

Goal

Identify hospitalized patients who have or are at risk of aberrant medication behaviors (i.e. “cheeking” pills or diverting medications) so all team members can be made aware and appropriate interventions can be implemented. It is a guidance document only, and is intended to increase patient safety and not to limit patient care.

Key Aspects of Care

- Patients who have a history of drug abuse in the community may be considered for Level 1 interventions when appropriate to reduce risk of inpatient abuse or diversion.
- Level 2 interventions are intended for patients who demonstrate drug abuse or diversion while hospitalized. When “At Risk for Abuse of Opiates” is added to the problem list, it will trigger a BPA on subsequent hospitalizations.

Risk Factors for Inpatient Aberrant Behaviors

Note: The risk factors outlined below are **not** an exhaustive list and only intended to supplement clinical judgment/suspicion as well as OARRS report information.

Physical Findings

- Track marks
- Acute diagnosis for drug abuse (e.g., Endocarditis or Superficial abscesses)
- Nasal septum atrophy
- Symptoms of withdrawal

History of

- IV drug use in past 90-days
- Recent prescription opioid abuse
- Other drug abuse

Behaviors

- Report of controlled substance use inconsistent with prior documentation in the medical record or with [Ohio Automated Rx Reporting System \(OARRS\)](#).
- Double-doctoring or prescription shopping.
 - Received opioid prescriptions from ≥ 5 clinicians in past 90-days.
- Use of pain medications without a prescription in past 90-days.
- Violation of Patients Leaving Units Policy.
- Excessive fixation on medication administration:
 - Keeping track of time.
 - Continuously asking for additional medication.
 - Demanding a certain route of medication administration.
 - Claim to be allergic to all medications other than one requested.
 - Rapidly escalating controlled substance dose requirements

Laboratory Findings

- Toxicology Screen Urine – UDRG on admission confirms presence of illicit drugs.
 - See **Appendix A** for additional guidance on potential urinary analytes.

Identified Inpatient Abuse or Diversion

Signs of potential drug abuse or diversion occurring during hospitalization include the following:

- Tampering with needle box or pain pumps (IV settings).
- Tampering with his/her IV access.
- Suspicion of visitor supplying drugs of abuse.
- Witnessed diversion or “cheeking” of pain medication
- Abusing non-hospital administered opiates or other drugs while admitted
- Unexplained altered mental status
- Leaving floor without RN approval
- UDRG during hospitalization confirms presence of illicit or non-prescribed medication (see Appendix A)

Level 1 Interventions

- Level 1 interventions are **preliminary preventative interventions** that may be considered if there is risk for potential aberrant behaviors:

Level 1 Interventions

- Clinician converts pills to liquid or RN to crush pills
- See **Appendix B** for formulary options for opioids
- RN directly observes the patient taking and swallowing medication with possible oral check
- Additional toxicology screens as indicated
- Identification of a prescribing clinician that can be contacted prior to discharge or taper
- Social Work consult for addiction, if appropriate
- See **Appendix C** – At Risk Population Leaving the Unit Algorithm

Level 2 Interventions

- Level 2 interventions are recommended if there is **high clinical suspicion or documentation of drug abuse or diversion that occurred while hospitalized.**

Level 2 Interventions

- **In order to appropriately monitor these patients on subsequent hospitalizations, add “At Risk for Abuse of Opiates” to the problem list (ICD-10 code Z91.89).**
- In the Overview section, narrate the witnessed or suspected behavior and the date of the event
- You may choose to click off the “Share w/Pt” box if desired.
- Addition of this problem to the problem list will trigger BPA on future hospitalizations.
- Preliminary interventions, if not already done.
- Removal of needle box and room check to ensure all controlled substances are properly secured.
- Security search of room/belongings.
- Patient room moved closer to nurse’s station and door left open.
- Application of tamper prevention seals on all IV ports
- Limit visitors and off unit privileges. Please refer to **Appendix C** and [Patients Leaving Units Policy](#) for further guidance.
- Use [Inpatient Opioid Treatment Agreement](#) if opioids are to be continued.
- Consider sitter.
- Standardization of interventions once drug diversion behaviors have been suspected or documented:
 - Multidisciplinary meeting to establish agreed upon plan of care.
 - Documentation of agreed upon plan of care including patient specific goals and interventions.
- Multidisciplinary communication of plan of care with patient/patient family including:
 - Verbalization of expectations of behavior including what is and what is not permissible.
 - Consequences of unacceptable behaviors or actions.

Documentation and Communication

- Standardized place to document in medical record such as social history section and discharge summary.
 - Please see [Documentation \(Electronic\) of the Nursing Process in IHIS.](#)

Pain Management (History of Opioid Abuse)

- Patients with a history of opioid abuse may require—and should receive—opioids when clinically indicated. These patients may require higher doses due to opioid tolerance.
- Change IV medications to oral as soon as medically indicated.
 - Consider use of oral liquid or crushed tablets to prevent diversion or hoarding.
- Avoid administering prn and scheduled pain medications at the same time.
 - Avoid prescribing benzodiazepines and diphenhydramine with opioids.
 - In select circumstances (e.g. patients previously appropriately prescribed and taking long-acting opioids), a combination of prn and scheduled dosing may be appropriate.
- Employ non-pharmacological comfort measures such as:
 - Repositioning.
 - Heating or cooling.
 - Distraction.
- Employ non-opioid pharmacologic therapies as appropriate.
 - Examples include:
 - Acetaminophen.
 - Nonsteroidal anti-inflammatories.
- For additional information on pain management please see [OSUWMC Pain Management](#) and [OSUWMC Pain Management \(Nursing\) Policy](#).

Discharge Planning

- Review OARRS report prior to patient discharge if prescribing opiates
- Identify prescribing physician that can be contacted prior to patient discharge.
- Consider prescription to only include pain medication up through the patient’s next appointment **OR**
- Consider discharge prescriptions with instructions to taper opioids off or to pre-hospitalization dose **OR**
- Consider **NOT** discharging the patient on controlled substances.
- Patient education:
 - Risk of sharing needles and injecting.
 - Community support networks.
 - Consider pain contract.
 - Consider risk – benefit of discharging with chronic IV access devices.

Resources

- IHIS Tip Sheet: [Opioid Ordering Restrictions for Acute Pain](#)
- IHIS Tip Sheet: [Best Practice Advisory \(BPA\) for Patients At Risk for Opioid Abuse](#)

Order Set

- OSU IP GEN: Medication Misuse Management [4624]

References

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- Todd, KH. (2005). Chronic Pain and Aberrant Drug-Related Behavior in the Emergency Department. *Journal of Law, Medicine and Ethics*. 33(4): 761-769.
- Turk, DC, et al. (2008). Predicting opioid misuse by chronic pain patients: a systematic review and literature synthesis. *Clinical Journal of Pain*. 24(6): 497-508.

Quality Measures

- BPA Use
- Order set use
- PSRS Events

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Disclaimer: *Clinical practice guidelines and algorithms at The Ohio State University Wexner Medical Center (OSUWMC) are standards that are intended to provide general guidance to clinicians. Patient choice and clinician judgment must remain central to the selection of diagnostic tests and therapy. OSUWMC's guidelines and algorithms are reviewed periodically for consistency with new evidence; however, new developments may not be represented.*

Appendix A

Table 1. Potential Urinary Analytes for Patients Taking Opioids*
[OSU Laboratory Drug Screen Guide](#)

Drug	Urinary Analytes	Additional Considerations
Heroin (diacetylmorphine)	<ul style="list-style-type: none"> Codeine Morphine 6-monoacetylmorphine 	<ul style="list-style-type: none"> Heroin has a very short presence in urine (6-8 hours) Careful analysis is important
Codeine	<ul style="list-style-type: none"> Codeine Morphine Hydrocodone 	<ul style="list-style-type: none"> Morphine is a metabolite of codeine Hydrocodone is a minor metabolite of codeine Consider Heroin as a potential source for unexpected presence
Morphine	<ul style="list-style-type: none"> Morphine Hydromorphone Codeine 	<ul style="list-style-type: none"> Hydromorphone is a minor metabolite of morphine Codeine is present as an impurity in commercially manufactured morphine Consider Heroin as a potential source for unexpected presence
Hydrocodone	<ul style="list-style-type: none"> Hydrocodone Hydromorphone 6-hydrocodol 	<ul style="list-style-type: none"> Hydromorphone is a metabolite of hydrocodone 6-hydrocodol is a metabolite of hydrocodone and the stereoisomer of dihydrocodeine
Hydromorphone	<ul style="list-style-type: none"> Hydromorphone 	
Oxycodone	<ul style="list-style-type: none"> Oxycodone Oxymorphone Hydrocodone 	<ul style="list-style-type: none"> Oxymorphone is a metabolite of oxycodone Hydrocodone is a potential impurity in commercially manufactured oxycodone preparations
Oxymorphone	<ul style="list-style-type: none"> Oxymorphone Oxycodone 	<ul style="list-style-type: none"> Oxycodone is a potential impurity in commercially manufactured oxymorphone preparations
Fentanyl	<ul style="list-style-type: none"> Norfentanyl Fentanyl 	<ul style="list-style-type: none"> Norfentanyl is a metabolite of fentanyl False negatives are possible with fentanyl when tested by UDRG (LC/MS/MS) at OSU labs.
Methadone	<ul style="list-style-type: none"> Methadone Methadone metabolites 	
Buprenorphine	<ul style="list-style-type: none"> Buprenorphine Norbuprenorphine 	<ul style="list-style-type: none"> Buprenorphine unlikely to be detected by typical UDRG (LC/MS/MS) at OSU Lab due to high lowest limits of detection Order "Buprenorphine, Urine Screen" for unexpected result and/or to ensure accurate compliance testing

NOTE: If questions regarding interpretation of results, please consider consult to pharmacist

Table 2. Urinary Analytes for Patients Taking Benzodiazepines*

Drug	Urinary Analytes
Lorazepam	<ul style="list-style-type: none"> Lorazepam
Alprazolam	<ul style="list-style-type: none"> Alprazolam
Diazepam	<ul style="list-style-type: none"> Diazepam Nordiazepam Temazepam Oxazepam
Clonazepam	<ul style="list-style-type: none"> Clonazepam 7-Aminoclonazepam
Temazepam	<ul style="list-style-type: none"> Temazepam Oxazepam
Oxazepam	<ul style="list-style-type: none"> Oxazepam
Triazolam	<ul style="list-style-type: none"> Triazolam
idazolam	<ul style="list-style-type: none"> Midazolam

*Adapted from [Dominion Diagnostics: Urinary Analytes for Patients Taking Opiate-based Medication.](#)

Appendix B

Table 1. OSUWMC Opioids per Formulary

	Opioid	Opioid Dose	Morphine Equivalent
Crushable Tablets*	Hydrocodone w/ Acetaminophen (Norco®)	5 mg w/ acetaminophen 325 mg	5 mg
		7.5 mg w/ acetaminophen 325 mg	7.5 mg
		10 mg w/ acetaminophen 325 mg	10 mg
	Hydromorphone	2 mg	10 mg
		4 mg	20 mg
		8 mg	40 mg
	Morphine	15 mg	15 mg
		30 mg	30 mg
	Oxycodone HCl	5 mg	7.5 mg
		15 mg	22.5 mg
20 mg		30 mg	
Oxycodone w/ Acetaminophen (Percocet®)	Oxycodone 5 mg w/ acetaminophen 325 mg	5 mg	
Oral Liquids	Hydromorphone	1 mg/1 ml oral syringe (or 1 mg/mL)	5 mg
		2 mg/1 ml oral syringe (or 2 mg/mL)	10 mg
		4 mg/1 ml oral syringe (or 4 mg/mL)	20 mg
	Morphine	20 mg/1 ml oral syringe (or 20 mg/mL)	20 mg

* **Note:** Never crush extended-release preparations

Table 2. Opioid Conversion of Tablets to Oral Liquid Doses

1. Tablets may be crushed or converted to oral liquid formulations.
2. Long acting or sustained release tablets cannot be crushed or converted.
3. Immediate release hydrocodone with acetaminophen, hydromorphone, and morphine tablets should be crushed or converted to an equivalent dose oral liquid.
4. Oxycodone products (with or without acetaminophen) should be crushed or converted to an equivalent dose morphine or hydromorphone oral liquid.*

		Morphine Liquid Dose	Hydromorphone Liquid Dose
Oxycodone or Oxycodone with Acetaminophen	5 mg	7.5 mg	2 mg
	10 mg	15 mg	3 mg
	15 mg	22.5 mg	5 mg
	30 mg	45 mg	10 mg

***Note:** Due to less cost with equivalent efficacy, morphine or hydromorphone liquid are preferred to oxycodone liquid

Appendix C: At-Risk Population Leaving the Unit Algorithm

