**Title:** Learning Optimal Dynamic Treatment Regimes from Longitudinal Data

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**Running Head:** Learning Optimal Dynamic Treatment Regimes

**Abbreviations:** average treatment effect (ATE), optimal dynamic treatment rule (ODTR), buprenorphine-naloxone (BUP-NX), opioid use disorder (OUD), return-to-regular-opioid-use (RROU), doubly-robust (DR), conditional average treatment effect (CATE), outcome weighted learning (OWL), residual weighted learning (RWL), multivariate adaptive regression splines (MARS), sequentially doubly-robust (SDR), risk ratio (RR), cross-fit (CF)