THE OHIO STATE UNIVERSITY
WEXNER MEDICAL CENTER

Inpatient Management of Potential Opioid Abuse and Diversion

This is considered a guidance document only and is not intended to limit patient care. Rather, when used appropriately, the guideline may help increase patient medication safety.

Guideline Rationale:

Proactively identify inpatients who exhibit aberrant medication behaviors or have in the past (i.e. "cheeking" pills and diverting medications) so all team members are aware and appropriate preventative interventions can be implemented.

Risk Factors for Aberrant Behaviors

Note: The risk factors outlined below are meant to aid in identifying those patients most likely to exhibit aberrant medication behaviors along with clinical suspicion and information from the OARRS report. This is **not** an exhaustive list and is only intended to supplement clinical judgment/suspicion as well as OARRS report information.

Physical Findings:

- Track marks
- Acute diagnosis for drug abuse such as:
  - Endocarditis
  - 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 **Ohio Automated Rx Reporting System (OARRS)**.
- Patient self-reported pain medication history is inconsistent with provider findings or prior documentation on the medical record.
- 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.
- 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 confirms presence of illicit drugs.
  - See **Appendix A** for additional guidance on potential urinary analytes.

If there is a high clinical suspicion of potential aberrant behaviors and/or the presence of risk factors such as those listed above, consider initiation of the **preliminary preventative interventions.**

If patient has previously documented diversion attempt(s), medication abuse, or current behaviors consistent with those listed below, consider implementation of the **secondary preventative interventions**.

- Documented tampering with needle box or pain pumps (IV settings).
- Documented abuse and/or diversion attempts during previous visit.
- Patient persistently tampering with her/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

Preventative Interventions

Include some or all of the following at clinician discretion:

Preliminary Interventions	Secondary Interventions
• Consider documentation of concerning behavior in problem list, progress note and discharge summary • 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.	• Add "At Risk for Abuse of Opiates" to the problem list with documentation detailing specific high–risk activities that led to this being added including dates. Also document this concerning behavior in progress note and discharge summary. • 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. • Limit visitors and off unit privileges. • Consider sitter.

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.
- **If there are specific high risk activities which demonstrated inpatient opiate abuse or diversion, add "At Risk for Abuse of Opiates" to the problem list.**
- 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.

Pain Management

- Orders to delineate plan of care for off shift providers and care givers including single provider management of pain medication.
- Treat controlled substance dependence separate from pain.
- 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 guideline.

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.

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Quality Measures

- Number of events
- Order set use

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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*

Drug	Urinary Analytes	Additional Considerations
Codeine	• Codeine • Morphine • Hydrocodone	• Morphine is a metabolite of codeine • Hydrocodone is a minor metabolite of codeine
Morphine	• Morphine • Hydromorphone • Codeine	• Hydromorphone is a minor metabolite of morphine • Codeine is present as an impurity in commercially manufactured morphine
Hydrocodone	• Hydrocodone • Hydromorphone • 6-hydrocodol	• Hydromorphone is a metabolite of hydrocodone • 6-hydrocodol is a metabolite of hydrocodone and the stereoisomer of dihydrocodeine
Hydromorphone	• Hydromorphone	
Oxycodone	• Oxycodone • Oxymorphone • Hydrocodone	• Oxymorphone is a metabolite of oxycodone • Hydrocodone is a potential impurity in commercially manufactured oxycodone preparations
Oxymorphone	• Oxymorphone • Oxycodone	• Oxycodone is a potential impurity in commercially manufactured oxymorphone preparations
Fentanyl	• Norfentanyl • Fentanyl	• Norfentanyl is a metabolite of fentanyl • False negatives are possible with fentanyl when tested by UDRG (LC/MS/MS) at OSU labs.
Methadone	• Methadone • Methadone metabolites	
Buprenorphine	• Buprenorphine • Norbuprenorphine	• 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 accurate compliance testing

** Adapted from Dominion Diagnostics: Urinary Analytes for Patients Taking Opiate-based Medication.*

Table 2. Urinary Analytes for Patients Taking Benzodiazepines*

Drug	Urinary Analytes
Lorazepam	• Lorazepam
Alprazolam	• Alprazolam
Diazepam	• Diazepam • Nordiazepam • Temazepam • Oxazepam
Clonazepam	• Clonazepam • 7-Aminoclonazepam
Temazepam	• Temazepam • Oxazepam
Oxazepam	• Oxazepam
Triazolam	• Triazolam
Midazolam	• 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/ acetaminophen325 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	5 mg
		15 mg	15 mg
		30 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 (1:1 ratio with oxycodone)	Hydromorphone Liquid Dose (1:5 ratio with oxycodone)
Oxycodone or Oxycodone with Acetaminophen	5 mg	5 mg	1 mg
	10 mg	10 mg	2 mg
	15 mg	15 mg	3 mg
	30 mg	30 mg	6 mg

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