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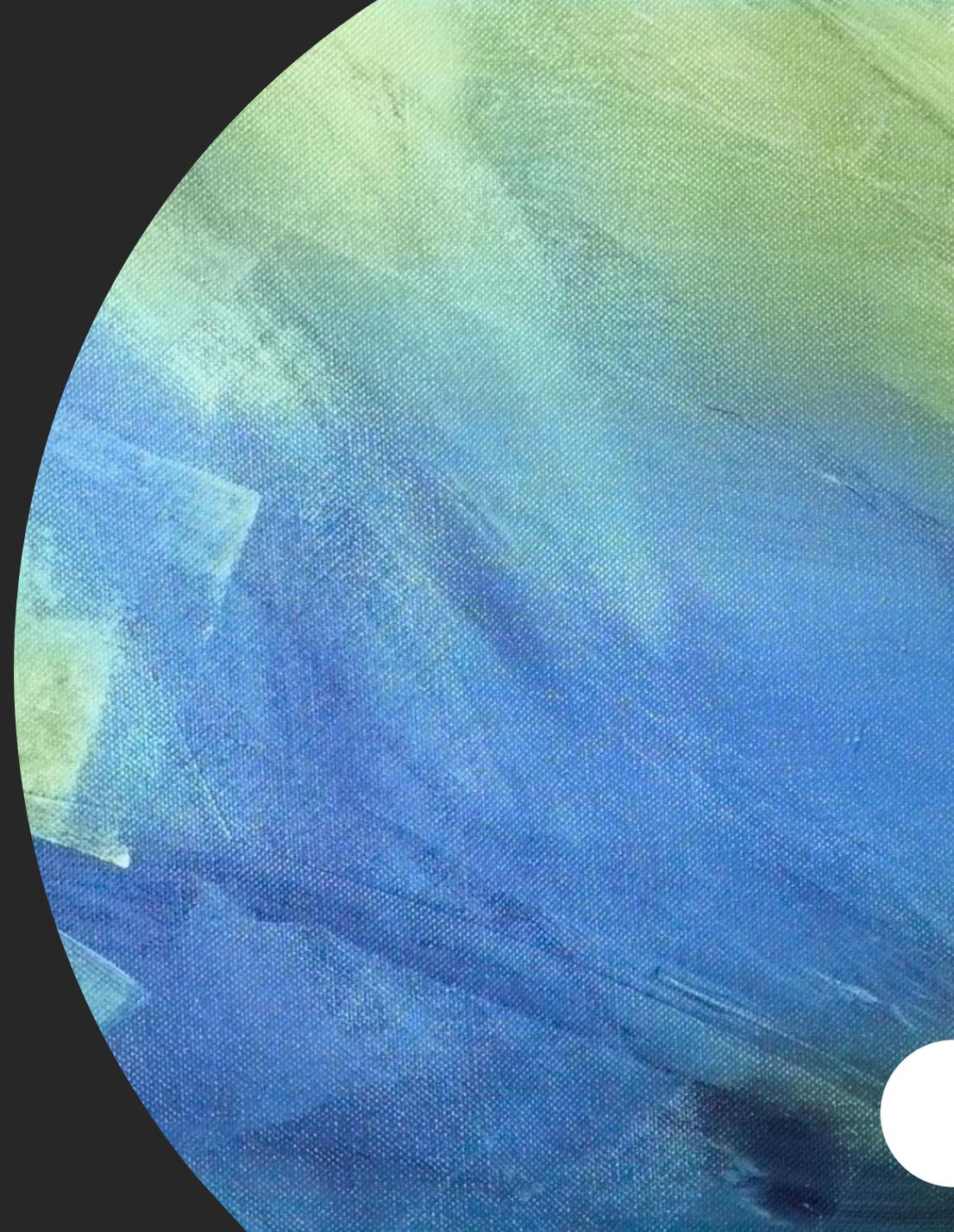
Harm Reduction in Family Medicine

Central Maine Healthcare, Lewiston, ME

September 2021

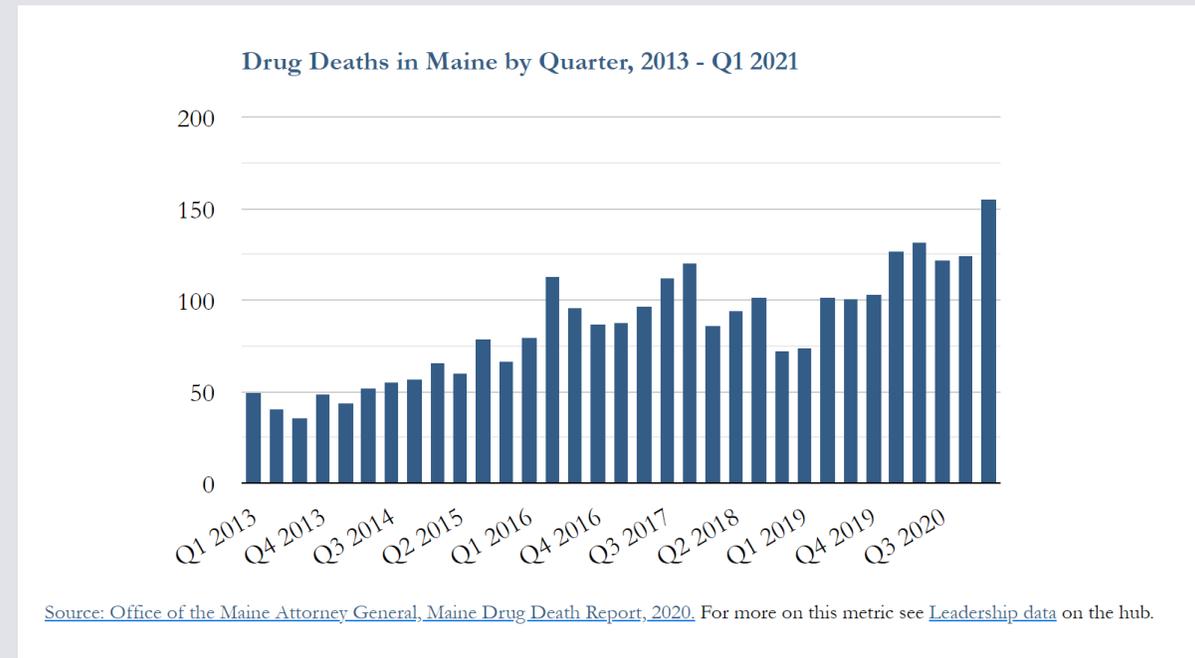
Mentor: Dr. Kara Callahan

Tess Hickey, MSIII



Identification of Need

- Drug related deaths in Maine have been increasing since 2014 when fentanyl & fentanyl analogs were found in toxicology reports. Drug related deaths have been increasing since the COVID-19 pandemic began [1]
- In ME from January 2021 - August 2021 there has been an estimated 802 fatal and nonfatal drug overdoses, 46 of those were confirmed fatal [1]
- In 2019 in ME there was a 51.3% increase of acute hepatitis C infections [2]
 - 41% percent of patients diagnosed used injection drugs
 - 27% of patients diagnosed used non-injection drugs
 - In 2017, 30 new HIV diagnoses were made. Among males 15.3% were attributed to injection drug use and among female 25% were attributed to injection drug use [4]



<https://mainedrugdata.org/> [1]



Public Health Cost

In ME in 2017 the estimated case count of opioid use disorder was 12,000 [3]

In ME in 2017 the combined cost of opioid use disorder and fatal opioid overdose cost was estimated to be 6,812.0 million [3]

Community Perspective

Bronte Roberts, CADC - "Community outreach is harm reduction. Ideally, we would be able to make our clinic a harm reduction center with the ability to provide on-site Narcan."

Dr. Paul Vinsel, DO - "Fentanyl testing strips have become obsolete in Lewiston. There has not been heroin in this area for over a year, most urine drug screens are positive for fentanyl."

Intervention & methodology

1. Performed literature search to collect evidence supporting harm reduction techniques for opioid use disorder

Spoke with community members to discuss available resources and needs

Created an educational pamphlet for providers with evidence supporting harm reduction & with local resources available to patients

HARM REDUCTION FOR SUBSTANCE USE DISORDER

Pathophysiology of substance use disorder as a chronic illness: Chronic substance use leads to altered dopamine signaling via glutamatergic pathways, predominantly in the prefrontal cortex and the limbic pathways. In the amygdala, a negative emotional state occurs, which is temporarily relieved by the use of the drug. Consumption of a drug creates an attenuated dopamine increase in the reward centers of the brain, which can lead to an increased motivation to use the substance, especially because dopamine is released in response to drug cues. In addition, chronic substance use leads to impaired pre-frontal cortex regulation which creates an increase in compulsivity [9]

What is harm reduction?
"Harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use [6]"

- What are the benefits of harm reduction?**
- U.S. hospitalizations due to SUD related infections cost over 700 million annually. [8]
 - Syringe service programs are associated with a 50% reduction in HIV and HCV incidence [1]
 - There has been an increase in MRSA infection rates in people who inject drugs & those who inject drugs are 16 times more likely to develop MRSA bacteremia [5,7]
 - Endocarditis is linked with frequency of injecting and syringe sharing & therefore syringe exchange programs may reduce bacterial infections [3]
 - New syringe service program users are five times more likely to enter substance use disorder treatment and three times more likely to stop using drugs compared with those who do not use SSPs [4]
 - Syringe service programs can benefit community safety by decreasing overdose deaths and needlestick injuries. [2]
 - Syringe service programs do not increase in drug injection or criminal activity [7]
 - Opioid overdose deaths are decreased in communities where overdose education and nasal naloxone distribution happen [10]

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Local Resources:

R.E.S.T (Recovery, Employment, Support, Training)
205 Maine Street Lewiston, ME 04240
(207) 783-7378

- Drop-in recovery center
- Community events
- Employment services
- Recovery coaching

Maine Access Points

(207) 370-9445: call or text
<https://www.maineaccesspoints.org/services>

- Narcan distribution available via mail or mobile van. Mobile van in: Sanford, Calais, Machias, Aroostook
- Overdose prevention education available via phone
- Syringe service programs
- Peer support and recovery coaching

Church of Safe Injection

(207) 332-4802
<https://www.facebook.com/safeinjection/>

- Syringe service program
- Peer support

TriCounty Mental Health Services

1155 Lisbon St. Lewiston, ME 04240
(207) 783-9141

- <https://www.tcmhs.org/substance-use-disorder>
- Syringe service program
 - Peer recovery coaches
 - One-on-one counseling
 - Group counseling

NEXT

<https://nextdistro.org/getnext>

- Mail-based harm reduction supplies shipped via Maine Access Points in Maine. Shipping to other states available

Lewiston Sharps Disposal

• Map: <https://www.lewistonmaine.gov/DocumentCenter/View/11725/LewistonSharpsDisposalStations>

Recovery Community Centers in Maine

<https://portlandrecovery.org/maine-recovery-hub/>

- Recovery center listings throughout the state of Maine

Narcan available at local pharmacies without a prescription from a provider

- Can be billed through insurance or purchased with cash for ~\$140.00/two nasal sprays
- Free to those with Medicare

Qualitative Results

- Created document: Harm Reduction For Substance Use Disorder for providers
- Supportive evidence of harm reduction techniques
- Local resources for patients

Evaluation of Effectiveness & Limitations

Effectiveness

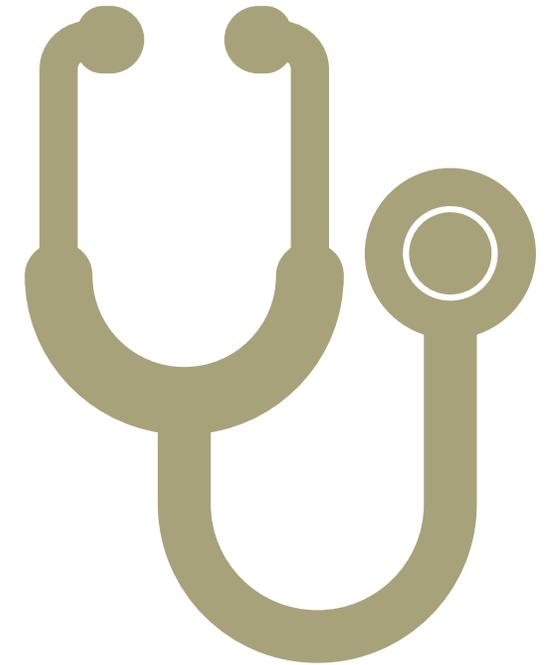
- Providers expressed interest in having a harm reduction resource
- Further effectiveness could be explored with a survey sent to providers asking how they utilized the educational resource to discuss with patients

Limitations

- Due to time constraints tracking of document was not completed
- Unable to connect with the wider outside community involved in recovery support services to discuss other areas of need

Future Interventions

- Track use of educational flyer
- Receive feedback on usability of resources
- Update resources document to include things like transportation & cell phone access
- Continue to connect with local recovery services to increase communication between resources



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