

1. Talk with your pharmacy director to be sure that buprenorphine is on the hospital formulary.
2. Develop a connection and with an outpatient facility who can receive patients referred from the ED.
3. Train nurses and doctors how to assess opioid withdrawal severity and how to dose buprenorphine.
4. Create or adapt a simple guide for providers for use in the clinical areas for real-time consultation.
5. If possible, bring in a patient care navigator to help patients transition to outpatient care.
6. Obtain patient education materials from outpatient partners that describe how to access their buprenorphine treatment services.

Will treatment with buprenorphine reduce mortality among patients with opioid addiction?

In a recent study of over 150,000 National Health Service patients treated for opioid dependence, followed for a total of 442,950 patient years, treatment of opioid dependence with buprenorphine was found to reduce risk for opioid overdose death by one half versus patients with no treatment or psychosocial treatment only.¹

In a study of 33,923 Medicaid patients diagnosed with opioid dependence in Massachusetts, mortality during the four-year study period (2003-2007) was double among patients receiving no treatment versus patients treated with buprenorphine. Additionally, patients treated with buprenorphine experienced a 75% reduced mortality versus patients treated with psychosocial interventions alone.²

Among the highest risk patients who inject heroin, treatment with methadone or buprenorphine for at least 5 cumulative years, is associated with a reduction in mortality from 25% at 25 years to 6%. The association between treatment and improved survival is likely multifactorial and mediated through reduced risk of HIV infection, improved social functioning, reduced criminality, and establishing long-term contact with health professionals.^{3,4,5,6,7,8,9,10} Importantly, survival benefit is not affected by cessation of injection drug use.³

¹ Pierce M, Bird SM, Hickman M, Marsden J, Dunn G, Jones A, and Millar T. Impact of treatment for opioid dependence on fatal drug-related poisoning: a national cohort study in England. *Addiction*. 2016;111(2):298-308. doi:10.1111/add.13193.

² Clark RE, Samnaliev M, Baxter JD, and Leung GY. The evidence doesn't justify steps by state Medicaid programs to restrict opioid addiction treatment with buprenorphine. *Health Aff (Millwood)*. 2011;30(8):1425-33. doi:10.1377/hlthaff.2010.0532.

³ Kimber J, Copeland L, Hickman M, Macleod J, McKenzie J, De Angelis D, and Robertson JR. Survival and cessation in injecting drug users: prospective observational study of outcomes and effect of opiate substitution treatment. *BMJ*. 2010;341(jul01 1):c3172-c3172. doi:10.1136/bmj.c3172.

⁴ Mattick RP, Breen C, Kimber J, and Davoli M. Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. *Cochrane Database Syst Rev*. 2014;2:CD002207. doi:10.1002/14651858.CD002207.pub4.

⁵ Fugelstad A, Stenbacka M, Leifman A, Nylander M, and Thiblin I. Methadone maintenance treatment: the balance between life-saving treatment and fatal poisonings. *Addiction*. 2007;102(3):406-12. doi:10.1111/j.1360-0443.2006.01714.x.

⁶ Bell J, Trinh L, Butler B, Randall D, and Rubin G. Comparing retention in treatment and mortality in people after initial entry to methadone and buprenorphine treatment. *Addiction*. 2009;104(7):1193-200. doi:10.1111/j.1360-0443.2009.02627.x.

⁷ Gowing L, Farrell M, Bornemann R, and Ali R. Substitution treatment of injecting opioid users for prevention of HIV infection. *The Cochrane Library*. 2004.

⁸ Amato L, Davoli M, Perucci CA, Ferri M, Faggiano F, and Mattick RP. An overview of systematic reviews of the effectiveness of opiate maintenance therapies: available evidence to inform clinical practice and research. *J Subst Abuse Treat*. 2005;28(4):321-9. doi:10.1016/j.jsat.2005.02.007.

⁹ Sporer KA. Strategies for preventing heroin overdose. *BMJ*. 2003;326(7386):442-4. doi:10.1136/bmj.326.7386.442.

¹⁰ Ward J, Hall W, and Mattick RP. Role of maintenance treatment in opioid dependence. *Lancet*. 1999;353(9148):221-6. doi:10.1016/S0140-6736(98)05356-2.