

Background

Prescription opioids accounted for 35 percent of opioid-related deaths in 2017. The most common opioids involved are methadone, oxycodone and hydrocodone.¹⁻²

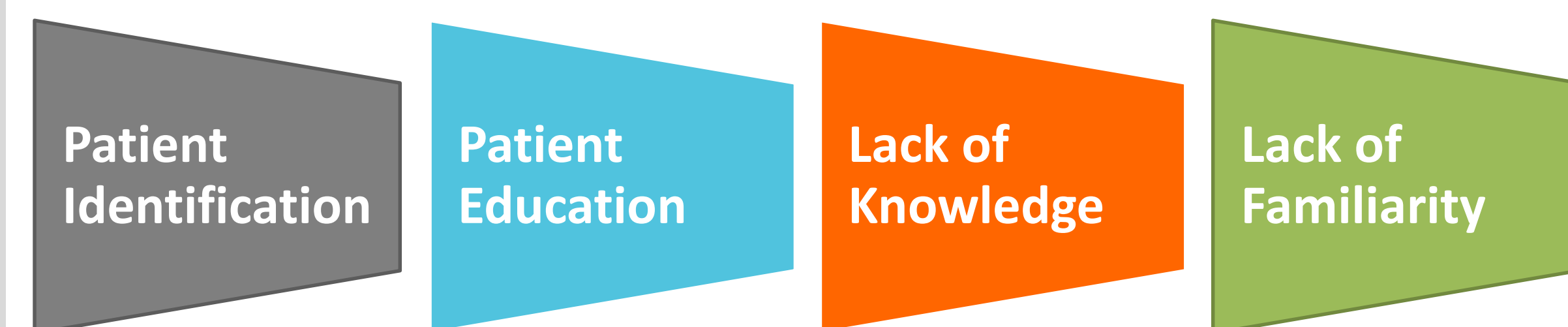
Certain high-risk factors contribute to a patient's risk of prescription opioid overdose which include:³⁻⁴



MME: Morphine Milligram Equivalent

Naloxone can help prevent overdose. However, the rate of naloxone prescriptions filled remains low for high-dose opioid prescriptions despite standing protocols for pharmacists in the community setting.⁵

Research indicates primary care physicians are apprehensive to prescribe naloxone and cite the following as barriers to prescribing naloxone:⁶



Purpose and Objectives

The purpose of this study is to evaluate the impact of pharmacist-led education on providers' naloxone prescription rates and perceptions of naloxone in high-risk opioid patients in community-based health system primary care clinics.

Primary Objective

- Naloxone prescription rates pre- and post- pharmacist-led education

Secondary Objective

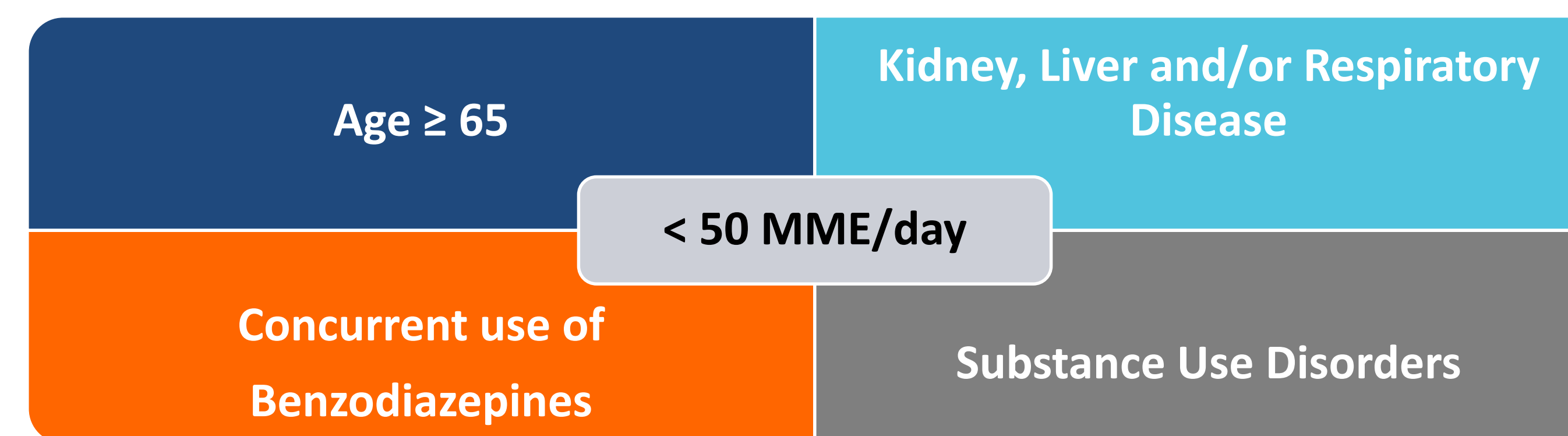
- Provider perceptions on a Likert scale pre- and post-pharmacist-led education

Methods

This prospective, observational study included 30 providers including physicians, nurse practitioners and physician assistants who work at three primary care clinics.



High-risk patients who are ≥ 18 years with chronic, non-cancer, non-palliative care pain were included **if they were prescribed ≥ 50 MME/day or met one of the following criteria:**



Providers will be asked to complete an anonymous online survey on a five point Likert Scale pre- and post- pharmacist-led education. The questions to the survey are as follows:

- Q1 How likely are you to identify patients at high-risk for overdose on opioids for chronic pain?
- Q2 How likely are you to prescribe naloxone for high-risk patients on opioids for chronic pain?
- Q3 How likely are you to provide education to patients who may initially refuse a prescription for naloxone?
- Q4 How likely are you to incorporate a pharmacist into the patient care team for naloxone education?

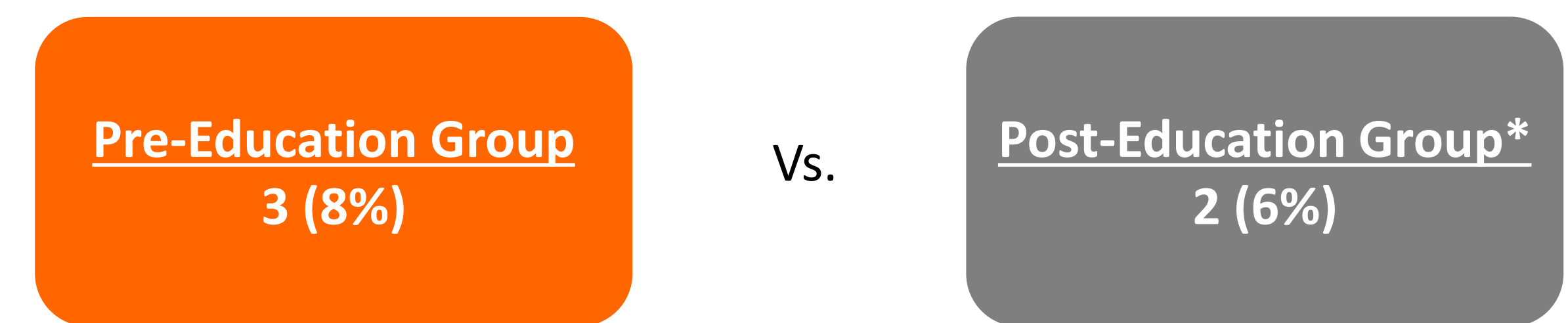
Results

High-Risk Opioid Patients Baseline Characteristics		
Characteristic	Pre (n=36)	Post (n= 34)*
Age \pm IQR	62 \pm 16	62 \pm 25
Age ≥ 65 (%)	13 (36%)	13 (38%)
Female (%)	29 (81%)	29 (85%)
White (%)	35 (97%)	33 (97%)
Kidney Disease (%)	6 (16%)	7 (21%)
Respiratory Disease (%)	12 (32%)	18 (53%)
Liver Disease (%)	4 (11%)	3 (9%)
Use with Benzodiazepine (%)	12 (33%)	13 (38%)
≥ 50 MME/day (%)	17 (47%)	12 (35%)
2 Prescriptions (%)	13 (36%)	10 (29%)
0 Risk Factors (%)	7 (19%)	3 (9%)
1 Risk Factor (%)	12 (33%)	11 (32%)
2 Risk Factors (%)	16 (45%)	16 (47%)
3 Risk Factors (%)	1 (3%)	4 (12%)

*Data is only from 3 months (December 2019 – February 2020)

Results (continued)

Primary Objective: Naloxone Prescription Rates of High-Risk Patients



Secondary Objective: Perceptions of Providers

Average Score of Providers' Responses to Surveys		
Question	Pre (n=7)	Post (n=6)
Q1	3.7 \pm 0.76	4.5 \pm 0.55
Q2	2.6 \pm 0.98	3.8 \pm 1.17
Q3	3.7 \pm 0.95	4.3 \pm 0.82
Q4	4.1 \pm 0.90	5 \pm 0

Discussion/Future Direction

- Preliminary results are uncertain if pharmacist-led education increases naloxone prescription rates
- Survey results, however, indicate a positive impact on providers' perceptions of naloxone



References

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Author Disclosures

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