Sondhi, A. Best, D., Leidi, A., Belanger, M., Bunaciu, A. & White, W. (2026). The impact of medications for opioid use disorder (MOUD) on retention and recovery capital in recovery housing: An exploratory causal inference analysis. *International Journal of Drug Policy*, 151, 105218.

A B S T R A C T

Background: Medications for Opioid Use Disorder (MOUD), including methadone (MET), sublingual buprenorphine (SL-BPN), extended-release buprenorphine (ER-BPN), and naltrexone (NTX), are increasingly used in recovery housing settings. However, their differential impact on retention and recovery capital remains underexplored.

Methods: We applied marginal structural models to explore the causal effects of MOUD on retention and recovery capital among individuals with substance use disorders in Virginia Recovery Residences (January 2020–May 2024). Model 1 compared MOUD-exposed (n = 509) and non-exposed individuals (n = 8785). Model 2 examined effects by medication type. Models 3 and 4 analyzed longitudinal changes in recovery capital using data from 5333 clients and 23,325 assessments. Marginal models for repeated measures estimated mean changes in recovery capital scores from baseline.

Findings: MOUD exposure was associated with a six-percentage-point increase in predicted retention. Recovery capital improved significantly between 3- and 4.5-months post-entry. NTX showed superior retention outcomes compared with MET and both buprenorphine formulations. SL-BPN and ER-BPN were associated with enhancements in recovery capital within the first three months.

Conclusion: Different MOUD agents were associated with distinct patterns in recovery outcomes. NTX was associated with higher predicted retention, while buprenorphine formulations promote early gains in recovery capital. These findings underscore the importance of aligning pharmacological strategies with individual recovery trajectories, particularly during the initial six months of residency. Further longitudinal research is needed to inform treatment-matching approaches based on motivational and clinical profiles.