

# Chart Review: Referral to addiction medicine in patients with opioid use disorder

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# Disclosure of Financial Support

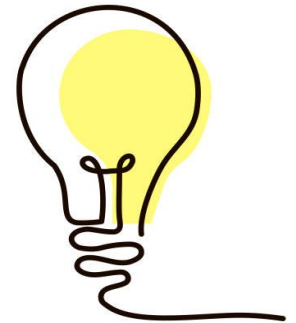
- This program has received financial support from WE-SPARK Health Institute in the form of the Igniting Discovery Grant – Health research innovation grant for projects in Windsor-Essex
- This program has received in-kind support from Windsor Regional Hospital in the form of Decision Support pulling patient list fitting study criteria.
- Potential for conflict(s) of interest:
  - Not Applicable

# Presenter Disclosure

- Presenter: Dr. Robert McKay, Zayya Zendo
- Relationships with financial sponsors:
  - Grants/Research Support: WE-SPARK Igniting Discovery Grant
  - Other: Dr. McKay – Hospital privileges at Windsor Regional Hospital, Hotel Dieu Grace Healthcare (Tayfour Campus)

# Learning Objectives

1. Understand the context of substance use disorder in a larger centre community hospital.
2. Gain insight into the pathway of patients with substance use disorder throughout their stay in the hospital.
3. Appreciate the gap in care for people with substance use disorders face when accessing appropriate care while in hospital.



# Presentation Overview

1. Introduction
2. Windsor-Essex
3. Addiction Medicine
4. Study Question
5. Methods
6. Findings
7. Discussions
8. Limitations
9. Looking Forward

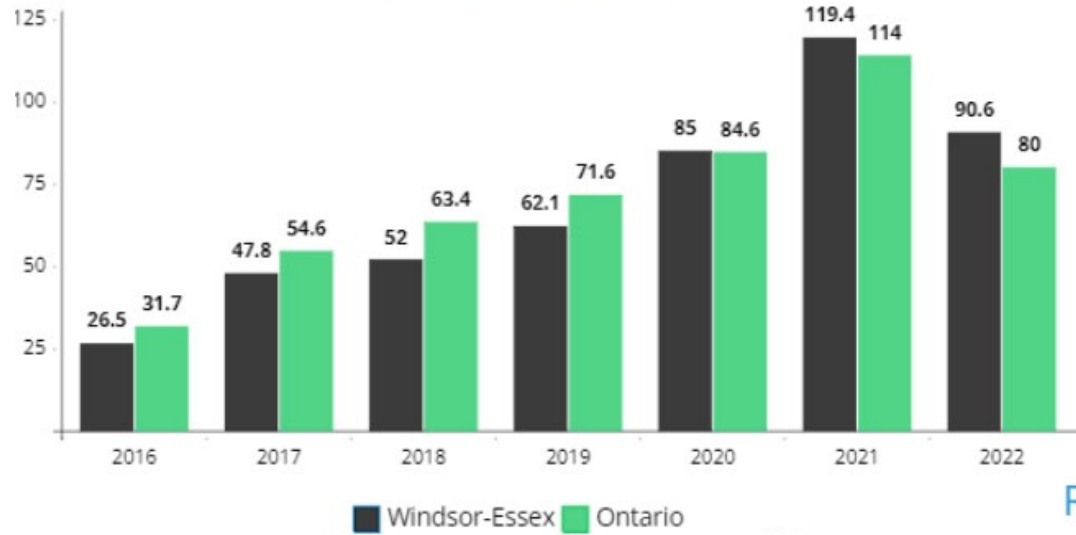


# Introduction

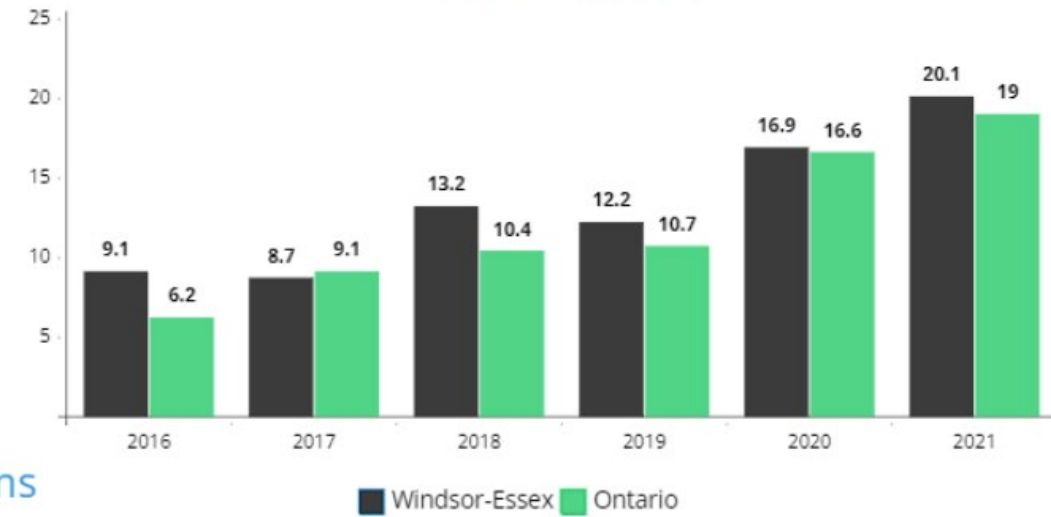
- Canada is facing urgent challenges with harms associated with opioid misuse
- 2016 – 2022
  - 36,233 opioid-related poisoning hospitalizations
  - 36,442 apparent opioid-related deaths
- COVID-19 worsened the problem
  - 24% increase in opioid-related hospitalizations from 2019 - 2020
  - 73% increase in apparent opioid-related deaths from 2019 - 2020

# Windsor-Essex Vs Ontario

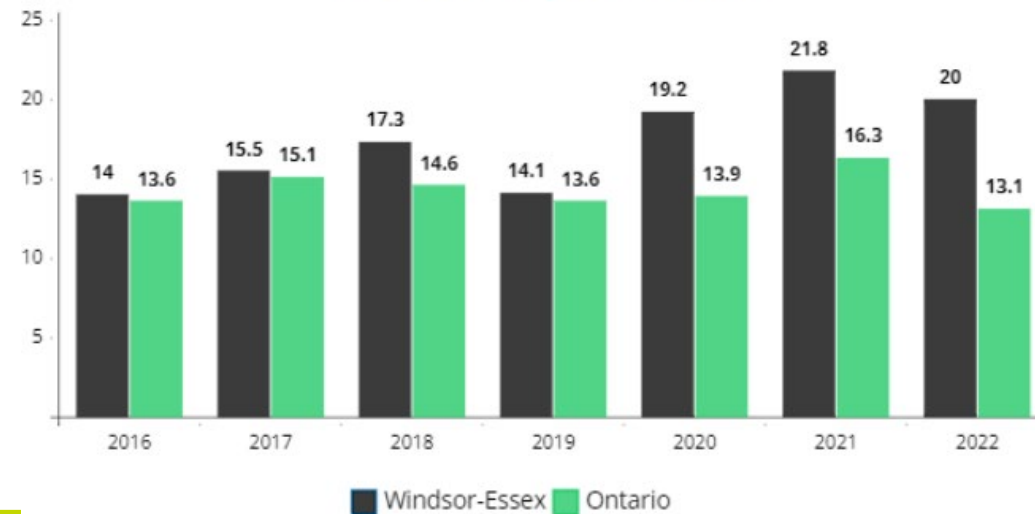
## Rate of ED Vistis



## Rate of Deaths



## Rate of Hospitalizations



# Addiction Medicine

- Physician based, in hospital consultation service
  - Physicians with specialization in Addiction Medicine – 4-member team in Windsor
  - Further assessment, focused treatment, planning for discharge and beyond
- For patients with known or suspected substance use disorder
  - Management of opioid-use complications and withdrawal symptoms
  - Offering opioid substitution therapy (OST)
- Patient centred care and shared decision making





# Study Question

1. How often are patients with opioid use disorder referred to addiction medicine service, when they are hospitalized with medical complications secondary to opioid-use?
2. Of those who are referred to addiction medicine service, what is the outcome of the inpatient consultation?

The rate of referral to addiction medicine service among inpatients with opioid use disorder is associated with a significant difference in the outcome of their course in hospital.



# Methods

## Study

- Retrospective chart review at WRH
- Study Period: January 1, 2019, to December 31, 2021
- Individuals with a documented history of opioid use disorder AND admission for medical complications as a result of significant opioid use
  - ICD-10 codes: opioid overdose, endocarditis, cellulitis, bacteremia, or osteomyelitis, pneumonia
    - F110-F119, T4028, Y4509, I011, I330, I339, I38, I398, B376, H601, K122, L0300, L0301, L0310, L0311, L032, L0330-L0339, N4821, L038, L039, L983, N730, N731, N732, A499, A021, A227, A267, A327, A400-A419, A427, A5486, B377, M4620, M4622, M4625, M4628, M4629, M8600-M8699
- REDCap was used for data collection and storage.



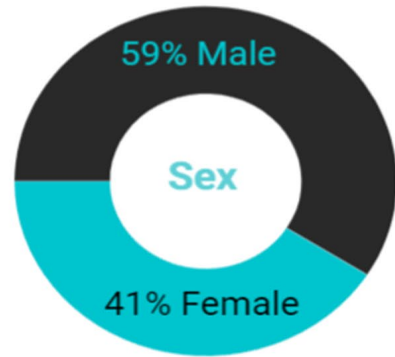
# Methods continued

- Data Collected
  - Demographics
    - Age, sex, ethnicity, housing status, employment status, family and social support
  - Healthcare Utilization
    - Emergency department visits
    - Admissions
- Charlson Comorbidity Index

# Methods continued

- Data Analysed
  - Admissions
    - Rate of admission per complaint
    - Rate of admission to various inpatient services
  - Addiction Medicine Service
    - Rate of referral to addiction medicine from inpatient
    - Outcome of referral to addiction medicine
- Comparative Analysis

# Findings



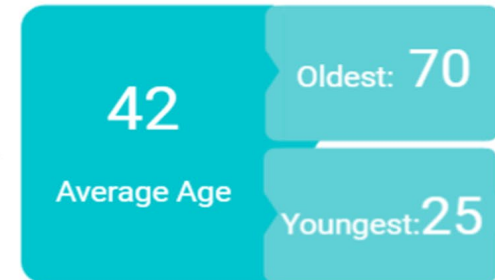
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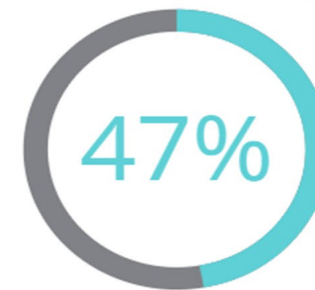
55% Housed



32  
PARTICIPANTS

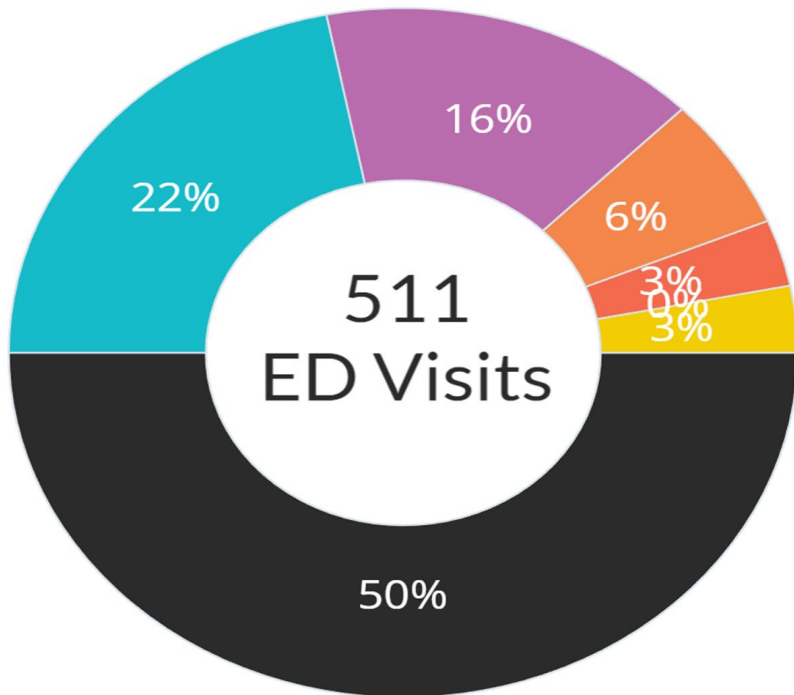


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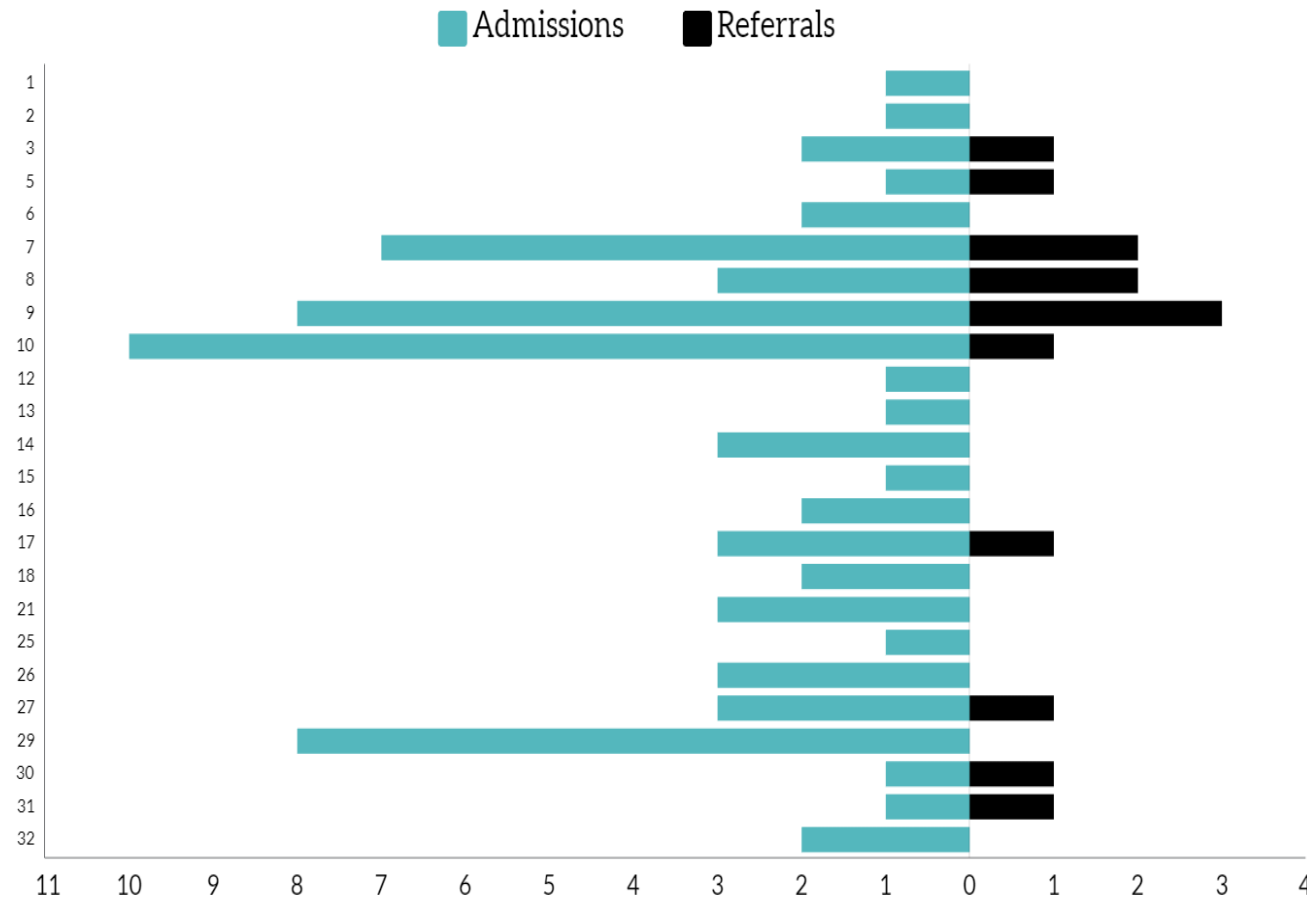
# Findings continued

- Hospital Utilization



0 - 10	16
11 - 20	7
21 - 30	5
31 - 40	2
41 - 50	1
51 - 60	0
60+	1

Distribution of emergency department visits between January 2019 and December 2021.

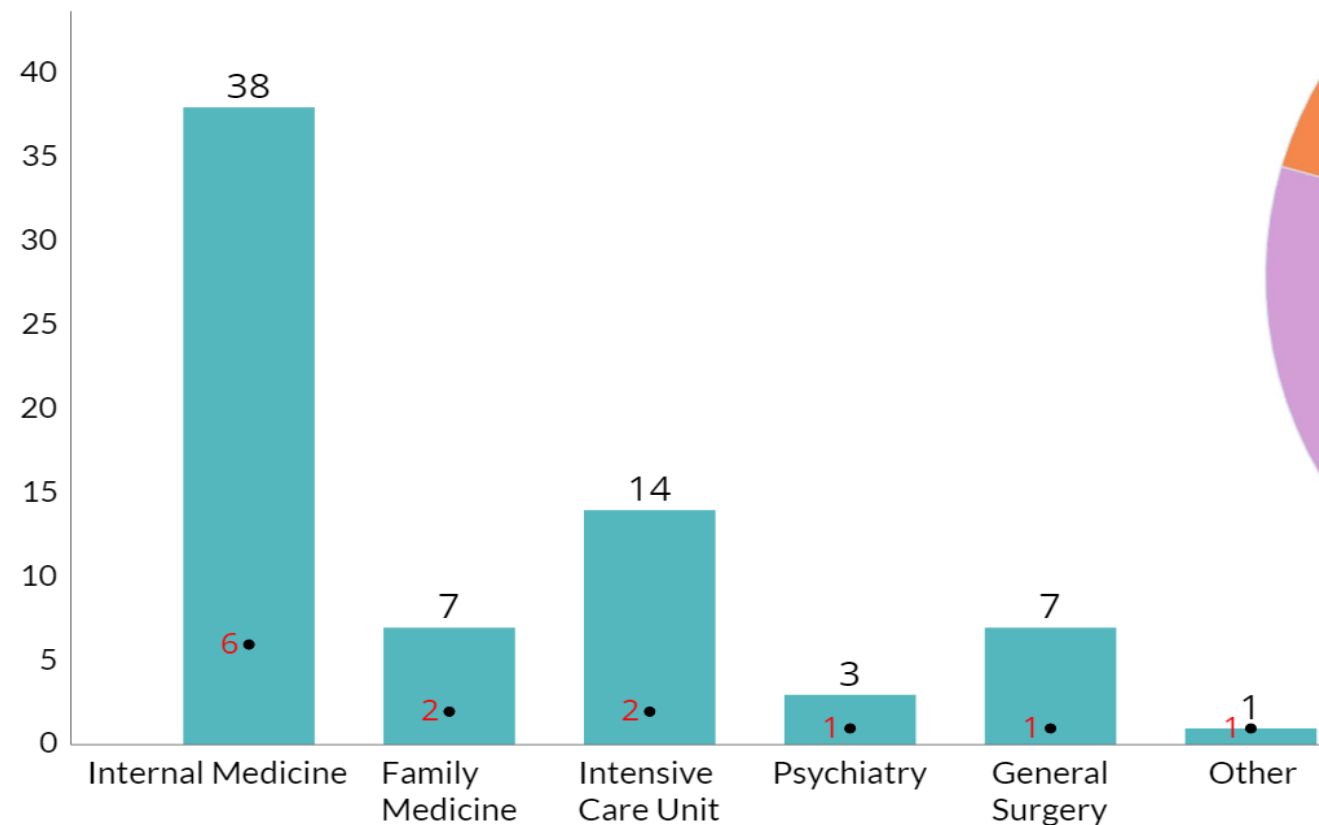


Number of admissions for each participant vs the number of referrals placed to addictions medicine while an inpatient, across the same period.

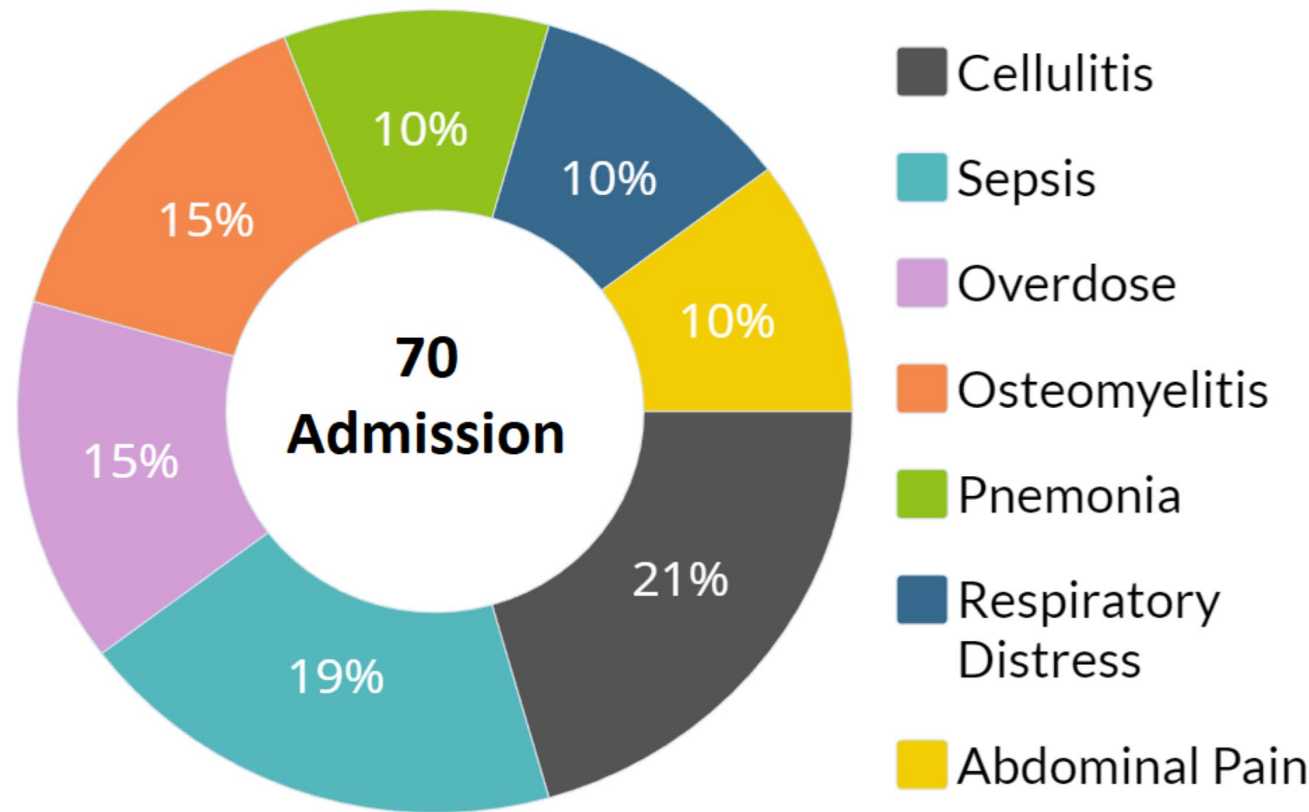
# Findings continued

## Addiction Medicine Referrals

■ Admissions ● Amount of Referrals



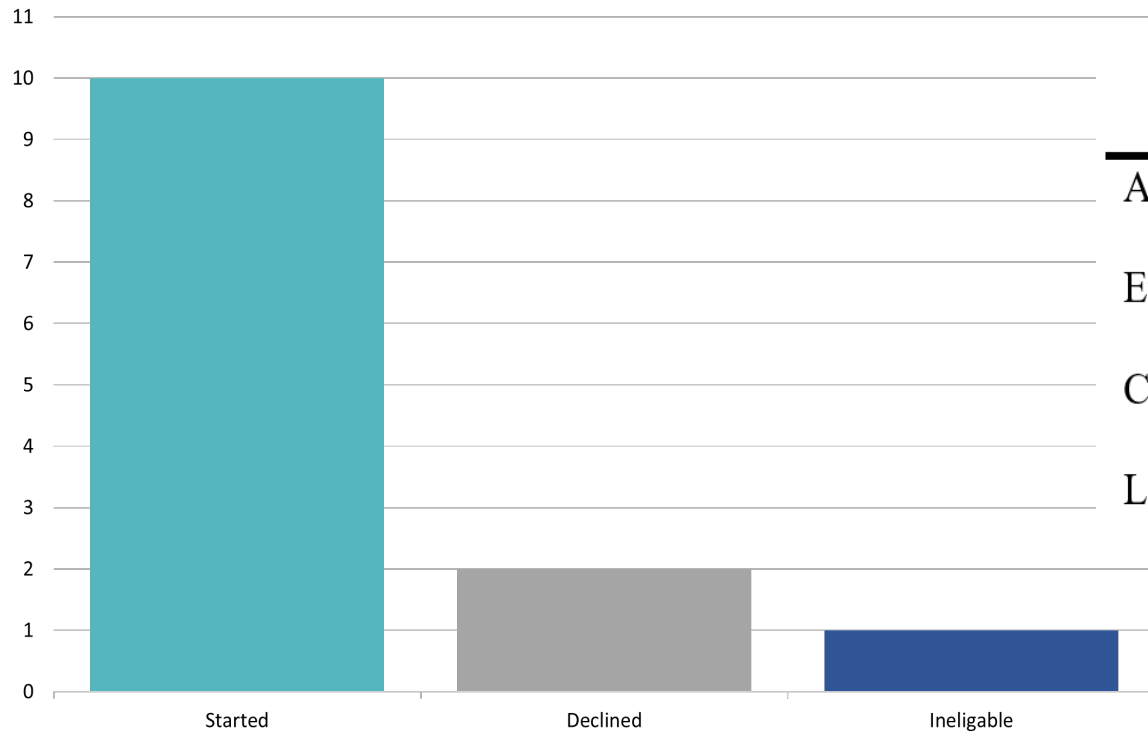
Number of admissions to specific inpatient service with number of referrals to addiction medicine



Top documented problems which contributed to the participants' admissions.

# Findings continued

- Referral Outcome



Factor	Mean (std dev)		t-Value	P-Value
	With Referral	Without Referral		
Admissions	3.90 (3.25)	1.41 (1.81)	2.79	0.009
Emergency Visits	22.40 (20.28)	13.05 (11.09)	1.69	0.10
CCI	3.50 (2.42)	2.68 (4.13)	0.58	0.57
Leaving AMA	1.00 (1.63)	0.41 (0.59)	1.52	0.14

Outcome of 13 inpatient addiction medicine referrals



# Discussion

- Inconsistency between inpatient service referrals to Addiction Medicine
  - Opportunity for standardization
- Low rate of referral to Addiction Medicine vs High rate of ORT being initiated for those referred
- High number of Emergency Department visits
  - Opportunity for early referrals



# Limitations

- Only reviewed individuals with medical complications and opioid use disorder
  - Missed individuals with uncomplicated opioid use disorder
- Limited ICD-10 codes - Limited study population
- Did not capture full Addictions Medicine consultations



# Looking Forward

- New branch of study: Individuals admitted to Psychiatric services without somatic condition, and the impact of Addiction Medicine on their care and outcomes.
- Evaluate efficacy of early Addiction Medicine consultations in Emergency Department



Thank You

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