

Emergency Department Naloxone Distribution: A Rhode Island Department of Health, Recovery Community, and Emergency Department Partnership to Reduce Opioid Overdose Deaths

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ABSTRACT

In response to increasing rates of opioid overdose deaths in Rhode Island (RI), the RI Department of Health, RI emergency physicians, and Anchor Community Recovery Center designed an emergency department (ED) naloxone distribution and peer-recovery coach program for people at risk of opioid overdose. ED patients at risk for overdose are offered a take home naloxone kit, patient education video, and, when available, an Anchor peer recovery coach to provide recovery support and referral to treatment. In August 2014, the program launched at Kent, Miriam, and Rhode Island Hospital Emergency Departments.

KEYWORDS: opioid overdose prevention, naloxone, peer coaching, emergency medicine

Each NRK contains two doses of intranasal naloxone (1mg/ml 2ml luer-lock needleless prefilled syringes), one nasal atomizer, and instructions in English and Spanish on what to do in the event of an opioid overdose and how to use naloxone. Individuals who receive an NRK are shown an educational video¹⁰ and, when available, an Anchor Recovery Community Center recovery coach is consulted to provide patients with support, naloxone education, and referral to addiction treatment. The recovery coaches also follow up with patients 24-48 hours after their ED visit. Coaches are trained, certified, and hired through Anchor Recovery Community Center, a peer-to-peer recovery support organization in RI. They are paid through state funding from the RI Department of Behavioral Healthcare, Developmental Disabilities and Hospitals, another partner in the OPRC. In August, Rhode Island, Miriam, and Kent County Hospitals started ED naloxone distribution and consulting Anchor recovery

INTRODUCTION

The Rhode Island (RI) Department of Health (HEALTH)'s naloxone emergency regulations released in March 2014 provided new opportunities for naloxone access through direct provider distribution and third party prescribing to family members or friends of an individual at risk for opioid overdose. Community opioid education and naloxone distribution programs have been shown to decrease opioid overdose deaths in Massachusetts¹ as well as Chicago.² Nationally, naloxone distribution programs have shown that lay people, including intravenous drug users, can reliably administer naloxone,³⁻⁸ and research evidence has also suggested that these programs are cost effective.⁹

HEALTH's Overdose Prevention and Rescue Coalition (OPRC) identified the ED as an underutilized arena to prevent opioid overdose deaths as RI emergency department (ED) visits for non-fatal opioid overdoses were growing alongside increasing opioid overdose mortalities. Currently, only a few EDs distribute naloxone to patients at risk for opioid overdose. Rhode Island Hospital (RIH) emergency medicine physician members of OPRC collaborated with Lifespan Pharmacy and Anchor Recovery Community Center to finalize a protocol for direct distribution of a naloxone rescue kit (NRK) to patients at risk for opioid overdose (see **Table 1**) paired with overdose prevention education, addiction counseling and referral to treatment.

Table 1: Patients at Risk for Opioid Overdose

1. Have suspected substance abuse or non-medical opioid use.
2. Are currently being prescribed methadone or buprenorphine through a prescriber or program.
3. Are receiving an opioid prescription for pain and:
 - a) Given higher-dose (>50 mg morphine equivalent/day).
 - b) Rotated from one opioid to another because of possible incomplete cross tolerance.
 - c) Have poorly controlled COPD, emphysema, asthma, sleep apnea, or respiratory infection where the provider is concerned concurrent opiate use will compromise their respiratory status.
 - d) Have pre-existing renal dysfunction, hepatic disease, cardiac illness.
 - e) Have known or suspected concurrent excessive alcohol use or dependency.
 - f) Concurrent usage of a benzodiazepine or other sedative prescription.
 - g) Suspected poorly controlled depression.
4. Patients who fall into categories listed above and may have difficulty accessing emergency medical services (distance, remoteness).
5. Recent abstinence from use and/or incarceration/release from prison.

coaches to provide needed services to patients presenting with an opioid overdose.

Key steps to program establishment were finding funding for NRK purchase, engagement of community and institutional stakeholders, provider and staff engagement and education, and protocol review and approval by institutional risk management, legal, and pharmacy departments. Moving forward, funding will be the primary obstacle. While prescribed naloxone is billable to insurance, an NRK given in the ED is not reimbursable since the first dose of the medication is not administered in the ED. At RIH, whose ED treats approximately 11 overdoses a week (40-50 a month), the Lifespan leadership chose to cover the cost of the NRKs as a community service. The OPRC is pursuing other avenues of funding, from state or private grants, to allow other hospitals to provide direct naloxone distribution without incurring additional cost.

Provider and staff reception of the program has been generally positive, which is a departure from prior surveys of provider attitudes.¹¹ This may be due to general attitude change over time, or may reflect a more recent shift related to the recent dramatic rise in opioid overdose mortality in combination with high profile deaths.¹²

CONCLUSION

In addition to decreasing deaths to overdose, our program's ultimate goal is to help make recovery an option for anyone in RI who may need or want it. By bringing together representatives from different state departments, community organizations, and local hospitals, the OPRC designed and implemented a forward-thinking initiative to decrease opioid overdose deaths, create jobs for individuals in the recovery community, and prioritize the health and future wellbeing of people struggling with addiction or at risk for opioid overdose.

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References

1. Walley A, Xuan Z, Hackman H, Sisson E, Doe-Simkins M, Alawad A, and Ozonoff A. Is implementation of bystander overdose education and naloxone distribution associated with lower opioid-related overdose rates in Massachusetts? *AMERSA*. 2011. Saturday, November 5, 2011.
2. Maxwell S, Bigg D, Stanczykiewicz K, and Carlberg-Racich S. Prescribing naloxone to actively injecting heroin users: a program to reduce heroin overdose deaths. *J Addict Dis*. 2006;25:89-96.
3. CDC. Community-Based Opioid Overdose Prevention Programs Providing Naloxone Reduce Heroin Overdose Deaths. *MMWR*. February 17 2012;61(06):101-105.
4. Piper TM, Stancliff S, Rudenstine S, Sherman S, Nandi V, Clear A, and Galea S. Evaluation of a naloxone distribution and administration program in New York City. *Subst Use Misuse*. 2008;43:858-70.
5. Doe-Simkins M, Walley AY, Epstein A, and Moyer P. Saved by the nose: bystander-administered intranasal naloxone hydrochloride for opioid overdose. *Am J Public Health*. 2009;99:788-91.
6. Enteen L, Bauer J, McLean R, Wheeler E, Huriaux E, Kral AH, and Bamberger JD. Overdose prevention and naloxone prescription for opioid users in San Francisco. *J Urban Health*. 2010;87:931-41.
7. Bennett AS, Bell A, Tomedi L, Hulsey EG, and Kral AH. Characteristics of an overdose prevention, response, and naloxone distribution program in Pittsburgh and Allegheny County, Pennsylvania. *J Urban Health*. 2011;88:1020-30.
8. Strang J, Manning V, Mayet S, Best D, Titherington E, Santana L, Offor E, and Semmier C. Overdose training and take-home naloxone for opiate users: prospective cohort study of impact on knowledge and attitudes and subsequent management of overdoses. *Addiction*. 2008;103:1648-57.
9. Coffin P, Sullivan S. Cost-Effectiveness of Distributing Naloxone to Heroin Users for Lay Overdose Reversal. *Ann Intern Med*. 2013;158:1-9.
10. *Staying Alive on the Outside*. Prod. Gretchen Hildebran. Rhode Island Hospital, 2012. DVD.
11. Beletsky L, Rughazer R, Macalino G, Rich JD, Tan L, and Burriss S. Physicians Knowledge of and Willingness to Prescribe Naloxone to Reverse Accidental Opiate Overdose: Challenges and Opportunities. *J Urban Health*. 2006; 84(1): 126-136.
12. Gilbey R. Philip Seymour Hoffman Obituary. *The Guardian*. February 3, 2014; Accessed July 17, 2014 at: <http://www.theguardian.com/film/2014/feb/03/philip-seymour-hoffman>.

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Disclosures

None

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