about implementation often include concerns that people with OUD will inundate EDs. Importantly, sites note that this is not the case, and research has shown that EDIB programs are not associated with increased rates of patients presenting with requests for treatment.33 People also worry about potential diversion of medication; however, the risk of fatal overdose associated with not receiving medication outweighs the risk associated with potential diversion.34

Research shows that facilitators of initiating buprenorphine in EDs include (1) education and training; (2) access to treatment; (3) support including care coordinators, social workers or peer counselors, pharmacist consultation, local protocols, and order sets; and (4) feedback on patient experiences.32

5 | EDUCATION AND QUALITY IMPROVEMENT RESOURCES ARE AVAILABLE

Clinicians may dispense or administer buprenorphine in the ED but are currently required to apply for a Drug Addiction Treatment Act (DATA) 2000 X-waiver to prescribe buprenorphine. Free training and ongoing support are available through the Providers Clinical Support System,35 and free emergency medicine–focused training is available through the ACEP.36 There is momentum to remove the separate waiver that is required for buprenorphine prescribing for physicians, which could improve access to medication.37,38 A quality framework can guide efforts to improve care in EDs.39,40 Comprehensive efforts are needed that include starting MOUD, overdose education, and naloxone distribution. Structured quality improvement programs could require training and initiation of medication before hospital discharge for patients with moderate to severe OUD. Process quality measures could include the proportion of patients with OUD who are provided with buprenorphine before discharge from the ED. Pennsylvania introduced the first statewide financial incentive to engage patients with OUD in treatment after hospital discharge from the ED or inpatient care. In future years, hospitals participating in the program can earn payments for improvement in the rate of OUD follow-up treatment.41 The ACEP Emergency Quality Network Opioid Initiative,42 Yale,43 the California Bridge Program,24 and the National Institute on Drug Abuse44 have resources for quality improvement activities. The Centers for Medicare and Medicaid Services (CMS), through the quality improvement organizations45 and other associated improvement networks, have been working to reduce opioid-related harms in every state in the United States and to identify, develop, and spread best practices for addressing OUD.

6 | ACCESS TO TREATMENT IS IMPROVING

With increased funding and attention to the overdose epidemic in recent years, community access to care is improving.46,47 However, the adoption of medications in some settings remains low,48 there are regional differences in the distribution of medication,49 and a large treatment gap remains.50–52 Continuing efforts are needed to enhance access, and EDIB programs offer an opportunity to build connections with community clinicians and to engage people in treatment.

7 | NEW FORMULATIONS COULD ENHANCE LINKAGE AND RETENTION IN CARE

New extended-release buprenorphine formulations may help to address concerns about the transition to follow-up care in the community. US Food and Drug Administration–approved buprenorphine and naloxone daily formulation products53 can result in cravings near the end of a 24-hour cycle. A buprenorphine monthly extended-release injection supports long-term abstinence from illicit opioid use. New injectable extended-release buprenorphine-only formulations to
be available in the US in 2021, which allow for immediate induction and treat symptoms for up to 7 days, then monthly, are ideally suited for use in EDs and could address many of the challenges that patients face more effectively than daily medication formulations. A weekly injection would allow consistent dosing and time to connect with outpatient follow-up care. New formulations promise a higher level of opioid receptor occupancy, and a higher steady blood level, which should reduce cravings and provide a consistent blockade of the effects of illicit opioids.54

8 | INNOVATION AND TECHNOLOGY CAN IMPROVE CARE

Solid linkages with physicians, physician assistants, advanced practice nurses, and nurse practitioners providing MOUD in the community who can see patients quickly are of the utmost importance. Telehealth technologies have the potential to enhance access to treatment for those limited in ability to attend appointments because of limited transportation options, burden of time and effort associated with frequent in-person clinic visits, or not having treatment available locally.55,56

Electronic health record integration of order sets or clinical decision support is needed to operationalize roles, processes, and policies. Referral processes need to be streamlined, and research has indicated that specific patient identifiers, encrypted emails, and electronic health records are the preferred methods of communication for these linkages.57

9 | FUTURE RESEARCH

Current research is limited in that studies have predominantly been conducted at academic medical centers with few studies conducted in community EDs. Gaps exist in our knowledge about patient attitudes toward MOUD and the best practices, protocols, and workflows for EDIB.19,58 Also, research is needed to improve real-time identification of at-risk patients using electronic health record machine learning and/or screening.59,60

Research on innovative payment models may be necessary to improve care and coverage for people with OUD. The CMS recently announced 2 new payment models61,62 as the next steps in a multi-pronged strategy to combat the nation’s opioid crisis. In addition, the CMS has committed $50 million to assist states with limited in ability to attend appointments because of limited transportation options, burden of time and effort associated with frequent in-person clinic visits, or not having treatment available locally.55,56

Electronic health record integration of order sets or clinical decision support is needed to operationalize roles, processes, and policies. Referral processes need to be streamlined, and research has indicated that specific patient identifiers, encrypted emails, and electronic health records are the preferred methods of communication for these linkages.57

10 | CALL TO ACTION

Opportunities exist in EDs to impact the morbidity and mortality associated with the opioid overdose epidemic. There is an urgent need to create more public demand for MOUD and to further engage the emergency medicine community and hospitals to address the overdose crisis. Many tools and resources are now available to address clinician concerns and assist EDs in initiating medication for OUD and facilitating linkage to community treatment.

ACKNOWLEDGMENTS
All authors contributed to the development and writing of the article. The authors acknowledge Dr. Douglas Olson for his insights, expertise, and thoughtful reviews. The authors acknowledge CarolAnne Sanders for her assistance with preparing the reference section.

DISCLAIMER
The views and opinions expressed in this manuscript are those of the authors only and do not necessarily represent the views, official policy, or position of the US Department of Health and Human Services or any of its affiliated institutions or agencies.

CONFLICT OF INTEREST
The authors declare no conflict of interest.

REFERENCES
1. American Medical Association Advocacy Resource Center. Issue brief: reports of increases in opioid related overdose and other concerns during covid pandemic. https://www.ama-assn.org/system/files/2020-07/issue-brief-increases-in-opioid-related-overdose.pdf. Updated April 15, 2021. Accessed May 2021.
2. Hedegaard H, Minino A, Warner M. Drug overdose deaths in the United States, 1999-2019. NCHS Data Brief. 2020;394:1-8. https://www.cdc.gov/nchs/products/databriefs/db394.htm. Published December 2020. Accessed February 2021.
3. Ahmad F, LM R, Sutton P, Provisional drug overdose death counts. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm Published 2021. Accessed January 2021.
4. Morgan JR, Schackman BR, Weinstein ZM, Walley AY, Linas BP. Opioid overdose following initiation of naltrexone and buprenorphine medication treatment for opioid use disorder in a United States commercially insured cohort. Drug Alcohol Depend. 2019;200:34-39.
5. Weiss RD, Rao V. The prescription opioid addiction treatment study: what have we learned. Drug Alcohol Depend. 2017;173(suppl 1):S48-S54.
6. Weinor SG, Baker O, Berenson D, Schuur JD. One-year mortality of patients after emergency department treatment for nonfatal opioid overdose. Ann Emerg Med. 2020;75(1):13-17.
7. D’Onofrio G, O’Connor PG, Pantalon MV, et al. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial. JAMA. 2015;313(16):1636-1644.
8. Busch SH, Fiellin DA, Chawarski MC, et al. Cost-effectiveness of emergency department-initiated treatment for opioid dependence. Addiction. 2017;112(11):2002-2010.
9. D’Onofrio G, Chawarski MC, O’Connor PG, et al. Emergency department-initiated buprenorphine for opioid dependence with continuation in primary care: outcomes during and after intervention. J Gen Intern Med. 2017;32(6):660-666.
10. Office of the President (2020-05794). Declaring a national emergency concerning the novel coronavirus disease (COVID-19), outbreak https://www.federalregister.gov/documents/2020/03/18/2020-05794/declaring-a-national-emergency-concerning-the-novel-coronavirus-disease-covid-19-outbreak. Published 2020. Accessed March 2021.
11. CDC Health Alert Network (HAN). Increase in fatal drug overdoses across the United States driven by synthetic opioids before and during the COVID-19 pandemic. https://emergency.cdc.gov/han/2020/han00438.asp. Published 2020. Updated December 17, 2020. Accessed January 2021.

12. Millenium Health LLC. Millennium health’s signals Report™ COVID-19 special edition reveals significant changes in drug use during the pandemic. CISTON PR Newswire. https://www.prenswire.com/news-releases/millenium-health-sIGNALS-report-covid-19-special-edition-reveals-significant-changes-in-drug-use-during-the-pandemic-301089684.html Published July 8, 2020. Accessed August 2020.

13. Sanchez M, Eldeib D. CORONAVIRUS: overdose deaths have skyrocketed in Chicago, and the coronavirus pandemic may be making it worse. ProPublica. https://www.propublica.org/article/overdose-deaths-have-skyrocketed-in-chicago-and-the-coronavirus-pandemic-may-be-making-it-worse. Published May 30, 2020. Accessed August 2020.

14. Raman S. POLICY: drug overdoses climb during COVID-19 pandemic. RollCall. https://www.rollcall.com/2020/05/27/drug-overdoses-climb-during-covid-19-pandemic/. Published May 27, 2020. Accessed August 2020.

15. Volkow ND. Collision of the COVID-19 and addiction epidemics. Ann Intern Med. 2020;173(1):61-62.

16. D’Onofrio G, Venkatesh A, Hawk K. The adverse impact of COVID-19 on individuals with opioid use disorder: the urgent need for reform to leverage emergency department-based treatment. NEJM Catalyst Innov Care Deliv. 2020;13(3):1-7.

17. Wang QQ, Kaelber DC, Xu R, et al. COVID-19 risk and outcomes in patients with substance use disorders: analyses from electronic health records in the United States. Mol Psychiatry. 2021;26:30-39.

18. American College of Medical Toxicology (ACMT). ACMT Position Statement Buprenorphine Administration in the Emergency Department. https://www.acp.org/globalassets/sites/acp/media/equal-documents/policy_acmt_bupeadministration.pdf. Accessed August 2020.

19. Strayer RJ, Hawk K, Hayes BD, et al. Management of opioid use disorder in the emergency department: a white paper prepared for the american academy of emergency medicine. J Emerg Med. 2020;58(3):522-546.

20. American College of Emergency Physicians (ACEP). ACEP leadership report. https://www.acep.org/leadershipreport. Accessed August 2020.

21. American College of Emergency Physicians (ACEP). Pain and Addiction Care in the ED (PACED). https://www.acep.org/paced/. Accessed August 2020.

22. D’Onofrio G, Edelman EJ, Hawk KF, et al. Implementation facilitation to promote emergency department-initiated buprenorphine for opioid use disorder: protocol for a hybrid type III effectiveness-implementation study (Project ED HEALTH). Implement Sci. 2019;14:1:48.

23. Melnick ER, Jeffery MM, Dziura JD, et al. User-centred clinical decision support to implement emergency department-initiated buprenorphine for opioid use disorder: protocol for the pragmatic group randomised EMBED trial. BMJ Open. 2019;9(5):e028488.

24. California Department of Health Care Services (DHCS), Substance Abuse and Mental Health Services Administration (SAMHSA). CA Bridge—transforming addiction treatment. https://www.bridgeatreatment.org/. Accessed August 2020.

25. NIH National Institute on Drug Abuse (NIDA). Emergency Department-Initiated Buprenorphine And Validation Network Trial (Ed-Innovation) (NIH HEAL Initiative). CTN Protocol ID: CTN-0099. https://www.drugabuse.gov/about-nida/organization/cctn/crn/research-studies/emergency-department-initiated-buprenorphine-validation-network-trial-ed-innovation-nih-heal. Accessed August 2020.

26. McCormack RP. Project information: measuring improvement in the quality of ED-initiated treatment for OUD using observation. https://reporter.nih.gov/search/5jJuWxpdGkiz_dSH5hGa/project-details/10186872?similar-Projects. Accessed August 2020.

27. NIH National Institute on Drug Abuse (NIDA). Emergency medicine opioid data infrastructure: key venue to address opioid morbidity and mortality (Project CODE PRO—capturing opioid use disorder electronically and patient reported outcomes). CTN Protocol ID: CTN-0081. https://www.drugabuse.gov/about-nida/organization/cctn/crn/research-studies/emergency-medicine-opioid-data-infrastructure-key-venue-to-address-opioid-morbidity-mortality. Accessed August 2020.

28. NIH National Institute on Drug Abuse (NIDA). Peer recovery support: a bridge to treatment for overdose survivors (NIH HEAL Initiative). CTN Protocol ID: CTN-0107. https://www.drugabuse.gov/about-nida/organization/cctn/crn/research-studies/peer-recovery-support-bridge-to-treatment-overdose-survivors-nih-heal-initiative. Accessed August 2020.

29. NIH National Institute on Drug Abuse (NIDA). Emergency Department Connection to Care with Buprenorphine for Opioid Use Disorder (ED-CONNECT). https://www.drugabuse.gov/about-nida/organization/cctn/crn/research-studies/emergency-department-connection-to-care-buprenorphine-opioid-use-disorder-ed-connect. Accessed August 2020.

30. Lowenstein M, Kilaru A, Perrone J, et al. Barriers and facilitators for emergency department initiation of buprenorphine: a physician survey. Am J Emerg Med. 2019;37(9):1787-1790.

31. D’Onofrio G, McCormack RP, Hawk K. Emergency departments—a 24/7/365 option for combating the opioid crisis. N Engl J Med. 2018;379(26):2487-2490.

32. Hawk KF, D’Onofrio G, Chawarski MC, et al. Barriers and facilitators to clinician readiness to provide emergency department-initiated buprenorphine. JAMA Netw Open. 2020;3(5):e204561.

33. Jennings LK, Bogan C, McCauley JI, et al. Rates of substance use disorder treatment seeking visits after emergency department-initiated buprenorphine. Am J Emerg Med. 2020;38(5):975-978.

34. National Academies of Sciences, Engineering, and Medicine. Medications For Opioid Use Disorder Save Lives. Washington, DC: The National Academies Press; 2019.

35. Providers Clinical Support System (PCSS). Overview of medications for opioid use disorder. https://pcssnow.org/medications-for-opioid-use-disorder/. Accessed March 2021.

36. Brown J. Zooming to an X-Waiver: a silver lining of the COVID-19 pandemic. SocialEMpact. https://www.socialempact.com/zoomxwaiver. Published 2021. Accessed August 2020.

37. American College of Emergency Physicians. X-ing the X-Waiver: the fight continues! https://www.acp.org/federal-advocacy/federal-advocacy-overview/regs--eggs/regs--eggs-articles/regs--eggs--january-28-2021/. Published January 28, 2021. Accessed February 2021.

38. Diamond D. Lawmakers urge Biden to back opioid-treatment measure. The Washington Post. https://www.washingtonpost.com/health/2021/02/09/lawmakers-urge-biden-back-opioid-treatment-measure/. Published February 9, 2021. Accessed February 2021.

39. Samuels EA, D’Onofrio G, Huntley K, et al. A quality framework for emergency department treatment of opioid use disorder. Ann Emerg Med. 2019;73(3):237-247.

40. Samuels EA, Dwyer K, Mello MJ, Baird J, Kellogg AR, Bernstein E. Emergency department-based opioid harm reduction: moving physicians from willing to doing. Acad Emerg Med. 2016;23(4):455-465.

41. Kilaru AS, Perrone J, Kelley D, et al. Participation in a hospital incentive program for follow-up treatment for opioid use disorder. JAMA Netw Open. 2020;3(1):e1918511.
42. American College of Emergency Physicians (ACEP). E-QUAL Network Opioid Initiative: reducing opioid associated harm. https://www.acep.org/administration/quality/equal/emergency-quality-network-e-qual/e-qual-opioid-initiative/. Accessed August 2020.

43. Yale School of Medicine, Yale School of Medicine: ED-initiated buprenorphine. https://medicine.yale.edu/edbup/. Published 2020. Accessed August 2020.

44. NIH National Institute on Drug Abuse (NIDA). Initiating buprenorphine treatment in the emergency department. https://www.drugabuse.gov/ nidamed-medical-health-professionals/discipline-specific-resources/emergency-physicians-first-responders/initiating-buprenorphine-treatment-in-emergency-department. Published 2019. Accessed August 2020.

45. Centers for Medicare and Medicaid Services (CMS). The Centers for Medicare and Medicaid Services (CMS): Quality Improvement Organizations (QIO). https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityImprovementOrgs. Published 2020. Accessed August 2020.

46. Truven Health Analytics. Use of medication-assisted treatment for opioid use disorders in employer-sponsored health insurance: final report. https://aspe.hhs.gov/basic-report/use-medication-assisted-treatment-opioid-use-disorders-employer-sponsored-health-insurance-final-report. Updated February 12, 2019. Accessed August 2020.

47. Medicaid and CHIP Payment and Access Commission (MACPAC). Examines access to medication assisted treatment under Medicaid [press release]. https://www.macpac.gov/wp-content/uploads/2019/10/MACPAC-Examines-Access-to-Medication-Assisted-Treatment-under-Medicaid.pdf. Published October 24, 2019. Accessed August 2020.

48. Huhn AS, Hobelmann JG, Strickland JC, et al. Differences in availability and use of medications for opioid use disorder in residential treatment settings in the United States. JAMA Netw Open. 2020;3(2):e1920843.

49. Pashmineh Azar AR, Cruz-Mullane A, Podd JC, et al. Rise and regional disparities in buprenorphine utilization in the United States. Pharmacoepidemiol Drug Saf. 2020;29(6):708-715.

50. Research reveals that thirty-nine percent of counties across the United States lack access to effective opioid use disorder treatment [press release]. https://www.shatterproof.org/press/buprenorphine-press-release. Published April 29, 2020. Accessed August 2020.

51. Williams AR, Nunes EV, Bisaga A, Levin FR, Olsson M. Development of a Cascade of Care for responding to the opioid epidemic. Am J Drug Alcohol Abuse. 2019;45(1):1-10.

52. Williams AR, Nunes EV, Bisaga A, et al. Developing an opioid use disorder treatment cascade: a review of quality measures. J Subst Abuse Treat. 2018;91:57-68.

53. Substance Abuse and Mental Health Services Administration (SAMHSA). Medication assisted treatment: buprenorphine. https://www.samhsa.gov/medication-assisted-treatment/treatment/buprenorphine. Published 2020. Accessed August 2020.

54. Ling W, Shoptaw S, Goodman-Meza D. Depot buprenorphine injection in the management of opioid use disorder: from development to implementation. Subst Abuse Rehabil. 2019;10:69-78.

55. Rockwell KL, Gilroy AS. Incorporating telemedicine as part of COVID-19 outbreak response systems. Am J Manag Care. 2020;26(4):147-148.

56. Samuels EA, Clark SA, Wunsch C, et al. Innovation during COVID-19: improving addiction treatment access. J Addict Med. 2020;14(4):e8-e9.

57. Ahmed OM, Mao JA, Holt SR, et al. A scalable, automated warm handoff from the emergency department to community sites offering continued medication for opioid use disorder: lessons learned from the EMBED trial stakeholders. J Subst Abuse Treat. 2019;102:47-52.

58. Johns SE, Bowman M, Moeller FG. Utilizing buprenorphine in the emergency department after overdose. Trends Pharmacol Sci. 2018;39(12):998-1000.

59. Ellison J, Walley AY, Feldman JA, et al. Identifying patients for overdose prevention with ICD-9 classification in the emergency department, Massachusetts, 2013-2014. Public Health Rep. 2016;131(5):671-675.

60. Sahota PK, Shastry S, Mukamel DB, et al. Screening emergency department patients for opioid drug use: a qualitative systematic review. Addict Behav. 2018;85:139-146.

61. Centers for Medicare and Medicaid Services (CMS). CMS announces new model to address impact of the opioid crisis for children [press release]. https://www.cms.gov/newsroom/press-releases/cms-announces-new-model-address-impact-opioid-crisis-children. Published August 23, 2018. Accessed August 2020.

62. Centers for Medicare and Medicaid Services (CMS). Maternal Opioid Misuse (MOM) model. https://innovation.cms.gov/initiatives/maternal-opioid-misuse-model/. Published 2019. Accessed August 2020.

63. CMS commits $50 million to assist states with substance use disorder treatment and recovery [press release]. https://www.cms.gov/newsroom/press-releases/cms-commits-50-million-assist-states-substance-use-disorder-treatment-and-recovery. Published June 25, 2019. Accessed August 2020.

64. US House of Representatives. Walden GR, SUPPORT for Patients and Communities Act - H.R.6. https://www.congress.gov/bill/115th-congress/house-bill/6. Published 2018. Accessed August 2020.

How to cite this article: Huntley K, Einstein E, Postma T, et al. Advancing emergency department–initiated buprenorphine. JACEP Open. 2021;2:e12451. https://doi.org/10.1002/emp.212451