

Characterizing withdrawal in outpatient low-dose buprenorphine initiations among people who use fentanyl

Benjamin L. H. Jones, Michelle Geier, PharmD, John Neuhaus, PhD, Phillip O. Coffin, MD, MIA, Hannah R. Snyder, MD, Christine S. Soran, MD, Kelly R. Knight PhD, Leslie W. Suen, MD, MAS

BACKGROUND

- Buprenorphine is a life-saving treatment for opioid use disorder (OUD).1
- Low dose initiation (LDI) has gained popularity as a way to start buprenorphine with less withdrawal risk.2
- Limited data are available on withdrawal in LDI in patients who use fentanyl.3

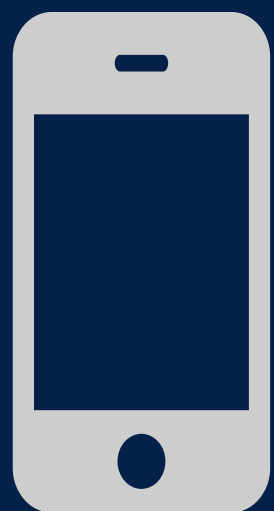
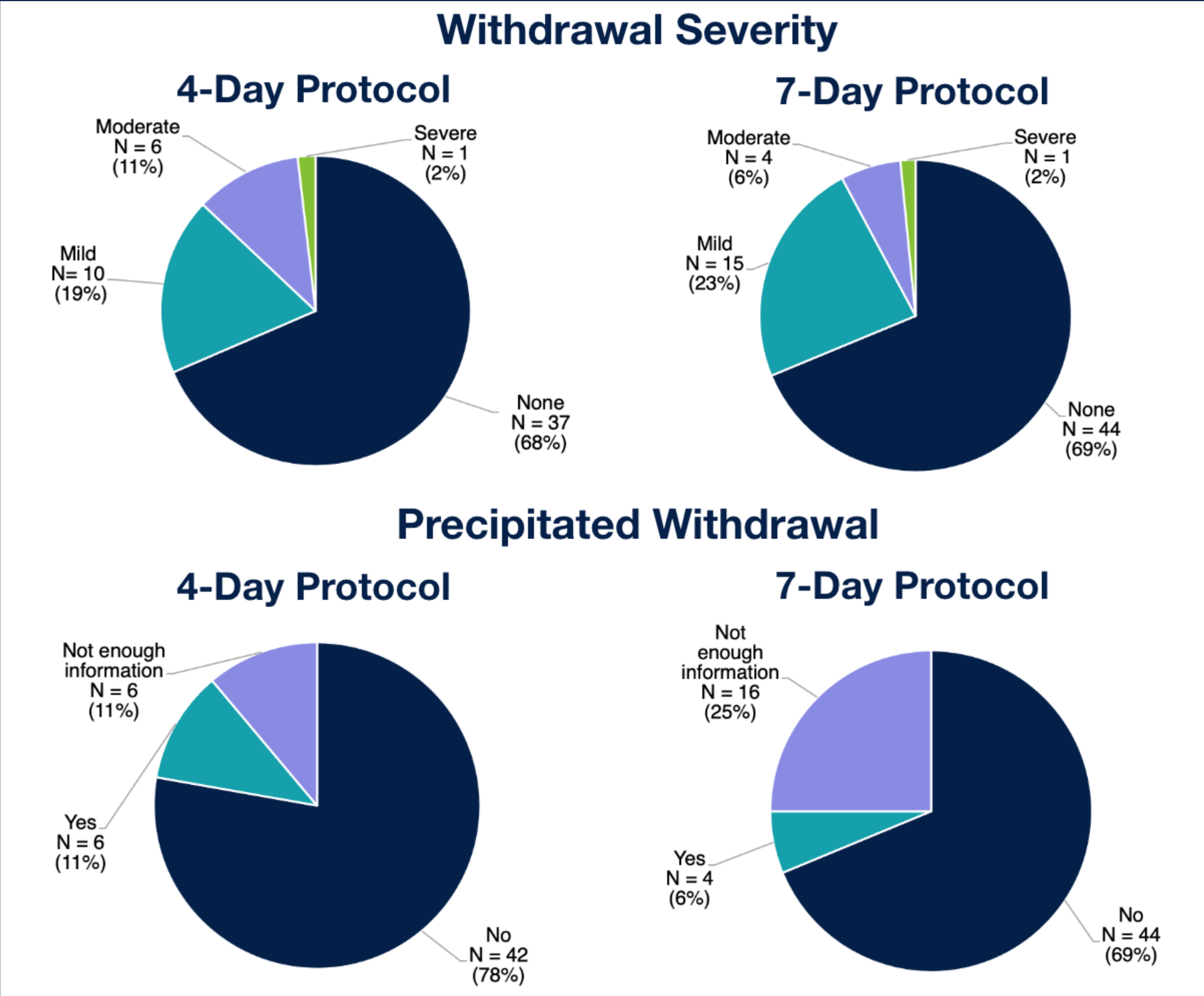
METHODS

- Retrospective chart review of patients using daily fentanyl, prescribed 4-day or 7-day low-dose buprenorphine initiation for OUD.
- Two San Francisco substance use disorder clinics, May 2021-November 2022.
- Two addiction medicine experts, blinded to protocol, assessed extracted descriptions of withdrawal for severity and incidence of precipitated withdrawal (defined as acute worsening of withdrawal symptoms immediately after taking buprenorphine).
- Analyzed via descriptive statistics in Stata 18.

Buprenorphine initiation protocols:

Day	4-Day Protocol	7-Day Protocol
1	0.5mg every 6 hours	0.5mg once
2	1mg every 6 hours	0.5mg in AM and PM
3	2mg every 6 hours	0.5mg in the AM, then 1mg in afternoon and evening
4	12mg in AM, then FU	2mg in AM and PM
5		3mg in AM and PM
6		4mg in AM and PM
7		12mg in the AM, then FU

Precipitated withdrawal was rare, and most cases involved deviation from instructions.



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RESULTS

- 175 LDI attempts in 126 patients. 118 (67%) attempts with follow-up data available.
- Rates of withdrawal severity and of precipitated withdrawal displayed below.
- Deviation from protocol was present in 22% of all attempts; 7 of 10 cases of precipitated withdrawal.
 - Deviation was defined as any significant departure from prescribed protocol instructions such as skipping doses, taking higher doses ahead of schedule, further splitting tablets into smaller doses, or intentionally prolonging the initiation process beyond the 4- or 7-day period.

DISCUSSION

- While withdrawal was usually mild in our sample, rates of moderate and severe symptoms were higher than in other LDI studies.2,4
- Precipitated withdrawal was relatively rare compared to studies of traditional buprenorphine initiations in people who use fentanyl.3,5,6
- Protocol deviation was common, and occurred in most cases of precipitated withdrawal (70%).

CONCLUSION

- Withdrawal was relatively common in this large cohort of outpatients who use fentanyl.
- The majority of withdrawal symptoms were mild and precipitated withdrawal was rare.
- Complicated dosing schedules, structural barriers, and fentanyl pharmacokinetics may contribute to withdrawal.
- Clinicians should counsel patients that they may experience mild discomfort during LDI, and that there is still some risk of moderate to severe withdrawal.

For references and funding, see full paper QR code at right.