## Assessing the Adherence of Buprenorphine Treatment among Patients Discharged from the Emergency Department after an Overuse Event: A Retrospective Study

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### Introduction

- Overdose deaths have continued to rise to record levels in recent years, surpassing 100,000 deaths<sup>1</sup>.
- OUD treatment is often underutilized. A recent overdose is a significant risk factor for recurrent overdose<sup>2,3</sup>.
- No studies have looked at linkage of buprenorphine treatment with outpatient adherence following an overdose and the critical time period thereafter.

### **Objectives**

- Describe buprenorphine adherence among patients discharged from the ED of LA General Medical Center after an opioid overdose event
- Identify factors associated with adherence

### Methods

### **Study Population:**

• Patients discharged from LAGMC's ED between Oct 2022 and Dec 2023

Inclusion	Exclusion		
T40 (opioid poisoning) F11 (opioid-related disorders)	Admitted to		
Prescribed with buprenorphine	hospital		
Discharged after the ED visit			

### **Data Collection and Analysis:**

- Analyze CURES data
- Assess time from ED visit to pharmacy fill
- Calculate PDC (proportion of days covered)
- Classify patients into primary and secondary non-adherence
- Employ descriptive statistics to report results
- Utilize t-tests to assess: mean adherence and days for first fill





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	Resu	lts					
pioid Overdose Patient Visits Table 2. Patient Encounter							
ients Discharged with 156	Description						
		Total Patient Encounters			1:		
		Patients Prescribed Buprenorphine			e 1	56 (	
		Patients with T40 Diagnosis				33 (2	
		Patients with F11 Diagnosis			1	22 (	
Medication for SUD		Patients wit	hout S: Visit	ubsequ	ent ED	1	50 (
Characteristics	Ν	Patients with One Subsequent ED			)	5 (3	
)	125 (80%)	Visit					
en	31 (20%)	Patients with Two Subsequent ED Visits					1 (0
		Patients	with C	URES [	Data	7	70 (4
(13-17)	5 (3%)	Patients with No CURES Data				3	36 (5
s (18-26)	24 (15%)						7 /
s (27-35)	53 (35%)	Primary Adherence (≥ 80%)					/ (
Adults (36-44)	37 (24%)	Primary Adherence (<80%)				1	49 (
Adults (65 and r)	35 (23%)	Table 3. Secondary Adherence					
		Secondary	With	in 30	Withi	n 60	2 9
Latino	73 (47%)	Adnerence	Da	iys	Da	ys	
American	11 (7%)	PDC ≥80%	44 (62.9%) 12		12 (17	7.1%) 7	
е	26 (17%)	PDC <80%	26 (37.1%) 58 (82		2.9%)	63	
ace	3 (1%)						
known	43 (28%)	Table 4. Day(s) to Dispense					
lass		First Fill D	ill Date Mean PDC (%)		PDC %)	95% CI	
		0-3 days fro	rom ED 34.5%		0.30-0.38		

visit (n=47)

>3 days from ED

visit (n=23)

21.3%

0.17-0.25

### Limitations

Single-center study: findings may not be
applicable to other EDs

- Reliance on accurate ICD10 code reporting
- Failure to consider extenuating factors like incarceration, rehabilitation programs, or relocation outside California may impact study findings and conclusions
- Study not designed to assess accidental opioid ingestion from laced substances

### **Discussion & Conclusions**

- The study highlights challenges in buprenorphine adherence post-opioid-related ED visits, emphasizing targeted interventions to improve rates.
- Patients receiving higher buprenorphine doses and filling prescriptions within 3 days of the ED visit showed significantly better adherence at 6 months (p=0.014), addressing timely treatment access.
- Strengths include real-world data from a high-overdose-rate county ED, with fentanyl as the primary street opioid.
- These findings underscore the ED's crucial role in facilitating prompt buprenorphine access, potentially enhancing adherence and long-term outcomes for opioid use disorder individuals.

### References Provisional drug overdose data. Centers for Disease Control and Prevention. March 13, 2024. Accessed March 14, 2024. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm. Morgan JR, Barocas JA, Murphy SM, et al. Comparison of Rates of Overdose and Hospitalization After Initiation of Medication for Opioid Use Disorder in the Inpatient vs Outpatient Setting. JAMA Netw Open. 2020;3(12):e2029676. Published 2020 Dec 1. doi:10.1001/jamanetworkopen.2020.29676 Pizzicato LN, Hom JK, Sun M, Johnson CC, Viner KM. Adherence to buprenorphine: An analysis of prescription drug monitoring program data. Drug Alcohol Depend. 2020;216:108317. doi:10.1016/j.drugalcdep.2020.108317 Acknowledgments Special thanks to Dr. David Dadiomov for his invaluable contributions and expertise, which

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### 349

(11.6%)

- 22.0%)
- (78.0%)
- (96.2%)
- 3.2%)
- 0.6%)
- 44.9%)
- 55.1%)
- (4.5)
- (95.5%)

### 90 Days

(10.0%)

(90.0%)

