Compass SHARP in Practice Podcast Series

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COMPASS HEALTHCARE COLLABORATIVE
Sustainable Healthcare Transformation

Urine Toxicology Testing: Part 2

Hosted By: Rachael Duncan, PharmD, BCPS, BCCP, with guest Dr. Jennifer Hah, MD (anesthesiologist, pain, and addiction medicine specialist)

Q&A Highlights

Q: How long can opioids be detected after the last dose?"
A: Opioids are generally detectable in urine for about 1 to 4 days after the last dose. Some exceptions exist: heroin metabolites may last 12–24 hours. Methadone can be detected for 3–6 days, but just like fentanyl and other synthetic opioids, it has to be tested for separately.

Q: What do opioid results look like on testing?
A: Immunoassay urine tests for opioids will generally show natural opiates like codeine, morphine, and heroin as positive. Metabolism can cause overlap: codeine converts to morphine (and a bit of hydrocodone), morphine can appear as hydromorphone, and heroin also breaks down to morphine and codeine. A key marker specific to heroin use is 6-monoacetylmorphine, which flags recent IV heroin use. Semi-synthetic opioids like hydrocodone, oxycodone, and hydromorphone may not reliably show on standard opiate immunoassays, so confirmatory testing (GC-MS or LC-MS) is often needed.

Q: Can synthetic opioids like fentanyl or buprenorphine be detected?
A: Fully synthetic opioids—fentanyl, buprenorphine, methadone, and tramadol—usually require specific immunoassays or confirmatory tests to detect their presence and metabolites.

Q: What substances can cause false positives for opioids?
A: Many everyday substances can trigger false positives for opioids on a urine drug test. Common culprits include cold medicines like dextromethorphan, certain antibiotics (fluoroquinolones), cardiac drugs such as verapamil, naloxone, antihistamines like Benadryl, and even poppy seeds.

Q: What caveats should clinicians remember when using UDT?
A: Urine drug tests can yield false positives or negatives, so results alone should not determine a diagnosis. Confirm unexpected results with the lab or confirmatory testing, review medications and supplements, and maintain a collaborative, non-punitive approach with patients.

Q: How should unexpected positive results be managed?
A: Address unexpected opioid positives with a non-judgmental conversation, review perioperative risks, optimize a personalized pain plan, and involve specialists as needed.

Q: What about non-opioid substances—how long are they detectable?
A: Non-opioid substances vary in detection: cannabis 2–30 days, cocaine/amphetamines 1–4 days, short-acting benzos 1–3 days, long-acting 21–30 days, alcohol ~12 hours (metabolites 1–2 days). Immunoassays can be affected by prescriptions, OTCs, or false positives.

Quick Takeaways

- UDT is a clinical tool, not a diagnostic measure.
- Detection windows vary by drug type, dose, and chronicity.
- Immunoassays are convenient but may miss synthetics; confirmatory testing improves accuracy.
- False positives are common; interpret results cautiously.
- Discuss results non-judgmentally and involve patients in shared decision-making.
- Consider perioperative risks, optimize pain control, and involve specialists for high-risk patients.

This episode emphasizes that urine drug testing is a nuanced, patient-centered tool for perioperative care, requiring careful interpretation, tailored testing, and open, non-stigmatizing communication.

Resources

Provider Resources:

- TAPS Screening Workflow
- Best Practices Guide for Interpreting TAPS
- Perioperative Management of Patients on Opioids