Submission Id: 7012

Title

Characterizing nonfatal opioid overdose patients and receipt of medication for opioid use disorder at a safety net hospital

Priority 1 (Research Category)

Social determinants and vulnerable populations

Presenters

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Abstract

Context: Amid an ongoing opioid overdose crisis in the U.S., Medications for Opioid Use Disorder (MOUD) have been shown to effectively treat opioid use disorder and prevent overdose. However persistent access barriers remain especially for patients with social risks like homelessness.

Objective: Describe the demographics, rate of homelessness, rate of MOUD prescriptions, healthcare encounters, and mortality rates of adult patients with a nonfatal opioid overdose (NFOD) at the time of first encounter (t=0) and over the subsequent year (t=0+365 days).

Study Design: Retrospective observational cohort study.

Setting or Dataset: Hennepin Healthcare is a large, safety net health system based in a mid-sized, U.S., Midwestern city. We extracted data from their Virtual Data Warehouse which follows the Health Care Systems Research Network data model.

Population Studied: We included people 18+ years of age who presented with a NFOD resulting in a healthcare encounter from 1/1/2020-12/31/2022.

Outcome Measures: We included self-reported age, gender, race, ethnicity, and preferred language at the time of NFOD, t=0. We identified homelessness via an indicator built into the health record based on our team's validated research. We counted MOUD prescriptions (buprenorphine, methadone, naltrexone, and naloxone) and healthcare encounters (inpatient, ambulatory, and ED) at t=0, and the next first occurrence of each within t=0+365 days. We also counted total healthcare encounters and deaths within t=0+365 days.

Results: We found 3,055 initial NFOD encounters with 69.95% male-identifying patients, 37.87% African American, and 21.44% Native American/Alaskan Native. Over one quarter (26.12%) had the homeless indicator. The majority of initial NFOD encounters occurred in the ED (77.22%) and fewer in inpatient (19.28%) or ambulatory (3.50%) settings. At t=0, we found that prescriptions for buprenorphine (2.95%), methadone (2.00%), and naltrexone (0.52%) were overall low, while for naloxone (61.73%) were high. Subsequent deaths, healthcare encounters, and buprenorphine and naloxone prescriptions increased annually.

Conclusions: We found strong racial, gender, and housing status patterns among NFOD encounters. We identified low prescription rates for MOUD except naloxone at t=0. These findings suggest a need for further investigation on disparities and how access to MOUD prescription can be improved, especially where the majority of NFOD and subsequent healthcare encounters occur.