UNC SON ECHO ABC for MOUD

Addiction and Behavioral Clinic for Medication for Opioid Use Disorder Treatment

A SECOND LOOK AT TOXICOLOGY TESTING IN THE OUTPATIENT SETTING

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Disclosures

None

Objectives:

- Discuss types of toxicology testing modalities
- Discuss role of toxicology results in clinical decision making
- Discuss challenges with toxicology tests

What does a toxicology test tell you?

Toxicology tests measure if a **particular medication or substance** is in the patient's **sample** (urine, blood, saliva, etc.) at a specific **point in time.**

Toxicology tests **CANNOT**:

- Prove that a substance *hasn't* been taken
- Identify every substance that may have been recently taken
- Detect if the patient is intoxicated
- Rule out or diagnosis a Substance Use Disorder

Types of samples used for toxicology screening

- Urine
- Blood
- Sweat
- Oral fluid
- Hair

Each sample type has it's own limitations and benefits; consult with a clinical pathologist or toxicologist to determine the best testing for your needs

Two general categories of toxicology testing

	"Point of Care" or "Presumptive" testing	"Confirmatory" or "Definitive" testing
Timing of collection	Performed in clinic at time of visit	Performed by outside lab after patient visit
Timing of results	Results available at time of patient visit	Results available 2-10 days after patient visit
Specimen	Sample collected in clinic	Sample may be collected in clinic or at lab site
Results	Positive or negative results, no quantities	Results can be reported as quantities
Accuracy	Some substance or drugs can cross-react leading to "false pos" and "false neg"	Very rare false positives or false negatives
Cost	$	$$$

Windows of detection

- Depends on substance, type of specimen (urine, blood, hair, etc.),
- Urine
  - Heroin: 1-2 days
  - Fentanyl: 2-4 days ***metabolite may be present for much longer
  - Cocaine: 2-4 days (low use), 10-22 days (heavy use)
  - Marijuana:1-3 days (low use), up to 30 days (heavy use)
  - Benzodiazepines: 1-3 days (short acting), up to 6 weeks (long acting)
  - Methamphetamines: 1-2 days

Test interpretation

- *Consistent* results
  - The test is positive for a medication or substance that the patient confirms taking
    - ✓Further testing for that drug not indicated
- *Inconsistent* results
  - The test is negative for medication or substance(s) that the patient has taken recently (within window of detection)
  - The test is positive for a medication or substance(s) that the patient denies taking recently
    - ✓Further testing indicated (if urine, send out same sample)

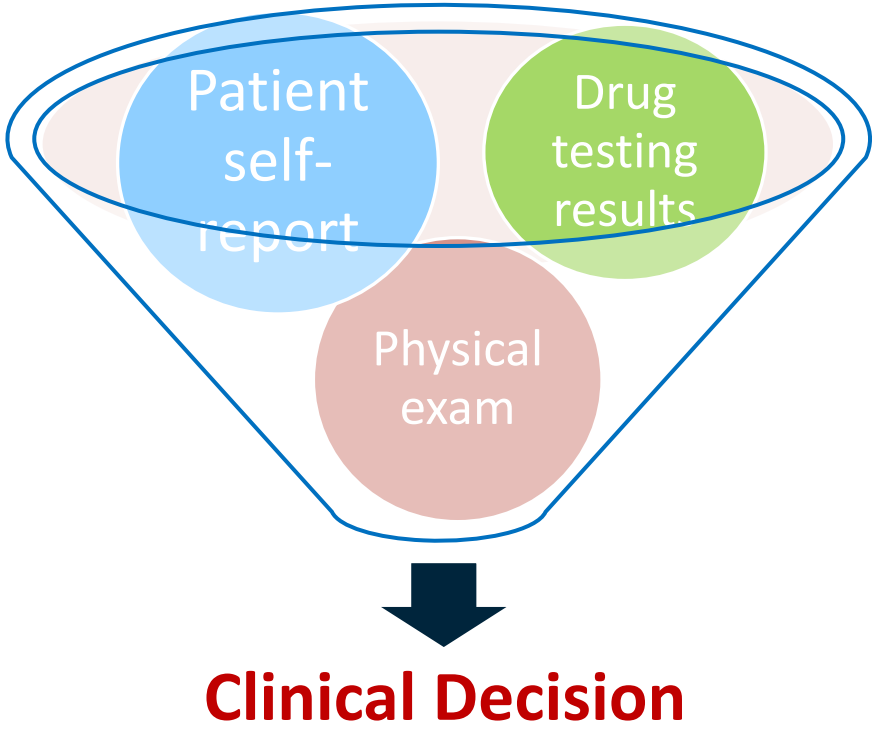
POC (presumptive) test challenges

- Lots of substances trigger a “false positive” for Methamphetamines or amphetamines
  - Over the counter sold/allergy or heartburn meds
  - Some antidepressants (Prozac, Wellbutrin)
- Some benzodiazepines may not be detected unless they are at high levels
  - Clonazepam (Klonopin), Lorazepam (Ativan)
- Some opioids will not be detected with a general opioid (morphine screen), they require specific tests
  - Buprenorphine, Methadone, Oxycodone, Fentanyl

Responding to results

- Tests provide information to guide treatment
  - Results are consistent (expected) or (inconsistent)unexpected with the rest of the clinical picture
  - Avoid stigmatizing language
    - Testing is not performed to “catch” the patient.
    - Do not refer to results as pass/fail or clean/dirty.
- Understand that patients may have a lot of anxiety about their potential test results and may not feel comfortable talking about their recent drug use.
- Consistent compassionate, nonjudgmental and health-oriented approach will help to develop therapeutic alliance with the patient over time.

Test results are just one component of clinical decision making



Toxicology testing in different contexts

Context	Question
	Is the individual violating their parole? Did the individual drive while intoxicated?
	Was the employee intoxicated? Is the employer financially responsible for the worker's injury?
	Has the patient recently used these *specific* substances (drugs or medications)? Which clinical approach is most likely to help the patient?

Inequity in toxicology testing

- Studies have demonstrated racial inequity in toxicology screening across different sectors of the population:
  - Older cancer patients (Enzinger et al, 2023)
  - Children and adolescents (Herrera et al 2024)
  - Pregnant people (Jarlenski et al, 2023, Olaniyan et al, 2023)

Toxicology screening for pregnant and parenting individuals

- Can lead to pregnancy criminalization
- Can lead to reports to child protective services and subsequent family separation
- Informed consent is often overlooked
- For pregnant and parenting people we know that having a substance use disorder is only one of many other factors in determining child safety

Considerations

- Changes in treatment structure and access during the COVID pandemic has led to new discussions about the utility of toxicology tests
- There is no consensus about how to act on results
- Toxicology tests are not a substitute for verbal, interactive questioning and screening of patients about their substance use.

Strategies

- Create a clear policy that is routinely reviewed to ensure that the policy is being applied consistently and appropriately
- Ensure policies that delineate criteria for testing do not directly or indirectly target marginalized populations
- Be aware of the sensitivity and specificity of the tests used at your facility
- Be familiar with the current laws and regulations for your county and state
- Remember that EVERY patient must be able to give informed consent
- Every patient has a right to withhold consent and coercive language should not be used