

*Title:* Concordance of Self-reported Drug Use and Urine Drug Screening at a Psychiatric Urgent Care Center

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*Objective:* The utilization and value of routine urine drug screens (UDS) in the medical assessment of psychiatric patients varies widely among healthcare systems and patient populations. This study evaluates the concordance of anticipated UDS findings by patient self-reports and laboratory UDS results in adults seeking care at a dedicated Psychiatric Urgent Care Center (PUCC).

*Methods:* Retrospective chart review of patients 18 years and older seeking treatment at the PUCC from May to August 2020 was performed. Data was collected from a standardized patient intake form that included the question “If we were to do a Urine Drug Screen today, would it be positive for any drug(s), prescription or recreational?” followed by “If yes, which one(s).” These self-reported answers were then compared with results of on-site UDS that is performed as part of a new patient evaluation. Kappa statistics ( $k$ ) were used to determine the level of agreement between self-reported drug use and UDS results.

*Results:* Of the 595 new patient encounters, 545 patients had laboratory UDS results for comparison against patient intake form. This patient sample included 344 (58%) females and 251 (42%) males with a mean age of 34. Among the 545 UDS performed, 276 (50.6%) tested positive in at least one of the ten major drug classes and 327 (60%) patients self-reported an expected positive UDS result. The concordance between self-reports of anticipated positive UDS across all drug categories and laboratory UDS results was weak ( $k = 0.49$  [95% CI, 0.42-0.56]). When evaluating the level of agreement with anticipated UDS results by specific drug class, opiates, cocaine, MDMA, and oxycodone exhibited no agreement ( $k < 0.15$ ); benzodiazepines, buprenorphine, methamphetamine, and methadone had minimal agreement ( $0.22 \leq k \leq 0.36$ ); amphetamine had weak agreement ( $k = 0.43$ ), and THC had moderate agreement ( $k = 0.65$ ).

*Conclusion:* These findings suggest that self-reports alone are not a reliable substitute for routine UDS in this patient population. The limitations of this study include extracting patient self-reports of specific drug classes from an open field intake form. This method of self-reporting could produce lower levels of agreement with UDS results due to low patient health literacy about the UDS and pharmacokinetics of the drugs they are using resulting in over or underreporting of anticipated positive UDS results. Regardless, our data supports the routine use of UDS in patients seeking acute psychiatric care at the PUCC as patient self-reports were limited in their ability to accurately predict laboratory UDS results.