Evaluation of a Pharmacist-Led Opioid Use Disorder Treatment Service: A Retrospective Cross-Sectional Study

Kaitlyn M. Waltsgott, PharmD Candidate, Chris M. Herndon, PharmD, BCACP, FASHP, FCCP

Introduction

- Access to care for opioid use disorder (OUD) continues to be sub-optimal, despite the removal of numerous regulatory barriers.[1,2]
- Pharmacists embedded within primary care clinic settings often provide direct patient care services, including for OUD, under advanced scope / collaborative practice agreements.[3]

Objectives

- Evaluate the impact of pharmacist multidisciplinary practice versus usual medical care based on treatment success rates defined as continuity of therapy, treatment adherence, and return to use.
- Identify gaps in clinical care in patients with OUD

Methods

- Following IRB approval, EHR was queried for all health centers operated by SIHF Healthcare (32) to identify patients with a diagnosis of OUD (ICD-10 codes inclusive of F11) within the previous 24 months.
- Of the 794 unique patients that were seen between 1/1/2020 and 1/31/2022, 31 were provided care for OUD by a pharmacist-led team.
- A random sample of 60 patients receiving usual medical care for OUD was selected for a 1:2 study comparison.
- The primary outcome included treatment success defined by continuity of therapy, treatment adherence, and no return to use. Adherence was assessed with toxicology screening and prescription refill tracking within the EHR software.
- Secondary outcomes measured lost to follow-up, urine drug screen results, counseling engagement, missed appointments, and return to use.

Results

- All subjects receiving OUD care from the pharmacist-led service (PLS) were included and a random sample of subjects receiving UMC for OUD were selected for a 1:2 stratification.
- One case was omitted due to substantial missing data yielding a final sample of 31 (34.4%) subjects in the pharmacist-led arm and 59 (65.6%) in the usual medical care arm.

Figure 1. Baseline demographics

		n (%)
Age (years), mean (SD)		45.1 (12)
Sex	Male	41 (45.6)
	Female	49 (54.4)
Insurance	Private	28 (34.1)
	Medicaid	53 (64.6)
	Medicare	1 (1.2)
Care Model	Usual Medical Care	59 (65.6)
	Pharmacist Provided	31 (34.4)

Figure 2. OUD treatment outcomes, pharmacist-led vs. usual medical care

		Pharmacist-led care, n (%)	Usual medical care, n (%)	Total, n (%)	p values
Missed Appointments, median (IQR)		3 (2)	2 (3)	2 (3)	0.111*
Length of Treatment (Days), median (IQR)		547 (924)	580.5 (623.3)	547 (730.75)	0.722*
Lost to Followup		6 (19.4)	32 (54.2)	38 (42.2)	0.001**
No return to use	No	17 (54.8)	15 (25.4)	32 (35.6)	<0.001**
	Unknown	0 (0)	23 (39.0)	23 (25.6)	
Counseling	Yes	16 (51.6)	43 (72.9)	59 (65.6)	0.043**
	Unknown	0 (0)	2 (3.4)	2 (2.2)	
Unexpected UDS	Yes	15 (48.4)	17 (28.8)	32 (35.6)	< 0.001**
	Unknown	0 (0)	21 (35.6)	21 (23.3)	
MOUD Initial	Bup / Naloxone	29 (93.5)	37 (68.5)	66 (77.6)	0.067
	Buprenorphine	1 (3.2)	9 (16.7)	10 (11.8)	
	Naltrexone	1 (3.2)	1 (1.9)	2 (2.4)	
	Methadone	0 (0)	4 (7.4)	4 (4.7)	
	Symptom Only	0 (0)	3 (5.6)	3 (3.5)	
* Independent Samples Mann-Whitney U					
** Chi square analysis					

Conclusions

- Among patients undergoing OUD treatment, pharmacist-led services resulted in a significant reduction in a) lost to follow-up, b) return-to-use, and c) steady rate of therapy continuation over the study period.
- Pharmacists are an underutilized resource for improving access to OUD services.
- Further studies are warranted considering limitations of this study including: limited sample size, retrospective design, homogenous clinic setting, single pharmacist

References

- Chisholm-Burns, M. A., et al. The opioid crisis: Origins, trends, policies, and the roles of pharmacists. *Am J Health-Syst Pharm* 2019;76(7), 424–435.
- Lagisetty, P, et al. A physician-pharmacist collaborative care model to prevent opioid misuse. *Am J Health-Syst Pharm* 2020;77(10), 771–780
- Mattle AG, et al. Evaluating outcomes of a clinical pharmacist medication management program in a multidisciplinary practice for outpatient buprenorphine treatment of opioid use disorder. *J Am Coll Clin Pharm* 2021;4(4):424–434.

Disclosures

- Ms. Waltsgott reports no financial conflicts of interest.
- Dr. Herndon discloses the following: consulting fees (US Dept of Justice), speaking honoraria (ASHP, ICHP, PTCE), stock ownership of private company (Spouse – LiveLife Natural Products)

Contact

- kjokisc@siue.edu for Ms. Waltsgott
- cherndo@siue.edu for Dr. Herndon

Reprints