Compass SHARP in Practice Podcast Series

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COMPASS HEALTHCARE COLLABORATIVE
Sustainable Healthcare Transformation

Urine Toxicology Testing: Part 1

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

Q&A Highlights

Q: What are the risks of missed substance use assessment before surgery?
A: Failing to assess substance use preoperatively can lead to delayed wound healing, hemodynamic instability, longer hospital stays, higher infection rates, and complications with anesthesia or pain management. It may also result in perioperative withdrawal or acute intoxication, which can be confused with other post-op complications. Additional risks include persistent post-operative opioid use and, in emergency surgery, increased post-op complications and higher analgesic or anesthetic requirements.

Q: Should patients receive routine urine drug screening before surgery?
A: Routine urine drug testing is not generally necessary. Targeted screening through open conversations and preoperative assessments is more effective. Urine testing may be helpful in cases of acute intoxication to identify substances. Risk factors for substance use include younger age, male sex, chronic pain, higher pre-op pain scores, psychological distress, or certain procedures (e.g., upper extremity surgery), which may guide more focused screening.

Q: What screening approaches are recommended?
A: Preoperative substance use screening should use history and validated tools (e.g., NIDA Quick Screen, ASSIST), with urine testing reserved for higher-risk patients. Always obtain informed consent, interpret results as one piece of information, and screen non-judgmentally. For youth and young adults, use age-appropriate tools like CRAFT or Screening to Brief Intervention, and address substances including opioids, cannabis, nicotine/vaping, and illicit drugs, with referrals for cessation or related health concerns as needed.

Q: When might universal urine drug testing be appropriate?
A: Universal urine toxicology may be appropriate for high-risk patients—those on long-term opioids, with suspected substance use disorder, acutely intoxicated, or in populations with high substance use. Screening plus counseling and referral can help these patients achieve postoperative outcomes similar to non-substance users.

Q: What types of urine drug tests exist, and what should be considered?
A: There are three main types of urine drug testing. Immunoassays are quick and inexpensive but less specific and prone to false results. GC-MS is highly sensitive and specific for confirmation but costly and time-consuming. LC-MS confirms multiple substances at once and is less expensive than GC-MS.

Q: How should testing be approached with patients?
A: Urine drug testing should be a tool to support care, not a judgment. Always obtain informed consent, explain that results are one piece of information, and avoid making clinical decisions solely based on testing. The conversation should be neutral and non-stigmatizing.

Quick Takeaways

- Missed assessment increases post-op risks and opioid needs.
- Routine testing is rarely needed; targeted discussion often works best.
- Use validated screening tools and adapt to patient populations.
- Universal testing can be appropriate for high-risk groups, with follow-up counseling.
- Test types vary in speed, cost, and accuracy; interpret carefully.
- Communicate results openly and non-judgmentally to ensure patient-centered care.

This episode reinforces the importance of targeted, patient-centered preoperative substance use assessment, emphasizing validated screening, appropriate urine testing, careful interpretation, and non-judgmental communication.

Resources

Provider Resources:

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