Naloxone Upon Hospital Discharge: an Interdisciplinary Approach



Meghan K Train, DO; Nilbhi Patel, MD; Kriti Thapa, MD, MPH; Marissa Pasho, NP; Nicole M. Acquisto, Pharm.D.

University of Rochester Medical Center, Rochester, NY -

INTRODUCTION

- - Opioids were involved in 47,600 overdose deaths in 2017 (67.8% of all drug overdose deaths) in the US (1)
- In Monroe County, NY, heroin and fentanyl deaths have increased 200% from 2015 to 2017 (2)
- High lifetime prevalence of a substance use disorder (50%) occurs among hospitalized individuals.
- Center for Disease Control & Prevention and the Surgeon General have issued guidelines recommending co-prescription of naloxone with opiates for a subset of patients
 - o Those on opiate pain medications
 - o Those with risk factors for opiate overdose
- - Naloxone prescribing for high-risk patients is a risk mitigation strategy.
- Aim: increase access to naloxone in the community by identifying patients at risk of an OAE upon hospital discharge, targeting staff and patient education, and increasing the number of naloxone prescriptions.

1

Category A recommendation from the CDC

prescription of ≥50 morphine milligram -

history of substance abuse

equivalents (MME)/day

previous history of an overdose

Guideline for Prescribing Opioids for Chronic Pain:

·co-administration of opioids and benzodiazepines

risk for returning to higher doses after a period of

• patients with a significant reduction in opiate dose

METHODS

 - A faculty development conference for prescribing providers -

naloxone

- o local and national trends of OAEo criteria used for identifying
- patients at risk for an OAE o indications for prescribing
- o review of the process to prescribe the medication on hospital discharge
- Educational sessions for nursing
 o pioid use disorder & epidemic
 - o signs of an overdose
 - o instructions on intranasal
- Information was disseminated over 2 weeks with review 2x daily
 - at AM and PM nursing huddles
 - brief PowerPoint overview
 live simulation between staff
 - members
- a video from Monroe County
- Plan reviewed with care coordinators and social workers

RESULTS

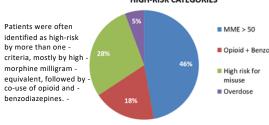
- Data was obtained from the hospital outpatient pharmacy records of naloxone nasal spray prescriptions at the time of discharge
- Patients who received naloxone after program implementation:
 - o mostly male (56%, n=36)
 - o mean age 51 ± 15 years
 - o median hospital length of stay was 6 days
 - o 59% were on chronic opioids prior to admission
- Co-payments
 - o 85.9% of patients had a co-pay ranging from \$0 to \$1
 - O Seven patients (10.9%) had a co-pay ranging from \$2 to \$35
 - o 3% had a co-pay of higher than \$35

Naloxone Presciptions Naloxone Presciptions Naloxone Presciptions Naloxone Presciptions Naloxone Presciptions Naloxone Presciptions

We compared data from 7 months before and after implementing our program.

- 64 patients received naloxone and education at discharge after starting our project, compared to only 2 in the preceding 7 months.
- Naloxone prescriptions declined a few months after project initiation. We found that patients being discharged to skilled nursing facilities did not require naloxone prescriptions, as these facilities had their own supply.

HIGH-RISK CATEGORIES



DISCUSSION

- - Other patients that are at risk that were not included:
 - o decreased opioid clearance and metabolism (ie: liver cirrhosis or chronic kidney disease)(12)
 - o discharged to skilled nursing facilities and thus already have access to naloxone
 - o patients who preferred to use an external pharmacy
 - o patients receiving opioids for cancer related pain
- · Limitations include:
 - o inability to measure how often naloxone is being used after discharge, partly due to limited access to external databases
 - o ability to study how our intervention of increasing naloxone in the community is impacting the number of emergency department visits and deaths related to OAE
- Additional inpatient hospital medicine units replicated this pilot and prescriptions for naloxone have increased across the institution as a whole
- The ambulatory internal medicine clinic started a similar Narcan Initiative to increase naloxone prescriptions in the outpatient setting.
- The Opioid Task Force at the University of Rochester Medical Center provided guidelines for safe opioid prescribing/naloxone use and mandated providers to complete training modules regarding OAE and naloxone.

REFERENCES

- Scholl L, Seth P, Kariisa M, Wilson N, Baldwin G. Drug and Opioid-Involved Overdose Deaths United States, 2013-2017. Morbidity and Mortality Weekly Report (MMWR) Report. ePub: 21 December 2018.
- 2. Singer, Patti. Normore County opioid overdose deaths up more than 200 percent in two years. Democrat and Chronicle. 3 July 2015
 3. Dumne R8. Prescribing naisonne for opioid overdose intervention. Hamagement. 2015; 8(3): 157–288 L. Downe D. Hangerich TM, Chou R. CDC.
 Guideline for Prescribing Opioids for Chronic Pain. Morbidity and Morbatility Wespert (MMMR) Ecommendations and Reports. 18 March 2016;
- A U.S. Department of Health and Human Services (HES), Office of the Surgeon General Tacing Addiction in America: The Surgeon General's Socilight to Opicids. Available at https://www.surgeongeneral.gov/priorites/opicids-overbook-prevention/automen-advisory.html.Accessed September 2018.

 5. Zschode HJ, Nebbl S, Murtza U, et al. Development and implementation of procedures for outpatient nakonone prescribing at a large academic medical center. American Journal of Health-Systeth Pharmary, Nov 2018; 75(2): 1812-18207.
- institute tenter. Arien to Journal or Hearing-Specim Hearlans, Vol. 2006,73 (22), 1022-10207.

 6. Winggradi, Davis C, Niculet M, Oliva E, Martielli R (2017). Medical provider's knowledge and concerns about opioid overdose education and take home nailoxone rescue kits within Veterans Affairs health care medical treatment settings. Substance Abuse. 2017; 38(2):135-1408.

 7. Monroe County Department of Public Health. Opioid Overdose Prevention Training (Narcan/Naioxone). Available athttps://www.monroecounty.gov/opioids/.Accassed September 2018s).
- 8. 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: 346-f17410.
- Neasocitusetts. Intertrupted unterseries alrialysis, BMV. 2015, 346.11.7410.

 9. Coffin PO, Behar E, Rowe C, et al. Nonrandomized InterventionStudy of Naloxone Coprescription for Primary Care Patients Receiving Long-Term Opioid Therapy for Pain. Ann Intern Med. 2016;165:245-25211.
- 10. New York State Department of Health. Naloxone Co-payment Assistance Program (N-CAP). Available at: https://www.health.nv.gov/publications/9826.pdf.Accessed September 201812.
- 11. Vu Q, Beselman A, Monolakis J, Wang A, Rastegar D. Risk factors for opioid overdose among hospitalized patients. Journal of Clinical Pharmacy and Therapeutics. 201813.
- 12. Doe Sirikins M, Quinn E, Xuan Z, et al. Overdose rescues by trained and untrained participants and change in opioid use among substance-using participants in overdose education and relationed edistribution programs: a refrequence tow coher study, BMC Public Health 2014; 14(1) 13. Van SP, Yao ML, Tang T, et al. Implementing an Opioid Risk Reduction Program in the Acute Comprehensive Inpatient Rehabilitation Setting. Arch Phis Med Rehabil Maz 2019;10(8):1831-1398.
- Braithwaite V, Nolan S. Hospital-Based Addiction Medicine Healthcare Providers: High Demand, Short Supply. Available at: https://journals.lww.com/journaladdictionmedicine/Abstract/2019/08000/Hospital_Based_Addiction_Medicine_Healthcare.1.aspx. Accessed October 2019