Using UDS to Monitor Opioid Therapy for Complex Chronic Non-Cancer Pain

The purpose of drug testing is to identify aberrant behavior, undisclosed drug use and/or abuse, and to verify compliance with treatment. If a decision has been made to prescribe opioids for chronic non-cancer pain, the prescriber should get a baseline UDS prior to prescribing and periodically thereafter. The frequency of such testing can be determined by risk stratification based upon screening tools already mentioned in this document (page 11) and Appendix A). Risk determination may change over time as you get to know the patient better, so clinical judgment is critical in determining an appropriate testing schedule. Often explaining the need for routine UDS can lead to a beneficial discussion between provider and patient concerning risky concomitant substance use.

Prior to drug testing, the prescriber should inform the patient of the reason for testing, frequency of testing and consequences of unexpected results. This gives the patient an opportunity to disclose drug use and allows the prescriber to modify the drug screen for the individual circumstances and more accurately interpret the results.

Q Drug screening implies that I don’t trust my patients. How do I get around this?
A A self-report of drug use has limited validity, and monitoring behavior alone can fail to detect problems revealed by UDSs. Creating a UDS policy in advance and applying it consistently to all patients on opioids may help de-stigmatize the testing. Inform patients that drug testing is a routine procedure for all patients starting or maintained on opioid therapy and it is an important tool for monitoring the safety of opioid therapy.

Possible language for explaining to patient includes:

› “Ensures my capacity to provide treatment for your pain while balancing the need for safety.”
› “Provides critical information needed to assess the success of your therapy.”
› “Prescription medications are a common form of treatment for chronic pain. However, each person reacts differently to them. UDS enables us to identify individual risks related to your medications and avoid problems.”
› “Our clinic uses ‘universal precautions’ in opioid prescribing, which includes UDS. This is the same as wearing gloves on all patients when drawing blood.”

Q Can I tell whether my patient has taken the dose of opioid(s) I prescribed?
A No. It is very difficult to correlate urine drug concentration with a patient’s dose. UDS can detect the parent drug and/or its metabolite(s) and demonstrate recent use of prescribed drugs and illegal substances. However, it cannot determine the amount of drug used and when the last dose was taken, nor can it identify the source of the drug.

Q My patient says he is a “high metabolizer” and that is why the expected drug is not found in the urine. Is this possible?
A A small percentage of persons are ultrarapid metabolizers. They metabolize specific drugs more rapidly than typical patients. It would be rare to take an opioid as prescribed and have a totally negative UDS. It is important that you use testing that is specific to the medication of interest and with cutoff thresholds that are extremely low.

Q How do I deal with marijuana?
A This is a complex issue. Marijuana is currently classified as a Schedule I drug by the DEA. For that reason, many providers will not prescribe opioids to patients using cannabis. Other providers reference State "Medical Marijuana" laws (http://apps.leg.wa.gov/RCW/default.aspx?cite=69.51A&full=true) and feel comfortable prescribing opioids to cannabis users. Some providers adopt a “don’t ask, don’t tell” policy, and request the lab to remove marijuana from the UDS so that positive results are not seen. Do your homework and create an office policy. Then disclose this policy to your patients.
Q: Would short-acting opioids show up in UDS?
A: Urine testing typically has a 1- to 3-day window of detection for most drugs depending on dose and individual differences in drug metabolism. Short-acting opioids can be detected if the lab removes the cutoff concentration so that the presence of lower concentrations is detected. If the laboratory uses LC/MS/MS, then it will have a lower limit of detection (LOD) with less interference.

Q: Why confirm results?
A: Immunoassays used in drug screening can cross-react with other drugs and vary in sensitivity and specificity. Thus, confirmation with a more accurate method may be required for clinical decision making. Confirmatory drug testing (GC/MS or LC/MS/MS) of the original specimen is recommended for unexpected results, or in cases where patients are known to be high risk. However, on occasion, even confirmatory testing requires expert assistance for interpretation. Consider consultation with the lab before discussing/confronting the patient with unexpected test results and discontinuing opioid therapy.

Q: Should I use temperature and adulteration strips?
A: It depends. Drug testing for clinical compliance, unlike employment testing, does not require a strict "chain-of-custody." However, if tampering is a concern, the specimen should be monitored for temperature and/or adulterants. Normal human urine should have a temperature between 90°F–100°F, pH between 4.5–8.5 and creatinine >20 mg/dL. Be aware that there are multiple websites and devices devoted to getting a “clean” urine drug screen.

Q: Should I perform a drug screen on every visit for patients using opioids for chronic pain?
A: No. Random screening based on the frequency recommended in the guideline should suffice for most patients. Those patients who you feel require drug screening on every visit, are perhaps not candidates for chronic opioid therapy.

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>UDS Frequency</th>
<th>Recommended Drug Panel to Test</th>
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</thead>
<tbody>
<tr>
<td>LOW RISK by ORT (1 or more/year)</td>
<td>Periodic (e.g. up to 1/year)</td>
<td>Drug you are prescribing if not listed Amphetamines Opiates Cocaine Benzodiazepines Alcohol Barbiturates Oxycodone Methadone Fentanyl Marijuana</td>
</tr>
<tr>
<td>MODERATE RISK by ORT (2 or more/year)</td>
<td>Regular (e.g. up to 2/year)</td>
<td></td>
</tr>
<tr>
<td>HIGH RISK by ORT (3 or more/year) or opioid doses &gt;120 mg MED/d</td>
<td>Frequent (e.g. up to 2+/year)</td>
<td></td>
</tr>
<tr>
<td>Aberrant Behavior (lost prescriptions, multiple requests for early refills, opioids from multiple providers, unauthorized dose escalation, apparent intoxication, etc.)</td>
<td>At time of visit (Address aberrant behaviors in person, not by telephone)</td>
<td></td>
</tr>
</tbody>
</table>

Testing for all drug classes may not be necessary, depending on clinical situation.
Consideration

Typically, the initial (screening) drug test uses an immunoassay method to identify the presence of a drug (presumptive positive). Because of cross reactivity and different sensitivity and specificity between immunoassays, a second confirmatory test is required unless result is expected or the patient has disclosed drug use. Confirmatory drug tests use gas chromatography/mass spectrometry or liquid chromatography/ tandem mass spectrometry (GC/MS or LC/MS) to verify a presumptive positive result.

Contact the laboratory director, toxicologist or a certified Medical Review Officer (MRO) in your area for questions about drug testing or result.

If a point of care (POC) test is used, contact technical support from the manufacturer for questions.

UDS Results

Interpreting UDS results can be challenging, especially when the parent drug can be metabolized to other commonly prescribed drugs. The table in Appendix H may aid prescribers when interpreting UDS results. The following UDS results should be viewed as a “red flag,” requiring confirmation and intervention:

› Negative for opioid(s) you prescribed
› Positive for drug (benzodiazepines, opioids, etc) you did NOT prescribe or have knowledge of
› Positive for amphetamine or methamphetamine
› Positive for alcohol
› Positive for cocaine or metabolites

If a confirmatory drug test substantiates a “red flag” result AND is positive for prescribed opioid(s):

› Prescriber should consider a controlled taper and a referral to an addiction specialist or drug treatment program depending on the circumstances.
› Prescriber should consider extraneous circumstance such as duration of action of the drug and timing of last dose. Consultation with your laboratory’s pharmacologist may be useful. Discontinue prescribing opioid(s) and consider a referral to an addiction specialist or drug treatment program depending on the circumstances.

References


UDS FAQs and other tools are available online at www.oregonpainguidance.org/clinical-tools.