

Opioid Prescribing Guidelines Adherence Initiative



COLLEGE OF NURSING
THE UNIVERSITY OF TOLEDO

Anita Stechschulte DNP-C, APRN-CNP, Linda Lewandowski PhD, RN, FAAN, Linda Lewin PhD, PMHCNS-BC, & Kati Hughes DNP, APRN-CNP, CARN-AP

The University of Toledo College of Nursing

Nature & Scope

- Introduction:** Adults < 50 are more likely to die from a fatal opioid overdose than a car accident; **leading cause of morbidity & mortality** in adults < 50 years since 2017
- Significance:** 70,237 people died from fatal overdose in America in 2017: 4.1% decline in rates from 2017-2019 as access to naloxone doubled
- 4,293 fatal overdoses in 2017 in Ohio; ranking Ohio 2nd in overdose rates; 22% decline noted in 2018; 5% increase in 2019
- 2018 (157) increase in 2019 (227) fatal overdoses in Lucas County despite National trends
- Problem Identification:** 890 more people suffer from unhealthy use and misuse for each fatal overdose; let's find them!

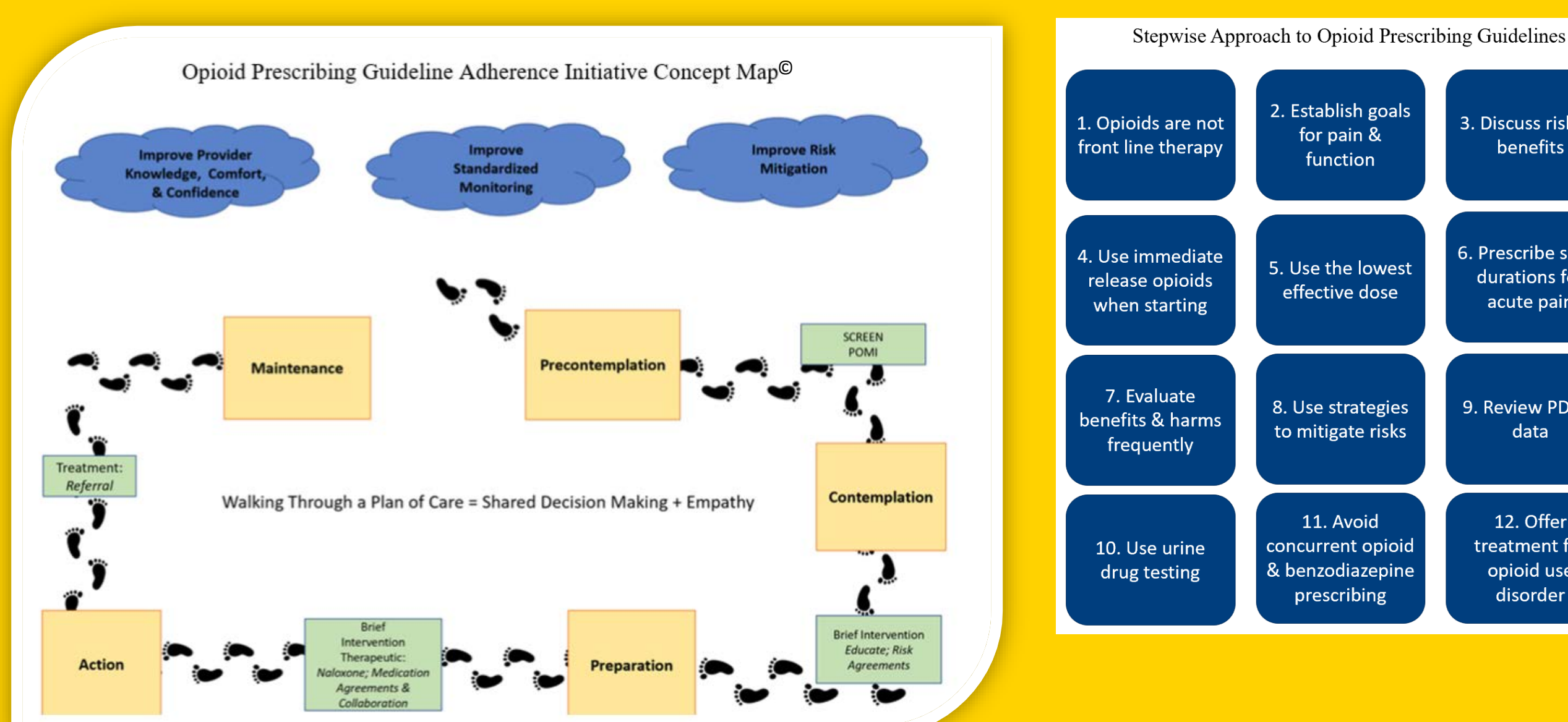
Synthesis & Analysis of Literature

12 articles + 5 Guidelines

Evidence Synthesis			
Level of Evidence	Number of Sources	Overall Rating	Evidence
Level 1 Systematic Reviews RCT, RCT, experimental study	0	N/A	N/A
Level 2 Quasi-experimental studies, Systematic Review of combination studies RCT/quasi-experimental	2	High	Supports screening for opioid misuse as beneficial.
Level 3 Non-experimental study, Systematic Review of nonexperimental study, qualitative studies	4	High	Supports among orthopedic patients to monitor for overdose risks and unhealthy medication use.
Level 4 Clinical Practice Guidelines, Consensus statements	7	High	Supports adherence to opioid prescribing guidelines and early education strategies improve care and reduce risks with opioid therapy.
Level 5 Opinions of respected authors, expert opinion, case reports, & literature reviews	4	Good to High	Supports screening and brief intervention (S-Bi-Rt) as primary prevention for unhealthy medication use and overdose

Dearholt, S. & Dang, D. 2017. *John Hopkins of Nursing Evidenced-Based Practice Model & Guidelines...*

✓ Evidence Supports a Need for a Practice Change

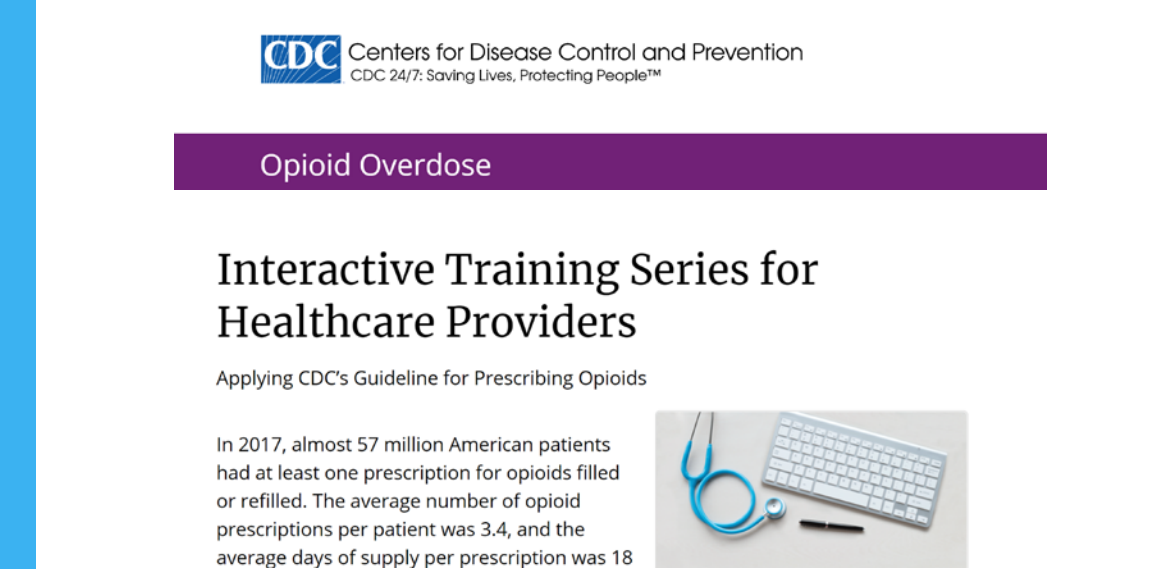


Project Concept Map © copyright Stechschulte, A. 2020

Evidence-Based Solution: implement opioid prescribing guidelines

Evaluation Criteria

Intervention:
Interactive CDC Education Modules for Providers



Modified Physicians' Experiences With Prescribing Opioids Survey

Prescription Opioid Misuse Index
POMI identifies those with unhealthy opioid use, misuse, & abuse
Specificity of 0.923, sensitivity of 0.82, Cronbach α 0.85

DSM-5 Criteria for Diagnosis of Opioid Use Disorder

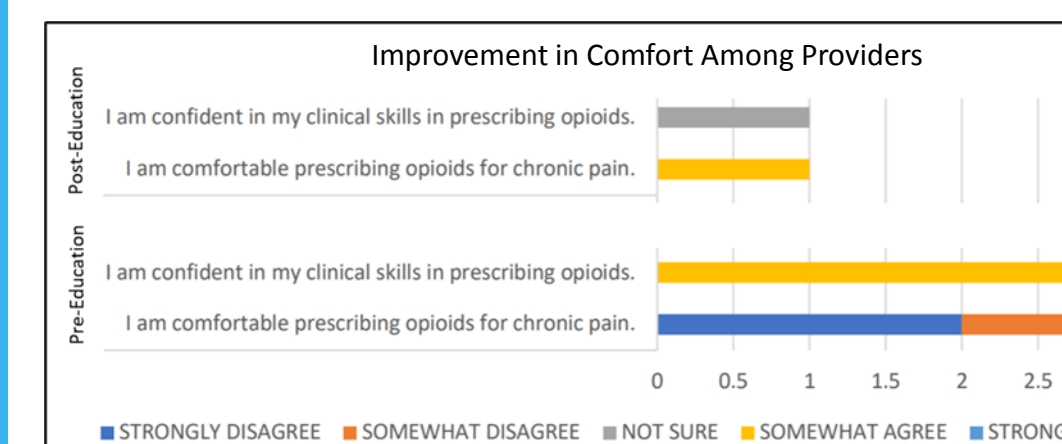
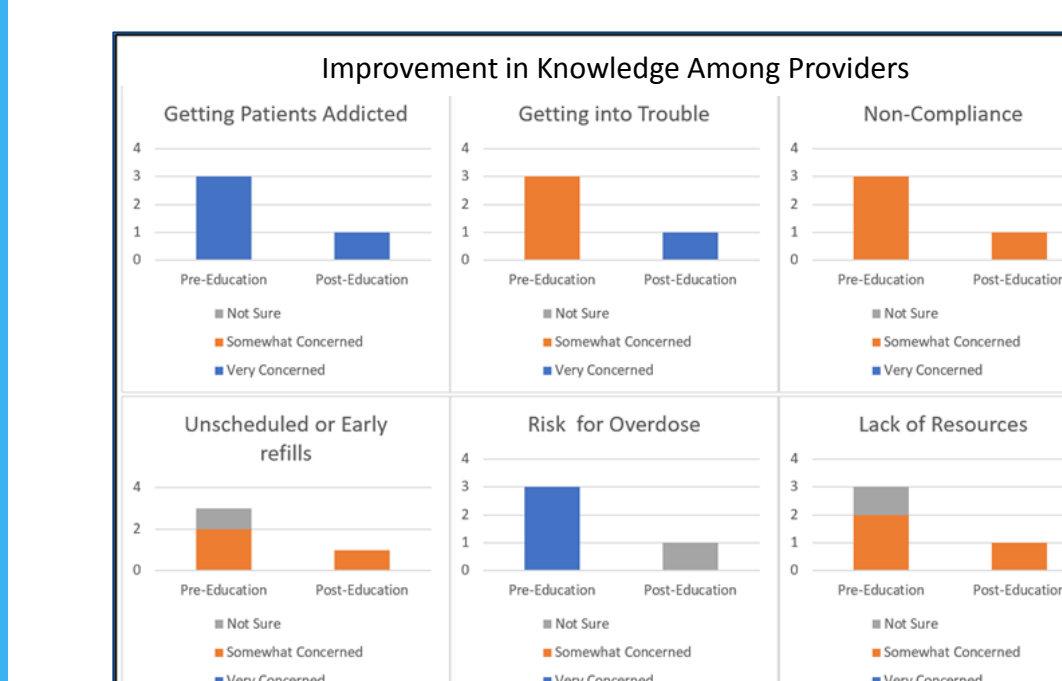
Diagnostic Criteria

Check all that apply

Opioids are often taken in larger amounts or over a longer period of time than intended.	YES	NO
1. Do you ever use MORE of your medication, that is, take a higher dose, than is prescribed to you?		
2. Do you ever use your medication MORE OFTEN, that is, shorten the time between dosages, than is prescribed for you?		
3. Do you ever need early refills for your pain medication?		
4. Do you ever feel high or get a buzz after using your pain medication?		
5. Do you ever take your pain medication because you are upset, using the medication to relieve or cope with problems other than pain?		
6. Have you ever gone to multiple physicians including ER, seeking more of your pain medication?		

Modified Physicians' experience with prescribing opioids survey. Wenghofer, E., et al. (2011)

Methods:



POMI Screened
34/46 = 73.91%, p-value 0.8648

POMI Scores at risk for Unhealthy Use
Score 0 = 30/34 = 88% with normal use
Score 1-2 = 3/34 = 8% with unhealthy use (misuse)
Score ≥ 3 = 1/34 = 3% with possible Opioid Use Disorder

At risk for Overdose
Score 0 = 20% at risk for overdose
Score 1-2 = 67% at risk at risk for overdose
Score ≥ 3 = 0% at risk at risk for overdose

Outcomes

Outcome 1:

- Knowledge of factors contributing to adverse events,
- Comfort with monitoring therapy,
- Confidence with opioid management.

Provider knowledge & comfort did improve with education, however provider confidence did not improve but had changed.

Outcome 2: at least 75%

- POMI screen use
- Documentation of opioid education
- Documentation of state PDMP access day of visit

Provider adherence to use of standardized opioid prescribing guideline documentation did not improve. However, nearly 74% of those on opioids were screened for unhealthy medication use.

Outcome 3: at least 75%

- Naloxone access >50MED/day & ORS >450
- Medication risk agreement use short & long-term use)
- Documented communication primary care/referral

Provider use of risk mitigation strategies found 20% of patients on an opioid at risk for overdose and 11% had some unhealthy medication use.

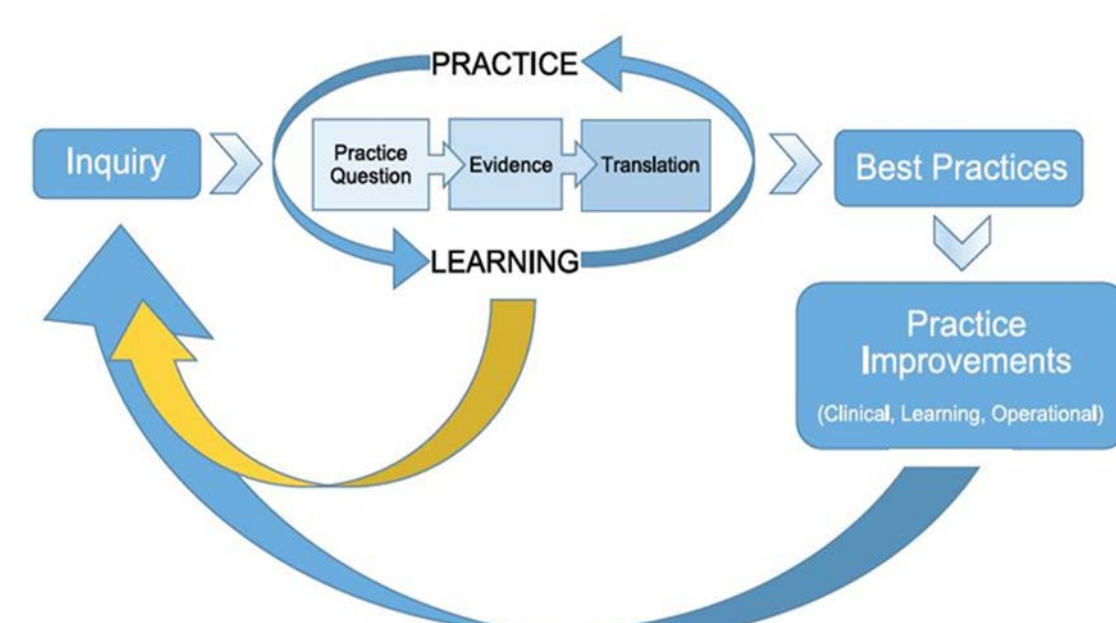
Project Objectives

Establish an EBP approach to monitoring adults ages 18-64 on opioid therapy utilizing S-Bi-Rt

PICO-T Question

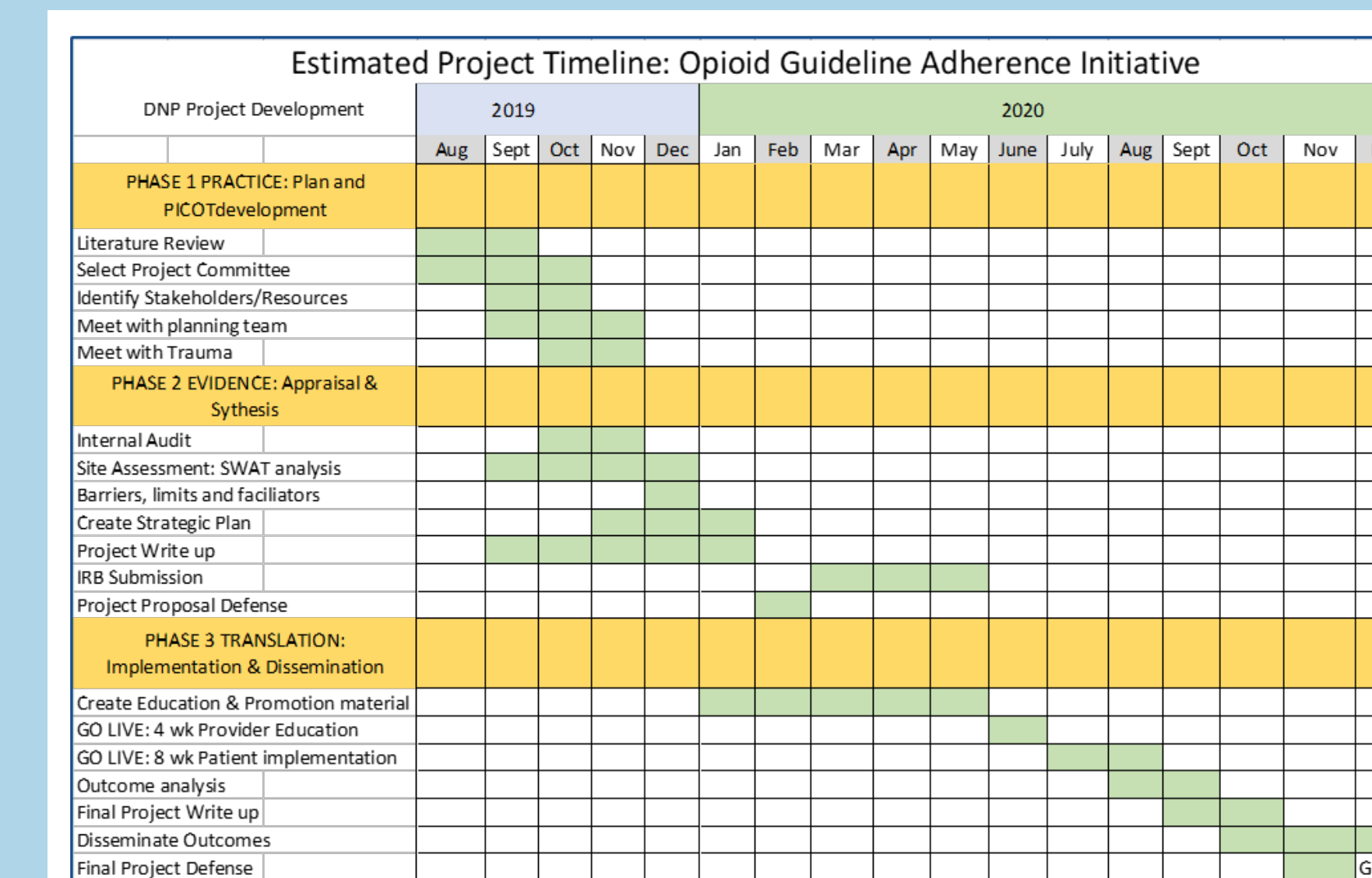
In a population of adults ages 18 to 64 currently on opioid therapy, in an ambulatory trauma orthopedic clinic of a targeted Level I Trauma Center, does **provider education on current standardized opioid monitoring guidelines** result in the following

- improve provider **knowledge, comfort, and confidence** with opioid monitoring after four weeks education
- improve the **use of standardized monitoring practices**, and
- improve the **use of risk mitigation strategies** for eight weeks after the initial four weeks of education intervention?



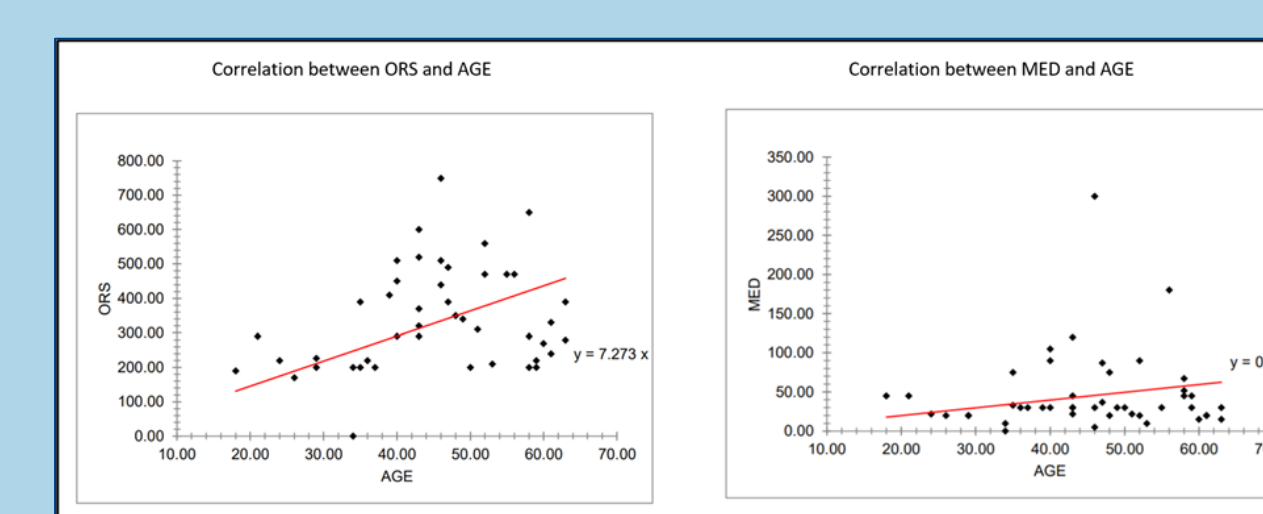
John Hopkins Evidence-Based Practice Model

Project Implementation



Significant Project Challenges

- Low provider responses limited data collection and reliability
- Covid-19: stress, increased acuity, increased time demands
- Subjective patient behaviors for misuse rather than objective risks for overdose



As AGE increases so does the use of SEDATIVES, COMORBID CONDITIONS, ORS score & MED per day thus **INCREASED RISK FOR OVERDOSE**

Recommendations

- Education on opioid prescribing guidelines helped guide patient care and improve provider knowledge and comfort.
- The implementation of clinical guidelines improved monitoring of therapy and the mitigation of risks associated with opioid therapy.
- The continued use of opioid prescribing guidelines has the potential to save lives and should continue to be used to monitor risks and use of opioid therapy.



References

American Academy of Orthopaedic Surgeons (AAOS). (2015). *Opioid Use, Misuse, and Abuse in Orthopaedic Practice: Information Statement*

Centers for Disease Control and Prevention. (2016). *CDC guidelines for prescribing opioids for chronic pain*

Lucas County Children Services. (2019). Opiate epidemic continues to create a crisis for Lucas County Children Services. *Lucas County Trauma Coalition*

National Institute on Drug Abuse (NIDA). (2019). *Ohio opioid summary: Opioid-related deaths*

United States Preventative Services Task Force. (2019). *USPSTF: Screen adults for illicit drug use.*