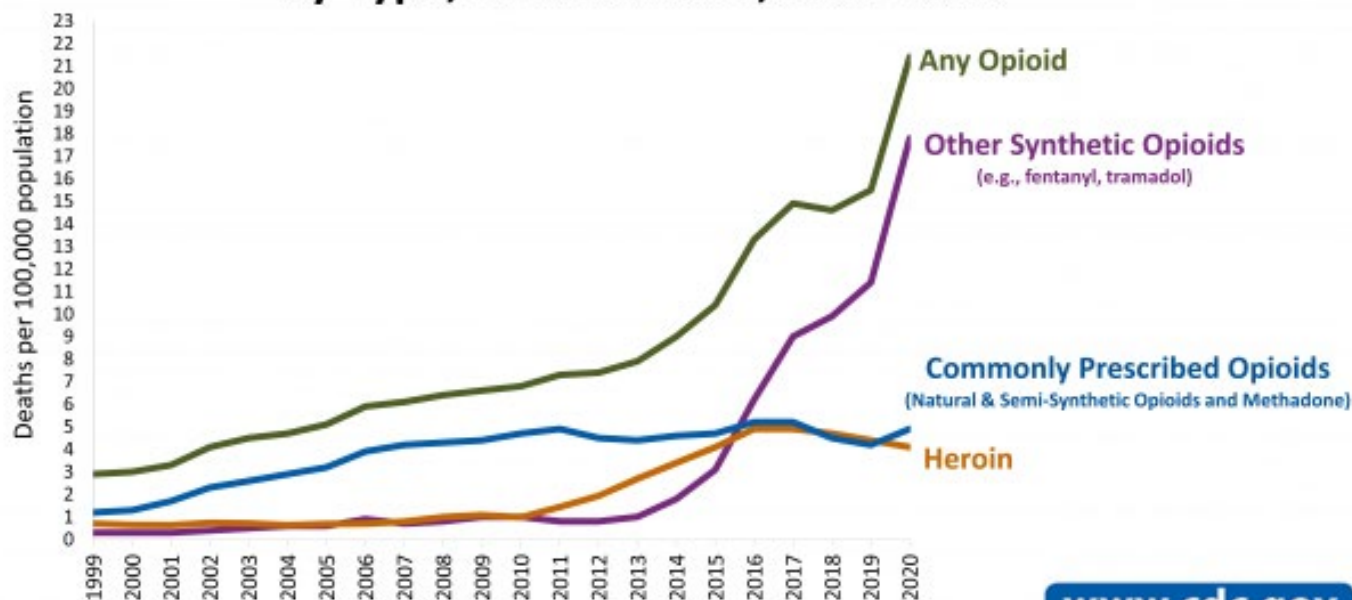

Naloxone Distribution at Hospital Discharge Implementation and Outcomes

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Background

- ❖ Opioid overdoses are a common cause of morbidity and mortality among individuals with substance use disorder and individuals on chronic opioid therapy.
- ❖ Rates of opioid overdose deaths have dramatically increased over the past two decades.
- ❖ Opioid overdoses disproportionately impact Black individuals, and the degree of disparity is rising.
- ❖ Naloxone distribution helps to prevent deaths from opioid overdose in high -risk individuals.
- ❖ Naloxone is drastically under -prescribed (one study estimated that only 1 in 69 patients receiving high -dose opioid prescriptions received a prescription for naloxone).
- ❖ Cost and availability can be a significant barrier to naloxone access.

Overdose Death Rates Involving Opioids, by Type, United States, 1999-2020



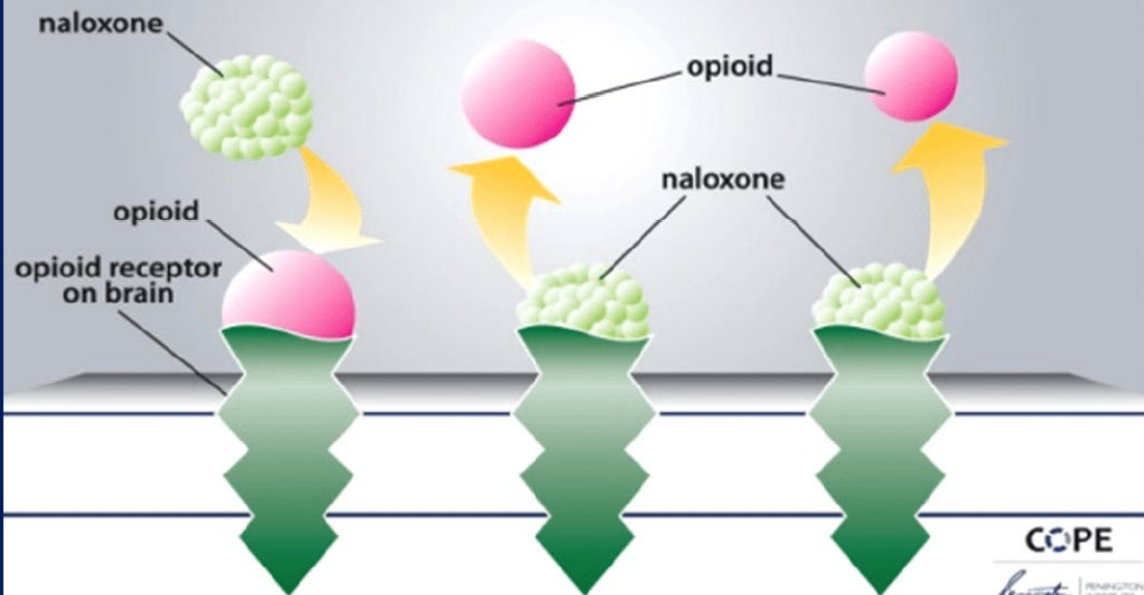
SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA; US Department of Health and Human Services, CDC; 2020. <https://wonder.cdc.gov/>.

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Naloxone reversing an overdose

Naloxone has a stronger affinity to the opioid receptors than opioids, such as heroin or oxycodone, so it knocks the opioids off the receptors for a short time (30-90 minutes).

This allows the person to breathe again and reverse the overdose.



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Project Goal

Study Objectives:

- ❖ To sustainably establish our residency inpatient medicine service as a naloxone distribution site
- ❖ To determine the demographics and clinical characteristics of patients at WSMC who might benefit from naloxone distribution.
- ❖ To determine the number of naloxone kits distributed

Hypothesis: We anticipate that our residency program can efficiently and sustainably provide naloxone to patients on the inpatient service at high risk for opioid overdose. We expect that the population of patients to whom naloxone is provided will be similar to the population cared for at West Suburban Medical Center.

Methods

Study Population Inclusion Criteria:

- ❖ Patients admitted to our FMS service who are at risk of experiencing an opioid related drug overdose (including those with a diagnosis of opioid use disorder or on any dose of opioids on a chronic basis [more than 5 days after hospital discharge]) -
- ❖ A family member, friend or other person in a position to assist a person at risk of experiencing an opioid -related drug overdose
- ❖ Any patient who requests naloxone, even if they do not disclose their reason for desiring the medication

Patient Narcan Survey

Our hospital is able to provide free naloxone (Narcan) to eligible patients. Narcan is a medication that can be used to rescue a person experiencing opioid overdose. Rapid Narcan administration has been shown to save lives in the event of an opioid overdose. Please fill out the following survey to determine if you are eligible. You do not have to fill out this survey to continue receiving medical care.

1. [OPTIONAL] Do you or anyone you know (family, friends, neighbors) use opioids, including heroin or prescription narcotics (e.g. oxycodone, Norco, or Percocet)?

Yes

No

2. Would you consider carrying Narcan with you in the case you encounter someone who has overdosed on opioids?

Yes

No

If you answered yes to the above questions, our team will provide you with Narcan prior to your discharge from the hospital. They will also instruct you on how to use Narcan if you or someone around you shows signs of opioid withdrawal. This medication is given to you free of charge. We will record your medical record number for documentation and review, but your name will not be recorded and your personal information will not be shared.

Methods

- ❖ We utilized our FQHC's Chemical Dependency Clinic as our Opioid Overdose Education and Naloxone Distribution Site (we did not establish as our own site)
 - Sustainable, free Narcan supply
- ❖ Educated residents regarding opioid dependence, naloxone uses, and project protocol
- ❖ Stored naloxone and patient education materials in the FMS lounge
- ❖ Offered and distributed naloxone to those identified in the inclusion criteria
 - 5 month period
 - Patient Narcan Survey completed
- ❖ Provided education on opioid overdose prevention, identification, and actions to reverse and seek support for overdoses

Methods

- ❖ Recorded patient MRN and indication for naloxone prescription each time naloxone was distributed.
- ❖ Chart review and analysis of patients to whom naloxone is given: age, self identified gender, home zip code, new Rx or refill, PCP/clinic site, enrollment status in MAT, indication for distribution, prior naloxone use information

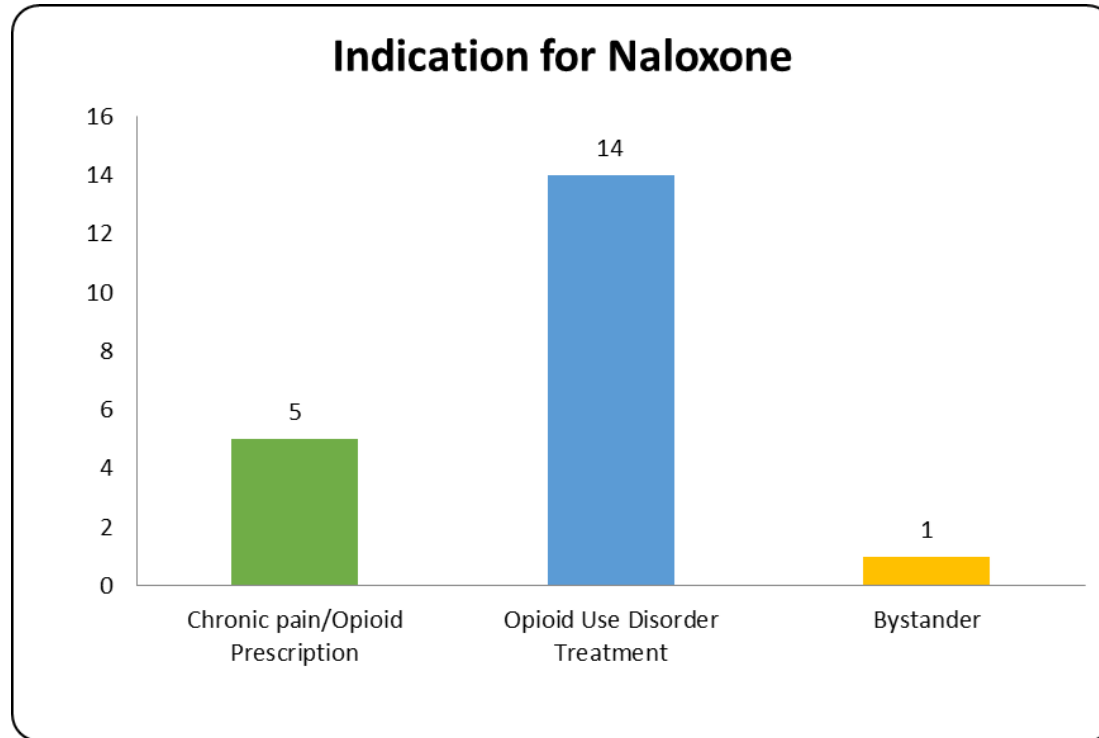
Results: Overview

The FMS team distributed naloxone to 26 patients between February and June 2022



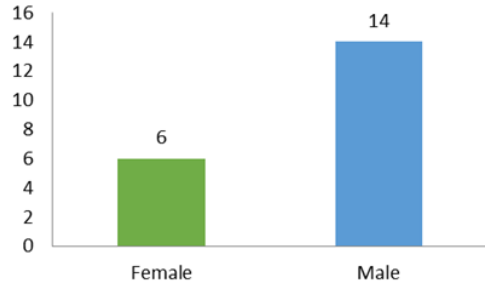
Of these, 20 had MRNs recorded and were included in our analysis

Results: Indication for Naloxone Distribution

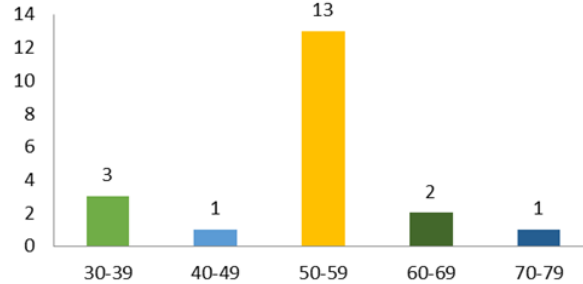


Results: Patient Demographics

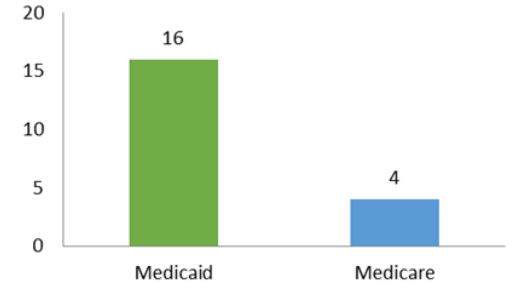
Patient Sex



Patient Age

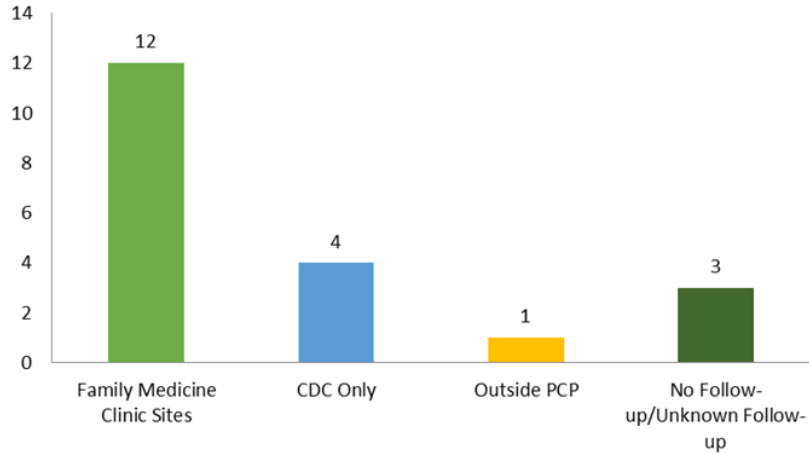


Insurance Coverage

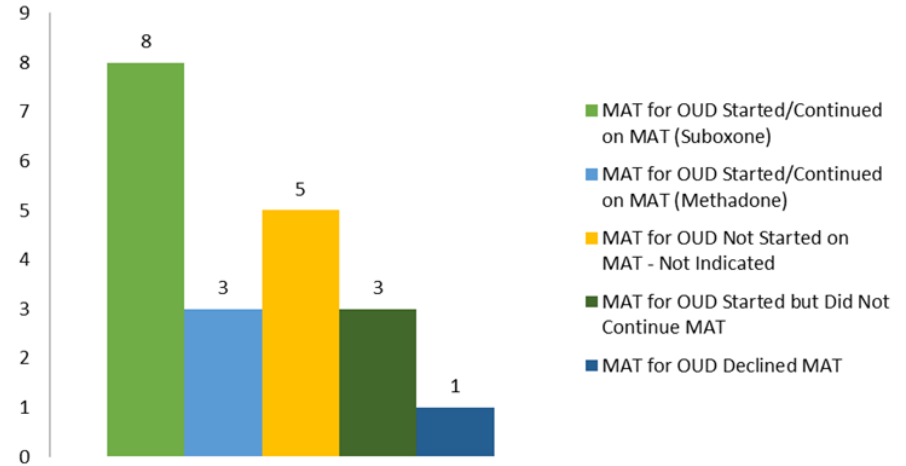


Results: Follow up and MAT

Patient Follow-Up



Treatment of Opioid Use Disorder



Discussion

- ❖ Data show an aging population of persons at risk for opioid overdose (OD) receiving naloxone (majority over 50 years of age). Previous studies demonstrate drastically increasing rates of overdose among older patients, particularly men who identify as Black (Mason, *et al*, 2022).
- ❖ The majority of patients enrolled in the study initiated or continued MAT; this program further supports the efforts to connect patients to life-saving MAT.
- ❖ This program clearly demonstrates resident involvement in harm reduction and engagement in addiction medicine learning, which may help increase comfort in the care for patients with addiction beyond residency.
- ❖ Geographically, this program reaches a breadth of zip codes, but primarily serves patients living in the West Side of Chicago, where rates of OUD and overdose are high.

Conclusion/Next Steps

- ❖ This program serves as an example for other resident inpatient services who can effectively act as an Opioid Overdose and Naloxone Distribution site (OEND) to improve mortality in overdose deaths.
- ❖ The program's simplicity and institutional support from PCC's Chemical Dependency Clinic make it highly sustainable.
- ❖ As the program evolves, it would be useful to collect data related to naloxone use to better capture and understand risk reduction of death due to overdose.
- ❖ Advocacy for addiction services from residents may extend beyond naloxone distribution into other realms of addiction care, such as patient education or needle exchange programs.

References

- ❖ <https://www.cdc.gov/opioids/data/analysis-resources.html>
- ❖ <https://www.nih.gov/news-events/news-releases/disparities-opioid-overdose-deaths-continue-worsen-black-people-study-suggests>
- ❖ McClellan, Chandler, et al. "Opioid overdose laws association with opioid use and overdose mortality." *Addictive behaviors* 86 (2018): 90-95.
- ❖ Guy GP Jr., Haegerich TM, Evans ME, Losby JL, Young R, Jones CM. Vital Signs: Pharmacy-Based Naloxone Dispensing — United States, 2012–2018. *MMWR Morb Mortal Wkly Rep* 2019;68:679–686. DOI: <http://dx.doi.org/10.15585>.
- ❖ Spivey, Christina A., et al. "Evaluation of naloxone access, pricing, and barriers to dispensing in Tennessee retail community pharmacies." *Journal of the American Pharmacists Association* 60.5 (2020): 694-701.
- ❖ Mason, M., Soliman, R., Kim, H. S., & Post, L. A. (2022). Disparities by sex and race and ethnicity in death rates due to opioid overdose among adults 55 years or older, 1999 to 2019. *JAMA network open* 5(1), e2142982-e2142982.

Abstract

Introduction: Opioid overdose deaths have dramatically increased in recent years, disproportionately affecting Black individuals. Naloxone prevents deaths from opioid overdose in high-risk individuals; however, this medication remains under-prescribed (one study estimated that only 1 in 69 eligible patients received a prescription for naloxone). Cost and accessibility are common barriers to naloxone access. Our project established our inpatient Family Medicine Residency service as a naloxone distribution site, increasing patient access to naloxone while also improving residents' familiarity with naloxone distribution.

Methods: We collaborated with our hospital's addiction medicine clinic to establish a reliable supply of naloxone provided free of charge from the Illinois Department of Public Health. We provided resident training regarding the indications and use of naloxone, and we maintained our supply of naloxone in an accessible and secure area. We encouraged residents to distribute naloxone to any patient with a history of opioid use disorder or prescription for chronic opioids. For five months, we recorded the reason for naloxone distribution and the MRN from each patient to whom naloxone was distributed. We then performed a chart review of these patients.

Results: Our resident team provided naloxone to 26 patients during the recording period. Accurate MRNs were recorded for 20 patients. 70% (14 patients) were provided with naloxone in the setting of opioid use disorder, 25% (5 patients) were provided with naloxone due to chronic opioid use for pain management, and 5% (1 patient) was provided with naloxone as a potential bystander. 70% were male, compared to 30% female. Patients ranged from 30 to 78 years old. All patients had public insurance; 80% (16 patients) had Medicaid and 20% (4 patients) had Medicare. More than half of the patients (12 patients) followed up with our family medicine clinics, the remainder followed up with our addiction medicine clinic (4 patients), saw an outside primary care provider (1 patient), or had no known provider (3 patients). 40% (8 patients) were continued or started on suboxone and 15% (3 patients) were continued or started on methadone. One patient declined MAT, three patients were started on medication but did not continue after discharge, and five patients did not have indication for MAT.

Conclusions: We devised a sustainable, resident-driven process for distributing naloxone to patients admitted to our residency service. These patients came from diverse areas of Chicago and the western suburbs, and represented a wide variety of diagnoses and ages. Most of our patients who were eligible for medication for addiction treatment were started or continued on treatment during their hospital admission.