# Comparison of Opioid and Alcohol Use Disorders in an Urban Health System

## INTRODUCTION

- Opioid overdose and opioid-related deaths continue to rise in the United States.<sup>1</sup>
- Alcohol-related deaths increased to > 140,000 in 2022, and heavy alcohol use increases the risk of developing many serious health conditions, including trauma, liver failure, heart disease, and multiple types of cancer.<sup>2</sup>
- Considerable funding has been contributed to combatting the opioid epidemic, but general societal acceptance for alcohol use masks its heavy burden on our communities.
- We compare the impacts of opioid and alcohol use at Denver Health, an urban, safety-net, integrated health system in Denver, Colorado.
- Comparing the impact of opioids and alcohol helps to design better services and to advocate for population-level interventions.

#### METHODS

Encounter, billing, and problem list ICD-10-CM diagnosis codes associated with emergency department (ED) visits, hospitalizations, and outpatient visits from 2018-2023 were extracted from Denver Health's single electronic health record (EHR, Epic). Diagnoses of interest were:

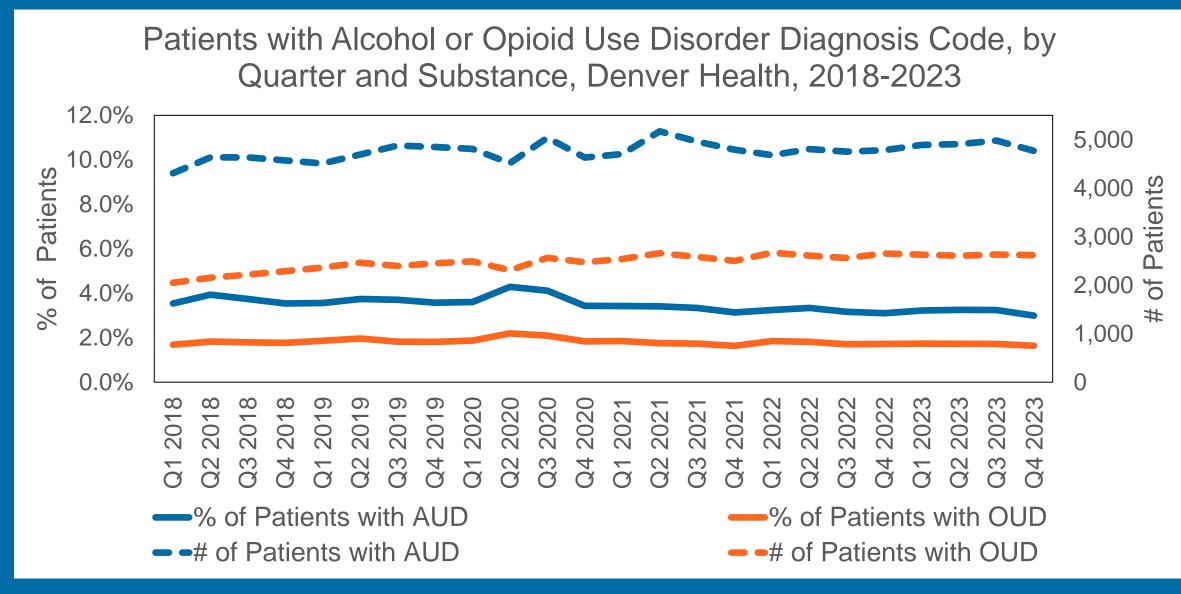
- Opioid use disorder (OUD): F11.\* (excluding remission)
- Opioid poisoning (OP): T40.\*
- Alcohol use disorder (AUD): F10.\* (excluding remission)
- Alcohol poisoning (AP): T51.\*

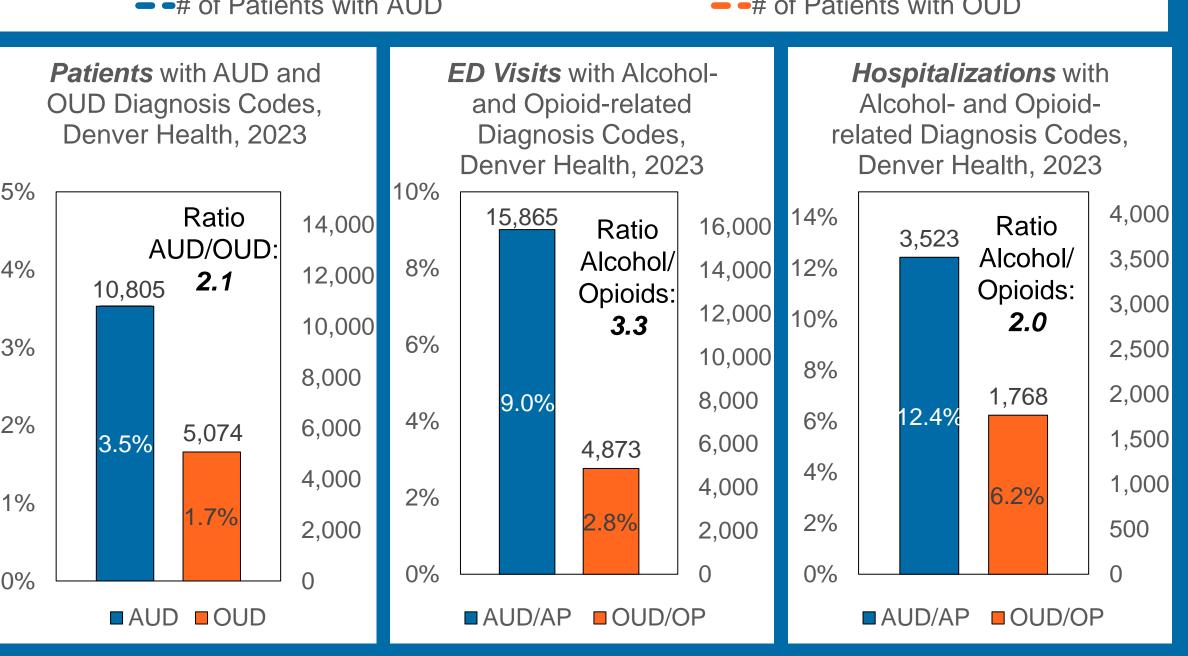
#### We compared:

- 1. Temporal trends in patients with OUD/AUD by quarter
- 2. Number/percent of patients with OUD/AUD in 2023
- 3. Number/percent of ED visits related to opioids/alcohol in 2023
- 4. Number/percent of hospitalizations related to opioids/alcohol in 2023

## RESULTS

Whether assessed as patients, emergency department visits, or hospitalizations, alcohol-related visits were consistently more common than opioid-related visits in the Denver Health system.





## CONCLUSION

- 2 to 3-fold greater impact of alcohol than opioids in an urban integrated healthcare system.
- Consistency of this finding over the 6 years of this analysis and across different measures (patients, ED visits, and hospitalization) strong evidence of the greater impact of alcohol even at the height of the fentanyl epidemic.
- Health systems, communities, and policy makers can address the substantial health, social, and economic consequences of AUD by designing better services and implementing population-level policies.
- This analysis has several limitations:
  - Limited to a single publicly-funded healthcare system, and we do not know if its results are generalizable.
  - Relies on diagnoses within the EHR; there was no standard screening for substance use disorders and both OUD and AUD are likely underdiagnosed.
  - Results may be affected by organizational changes between 2018-2023.

#### **AUTHORS & DISCLOSURES**

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- 1. Denver Health and Hospital Authority
- A. Nothing to disclose

#### REFERENCES

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- 2. National Institute on Alcohol Abuse and Alcoholism (NIAAA). 2023. Alcohol Use in the United States: Age Groups and Demographic Characteristics. Retrieved from [https://www.niaaa.nih.gov/alcohols-effects-health/alcohol-topics/alcoholfacts-and-statistics/alcohol-use-united-states-age-groups-and-demographiccharacteristics]