

Needs Assessment for Medication Assisted Treatment for Opioid Use Disorder in the DOC Family Medicine Clinic

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Introduction

- In 2019:
 - Nebraska providers wrote 50.3 opioid prescriptions for every 100 persons (national average 46.7, Iowa average 43)¹
 - Douglas County exceeded the state and national average at 67.9
 - 2.1 million Americans with diagnosis of opioid use disorder (OUD)²
 - Opioid overdose caused 46,800 deaths in America
- In 2018 in Nebraska:
 - 8,154 people died of a drug overdose, at least 60 involved opioids³
 - The opioid related overdose fatality rate was 3.2 deaths/100,000 people

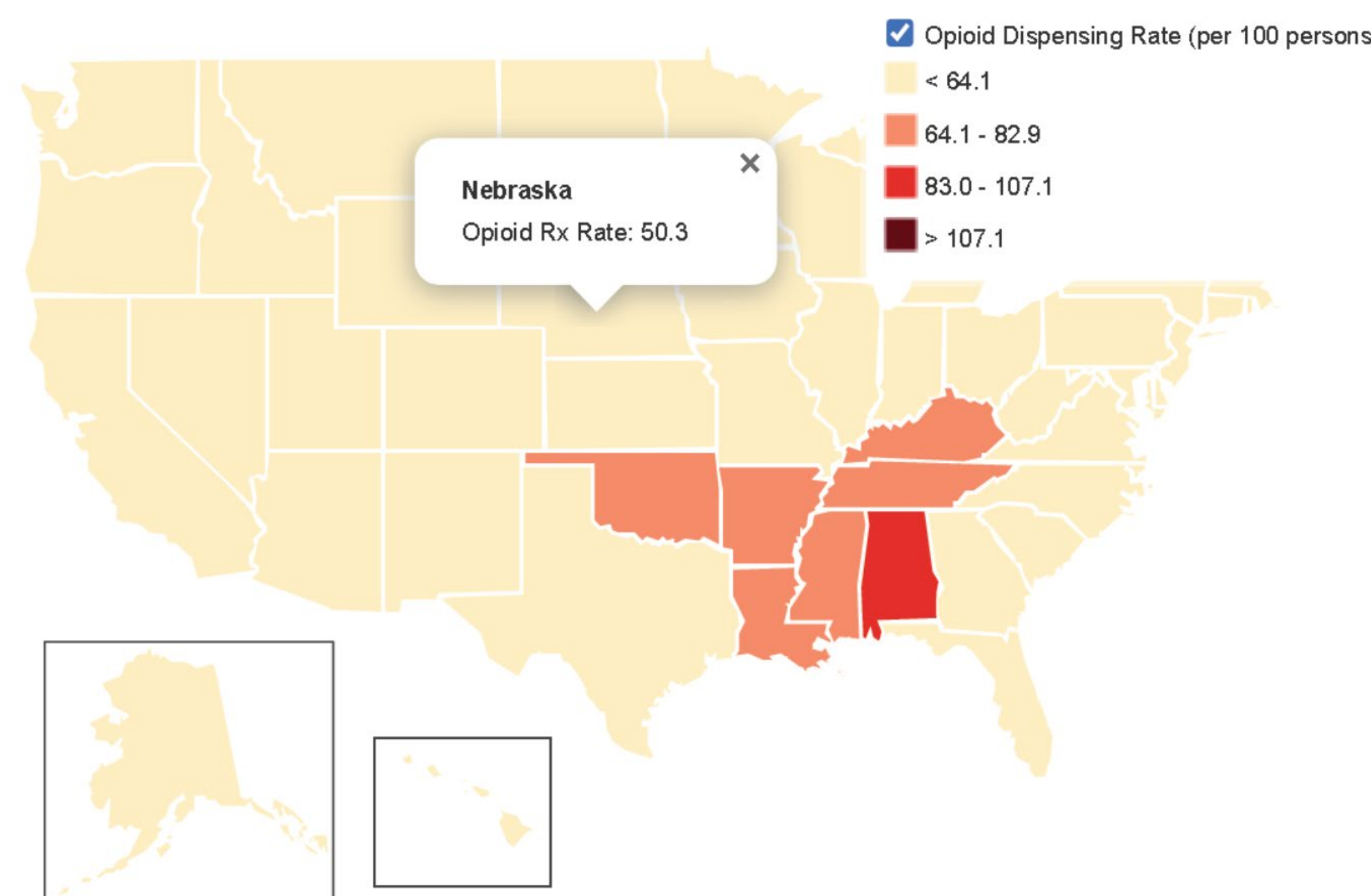


Figure 1⁴
U.S. State Opioid Dispensing Rates, 2019

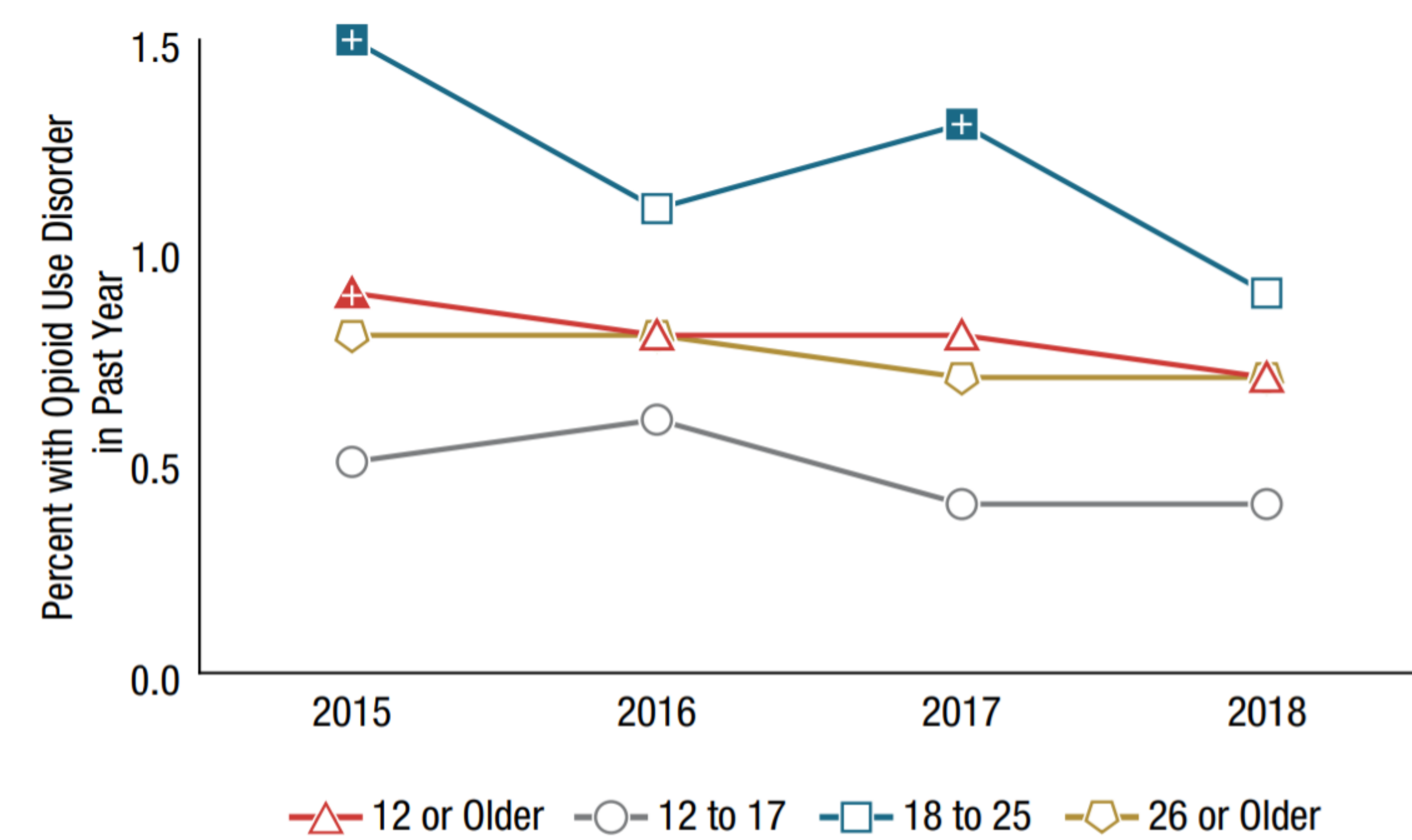


Figure 2²
Opioid Use Disorder in the Past Year among People Aged 12 or Older in the U.S.: 2015-2018

Background

- Currently, 34,367 patients identify a DOC Family Medicine Clinic provider as their PCP
- In 2019, 1 provider prescribed methadone, 0 providers prescribed Suboxone or other medication assisted treatment (MAT) for OUD
- Needs assessment deemed first step to formally evaluate level of need for MAT in DOC Family Medicine clinic



Figure 3⁵
Prescription Opioid Overdose Death Rate: Age-adjusted deaths per 100,000 population from 2017 to 2018 by county urbanization level. DOC Family Medicine clinic is in a Medium metro—Counties of populations of 250,000 to 999,999. (Douglas County population was 566,391 in 2018)

*Statistically significant at p < 0.05 level

FDA approved medications to treat OUD	Methadone	Naltrexone	Buprenorphine
Mu-opioid receptor action	Agonist	Antagonist	Partial agonist
Available routes	Oral	Oral, IM	Sublingual, buccal, subdermal implant, subcutaneous injection
Regulations	Schedule II	Not scheduled	Schedule III, requires waiver
Other considerations	<ul style="list-style-type: none"> Can cause respiratory depression 	<ul style="list-style-type: none"> Does not reduce withdrawal symptoms Lower affinity to receptor 	<ul style="list-style-type: none"> Respiratory depression very uncommon Equal efficacy in reducing illicit opioid use

Table 1: FDA approved medications to treat OUD with corresponding details

Procedures

- Questions formulated, sent request for electronic health record data from the electronic health record access core department at UNMC

Inclusion Criteria	Exclusion Criteria
Patient of DOC Family Medicine (Patient's PCP is a DOC Family Medicine provider)	<19yo
>19yo	Allergy to buprenorphine
Date range for search '2017-12-15' and '2020-12-15' (active patient)	Allergy to naloxone
	Severe hepatic impairment (ICD-10 codes K70, K72)

Table 2: Inclusion and exclusion criteria for EHR search

Results

Clinical Question	Number of patients	Percent of patient population
Number of patients with the following diagnoses on problem list:	165	0.5
1. Opioid withdrawal F11.93, F11.23, F11.22, F11.1, F11.2, F11.13		
2. Opioid dependence F11.20, F11.22, F11.24, F11.23, F11.259, F11.222, F11.2		
3. Opioid abuse F11.10, F11.159, F11.14, F11.150, F11.151		
4. Any subcategory of F11		
Number of patients with hydrocodone, oxycodone, or morphine on medication list	8836	26
Number of patients in DOC clinic with a prescription ordered for hydrocodone, oxycodone, or morphine in the last 90 days	1403	4
Number of patients with suboxone (buprenorphine / naloxone) on medication list	1006	2.9
Number of patients on methadone on medication list	106	0.3

Table 3
Results from EMR data request

Conclusion and Future Directions

- Large number of DOC Family Medicine patients demonstrated use of opiates with small number carrying official diagnosis of OUD or use of MAT, suggesting OUD is under diagnosed, under-treated, and would benefit from increased access to MAT
- Could initiate care to population with 3-4 waived providers, though will likely need more
- Residents were offered an opportunity to complete training to obtain MAT prescribing privileges as a part of resident education; there was robust interest
 - Emphasized both the need for MAT in our clinic and the benefit to resident education
- Could use the data obtained to create patient list for recruitment; would need IRB approval
- Additional patient recruitment from inpatient service and overflow from already established addiction clinic through Psychiatry
- Re-run this data search in 6 and 12 months after initiation of MAT

References

- NIDA. 2020, April 3. Nebraska: Opioid-Involved Deaths and Related Harms. Retrieved from <https://www.drugabuse.gov/drug-topics/opioids/opioid-summaries-by-state/nebraska-opioid-involved-deaths-related-harms-on-2021>, February 15
- Substance Abuse and Mental Health Services Administration. (2019). Key substance use and mental health indicators in the United States: Results from the 2018 National Survey on Drug Use and Health (HHS Publication No. PEP19-5068, NSDUH Series H-54). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>
- Nebraska Coalition to Prevent Opioid Abuse Report on Progress. (2020, February 13). Retrieved February 24, 2020, from <https://ago.nebraska.gov/news/nebraska-coalition-prevent-opioid-abuse-releases-report-progress>
- U.S. state Opioid Dispensing rates, 2019. (2020, December 07). Retrieved February 15, 2021, from <https://www.cdc.gov/drugoverdose/maps/rxstate2019.html>
- Overdose death urbanicity graphs. (2020, March 19). Retrieved February 15, 2021, from <https://www.cdc.gov/drugoverdose/data/prescribing/overdose-death-urbanicity.html>