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Drug Testing (e.g. Pain Management and Substance Use Disorder Monitoring) and Screening

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Related Policies (if applicable)
None

Disclaimer

Carefully check state regulations and/or the member contract.

Each benefit plan, summary plan description or contract defines which services are covered, which services are excluded, and which services are subject to dollar caps or other limitations, conditions or exclusions. Members and their providers have the responsibility for consulting the member's benefit plan, summary plan description or contract to determine if there are any exclusions or other benefit limitations applicable to this service or supply. **If there is a discrepancy between a Medical Policy and a member's benefit plan, summary plan description or contract, the benefit plan, summary plan description or contract will govern.**

Coverage

Documentation Requirements:

- Drugs or drug classes for which screening is performed should only reflect those likely to be present based on the patient’s medical history or current clinical presentation, and without duplication. Each drug or drug class being tested for, must be indicated by the referring clinician in a written order and so reflected in the patient’s medical record. Additionally, the clinician’s documentation must be patient specific and accurately reflect the need for each test.
- Urine, blood, exhaled breath, oral fluid, sweat, and hair are matrices used in drug testing. Urine is the preferred matrix but all matrices have advantages and disadvantages with respect to sensitivity and specificity over different time windows, time to obtain results, different susceptibility to sample tampering and ease of collection. Matrices other than urine may also be medically necessary when urine cannot be collected (e.g., patients on dialysis or with shy bladder) or when a sample collection technique is too invasive.

Documentation with justification of matrix other than urine must be included in the medical record.

Qualitative (presumptive) (i.e., immunoassay to evaluate, indicates the drug is present) drug testing that is utilized for outpatient pain management monitoring **may be considered medically necessary** for:

- *Baseline screening/induction phase* before initiating treatment or at the time treatment is initiated, when the following conditions are met:
 - An adequate clinical assessment of patient history and risk of substance use disorder is performed;
 - Clinicians have knowledge of test interpretation;
 - There is a plan in place regarding how to use test findings clinically.
- *Subsequent monitoring phase* of treatment at a frequency appropriate for the risk-level of the individual patient. (This type of monitoring is done to identify those patients who are non-compliant or abusing prescription drugs or illicit drugs.)

Qualitative (presumptive) (i.e., immunoassay to evaluate, indicates the drug is present) drug testing that is utilized for outpatient substance use disorder treatment, laboratory, in-office or point-of-care **may be considered medically necessary** for:

- *Baseline screening/induction phase* before initiating treatment or at the time treatment is initiated, when the following conditions are met:
 - An adequate clinical assessment of patient history and risk of substance use disorder is performed;
 - Clinicians have knowledge of test interpretation;
 - There is a plan in place regarding how to use test findings clinically.
- *Stabilization and Maintenance phase*:
 - Using an appropriate test, matrix and frequency of testing for the risk level of the individual and the substance being used;
 - Documentation in the medical record explains the following:
 - a. Rationale for the specific test(s) ordered,
 - b. Patient's history of substance use,
 - c. How drug testing results will guide medical decision-making.

NOTE 1: In general, qualitative (presumptive) drug testing should not require more than 15 tests within a 12-month period. Additional testing would require clinical justification of medical necessity.

Quantitative (definitive) (i.e., gas chromatography-mass spectrometry [GC-MS] as confirmatory, indicates the amount of drug is present) drug testing that is utilized for outpatient pain management or substance use disorder monitoring, **may be considered medically necessary** under the following circumstances:

- When immunoassays for the relevant drug(s) are not commercially available.

- In specific situations when quantitative (definitive) drug levels are required for clinical decision making the following qualitative (presumptive) urine drug screen results **must be present and documented**:
 - Positive for a prescription drug that is not prescribed to the patient; **or**
 - Negative for a prescription drug that is prescribed to the patient; **or**
 - Positive for an illicit drug.

NOTE 2: In general, quantitative (definitive) drug testing should not require more than 12 tests within a 12-month period. Additional testing would require clinical justification of medical necessity.

NOTE 3: Quantitative (definitive) testing is not appropriate for every specimen and should not be done routinely. This type of test should be performed in a setting of unexpected results and not on all specimens. The rationale for each quantitative (definitive) test must be supported by the ordering clinician's documentation. The record must show that an inconsistent positive finding was noted on the qualitative (presumptive) testing or that there was not an available qualitative (presumptive) test to evaluate the presence of semi-synthetic or synthetic opioid in a patient.

NOTE 4: Simultaneous blood and urine drug screening or testing is not appropriate and should not be done.

NOTE 5: Risk stratification is discussed in the Description section of this medical policy.

Drug testing for pain management or substance use disorder monitoring, **is considered not medically necessary** when the above criteria are not met, including but not limited to routine **qualitative** (presumptive) **or quantitative** (definitive) drug testing (see the **NOTEs** above and the coverage statements below for routine screenings, standing orders, and validity testing).

Routine screenings, including quantitative (definitive) panels, performed as part of a clinician's protocol for treatment, without documented individual patient assessment, **are considered not medically necessary**.

Standing orders are those routine orders given to a population of patients and may result in testing that is not individualized, not used in the management of the patient's specific medical condition and **are considered not medically necessary**.

Validity testing includes pH, specific gravity, nitrates, chromates, and creatinine which are performed on the same specimen that is being drug tested. Validity testing is an internal process to affirm that the reported results are accurate and valid and **is considered not medically necessary** as a separate evaluation.

NOTE 6: Validity testing with abnormal results invalidates the sample and should not be submitted for testing reimbursement.

NOTE 7: “Insufficient sample for testing” means no testing should be submitted for reimbursement.

Drug testing in the following settings **may be considered medically necessary:**

- Emergency rooms,
- Ambulatory surgery,
- Inpatient Services,
- An abrupt change in mental status (to rule out substance intoxication or delirium),
- Drug or alcohol exposure during pregnancy,
- To rule out a fetal withdrawal syndrome by testing the mother for drug use.

Policy Guidelines

Drug class testing may be done on any type of specimen, such as urine, blood, oral fluid, meconium, hair. The purpose of the testing can be qualitative, semi-quantitative, or quantitative. More than one test and/or more than one specimen may be tested. Not all procedure codes listed on this medical policy specify in the procedure code the type of specimen.

Description

Patients in pain management programs and substance use disorder treatment may misuse prescribed opioids and/or may use non-prescribed drugs. Thus, these patients are often assessed before treatment and monitored while they are receiving treatment. Drug Testing can be part of this monitoring strategy; it is most often used as part of a multifaceted intervention that includes other components such as patient benefit contracts.

Background

Pain Management

According to a 2012 evidence assessment by the American Society of Interventional Pain Physicians (ASIPP), approximately one-third of chronic pain patients do not use opioids as prescribed or may abuse them. (1) In 2016, the International Narcotics Control Board (INCB) reported that between 1999 and 2010, the number of deaths related to the use of prescription opioid painkillers increased 5-fold among U.S. women and increased by a factor of 3.6 among U.S. men. (2) Additionally, studies have found that a substantial proportion of chronic pain patients inaccurately report nonadherence to prescribed medications and use of illicit drugs. (3)

Substance Use Disorder

Substance use, abuse, and addiction involving numerous prescription and illicit drugs are also a serious social and medical problem. Addiction is a primary, chronic disease of brain reward, motivation, memory, and related circuitry and is manifested by the individual pathologic pursuit of reward and/or relief by substance use and other behaviors.

The U.S. Drug Enforcement Administration (DEA) classifies drugs, substances, and chemicals into 5 distinct categories or schedules depending on the drug's acceptable medical use and the drug's abuse or dependency potential. (4) The following schedule listing defines those substances or drugs included in each level:

- Schedule I – Drugs with no currently accepted medical use and a high potential for abuse. Examples include: heroin, lysergic acid diethylamide (LSD), marijuana (cannabis), 3, 4-methylenedioxymethamphetamine (ecstasy), methaqualone, and peyote.
- Schedule II – Drugs with high potential for abuse, with use potentially leading to severe psychological or physical dependence. Examples include: combination products with less than 15 mg of hydrocodone per dosage unit (Vicodin), cocaine, methamphetamine, methadone, hydromorphone (Dilaudid) meperidine (Demerol), oxycodone (OxyContin), fentanyl, Dexedrine, Adderall, and Ritalin.
- Schedule III – Drugs with a moderate to low potential for physical and psychological dependence; abuse potential is less than Schedule I and Schedule II drugs but more than Schedule IV. Examples include: Products containing less than 90 mg of codeine per dosage unit (Tylenol with codeine), ketamine, anabolic steroids, and testosterone.
- Schedule IV – Drugs with a low potential for abuse and low risk of dependence. Examples include: Xanax, Soma, Darvon, Darvocet, Valium, Ativan, Talwin, Ambien, and Tramadol.
- Schedule V – Drugs with lower potential for abuse than Schedule IV and consist of preparations containing limited quantities of certain narcotics; used for antidiarrheal, antitussive, and analgesic purposes. Examples include: Cough preparations with less than 200 mg of codeine or per 100 mL (Robitussin AC), Lomotil, Motofen, Lyrica, and Parepectolin.

Monitoring Strategies

Various strategies are available to monitor pain management and substance use disorder treatment in patients, and multicomponent interventions are often used. Many settings require patients to sign a contract before they are given a prescription for opioids. The contracts generally involve obtaining patients' agreement on behaviors they will engage in during the treatment period (e.g., taking medication as prescribed) and not engage in (e.g., selling prescribed medication and/or obtaining additional prescriptions from other physicians).

Confirming whether patients follow these behavioral guidelines can be a challenge. Risk-assessment screening instruments, such as the Screener and Opioid Assessment for Patients with Pain (SOAPP), (5) and the 5-item Opioid Risk Tool (ORT), (6) can aid in the assessment of patients' risk for inappropriate drug use. In addition, the presence of "aberrant behaviors" can be used as a marker for patients who are at high risk for deviating from treatment protocols. Aberrant behaviors include multiple lost prescriptions, obtaining prescriptions from other practitioners, and displaying evidence of acute intoxication during office visits.

Risk stratification assists the clinician (healthcare provider) to determine the individualized treatment strategy for the individual patient. To assess the addiction liability, the clinician triages or screens the patient into 1 of the 3 different categories (low-, medium-, and high-risk)

(7):

- Low-risk patients with chronic non-cancer pain have no history of substance abuse and lack any major psychiatric co-morbidity. There are no indications of aberrant behaviors in such patients, or any warning signs that they may abuse medications.
- Medium-risk patients may have a prior history of substance abuse or may have psychiatric co-morbidity.
- High-risk patients are those with active addictive disorders. These individuals are at an increased risk for aberrant behaviors.

Aberrant behavior is defined by one or more of the following:

- Multiple lost prescriptions,
- Multiple requests for early refill,
- Obtained opioids from multiple providers,
- Unauthorized dose escalation,
- Apparent display of intoxication during office visits.

Testing Matrices

Another strategy for monitoring patients is testing of biologic specimens for the presence or absence of drugs. Currently, urine is the most commonly used biologic substance. Advantages of urine drug testing (UDT) are that it is readily available and standardized techniques for detecting drugs in urine exist. Other biologic specimens (e.g., blood, oral fluids, hair, sweat) can also be tested. All matrices have advantages and disadvantages with respect to sensitivity and specificity over different time windows, time to obtain results, different susceptibility to sample tampering and ease of collection.

Matrices other than urine may also be appropriate when urine cannot be collected (e.g., patients on dialysis or with shy bladder) or when a sample collection technique is too invasive. Justification of matrix other than urine should be included in the medical record.

Appropriate frequency of testing depends on many factors:

- Tests' detection capabilities and windows of detection,
- Patient factors such as severity and chronicity of addiction,
- Substance(s) used,
- Phase of treatment:
 - During the stabilization phase, drug testing may be scheduled more frequently,
 - During the maintenance phase, drug testing may be scheduled less frequently.

Table 1 displays the interpretation of the unexpected results of UDTs. It was adapted from one developed by the Canadian National Opioid Use Guideline Group that was cited by ASIPP in their guideline on prescribing opioids for chronic non-cancer pain (1, 9):

Table 1. Interpretation of and Possible Action for Unexpected Results of UDTs (1, 9)

Unexpected Result	Possible Explanations	Possible Actions for the Provider
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Test is negative for prescribed opioid.	<ul style="list-style-type: none"> • False-negative. • Non-compliance. • Diversion. 	<ul style="list-style-type: none"> • Conduct confirmatory testing, specifying the drug of interest (e.g., oxycodone often missed by immunoassay). • Take a detailed history of the patient’s medication use for the preceding 7 days (e.g., could learn that patient ran out several days before to test). • Ask patients if they’ve given drug to others. • Monitor compliance with pill counts.
Test is positive for non-prescribed opioid or benzodiazepines.	<ul style="list-style-type: none"> • False-positive. • Patient acquired opioids from other sources (double-doctoring, “street”). 	<ul style="list-style-type: none"> • Repeat UDT regularly. • Ask patients if they accessed opioids from other sources. • Assess for opioid misuse/addiction. • Review or revise treatment agreement.
Urine drug screen (UDS) positive for illicit drugs (e.g., cocaine, cannabis).	<ul style="list-style-type: none"> • False-positive. • Patient is occasional user or addicted to the illicit drug. • Cannabis is positive for patients taking certain medications (e.g., dronabinol). 	<ul style="list-style-type: none"> • Repeat UDT regularly. • Assess for abuse/addiction and refer for addiction treatment as appropriate.

UDT: urinary drug testing.

Urine Drug Testing

There are 2 primary categories of UDT: presumptive testing (immunoassay) and confirmatory testing (specific drug identification). Each will be discussed below.

Presumptive (Immunoassay) Testing

Immunoassay testing (also called presumptive testing or qualitative testing or screening) can be performed in a laboratory or at point-of-service. Immunoassay tests are based on the principle of competitive binding and use antibodies to detect a particular drug or drug metabolite in a urine sample. With competitive binding, a fixed amount of a labeled drug is added to the urine sample, and the drug or metabolite in the sample competes with the labeled drug for binding sites on the antibody. The amount of labeled antigen that binds with the antibody is inversely proportional to the amount of the drug or metabolite in the sample.

Immunoassay tests vary in the type of compounds they can detect. Some detect specific drugs and may fail to recognize similarly structured drugs within the same class. Other immunoassays identify only classes of drugs and thus results cannot be used to determine which drug a patient is taking. For example, a positive result to an opiate immunoassay can be due to morphine or hydromorphone. The degree of cross reactivity (i.e., an antibody's reactivity with a compound other than the target of the test) varies widely among immunoassays.

Immunoassay findings are generally reported qualitatively as either positive (drug level above a prespecified threshold) or negative (drug level below a prespecified threshold). Raising or lowering the threshold thus changes the proportion of positive tests. A negative test is interpreted as a level below the threshold and does not necessarily mean that the drug or metabolite is absent.

Immunoassays generally have a rapid turnaround time, to within minutes for on-site tests, and 1 to 4 hours for laboratory-based tests. (8)

Confirmatory (Specific Drug Identification)

Confirmatory tests are always performed in a laboratory. Gas chromatography/mass spectrometry (GC/MS) and liquid-chromatography/mass spectrometry (LC/MS) are considered to be the criterion standard for confirmatory testing. These techniques involve using GC or LC to separate the analytes in a specimen and for MS to identify the specific molecular structures of the drug and its metabolites. The tests are able to quantify the amount of drug or metabolite present in the urine sample. Definitive quantitative tests can be used to confirm the presence of a specific drug identified by a screening test and can identify drugs that cannot be isolated by currently available immunoassays. Results are reported as the specific levels of substances detected in the urine. GC/MS and LC/MS generally require the specification of the drug or drugs to be identified. Alternatively, "broad-spectrum screens" can be conducted. There is a several-day turnaround time for GC/MS and LC/MS testing. (9)

An issue with both types of UDT is the possibility of sample tampering to mask the presence of illegal drugs. A variety of products and techniques are available to patients and can be as simple as drinking a large amount of water to dilute the sample. There are also commercial dilution and cleaning products, additives, and urine substitutes. Some of these techniques can be detected by visual inspection of the sample (e.g., color) or by on-site testing of sample characteristics including urine temperature, creatinine concentration, and specific gravity.

The correct interpretation of UDT results is very important. Knowledge of drug metabolites is essential for accurate interpretation. Accurate interpretation of test results also requires knowledge of the drug manufacturing process. For example, due to manufacturing impurities, a small amount of hydrocodone may be present in urine samples from patients prescribed oxycodone. Thus, it would be acceptable to detect a small amount of hydrocodone if high amounts of oxycodone were also present.

There are various approaches to incorporating UDT into pain management and substance use

disorder treatment settings. Most commonly, patients undergo UDS before beginning treatment to verify current drug use. Some clinicians believe that UDT should be routinely used to establish baseline information about substance use, but the optimal frequency and interval of testing remains uncertain. A universal approach to screening may uncover more inappropriate use and may reduce patients’ sense that testing is being performed due to a lack of trust. However, routine universal screening may place an unnecessary burden on the health care system and on the doctor-patient relationship. An alternative approach is selective testing of patients who are judged to be at increased risk for drug misuse.

Existing protocols vary for the use of presumptive (qualitative) versus definitive (quantitative) tests. Some involve conducting routine confirmation of positive presumptive tests with definitive quantitative testing. Others use selective confirmation of positive presumptive tests, such as when an unexpected immunoassay result is not adequately explained by the patient. There is also a mixed approach, with routine confirmation of presumptive tests only for drugs with poor-performing immunoassays.

Full informed consent is a requirement before UDT. Patients should be informed of the specific drug testing protocol before treatment and should provide written agreement with the plan for monitoring. As stated in a joint U.S. Veterans Affairs (VA)/Department of Defense (DoD) guideline, implementing risk mitigation strategies upon initiation of long-term opioid therapy, starting with an informed consent conversation covering the risks and benefits of opioid therapy as well as alternative therapies is recommended. (10)

Guidance on Definitive (Confirmatory) Testing

Situations for quantitative (definitive) drug testing may include, but are not limited to the following:

- Need to detect a specific substance not adequately identified by presumptive methods.
- Unexpected positive test inadequately explained by the patient (e.g., a positive result on a presumptive test is inconsistent with the history and physical exam).
- Unexpected negative test (suspected medication diversion).
- Need for quantitative levels to compare with established benchmarks for clinical decision making.

Presumptive test availability

There may not be commercially available tests for certain synthetic or semisynthetic opioids. Table 2 describes limitations on availability of presumptive tests. The following information on immunoassay availability and diagnostic capacity is included in American Society of Addiction Medicine (ASAM) 2017 guidelines and Washington State Interagency Guideline (Washington State Agency Medical Directors’ Group [2015]) (11, 12).

Table 2. Limitations in Availability of Presumptive Immunoassays

Drug Type	Potential limitations in availability of or sensitivity of presumptive immunoassays for certain drugs in urine
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Benzodiazepines	<ul style="list-style-type: none"> • Clonazepam and lorazepam are detected with varying sensitivity by different assays. • Therapeutic doses of benzodiazepines are generally not detected.
Semisynthetic Opioids	<ul style="list-style-type: none"> • Oxycodone and oxycodone (a metabolite of oxycodone) are detected in a few but not most standard opiate immunoassays depending on the antibodies used by the manufacturer. • Hydrocodone and hydromorphone (a metabolite of hydrocodone) are also detected in most standard opiate immunoassays.
Synthetic Opiates	<ul style="list-style-type: none"> • Meperidine, methadone, buprenorphine, and fentanyl will not be detected in a standard opiate immunoassay and require their own definitive test for detection.
Natural Opioids	<ul style="list-style-type: none"> • Morphine and codeine (which is metabolized to morphine) are detected by standard immunoassays for opiates but presumptive testing does not distinguish specific drug present. • Heroin is unable to be specifically detected by presumptive tests due to rapid metabolism to 6- MAM (6-Monoacetylmorphine) and subsequently to morphine.

Sources: Based on information included in ASAM 2017 guideline and Washington State interagency guideline (Washington State Agency Medical Directors' Group, 2015)

Oral Fluid Drug Testing

Oral fluid (liquid samples obtained from the oral cavity) can potentially be used to test for drug use. Oral fluid contains secretions from several different sources, including secretions from the 3 pairs of major salivary glands (parotid, sublingual, and submandibular), secretions from the minor salivary glands, oro-naso-pharyngeal secretions, and cellular debris. The mixture of fluids obtained varies depending on the collection method used (e.g., spitting, suctioning, draining, or collection on some type of absorbent material). Drug concentrations can be affected by the collection method and by the use of saliva stimulation methods. Several collection devices are commercially available in the U.S., and they generally involve collection on an absorbent material, such as foam pads; pads are then placed in a container with a stabilizing buffer solution. Drug concentrations may also depend on how the oral fluid is recovered from the collection device (e.g., by centrifugation or by applying pressure). Drug concentrations may not reflect blood levels because of residual amounts of drug (specifically those ingested or smoked) remaining in the oral cavity after recent use.

Analysis techniques must be able to detect drugs present in low concentration and in a small volume of fluid (often <1 mL). Immunoassay techniques are available to detect drugs in oral fluid; they require a small sample volume ($\approx 25 \mu\text{L}$). Immunoassays tend to be relatively sensitive techniques, but they have low specificity. Confirmation analysis is generally performed using MS-based methods. In recent years, advancements have been made in MS analysis techniques, including the development of multianalyte LC-MS methods.

A practical advantage of oral fluid collection compared with urine collection is that samples can be obtained under direct supervision and without loss of privacy. It has been used in situations where urine sampling is impractical, such as testing drivers during traffic stops. Oral fluid sampling also has the potential to be useful in the pain management or substance use disorder treatment settings, particularly when substitution or tampering with urine drug samples is suspected.

Hair Drug Testing

Hair is composed of protein that traps chemicals in the blood at the time the hair develops in the follicle. Hair on the human head grows at approximately 0.5 inch per month. Thus, a 1.5-inch hair sample could be used to detect drug use during the previous 90 days. Potential advantages of hair as a drug testing source include noninvasive collection; ease of collection, storage, and shipping; availability of samples for testing and retesting; and difficulty in tampering. Potential disadvantages include recent drug use (i.e., within past 7 days) cannot be detected; difficulty in detecting very light drug use (e.g., a single episode); and drug levels can be affected by environmental exposure. In addition, variation in hair texture as well as cosmetic hair treatments can affect drug incorporation into hair and the accuracy of drug tests on hair samples. As with other types of samples, hair can be initially tested using immunoassay techniques, with confirmation by MS-based methods. Hair testing has been used in a variety of situations where detection of drug use during the previous several months is desired (e.g., pre-employment screening, post-drug-treatment verification of relapse).

Regulatory Status

The U.S. Food and Drug Administration (FDA) regulates drugs of abuse tests that are sold to consumers or health care professionals in the U.S. The FDA reviews many of these tests before they are sold for use. In its review, the FDA evaluates the design and performance of tests and sample collection systems to help ensure that they produce accurate results. The FDA does not review drugs of abuse tests intended for employment and insurance testing provided they include a statement in their labeling that the device is intended solely for use in employment and insurance testing. The FDA review does not include test systems intended for federal drug testing programs (e.g., programs run by the Substance Abuse and Mental Health Services Administration, the Department of Transportation, and the U.S. military.)

The FDA has cleared assays for urine testing of drugs of abuse as well as oral fluid specimen collection devices and assays for analysis of oral fluid for drugs of abuse through the 510(k) regulatory pathways. Several collection devices are commercially available in the U.S., and they generally involve collection on an absorbent material, such as foam pads; pads are then placed in a container with a stabilizing buffer solution. Immunoassays of urine specimens have previously been cleared by the FDA and are used as the predicates for the oral fluid immunoassays.

Clinical laboratories may develop and validate tests in-house and market them as a laboratory service; laboratory-developed tests must meet the general regulatory standards of the Clinical

Laboratory Improvement Amendments (CLIA). Testing with GC/MS and some immunoassays are performed in laboratory settings. Laboratories that offer laboratory-developed tests must be licensed by the CLIA for high-complexity testing.

In addition to the oral fluid collection devices, the FDA has cleared a number of assays for analysis of oral samples. For example, there are FDA-cleared assays for 9 drugs collected with the Intercept™ device: amphetamines, methamphetamine, cocaine/metabolite, opiates, marijuana/THC, phencyclidine, barbiturates, benzodiazepines, and methadone.

Rationale

This policy was created in December 2014 with a search of the PubMed database and updated with a literature review through September 28, 2022.

Guidelines with evidence reviews of published peer-reviewed scientific literature suggest that evidence of benefit on health outcomes for drug testing for both patients in chronic pain using opioids and patients with substance use disorder is limited and usually confounded with drug testing as part of a multifaceted intervention of risk mitigation or contingency management. There is also no clear evidence in the literature regarding the most effective frequency of testing. (10, 14)

Notwithstanding the lack of evidence and guidelines indicate that drug testing is standard of care. Therefore, a rigorous study comparing drug testing to no drug testing and following patients for health outcomes is unlikely to be performed.

Thus a traditional evidence review will not be performed and relevant national and regional clinical practice guidelines were sought to inform the medical policy.

Practice Guidelines and Position Statements

Pain Management

Nuckols et al. (2014) published a systematic review of guidelines that addressed the management of opioid use for chronic pain. (15) Reviewers included guidelines from national organizations and specialty societies, as well as guidelines from state agencies and specific health systems. Moreover, reviewers identified 9 guidelines with recommendations on urine drug testing (UDT). Recommendations varied widely; 2 recommended mandatory testing for all patients, another recommended testing only patients at increased risk of a medication use disorder, and 2 stated that testing patients at low-risk of abuse is not cost-effective. If UDT is used, the recommended frequency of follow-up testing was at least quarterly in 1 guideline, at least yearly in another, and randomly in 2.

American Academy of Pain Medicine

In 2018, the American Academy of Pain Medicine (AAPM) published consensus recommendations on urine drug monitoring in patients receiving opioid for chronic pain.

(16) The AAPM recommended definitive testing at baseline for patients prescribed opioids for chronic pain unless presumptive testing is required by institutional or payer policy. The AAPM also recommended that the choice of substances to be analyzed should be based on considerations that are specific to each patient and related to illicit drug availability. Baseline risk assessment for aberrant medication-taking behavior, misuse, and opioid use disorder should be conducted using patient history, validated risk assessment tools, prescription drug monitoring program data, previous urine drug monitoring results, and evaluation of behaviors indicative of risk. The recommended frequency of urine drug monitoring was based on risk assessment: At least annually for patients at low risk, 2 or more times per year for those at moderate risk, and 3 or more times per year for those at high risk.

American Society of Interventional Pain Physicians (ASIPP)

In 2017, the ASIPP issued guidelines for responsible, safe, and effective opioid prescribing for chronic non-cancer pain. (17) The guidelines included the following recommendations on UDT (see Table 3).

Table 3. Recommendations on Urine Drug Testing for Chronic Non-Cancer Pain

Recommendation	LOE	SOE
“Comprehensive assessment and documentation is recommended before initiating opioid therapy, with documentation of comprehensive history, general medical condition, psychosocial history, psychiatric status, and substance use history.”	I	Strong
“Screening for opioid abuse is recommended, as it will potentially identify opioid abusers and reduce opioid abuse.”	II-III	Moderate
“Presumptive UDT is implemented at initiation of opioid therapy, along with subsequent use as adherence monitoring, using in-office point of service testing, followed by confirmation with chromatography/mass spectrometry for accuracy in select cases, to identify patients who are not compliant or abusing prescription drugs or illicit drugs. UDT may decrease prescription drugs abuse of illicit drug use when patients are in chronic pain management therapy.”	III	Moderate

LOE: level of evidence; SOE: strength of evidence; UDT: urine drug testing.

Centers for Disease Control and Prevention (CDC)

The CDC (2016) published guidelines on opioids for chronic pain. (18) The guidelines included the following recommendation on UDT: “When prescribing opioids for chronic pain, clinicians should use urine drug testing before starting opioid therapy and consider urine drug testing at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs.”

American College of Occupational and Environmental Medicine (ACOEM)

The latest guidelines from the ACOEM on the use of opioids for the treatment of acute, subacute, chronic, and postoperative pain were published in 2014. (19) The following recommendations on UDT were made for subacute (1-3 months) and chronic pain (>3 months)

(see Table 4).

Table 4. Recommendations on Opioid Use to Treat Acute, Subacute, Chronic, and Postoperative Pain

Recommendation	SOR	CIR
“Baseline and random urine drug screening, qualitative and quantitative, for patients prescribed opioids for the treatment of subacute or chronic pain to evaluate presence or absence of the drug, its metabolites and other substance(s) use. In certain situations, other screenings (e.g., hair particularly for information regarding remote use or blood) (for acute toxicity) may be appropriate.”	C	High

CIR: confidence in recommendation; SOR: strength of recommendation. Recommendations rating schema as: A: strongly recommended; B: moderately recommended; C: recommended.

Urine drug screening was not recommended for acute pain (up to 4 weeks) or for postoperative pain (up to 4 weeks).

As a companion to the guidelines, ACOEM developed a combined Opioid Consent Form and Opioid Treatment Contract. (20) The form provides explanations of the potential benefits and harms to be expected from opioid treatment and asks the patient to agree to numerous terms of opioid use, which include submitting to unscheduled urine, blood, saliva, or hair drug testing at the prescriber’s request and seeing an addiction specialist if requested.

Screening was recommended for all patients at baseline, and then randomly at least twice and up to 4 times a year, and at termination. Screening should also be performed if the provider suspects abuse of prescribed medication.

Department of Veterans Affairs (VA) and Department of Defense (DoD)

In 2022, the Department of Veterans Affairs and Department of Defense updated clinical practice guidelines for managing opioid therapy for the treatment of chronic pain. (10) The recommendations on risk mitigation to prescribed opioids include obtaining a UDT (with patient consent) before initiating opioid therapy, and then randomly at a follow-up to confirm appropriate use. Other strategies recommended include clinical assessment such as random pill counts and use of prescription drug monitoring programs.

The guidelines included the following specific recommendations on UDT as part of risk mitigation:

"We recommend implementing risk mitigation strategies upon initiation of long-term opioid therapy, starting with an informed consent conversation covering the risks and benefits of opioid therapy as well as alternative therapies. The strategies and their frequency should be commensurate with risk factors and include:

- Ongoing, random urine drug testing (including appropriate confirmatory testing)
- Checking state prescription drug monitoring programs
- Monitoring for overdose potential and suicidality

- Providing overdose education
- Prescribing of naloxone rescue and accompanying education".

The guideline states that gaining consent is required prior to a UDT; if a patient declines consent, "providers should factor that declination into their consideration about whether it is safe to continue opioids. Urine drug testing is required if long-term opioids are to be initiated or continued."

Washington State Agency Medical Directors' Group

In 2015, the Washington State Agency Medical Directors' Group updated its interagency guidelines on opioid dosing for chronic non-cancer pain. (12) The guidelines included recommendations on UDT. Recommendations on testing frequency differed depending on the patient risk of opioid addiction and opioid dosage, as listed below:

- Low risk: once per year.
- Moderate risk: twice per year.
- High risk or opioid dose over 120 mg MED/d: 3-4 times per year.
- Aberrant behavior: each visit.

In 2020, the Washington State Agency Medical Directors' Group released a guideline on long-term opioid therapy prescribing. Use of UDT was mentioned as an element of assessment of patients on long-term opioid therapy. (13) No pain management guidelines were identified that had recommendations on oral fluid or hair testing.

Substance Use Disorder Treatment

American Society of Addiction Medicine (ASAM)

The ASAM has published several documents on drug testing: a public policy statement (2010), (21) a white paper (2013), which provided background on the science and current practices of drug testing, (22) and guidelines (2017) on the effective use of drug testing. (11, 14)

The ASAM's public policy statement asserts that: "Urine drug testing is a key diagnostic and therapeutic tool that is useful for patient care and in monitoring of the ongoing status of a person who has been treated for addiction. As such, it is a part of medical care, and should not face undue restrictions." (21) The ASAM recommended drug testing where medically appropriate in clinical diagnostic settings and clinical treatment settings. The term "drug testing" in this document was a broad term that included urine or other body fluids or tissues.

The ASAM White Paper concluded that "The most important challenge in drug testing today is not the identification of every drug that we are technologically capable of detecting, but to do medically necessary and accurate testing for those drugs that are most likely to impact clinical outcomes." (22) The paper acknowledged that more specific guidance on drug testing was needed, which led to the development of the 2017 guidelines, described below.

The ASAM (2017) guidance on appropriate drug testing in clinical addiction medicine advises health care providers that before choosing the type of drug test, they should first identify the

questions they are seeking to answer and be aware of the benefits and limitations of the various drug tests. Table 5 summarizes the characteristics of urine, oral fluid, and hair drug tests that may inform the decision of what type of drug test to use. (11)

The ASAM also published an update in 2020 focusing on the treatment of opioid use disorder. The guideline states that "urine drug testing is a reasonably practical and reliable method to test for adherence to medication and illicit drug use. However, other reliable biological tests for the presence of drugs may be used. The frequency of drug testing should be determined by a number of factors, including the stability of the patient, the type of treatment, and the treatment setting. Drug testing is required a minimum of eight times per year for patients in OTP [opioid treatment programs]" (23)

Table 5. Summary of Drug Testing Characteristics

Characteristics	Urine	Oral Fluid	Hair
General detection period	Hours to days	Minutes to hours	Weeks to months
Point-of-care testing	Yes	Yes	No
Primarily detects	Drug metabolite	Parent drug compound	Parent drug compound
Best use in treatment setting	Intermediate-term detection in ongoing treatment	Short-term detection in ongoing treatment	Long-term monitoring, 3-month history
Ease of collection	Requires restroom	Easily collected	Easily collected
Resistance to tampering	Low	High, with some uncertainty	High when chemically untreated
Retesting same sample	Possible	Difficult	Easy

Adapted from Jarvis et al. (2017). (14)

Summary of Evidence

For individuals who have chronic pain treated with opioids who receive drug testing, there is limited peer-reviewed scientific literature to guide drug testing strategies; however, guidelines indicate that drug testing is standard of care. Guidelines from American Society of Interventional Pain Physicians, and American Academy of Pain Medicine, American College of Occupational and Environmental Medicine, Department of Veterans Affairs and Department of Defense have recommended drug testing and consider the frequency of testing to be at the discretion of the health care provider, based on an assessment of the patient’s risk for misuse or addiction.

For individuals who have a drug addiction who are in substance use disorder treatment who receive drug testing, there is limited peer-reviewed scientific literature to guide drug testing strategies; however, guidelines indicate that drug testing is standard of care. Guidelines from the American Society of Addiction Medicine have recommended drug testing and consider the frequency of testing to be at the discretion of the health care provider, based on an assessment of the patient’s risk and substance(s) used.

Coding

Procedure codes on Medical Policy documents are included **only** as a general reference tool for each policy. **They may not be all-inclusive.**

The presence or absence of procedure, service, supply, or device codes in a Medical Policy document has no relevance for determination of benefit coverage for members or reimbursement for providers. **Only the written coverage position in a Medical Policy should be used for such determinations.**

Benefit coverage determinations based on written Medical Policy coverage positions must include review of the member's benefit contract or Summary Plan Description (SPD) for defined coverage vs. non-coverage, benefit exclusions, and benefit limitations such as dollar or duration caps.

CPT Codes	80156, 80188, 80299, 80305, 80306, 80307, 80320, 80321, 80322, 80323, 80324, 80325, 80326, 80327, 80328, 80329, 80330, 80331, 80332, 80333, 80334, 80335, 80336, 80337, 80338, 80339, 80340, 80341, 80342, 80343, 80344, 80345, 80346, 80347, 80348, 80349, 80350, 80351, 80352, 80353, 80354, 80355, 80356, 80357, 80358, 80359, 80360, 80361, 80362, 80363, 80364, 80365, 80366, 80367, 80368, 80369, 80370, 80371, 80372, 80373, 80374, 80375, 80376, 80377, 82542, 82570, 83992, 84311, 84999, 0007U, 0011U, 0051U, 0054U, 0082U, 0093U, 0116U, 0117U
HCPCS Codes	G0480, G0481, G0482, G0483, G0659

*Current Procedural Terminology (CPT®) ©2023 American Medical Association: Chicago, IL.

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Centers for Medicare and Medicaid Services (CMS)

The information contained in this section is for informational purposes only. HCSC makes no representation as to the accuracy of this information. It is not to be used for claims adjudication for HCSC Plans.

The Centers for Medicare and Medicaid Services (CMS) does not have a national Medicare coverage position. Coverage may be subject to local carrier discretion.

A national coverage position for Medicare may have been developed since this medical policy document was written. See Medicare's National Coverage at <<http://www.cms.hhs.gov>>.

Policy History/Revision

Date	Description of Change
06/15/2024	Reviewed. No changes.
09/15/2023	Document updated with literature review. Coverage unchanged. References 13 and 23 added; others updated.
11/01/2022	Document updated with literature review. The following changes were made to Coverage: Added "NOTE 6: Validity testing with abnormal results invalidates the sample and should not be submitted for testing reimbursement" and "NOTE 7: "Insufficient sample for testing" means no testing should be submitted for reimbursement". References updated.
04/01/2021	Document updated with literature review. Coverage unchanged. Reference 15 added.
08/01/2020	Document updated with literature review. The following changes were made to Coverage: 1) Added the following to Documentation requirements: Urine, blood, exhaled breath, oral fluid, sweat, and hair are matrices used in drug testing. Urine is the preferred matrix but all matrices have advantages and disadvantages with respect to sensitivity and specificity over different time windows, time to obtain results, different susceptibility to sample tampering and ease of collection. Matrices other than urine may also be medically necessary when urine cannot be collected (e.g., patients on dialysis or with shy bladder) or when a sample collection technique is too invasive. Documentation with justification of matrix other than urine must be included in the medical record. 2) Replaced Urine Drug Testing (UDT) with drug testing in the coverage section to include other drug tests (blood, oral fluids, hair, sweat); 3) To the medically necessary for Qualitative (presumptive) drug testing for substance use disorder treatment coverage statement the following was added: laboratory, in-office or point-of-care and

	<p>for Stabilization and Maintenance phase: Using an appropriate test, matrix and frequency of testing for the risk level of the individual and the substance being used. Documentation in the medical record explains the following: a. Rationale for the specific test(s) ordered, b. Patient’s history of substance use, c. How drug testing results will guide medical decision-making. 4) The investigational coverage statement for pain management and substance use disorder treatment, hair drug testing and oral fluid drug testing was removed; and 5) Drug testing in the following settings may be considered medically necessary: Emergency rooms, Ambulatory surgery, Inpatient Services, An abrupt change in mental status (to rule out substance intoxication or delirium), Drug or alcohol exposure during pregnancy, To rule out a fetal withdrawal syndrome by testing the mother for drug use was added. References 11, 12, and 16 were added and some references removed.</p>
04/15/2018	<p>Document updated with literature review. Coverage unchanged; however, “substance abuse treatment” was replaced with “substance use disorder treatment” throughout entire policy. “Urine” and “Abuse” removed from title and exchanged “Including” for “In” in the title; title changed to: Drug Testing In Pain Management and Substance Use Disorder Monitoring. References added: 2, 8-10, 17-19, 21-23, 27, 30, 33; and reference list updated.</p>
04/15/2017	<p>Reviewed. No changes.</p>
12/15/2016	<p>Document update with literature review. The following coverage statement was added: In outpatient pain management and substance abuse treatment, hair drug testing and oral fluid drug testing are considered experimental, investigational and/or unproven. The following was added to the routine screening coverage statement that is considered not medically necessary: “without documented individual patient assessment.” The following NOTES were added: NOTE 1: In general, qualitative urine drug testing should not require more than 15 tests within a 12-month period. Additional testing would require clinical justification of medical necessity; NOTE 2: In general, quantitative urine drug testing should not require more than 12 tests within a 12-month period. Additional testing would require clinical justification of medical necessity; NOTE 4: Simultaneous blood and urine drug screening or testing is not appropriate and should not be done routinely; and NOTE 5: Risk stratification is discussed in the Description section of this medical policy.</p>
11/01/2015	<p>Document updated with literature review. Coverage unchanged.</p>
12/15/2014	<p>New medical document. Urine drug testing, qualitative or quantitative, is considered medically necessary when specific criteria are met, for outpatient pain management or for outpatient substance abuse monitoring. Urine drug testing, qualitative or quantitative, is considered not medically necessary</p>

	when specific criteria are not met, for outpatient pain management or for outpatient substance abuse monitoring.
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