

Pharmacist-Led Opioid Stewardship and De-Escalation of Therapy Morgan Jetton, PharmD Candidate and Dianne Klueppel, PharmD, BCPS, BCGP

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BACKGROUND

- The opioid epidemic has been a hot topic for the past several years. However, the opioid epidemic hasn't strictly just been prescription opioids, but other illicit drugs (heroin and synthetic opioids).¹
- In a study from 2016, 27 hospital pharmacy managers out of 288 academic medical centers responded to a survey about opioid stewardship. Over half of the respondents reported not performing opioid utilization/stewardship.⁴
- Pharmacists can expand their practice. With increased opioid use, implementing opioid stewardship led by pharmacists and de-escalation of therapy would benefit the healthcare system and patients' lives. Assessing the needs of patients for opioids and other non-opioid medications they are taking for pain management is necessary.

OBJECTIVE

 To evaluate the use of opioids in an inpatient setting and assess the need for de-escalation to reduce the risk of overuse/overdose and diversion when a patient is discharged.

METHODS

Study Design

- Using a chart review, this retrospective study was conducted from June 13th until July 28th, 2023, at SSM-Select Rehabilitation Hospital in Richmond Heights, Missouri.
- Patients' medication lists were reviewed for orders containing opioids (hydrocodone with acetaminophen (Norco), oxycodone (Roxicodone), or oxycodone with acetaminophen (Percocet)) and/or other non-opioids (acetaminophen, gabapentinoids, skeletal muscle relaxants, or topical/oral NSAIDs) as well as the evaluation of benzodiazepines ("The Trinity") to manage pain in an inpatient setting to assess the safety and efficacy of therapy.
- The study included looking at medication orders that included opioids and non-opioid medications with pain as an indication, how many doses of the opioid and non-opioid the patient received, the frequency (scheduled vs. as needed), and the average pain scale rating.

Study Population

• This study included 71 adult patients (18 years or older) who were admitted to SSM-Select Rehabilitation Hospital in Richmond Heights between and who have received opioid and/or non-opioid medications that are listed in the above section. Exclusion criteria included patients admitted before July 28th but discharged after July 30th, 2023.

Study Measures

• The study involved looking at medication orders that included opioids and non-opioid medications with pain as an indication, how many doses of the opioid and non-opioid the patient received, the frequency (scheduled vs. as needed), and the average pain scale rating. The primary outcome focuses on the doses/frequency of the opioid and/or non-opioid and the indication for medication.

Data Analysis

Pharmacotherapy, 34:4, 181-183, DOI: 10.1080/15360288.2020.1765066

Chart review data was analyzed and summarized using percentages

REFERENCES

1.Centers for Disease Control and Prevention. (2022, June 1). Understanding the opioid overdose epidemic. Centers for Disease Control and Prevention. https://www.cdc.gov/opioids/basics/epidemic.html

2.Tanya J. Uritsky, Michelle E. Busch, Sul Gi Chae & Cheryl Genord (2020) Opioid Stewardship: Building on Antibiotic Stewardship Principles, Journal of Pain & Palliative Care

3.Ghafoor VL, Phelps PK, Pastor J 3rd, Meisel S. Transformation of Hospital Pharmacist Opioid Stewardship. Hosp Pharm. 2019 Aug;54(4):266-273. doi: 10.1177/0018578718809267. Epub 2018 Oct 26. PMID: 31320777; PMCID: PMC6628553. 4.Phelps P, Achey TS, Mieure KD, et al. A Survey of Opioid Medication Stewardship Practices at Academic Medical Centers. Hospital Pharmacy. 2019;54(1):57-62.

5.Tilli T, Hunchuck J, Dewhurst N, Kiran T. Opioid stewardship: implementing a proactive, pharmacist-led intervention for patients co-prescribed opioids and benzodiazepines at an urban academic primary care center. BMJ Open Qual. 2020 Apr;9(2):e000635. doi: 10.1136/bmjoq-2019-000635. PMID: 32269056; PMCID: PMC7170545.

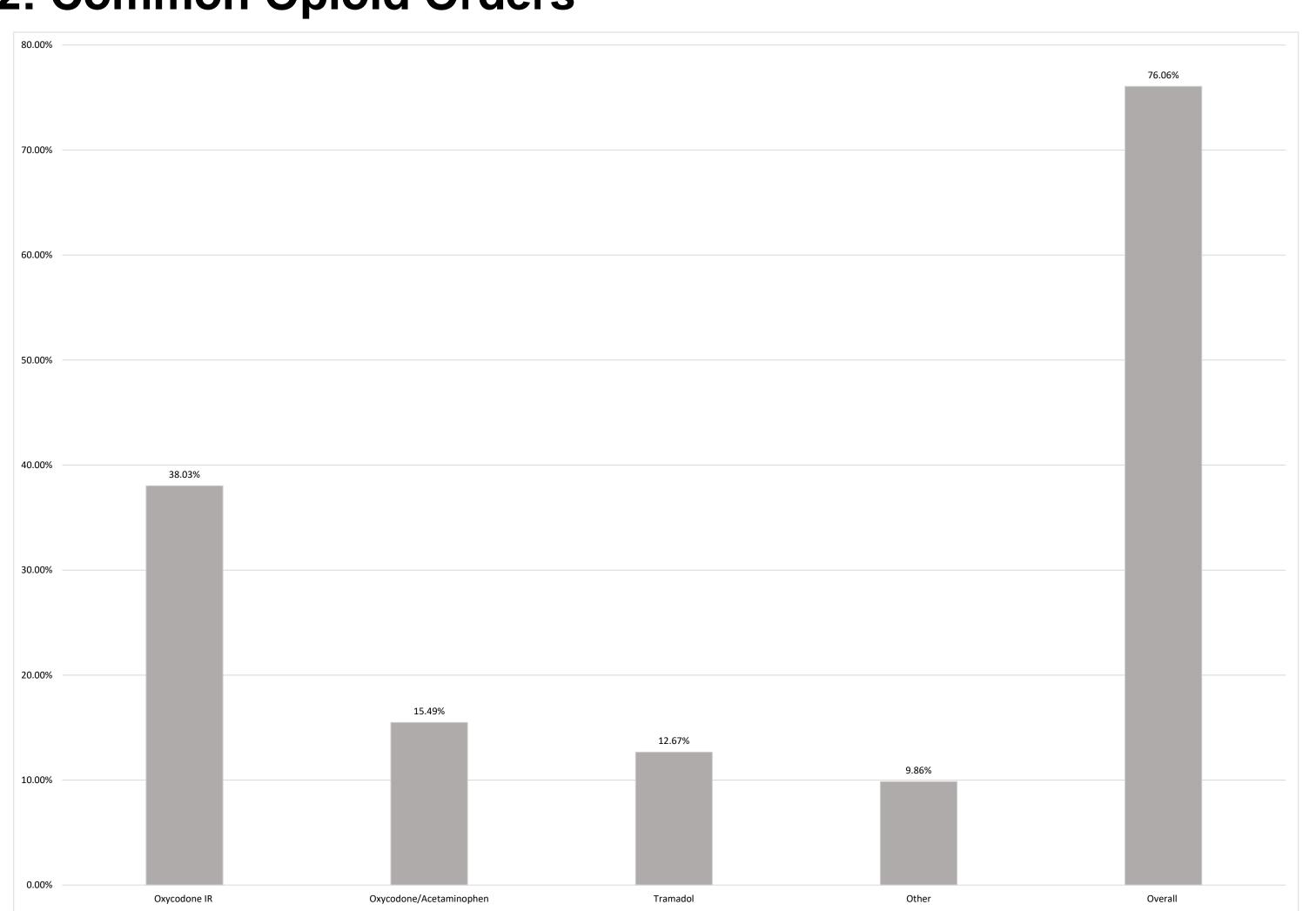
RESULTS

Table 1: Reason for Admission

Frequency of Need for Opioid Order				
Primary Problem	X/71	Percent		
Management/Debility	43	60.56%		
Motor Vehicle Accident (MVA)	5	7.04%		
Amputation	4	5.63%		
Fracture	12	16.9%		
Surgical	2	2.82%		
Chronic Pain	5	7.04%		

^{*}For patients with multiple primary problems (MVA + fracture) only one of the problems was counted in the frequency of need for opioid order percentage

Table 2: Common Opioid Orders



^{*}Other: hydrocodone/acetaminophen, morphine drip

Table 3: Non-Opioid Medications

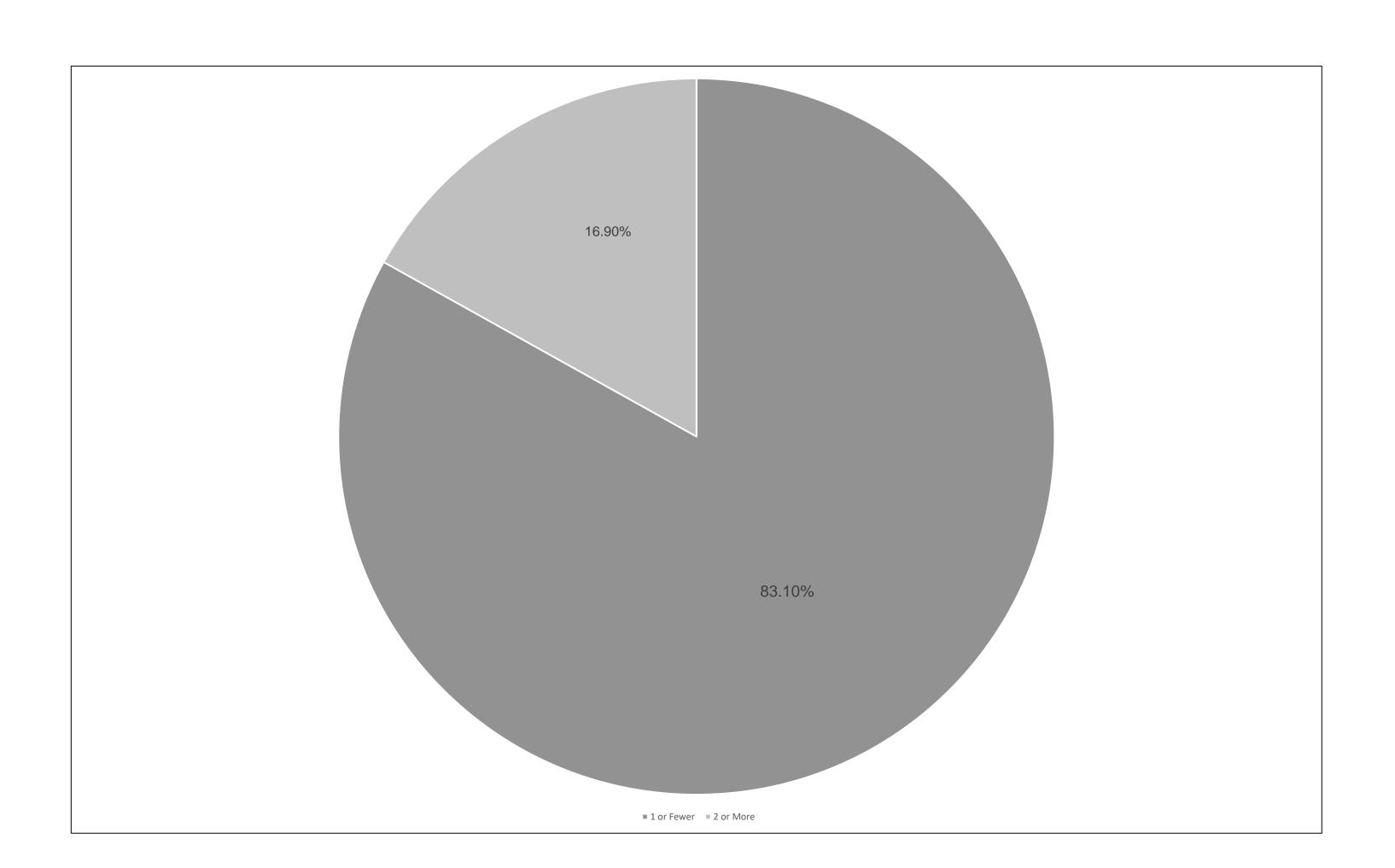
Non-Opioid Medications Commonly Ordered			
Medication	X/71	Percent	
Skeletal Muscle Relaxant	24	33.80%	
Acetaminophen	66	92.96%	
Topical NSAIDs	7	9.96%	
Lidocaine/ICY HOT	28	39.44%	
Gabapentinoids	21	29.58%	
Overall	146	205.63%	

RESULTS

Table 4: "The Trinity"

"The Trinity"				
Opioid + Skeletal Muscle Relaxant + Benzodiazepine	X/5	Percent		
Oxycodone + Cyclobenzaprine + Alprazolam	2	40%		
Oxycodone + Methocarbamol + Alprazolam	2	40%		
Oxycodone/Acetaminophen + Baclofen + Lorazepam	1	20%		

Figure 1: More Than One Opioid Order



CONCLUSION

- The study aimed to focus on the use of opioid medications and what role a pharmacist has in the de-escalation of therapy. During rounds, the pharmacist mentions what opioid medication a patient is on and how often they are receiving that medication. If a patient hasn't been using the opioid, the medication is discontinued before discharge.
- It's important that patients are educated on the use of opioids and how to properly take them. They should be used as a last-line option. Another key role pharmacists can play is not only providing naloxone counseling to the patient but also to the family and friends of the patient to ensure everyone is educated on the signs of overdose. It's important to include counseling on The Good Samaritan Law. Going forward, pharmacists could lead opioid stewardship by providing discharge opioid reconciliation, which already occurs with non-opioid medications, and ensuring a patient is not receiving a duplicate prescription for an opioid.
- Overall, this study showed a positive light on opioid prescribing. Pharmacists
 can provide insight into opioid stewardship and de-escalation of therapy.
 Opioids need to be used when necessary to manage pain, but other options
 should be considered first-line. I would like to see further studies done
 evaluating more than one health system to ensure healthcare providers
 everywhere are aware of opioid stewardship.

^{**}Patients may have more than one order for a scheduled or as-needed opioid