Opioid Safety Guidelines

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Chronic Opioid Therapy (COT) Safety Guideline For Patients with Chronic Non-Cancer Pain

Last guideline approval: August 2014

Guidelines are systematically developed statements to assist patients and providers in choosing appropriate health care for specific clinical conditions. While guidelines are useful aids to assist providers in determining appropriate practices for many patients with specific clinical problems or prevention issues, guidelines are not meant to replace the clinical judgment of the individual provider or establish a standard of care. The recommendations contained in the guidelines may not be appropriate for use in all circumstances. The inclusion of a recommendation in a guideline does not imply coverage. A decision to adopt any particular recommendation must be made by the provider in light of the circumstances presented by the individual patient.

Major Changes as of August 2014

- Monitoring has been simplified so that all components (assessment, drug screening, care plan update) are done at the same frequency, per intensity level:
  - Low-intensity: once per year
  - Moderate-intensity: twice per year
  - High-intensity: at least twice per year
- A standardized risk screening tool—the Opioid Risk Tool (ORT)—has been added for use at initial and follow-up visits. (See pp. 14–15 for ORT and scoring.)
- Numerous SmartPhrases have been condensed into three main ones:
  - **.opioidvisit** now includes prompts for each element of the evaluation.
  - **.opioidproblist** has been shortened.
  - **.opioidcareplan** has been cleaned up, and the infrequently used letter has been removed.
- Guidance on rapid discontinuation of opioids has been added.
- The guideline has been reorganized to improve usability; detailed urine drug screening information is now in an appendix.

Background

Safe and effective chronic opioid therapy (COT) for chronic non-cancer pain requires clinical skills and knowledge in both the principles of opioid prescribing and in the assessment and management of risks associated with aberrant opioid use–related behaviors. By all following these guidelines, we minimize practice variation, which ultimately increases both patient and provider satisfaction. These guidelines are in compliance with the State of Washington regulations on the treatment of patients on chronic opioid therapy (WAC 296-20-03030-03085).

As chronic non-cancer pain is often a complex biopsychosocial condition, clinicians who prescribe chronic opioid therapy should routinely integrate psychotherapeutic interventions, functional restoration, interdisciplinary treatment as needed and available, and other adjunctive non-opioid therapies.

Target population

The recommendations in this guideline apply to patients with chronic non-cancer pain who are either already on COT or are being considered for initiation of COT.

- *Chronic non-cancer pain* is pain in which the causes cannot be removed or otherwise treated and no relief or cure has been found after reasonable efforts (Washington State Department of Health 1996).
- *Chronic opioid therapy* is daily or near-daily doses of opioid medication (American Pain Society-American Academy of Pain Medicine [Chou 2009]).

New FDA indications for COT

FDA labels now state that extended-release and long-acting opioid analgesics are indicated “for the management of pain severe enough to require daily, around-the-clock opioid treatment and for which alternative treatments are inadequate.” The new labels emphasize first considering potentially less-addictive measures. The new wording is designed to make clinicians go beyond the pain-intensity scale to consider what an individual patient needs to “live and function better” (FDA news release, September 10, 2013).

Prescribing

Morphine equivalent dosing (MED)

All conversions between opioids are estimates generally based on "equianalgesic dosing," or ED. Patient variability in response to these EDs can be large, due primarily to genetic factors and incomplete cross-tolerance. Additionally, methadone has unique characteristics that make it difficult to translate dose to MED.

Table 1. Morphine equivalent dosing (MED) for selected opioids [1]

Opioid	Approximate equianalgesic dose (oral and transdermal) [2]
Morphine (reference)	*30 mg*
Codeine	200 mg
Fentanyl transdermal	12.5 mcg/hr
Hydrocodone	30 mg
Hydromorphone	7.5 mg
Methadone	Chronic: 4 mg [3]
Oxycodone	20 mg
Oxymorphone	10 mg
Tramadol	150 mg

[1] Agency Medical Directors Group (AMDG) 2010.

[2] Adapted from VA 2003 and FDA labeling.

[3] Equianalgesic dosing ratios between methadone and other opioids are complex, thus requiring slow, cautious conversion (Ayonrinde 2000).

MED calculator online

An electronic morphine equivalent dose calculator is available on the AMDG web site, at http://agencymeddirectors.wa.gov/mobile.html.

Maximum acetaminophen dosing

Table 2. Maximum acetaminophen doses for acute and long-term use

	Acute use	Long-term use
Well adults		
Maximum single dose	650 mg	1,000 mg
Maximum daily dose	3,000 mg	3,000 mg [1, 2]
Elderly patients and patients with alcohol misuse or liver disease		
Maximum single dose	650 mg	—
Maximum daily dose	1,500 mg	1,000–1,500 mg

[1] Patients on 3,000 mg or more of acetaminophen per day should have liver enzymes monitored every 6–12 months.

[2] While FDA acetaminophen dosing recommendations allow for up to 4 grams per day in patients with normal liver functioning, Group Health COT guidelines do not recommend that patients typically exceed 3 grams per day. Dosing at 4 grams per day confers increased risks of hepatotoxicity, thus providers utilizing doses greater than 3 grams per day should carefully assess patients for benefit and toxicity risks.

Prescribing considerations

- Clinicians involved in treating a patient on COT are expected to clarify—both among themselves and for the patient—which clinician holds primary responsibility for prescribing. Chronic non-cancer pain patients should receive all chronic pain management prescriptions from one physician and one pharmacy whenever possible.
- Before writing a prescription, clinicians are encouraged to:
  - Calculate and document the total morphine equivalent dose; doing this can help assess the magnitude of seemingly small incremental dosage changes over time. See "Morphine equivalent dosing," p. 3.
  - Calculate and document the total acetaminophen dose, including prescribed and over-the-counter, being sure not to exceed the amounts in Table 2 (above).
- When writing prescriptions, provide explicit directions:
  - Order medication in multiples of 7 days and include "to last __ days."
  - Consider setting up refills on Tuesday through Thursday so that they don't fall on a Monday or Friday, when patients and/or providers are more likely to be on vacation.
  - **Providers may prescribe up to 3 months (84 days) of medication for patients who are stable.**
  - Provide specific instructions (e.g., schedule for taking).
- **NEVER** prescribe long-acting medication on an as-needed basis.

Adverse effects of opioids

Serious side effects may include:

- **Slowed breathing that can cause death.** This is more likely for patients who: have sleep apnea or chronic lung disease; are on higher opioid doses; take more medicine than prescribed; or mix opioids with alcohol, other prescription medicines (such as sleep aids, muscle relaxers, and tranquilizers) or street drugs.
- **Physical dependence, tolerance or addiction to opioids**. Patients with *physical dependence* will experience withdrawal if they stop suddenly. Patients with *tolerance* need to take more of the medicine to get the same effect. Patients with *addiction* are not able to control their use of opioids even if they want to, which may result in harmful outcomes.
- **Sedation (sleepiness and sluggishness)** can cloud patients' judgment and slow their reaction time, putting them at increased risk for falls and accidents while driving, using tools, or operating heavy equipment. Driving while on opioids may be considered driving under the influence (DUI).

- **Babies born to mothers taking opioids will be dependent on opioids at birth.** Women who are trying to get pregnant should not take opioids. Women who become pregnant while taking opioids should consult with their physician to make a plan to stop the medication.

Common side effects may include:
- Constipation
- Depression
- Fatigue
- Itching (a side effect and not an allergic reaction)
- Nausea or vomiting
- Decreased sex drive (decreased testosterone)
- Low blood pressure
- Difficulty with urination
- Insomnia
- Increased sensitivity to pain (hyperalgesia)
- Impaired immune system

Management of Patients on COT

Note: **Opioids should be prescribed only after determining that alternative therapies do not deliver adequate pain relief** (CDC 2010).

Components of a COT visit

1. Encounter

> **Epic Tip:** Use the SmartPhrase **.opioidvisit** to include all recommended elements of the initial or follow-up COT visit.

When initiating or monitoring chronic opioid therapy, perform and document the following:

- **Medical screening** for issues that affect opioid risk (e.g., pulmonary, cardiac, renal or hepatic disease; obstructive sleep apnea; pregnancy risk)
- **Patient history and physical exam**
- **Pain and function assessment**

  There are a variety of tools for assessing pain and function. There is no evidence that one is superior to another.

  To determine baseline values (when considering initiation) and to assess patients' ongoing response to COT, Group Health recommends, at a minimum, using the two standard questions below to assess function and pain. The questions are drawn from the Graded Chronic Pain Scale:

  1. In the last month, how much has pain interfered with your daily activities? Use a scale from 0 to 10, where 0 is "no interference" and 10 is "unable to carry on any activities."

     Score interpretation: 1–3 = mild pain-related interference; 4–6 = moderate; 7–10 = severe

  2. In the last month, on average, how would you rate your pain? Use a scale from 0 to 10, where 0 is "no pain" and 10 is "pain as bad as could be." [*That is, your usual pain at times you were in pain.*]

     Score interpretation: 1–4 = mild average pain intensity; 5–6 = moderate; 7–10 = severe

- **Prescription monitoring**

  Check the patient's record in the Washington State Prescription Monitoring Program database. This is a central database that keeps track of schedule II–V medications that patients receive at any pharmacy in the state of Washington. We strongly encourage you to check this database before agreeing (or continuing) the use of chronic opioid therapy for a patient. You can sign up for an account on the website. http://www.wapmp.org

- **Opioid risk assessment** with the Opioid Risk Tool

  There are a number of validated tools for assessing the potential risks associated with COT. While there is no evidence to support using one tool over another, Group Health recommends using the Opioid Risk Tool (ORT) (see Appendix A and B, pp. 14–15). The ORT is recommended by the Washington State Agency Medical Directors' Group, commonly used, and available at no cost.

- **Depression screening** with the PHQ-9 (See the Adult and Adolescent Depression Guideline.)
- **Alcohol use screening** as needed with the AUDIT-C (See the Adult Unhealthy Drinking Screening & Intervention Guideline.)
- **Drug use screening** as needed with the Drug Use Questionnaire for Adults (DAST-10).
- **Urine drug screening**

  Urine drug screening (UDS) provides objective data regarding patients who are managing chronic pain, and can be used to directly improve patient safety. For their safety, it is important that patients take opioids as prescribed, and this test helps assess whether they are doing that. At Group Health, UDS is for medical purposes only. We do not collect samples for use in a court of law or for workplace testing.

  Apart from its use in initiation of COT and in ongoing monitoring, UDS should also be ordered when seeing patients already on COT who are new to the health plan and without records.

  It is strongly recommended that the clinician have a discussion with the patient before the UDS that includes:
  - The purpose for testing
  - What will be screened for
  - What results the patient expects
  - Prescriptions or any other drugs the patient has taken
  - Time and dose of last dose of opioids
  - Actions that may be taken based on the results of the screen
  - Possibility of cost to the patient

  Patients should be notified that the results will become part of their permanent medical record.

  For more detailed information on urine drug screening, see Appendix C (p. 16).

2. Problem List

> **Epic Tip:** Use the SmartPhrase **.opioidproblist** to establish and update the problem list.

3. Care Plan

> **Epic Tip:** Use the SmartPhrase **.opioidcareplan** to include all elements of the treatment plan.

All patients should receive an After Visit Summary that outlines their care plan.

Intensity and frequency of monitoring

The intensity of monitoring is determined by the "patient attributes" in Table 3. Patients should be placed in the highest-intensity group for which they meet at least one of the criteria.

Table 3. Chronic opioid therapy patient groups

Group	Patient attributes
High-intensity monitoring	• Taking more than 120 mg morphine equivalent dose (MED) per day • Taking methadone • Age 25 years or younger • High score (≥ 8) on the ORT • Repeated problems following opioid management treatment plan. Examples include: – Frequent early refill requests – Escalating dose without consultation with physician – Multiple emergency room/urgent care presentations for opioid treatment – Getting opioids from multiple prescribers
Moderate-intensity monitoring	• Taking between 40 mg and 120 mg MED/day • Moderate score (4–7) on the ORT • Occasional early refill request or other relatively minor problem following opioid treatment plan
Low-intensity monitoring	• Taking less than 40 mg MED/day • Low score (0–3) on the ORT • Compliant with medication plan

Table 4. Monitoring frequency by COT patient group
Note: Additional patient contacts (in-person, phone, or secure message), assessments, urine drug screens, or care plan updates may be needed, per the discretion of the prescribing clinician.

Group	**Frequency of visits** (See "Components of a COT visit," p. 5.)
High-intensity monitoring	At least twice a year
Moderate-intensity monitoring	Twice a year
Low-intensity monitoring	Once a year

Tapering and Discontinuation

Presurgical tapering

Tapering opioids is not required before surgery, but avoid escalating the dose before surgery. Set appropriate expectations with patients that their pain management needs will be met following surgery, with the understanding that they will return to their preoperative dose (or less) following surgery.

Clinical indications for tapering opioid therapy

In the following circumstances, it may be necessary to adjust or discontinue opioid therapy:

Table 5. Clinical indications for tapering opioid therapy (See Referral Criteria, p. 10.)

Indication	Taper method
• Medication adverse effects indicate risks are greater than benefit, or • Comorbidities increase risk of complication, or • Morphine equivalent dose exceeds recommended threshold.	10% per week
• Function and pain are not improved, or • Tolerance has developed with long-term opioid prescription, or • Comorbidities increase risk of complication.	10% every 2–4 weeks
• Urine drug screen is consistent with substance abuse concerns, or • Patient's behavior suggests possible misuse or diversion of medication. Such behaviors might include: ○ Selling prescription drugs ○ Forging prescriptions ○ Stealing or borrowing drugs ○ Frequently losing prescriptions ○ Aggressive demand for opioids ○ Injecting oral/topical opioids ○ Unsanctioned use of opioids ○ Unsanctioned dose escalation ○ Concurrent use of illicit drugs ○ Getting opioids from multiple prescribers ○ Recurring emergency department visits for chronic pain management	**Rapid discontinuation:** 15–33% per day over 3–7 days and/or Refer patient for chemical dependency or addiction counseling. (See Referral Criteria.)

Treatment of Withdrawal Symptoms

When opioids are rapidly discontinued (see Table 5, above) or stopped immediately, withdrawal symptoms can occur. The typical time course for symptom development depends on the particular opioid used by the patient.

- Short-acting opioids (e.g., heroin or oxycodone): Withdrawal symptoms begin 8–12 hours after last use and peak 48–72 hours after last use.
- Long-acting opioids (e.g., methadone or buprenorphine): Withdrawal symptoms begin more gradually, with a few symptoms in the first 24–48 hours, a peak in symptoms 3–5 days after last use, and some symptoms continuing for up to a few weeks.

While opioid withdrawal is unpleasant, it is not dangerous to patients. Medications for withdrawal symptoms are listed in Table 6 below.

Table 6. Medications used to treat symptoms during gradual taper

Target symptoms	Medication	Dosing
Hypertension, tremors, sweats, anxiety, restlessness	Clonidine [1]	0.1 mg three times daily as needed for 3 days
Anxiety, restlessness	Hydroxyzine [2] or Diphenhydramine [2]	25 mg every 6 hours as needed
Insomnia	Hydroxyzine [2] or Diphenhydramine [2]	25–50 mg daily at bedtime as needed
Nausea/vomiting	Promethazine [2]	25 mg every 6 hours as needed
	Metoclopramide	10 mg every 6 hours as needed
Dyspepsia	Calcium carbonate	500 mg 1–2 tabs every 8 hours as needed
	Mylanta, Milk of Magnesia	Follow package instructions.
Pain, fever	Acetaminophen (Tylenol)	500 mg every 4 hours (not to exceed 3 g/24 hours)
	Ibuprofen	400 mg every 4 hours as needed
Diarrhea	Loperamide	4 mg initially, then 2 mg every loose stool as needed
	Diphenozyphenolate/Atropine	5 mg/0.05 mg every 6 hours as needed
Muscle spasm	Methocarbamol	1,000 mg every 6 hours as needed

[1] Clonidine is not FDA-approved for this use, although evidence supports use in this setting. Group Health recommends clonidine as the first-line agent, as it is effective in many patients. As a non-opioid treatment option, it is readily available statewide and does not have extra restrictions on prescribing. Monitor blood pressure and pulse. Dosing of clonidine depends on whether patient is acutely withdrawing or gradually being tapered.

[2] These are high-risk medications for the elderly. Please consider alternatives for patients aged 64 and older.

Referral Criteria

Table 7. Referral criteria

Specialty	Service requested	Reason for referral

Physical medicine and rehabilitation/pain specialist	Consult	• **Dose at or above 120 mg MED per day**
		• Management recommendations for patients with neuromusculoskeletal conditions or chronic pain
		• Guidance regarding patients on chronic opioid therapy:
		  - Prior to increasing to high dose
		  - Help with tapering/discontinuing medication

Behavioral health	Counseling Medication management	• Psychiatric illness or symptoms complicating treatment of chronic pain • Psychiatric illness not responding to standard treatment in primary care (e.g., depression, anxiety) • Complicated psychiatric illness for which specialty treatment is indicated (e.g., bipolar disorder, post-traumatic stress disorder, personality disorder) • Possible undiagnosed psychiatric condition complicating treatment
	Chemical dependency treatment	• Urine drug screen positive for alcohol, sedative, cocaine or methamphetamine use • Patient request for help with addiction • Possible suboxone treatment
	Addiction medicine: one-time consult (WWA only)	• Help with tapering/discontinuing medication • Concern about substance use disorder • Difficulty adhering to opioid care plan • Problematic use of medications other than opioids

Evidence Summary and References

Methods and sources

To develop the Chronic Opioid Therapy Safety guideline, Group Health has:

- Considered recommendations from externally developed evidence-based guidelines and/or recommendations of organizations that establish community standards.
- Reviewed additional literature using an evidence-based process, including systematic literature search, critical appraisal, and evidence synthesis.

Externally developed guidelines considered

2013 American Society of interventional Pain Physicians (ASIPP)
2013 Washington State Department of Labor & Industries (L&I)
2013 Institute for Clinical Systems Improvement (ICSI)
2011 American College of Occupational and Environmental Medicine (ACOEM)
2010 Veterans Affairs & Department of Defense (VA/DoD)
2010 Kaiser Permanente (KP)
2010 Agency Medical Directors group (AMDG)
2010 Canadian National Opioid Use Guideline Group (NOUGG)
2009 American Pain Society & American Academy of Pain Medicine (APS/AAPM)

Additional evidence review

The Group Health guideline team reviewed additional evidence in the following areas:

- Urine drug testing
- Indications for long-term opioid use
- Screening tools

Urine drug testing

The literature search did not reveal any randomized controlled trials (RCTs) that examined the effect of urine drug screening on clinical outcomes, on compliance with chronic opioid therapy, or on reducing aberrant drug-related behavior. There were also no published trials that compared random urine testing with routine testing. The published studies on urine drug testing had methodological limitations.

Indications for long-term opioid use

Studies examining the long-term efficacy of opioid therapy were rare. One Cochrane review, completed in 2010, examined the safety and effectiveness of long term opioid management (defined as ≥ 6 months) for chronic non-cancer pain. Data from 26 studies including 4,893 participants were pooled and analyzed. With only one RCT included in analysis and the remainder of studies comprised of case series or uncontrolled trials, the evidence for improvement in quality of life and function was inconclusive and provided only weak evidence to support pain relief in well-selected patients (Nobel 2010).

Screening tools

There are a number of validated tools available for assessing the potential risks associated with COT. The literature search did not reveal any evidence to support using one tool over another. The guideline team selected the Opioid Risk Tool (ORT) based on cost and availability. Utilizing known risk factors associated with abuse and addiction, the ORT was designed to be a brief screening tool to predict which individuals may develop aberrant behaviors when prescribed opioids for chronic pain. The tool was validated in a population of 185 patients and displayed excellent discrimination in predicting opioid abuse–related behaviors: 94% of the patients identified as low-risk did not demonstrate any aberrant behaviors, while 91% of the high-risk patients did demonstrate aberrant behaviors (Webster 2005).

References

Agency Medical Directors' Group. *Interagency Guideline on Opioid Dosing for Chronic Non-cancer Pain.* Washington State Agency Medical Directors' Group: 2010. Available online at http://www.agencymeddirectors.wa.gov/Files/OpioidGdline.pdf. Accessed July 16, 2014.

Ayonrinde OT, Bridge DT. The rediscovery of methadone for cancer pain management. *Med J Aust.* 2000 Nov 20;173(10):538–540.

Centers for Disease Control and Prevention. Adult use of prescription opioid pain medications—Utah, 2008. *MMWR.* 2010 Feb. 19;59(06)153–157. Available online at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5906a1.htm. Accessed July 16, 2014.

Chou R, Fanciullo GJ, Fine PG, et al; American Pain Society-American Academy of Pain Medicine Opioids Guidelines Panel. Clinical guidelines for the use of chronic opioid therapy in chronic noncancer pain. *J Pain.* 2009 Feb;10(2):113–130.

Food and Drug Administration. FDA announces safety labeling changes and postmarket study requirements for extended-release and long-acting opioid analgesics [news release]. Silver Spring, MD: U.S. Food and Drug Administration; September 10, 2013. http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm367726.htm. Accessed July 16, 2014.

Nobel M, Treadwell JR, Tregear SJ, et al. Long-term opioid management for chronic noncancer pain. *Cochrane Database of Systematic Reviews*. 2010, Issue 1. Art. No.: CD006605. DOI:10.1002/14651858.CD006605.pub2.

Washington State Department of Health, Medical Quality Assurance Commission. *Guidelines for the Management of Pain.* 1996.

Webster L, Webster R. Predicting aberrant behaviors in opioid-treated patients: preliminary validation of the opioid risk tool. *Pain Medicine*. 2005 Nov; 6(6):432-442.

Guideline Development Process and Team

Development process

This guideline was adapted from externally developed evidence-based guidelines and organizations that establish the community standards for chronic opioid therapy for chronic non-cancer pain. The Group Health guideline team reviewed additional evidence using an evidence-based process, including systematic literature search, critical appraisal, and evidence synthesis. For details, see Evidence Summary and References.

This edition of the guideline was approved for publication by the Guideline Oversight Group in August 2014.

Team

The following specialties were represented on the development and/or update team: behavioral health, clinical laboratory, family medicine, pharmacy, and physical medicine and rehabilitation.

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Disclosure of conflict of interest

Group Health Cooperative requires that team members participating on a guideline team disclose and resolve all potential conflicts of interest that arise from financial relationships between a guideline team member or guideline team member's spouse or partner and any commercial interests or proprietary entity that provides or produces health care–related products and/or services relevant to the content of the guideline.

Team members listed above have disclosed that their participation on the Chronic Opioid Therapy Safety Guideline team includes no promotion of any commercial products or services, and that they have no relationships with commercial entities to report.

Appendix A. Opioid Risk Tool (ORT)

Date _____

Patient Name _____

OPIOID RISK TOOL

		Mark each box that applies	Item score if female	Item score if male
1. Family History of Substance Abuse	Alcohol	☐	1	3
	Illegal Drugs	☐	2	3
	Prescription Drugs	☐	4	4
2. Personal History of Substance Abuse	Alcohol	☐	3	3
	Illegal Drugs	☐	4	4
	Prescription Drugs	☐	5	5
3. Age (Mark box if 16–45)		☐	1	1
4. History of Preadolescent Sexual Abuse		☐	3	0
5. Psychological Disease	Attention Deficit Disorder, Obsessive Compulsive Disorder, Bipolar, Schizophrenia	☐	2	2
	Depression	☐	1	1
		TOTAL	_____	_____

Reference: Webster LR. Predicting aberrant behaviors in opioid-treated patients: Preliminary validation of the opioid risk tool. *Pain Medicine.* 2005;6(6):432-442. Used with permission.

Appendix B. Opioid Risk Tool (ORT) Scoring

Total Score Risk Category

Low Risk 0–3

Moderate Risk 4–7

High Risk ≥ 8

Appendix C. Urine Drug Screening

Specimen collection and integrity
To reduce the risk of adulteration, all specimens must be collected in the provider's office or the laboratory. Group Health does not test specifically for adulteration but will reject samples with strange odors.

Dilute urines
Dilute urine is defined as a creatinine less than 20 mg/dL. A dilute sample could lead to a false negative result on a drug screen. Known causes of dilute samples include the following: diuretics, excessive water intake prior to the test, diabetes insipidus, anemia, muscle wastage of any kind, leukemia, or a vegetarian diet. Diabetes has a characteristic clinical presentation with hypertension and electrolyte abnormalities. In a patient with a history of normal labs, this result would be unexpected and evaluated as such.

Table C1. Urine drug screens for routine management – Western Washington

There are two drug screens available to order in Epic. The **Opioid Management UDS** is recommended for routine management of this patient population. (For drug abuse/urgent needs **only,** see Table C.)

Epic order code:	**GHL4252** **Opioid Management UDS** Only available on a routine basis. Not available as STAT.
Recommended for:	**Patients on chronic opioid therapy**
Additional information:	This panel automatically orders a test for opiates at a lower therapeutic level with reported metabolites for *all* orders. In addition, it screens for methadone and other drugs, with a confirmation test at an outside reference lab for all positives, except THC and TCA. • THC confirmation must be ordered in addition to opioid management UDS. • TCA cannot be confirmed on urine specimen. Provider must follow up with *serum* TCA confirmatory test.
Initial opiate screen:	300 ng/mL *All* are automatically sent to an outside lab for testing at the lower therapeutic level.
Initial oxycodone screen:	100 ng/mL *All* are automatically sent to an outside lab for testing at the lower therapeutic level.
Reflex test cut-off for opiates:	20 ng/mL Sent to outside reference lab.
Reflex test cut-off for oxycodone:	20 ng/mL Sent to outside reference lab.
Screen includes:	• Amphetamine • Methamphetamine • MDMA • Cocaine • Opioids • Barbiturates • Benzodiazepines • Methadone • THC (marijuana) • PCP • TCA
Turnaround time:	3 days (to allow for outside testing)

Table continues

Table C1. Urine drug screens for routine management – Western Washington, *continued*	
Additional available lab tests	
Fentanyl & metabolite (norfentanyl) with confirmation	Epic order code: **GHL4602** Available as routine. Sent to outside reference lab.
Urine alcohol	Epic order code: **80101.010** Available as routine at AMB lab.
Methylphenidate (urine)	Epic order code: **82491.011** Available as routine, sent to outside reference lab
Tramadol and metabolites (urine)	Epic order code **84999.113** Available as routine, sent to outside reference lab
THC confirmation Does not reflex from screen	Epic order code **84999.113** Available as routine, sent to outside reference lab
Buprenorphine with confirmation & metabolites. Includes: • Buprenorphine • Norbuprenorphine • Buprenorphine glucuronide	Epic order code: **GHL3826** Available as routine. Sent to outside reference lab.

Table C2. Urine drug screens for routine management – Eastern Washington		
There are four PAML drug screens (Pain Management 7, 10, 13, 17) available to order in Epic. The PAML **Pain Management 10 Panel** is recommended for routine management of this patient population.		
Epic order code:	**80101.Z183** **Pain Management 10 Panel** Only available on a routine basis. Not available as STAT.	
Recommended for:	**Patients on chronic opioid therapy**	
Additional information:	This panel automatically confirms positive screen results without additional charges.	
Reflex test cut-off for opioids:	20 ng/mL	
Screen includes:	• Alcohol • Amphetamine • Methamphetamine • THC (marijuana) • Cocaine • Opioids	• Propoxyphene • Barbiturates • Benzodiazepines • Methadone • PCP
Turnaround time:	2 days	
Additional available lab screens		
Fentanyl & metabolite (norfentanyl) with confirmation	Epic order code: **83925.Z26** Available as routine.	
MDMA	Epic order code: **80100.Z55** Available as routine.	
TCA (Serum Specimen)	Epic order code: **80299.Z16** Available as routine.	
Buprenorphine with confirmation	Epic order code: **80102.Z89** Available as routine.	

Table C3. Urine drug screens for drug abuse/urgent needs ONLY – Western Washington ***(Not recommended for routine management of COT patients.)***	
Epic order code:	**80100.015** **Drug Abuse UDS** Available routine and STAT at CH, BVU and AMB labs.
Recommended for:	**Drug abuse, urgent needs only**
Additional information:	Order on anyone presenting intoxicated, pregnant, newborn, or suspected of drug overdose or abuse.
Initial opiate screen:	300 ng/mL
Initial oxycodone screen:	100 ng/mL
Reflex confirmation:	Yes – on all positives. Sent to outside reference lab.
Screen includes:	• Amphetamine • Methamphetamine • MDMA • Cocaine • Barbiturates • Benzodiazepines • Methadone • Opiates • Oxycodone • THC (marijuana) • PCP • TCA
Turnaround time:	STAT at CH, BVU and AMB labs

Table C4. Urine drug screen (UDS) result information		
Unexpected results	**Important information**	**Actions to be considered**
UDS not done	• —	• Review documentation of pre-testing conversation with patient. • Discuss results with patient via phone or face-to-face visit; inquire about possible reasons for unexpected result. • Document result and plan.
Specimen too dilute	• Dilute means creatinine less than 20 mg/dL.	
Prescribed medication missing	• Take into account half-lives and potential reasons for false positives/false negatives.	• Review documentation of pre-testing conversation with patient. • Consider consult with lab. • Discuss results with patient via phone or face-to-face visit; inquire about possible reasons for unexpected result. • Document result and plan.
Alcohol	• Half-life: Less than 0.5 days	• Review documentation of pre-testing conversation with patient. • Discuss results with patient via phone or face-to-face visit; inquire about possible reasons for unexpected result. • Consider discontinuing chronic opioid therapy. • Consider substance abuse evaluation and/or treatment. • Document result and plan.
THC (marijuana)	• False positives: Golden Seal tea, efavirenz and ibuprofen (negative on confirmation) • False negatives: Tolmetin • Half-life: 3–5 days	
Tricyclics	• False positives: Lamotrigene • Half-life: Detection time varies	

Table continues

Table C4. Urine drug screen (UDS) result information, *continued*		
Unexpected results	**Important information**	**Actions to be considered**
Amphetamines/ Methamphetamines	• False positives: Vicks VapoRub, ephedrine/pseudoephedrine, fenfluramine/phentermine (Fen-Phen) • False negatives: Tolmetin • Half-life: 3–5 days	• Review documentation of pre-testing conversation with patient. • Discuss results with patient via phone or face-to-face visit; inquire about possible reasons for unexpected result. • *Strongly* consider discontinuing chronic opioid therapy. • *Strongly* consider substance abuse evaluation and/or treatment. • Document result and plan.
Barbiturates	• False positives: Ibuprofen (negative confirmation) • Half-life: 4–6 days (phenobarbital: up to 30 days)	
Benzodiazepines	• False positives: Efavirenz and ibuprofen (negative on confirmation) • Half-life: 1–7 days	
Cocaine	• False positives: Coca tea leaf • False negatives: Salicylates, fluconazole • Half-life: 2–3 days	
Fentanyl	• Info not available	
Methylenedioxymeth-amphetamine (MDMA)	• Half-life: 0–3 days	
Methadone	• False positives: Doxylamine (Nyquil) (negative confirmation) • Half-life: 2–4 days	
Opioids	• False positives: Poppy seeds, dextromethorphan, procaine (Novocain) and tolmetin (negative on confirmation); morphine may metabolize to produce a small amount of hydromorphone, and oxycodone is metabolized into oxymorphone. • False negatives: Fast metabolizers in patients on opioids for long periods of time due to induction of liver enzymes. • Half-life: 0–3 days	
Oxycodone	• Half-life: 0–1.5 days	
Phencyclidine	• False positives: Venlafaxine (Effexor) • Half-life: 0–10 days	