

Comparative effectiveness of Urine Drug Testing schedules alongside opioid agonist treatment

Category: Oral Presentation

Abstract Body

Background: Though it is recommended practice in most settings internationally, the evidence on the effectiveness of urine drug testing (UDT) strategies alongside Opioid Agonist Treatment (OAT) on treatment retention is unclear and randomized control trials on UDTs may not extend to real-world practice. We aimed to determine the comparative effectiveness of alternative UDT monitoring strategies as observed in clinical practice among OAT clients in British Columbia, Canada from 2010 to 2020.

Methods: We conducted a retrospective cohort study for UDT monitoring strategies and their impact on retention for individuals initiating methadone (MET) or buprenorphine/naloxone (BNX) in British Columbia from 01/01/2010-03/17/2020. Our exposure was defined as five static UDT monitoring strategies: no UDTs, weekly UDTs, monthly UDTs, quarterly UDTs and biannual UDTs. We applied a ‘clone-censor-weight’ approach with a marginal structural cox model to compare the impact of these strategies on OAT retention.

Results: There were 19,036 and 11,423 first time OAT initiators with MET and BNX, respectively during the study period. When compared to no UDT monitoring, weekly UDTs resulted in a 12% decrease (HR: 0.88, 95% CI: (0.87, 0.89)) in the risk of discontinuation for clients receiving BNX, with similar results for MET. Monthly UDTs marginally reduced the risk of discontinuation, but quarterly and biannual UDTs demonstrated no difference in the risk of treatment discontinuation. However, for individuals retained for at least 4 weeks, receiving weekly UDTs after the first 4 weeks of treatment increased the risk of discontinuation by 26% (1.26, (1.16, 1.37)) compared to no UDTs for BNX clients, and by 40% (1.40, (1.28, 1.53)) for MET clients.

Conclusion: Our findings suggest that weekly UDT monitoring is beneficial during induction, however frequent UDT monitoring in thereafter may increase the risk of treatment discontinuation.

Key Words

- Assessment/screening
- Epidemiology
- Opiate Agonist Therapy
- Primary Care

Learning Objective # 1

Evaluate the efficacy of different UDT monitoring strategies on OAT retention.

Learning Objective # 2

Examine how administrative data can be used to evaluate and assess impacts different clinical OAT monitoring strategies, such as UDT monitoring.

Reference # 1

Guerra-Alejos, B. Carolina; Kurz, Megan; Min, Jeong Eun et al. Comparative effectiveness of urine drug screening strategies alongside opioid agonist treatment in British Columbia, Canada: A population-based observational study protocol. *BMJ Open*. 2023.

Reference # 2

Dupouy J, Mémier V, Catala H, Lavit M, Oustric S, Lapeyre-Mestre M. Does urine drug abuse screening help for managing patients? A systematic review. *Drug and Alcohol Dependence*. 2014;136:11-20

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