

# Combating the Opioid Crisis: A Quality Improvement Educational Initiative Implementing

## Best Practices in Opioid Therapy for Safe Prescribing in Primary Care

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### Purpose

- To introduce primary care providers (PCPs) with evidence-based clinical practice guidelines (CPGs) and risk evaluation and mitigation strategies (REMS) for prescribing opioid medications (POMs) for acute, non-cancer pain based on best practices may impact practice changes that improve patient outcomes, and minimize opioid misuse, abuse, overdose, and death.

### Background

- Prescription drug abuse is the fastest growing drug problem in the U.S. and affects every age, gender, ethnic group, and socioeconomic class.
- Opioids are the most prescribed narcotics for moderate to severe pain.
- PCPs are responsible for 50% of prescriptions written for opioids.
- The Office of National Drug Control Policy (ONDCP) reports that, fewer than 20 percent of all licensed prescribers of controlled substances have formal training in safe prescribing practice.

### Methods

**Project Design:**  
Descriptive quantitative one-group pre-test/post-test design executed over a 3 month period from May 2018 to August 2018.

**Setting:**  
An urgent care practice composed of 14 clinics on the west coast of Florida that served approximately 20,000 patients a month.

**Target Population:**  
A convenience sample of comprised of 80 PCPs composed of MDs, DOs, NPs, and PAs.

- Phase 1:**
- Retrospective Chart Review
  - Written Opioid Risk Survey
  - Written Pre-Test A and Pre-Test B

- Phase 2:**
- Educational Module (safe opioid prescribing)

- Phase 3:**
- Written Post-Test A, and Post-test B
  - Post-Educational Chart Review
  - Post-Educational Survey



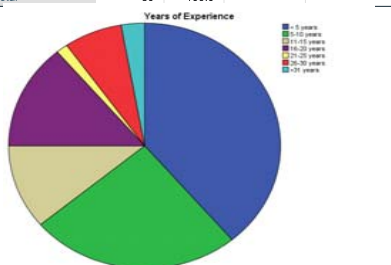
### Characteristics of Participants

#### Provider Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MD	30	37.5	37.5	37.5
	DO	16	20.0	20.0	57.5
	NP	17	21.3	21.3	78.8
	PA	17	21.3	21.3	100.0
	Total	80	100.0	100.0	

#### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	35	43.8	44.3	44.3
	Female	42	52.5	53.2	97.5
	Neutral	2	2.5	2.5	100.0
	Total	79	98.8	100.0	
Missing	System	1	1.3		
Total		80	100.0		



	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 5 years	28	35.0	35.0
	5-10 years	18	22.5	57.5
	11-15 years	8	10.0	67.5
	16-20 years	10	12.5	80.0
	21-25 years	1	1.3	81.3
	26-30 years	2	2.5	83.8
	>31 years	2	2.5	86.3
Total	72	90.0	100.0	
Missing	System	8	10.0	
Total		80	100.0	

### Results

- There was evidence of a significant increase from baseline for Test A and B.
  - Pre-Test A : 95% [CI 1.34 to 2.66] with a mean difference (md) of 2.00.
  - Pre-Test B : 95% [CI 4.06 to 6.60] with a (md) 5.33.
  - Post-Test A: 95% [CI 0.68 to 5.32] with a (md) 3.00.
  - Post-Test B : 95% [CI 4.44 to 7.16] with (md) 5.80.

Statistics		Pre-Edu. Score	Post-Edu. Score
N	Valid	6	6
	Missing	74	74
Mean		5.50	6.67
Std. Deviation		1.378	1.506
Range		4	4
Minimum		3	4
Maximum		7	8

### Correlations

Provider Level	Pre-Test A	Pre-Test B	Post-Test A	Post-Test B
Pre-Test A	Pre-Test A	1	-.036	.116
	Pre-Test B		.832	.402
Pre-Test B	Pre-Test A		1	.140
	Pre-Test B			.822
Post-Test A	Pre-Test A			1
	Pre-Test B			
Post-Test B	Pre-Test A			
	Pre-Test B			

Paired Samples Test

#### Paired Differences

	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)	
Pair 1	Provider Level - Pre-Test A	.667	.816	.333	-.180	1.524	2,000	5	.102
Pair 2	Practice Area - Pre-Test A	1.000	2.530	1.033	-.145	5.655	2,965	5	.034
Pair 3	Years of Experience - Pre-Test A	1.500	2.588	1.057	-.126	4.216	1,418	5	.010

Paired Samples Test

#### Paired Differences

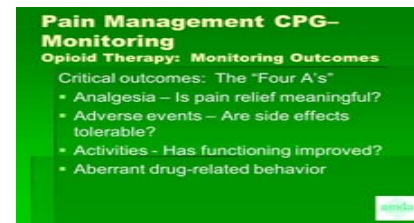
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)	
Pair 1	Provider Level - Adherence Post	3.3333	2.40139	.98258	-.68777	3.3334	1,850	5	.014
Pair 2	Practice Area - Adherence Post	1.33333	3.20599	1.33333	-.09411	6.76078	2,500	5	.004
Pair 3	Years of Experience - Adherence Post	1.6667	1.47156	.60293	-.17806	1.71139	277	5	.093

### Discussions

- CDC Opioid Prescription Guidelines described a knowledge deficit in POM among PCPs as a contributing factor to the opioid epidemic.
- A comprehensive review of Florida House Bill 21 (2018) Controlled Substances. There has been evidence of OT "3-day acute pain" and "7-day exceptional pain" in the EHR.
- Paramount measures to combat the opioid crisis:
  - Risk mitigation
  - Appropriately prescribing of naloxone,
  - Timely referral to Medication-Assisted-Treatment (MAT).



Participant's post-educational survey which utilized a likert scale method from 1-10, 1 indicates strongly disagree, 5-6 indicates neutral, and 10 indicates strongly agree to gauge effectiveness of the project and there was a significant increase in self-reported knowledge by all participants.



### Limitations

Adequate sample size, but poor participation rate plausibly related to:

- Time constraints
- Varying levels of experience
- Lack of "Buy-In"
- Generalization may be challenging.
- EHR search engine inability to extract secondary aggregate data for chart reviews specifically by prescriptions written for controlled substances.
- Length of the study.

### Acknowledgement

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- IRB Approval (ro00035488)

