

Shorter Drug Testing Intervals Are Associated With Improved Drug Misuse Rates

Background

- Drug overdose deaths in the United States have increased since the late 1990s. Higher rates are directly related to the prescribing patterns of opioids, illicit use of heroin, and illegal manufacturing of synthetic opioids (eg, fentanyl).¹
- For patients prescribed opioids for chronic pain, the Centers for Disease Control and Prevention (CDC) recommends urine drug testing (UDT) before opioid therapy. CDC also suggests considering UDT at least annually during therapy to assess misuse.²
- However, the association between UDT intervals and the rates of misuse has rarely been addressed in large-scale studies.
- **Objective:** In this retrospective study using a clinical laboratory database, the investigators examined if shorter UDT intervals were associated with lower rates of drug misuse.

Methods

- Serial UDT results from 2016 through 2017 were obtained from the Quest Diagnostics medMATCH® database.
 - Patients were included if they were being newly monitored (not tested within 9 months of study period start) for prescription drug adherence and had at least 3 specimens tested during the test period.
- The criteria for drug misuse were absence of a prescribed substance, presence of a nonprescribed substance, or presence of an illicit substance.
 - Drug misuse rates were compared across UDT intervals.

Results

- Clinician-provided prescribing data were available for 148,803 UDT specimens from 49,601 de-identified patients.
- Shorter intervals between the first and second UDTs were associated with larger declines in the rates of drug misuse:
 - Weekly, 19% decline; monthly, 15% decline; bimonthly, 12% decline; quarterly, 9% decline; semi-annually, 3% decline.
 - A similar pattern was observed between the second and third UDTs for weekly through quarterly intervals.
- In contrast, drug misuse rates increased by 1% when the testing interval was annual ($P < 0.01$).
- The declines in drug misuse were larger for opioids than for other drug groups evaluated. Positivity for heroin decreased by 32%, more than for other drugs.

Conclusions

- The findings of this study support the use of shorter intervals between UDTs for patients being monitored for prescription drug adherence.

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Webpage

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