Quick Safety
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Drug diversion and impaired health care workers

Issue:

In every organization, drug diversion is a potential threat to patient safety. Risks to patients include inadequate pain relief and exposure to infectious diseases from contaminated needles and drugs, compounded by potentially unsafe care due to the health care worker's impaired performance.[1] Furthermore, diversion may cause undue suffering to patients who don't receive analgesic relief, can be costly to an organization by damaging its reputation, and may lead to major civil and criminal monetary penalties.

Statistics from both the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) and the American Nurses Association (ANA) suggest that about 10 percent of health care workers are abusing drugs. Due to the availability of and access to medications in health care organizations, diversion of controlled substances can be difficult to detect and prevent without a comprehensive controlled substances diversion prevention program (CSDPP).[1]

Essential components of a controlled substances diversion prevention program

Core administrative elements:
- Legal and regulatory requirements
- Organization oversight and accountability

System-level controls:
- Human resources management
- Automation and technology
- Monitoring and surveillance
- Investigation and reporting

Provider-level controls:
- Chain of custody
- Storage and security
- Internal pharmacy controls
- Prescribing and administration
- Returns, waste, and disposal

Source: Brummond PW, et al. ASHP Guidelines on Preventing Diversion of Controlled Substances. *American Journal of Health-System Pharmacy* 74, Issue 5 (2017) 325-348.

The Drug Enforcement Administration (DEA) recognizes five classes of drugs that are frequently abused: opioids, depressants, hallucinogens, stimulants, and anabolic steroids. A major driver of drug diversion is opioid abuse, which in recent years has reached epidemic proportions. Fentanyl — one of the most potent opioids — is the most commonly diverted drug, and is the lead opioid in causing deaths due to opioid overdoses. Diversion of opioids in injectable and oral forms is seen across all levels of an organization, from chiefs to frontline staff, and across all clinical disciplines.

Experts believe that only a fraction of those who are diverting drugs are ever caught, despite clear signals — such as abnormal behaviors, altered physical appearance, and poor job performance. Direct observation is vital to detecting diversion and may be the only way to identify an impaired colleague. In organizations where controlled substances are used, all staff should be educated about CSDPP, including leadership oversight, legal and regulatory requirements, monitoring and surveillance, automation and technology, and pharmacy controls.[1]

The organization's culture must support empowerment of staff to stop, question and act. Health care workers must be expected and empowered to speak up when something seems abnormal or unsafe.

Patterns and trends that indicate potential diversion

Leaders have a responsibility to establish processes that support staff while enabling rapid detection of diversion. While all staff potentially may be implicated in diversion, evidence suggests that those employees with the greatest access to controlled substances are at the highest risk.[2] The focus of surveillance should be on patterns and trends, including:

- Controlled substances are removed:
  - With no doctor's orders.
  - For patients not assigned to the nurse.
  - For recently discharged or transferred patients.[1]
- Product containers are compromised.[1]
- Substitute drug is removed and administered while controlled substance is diverted.[1]
- Verbal order for controlled substances is created but not verified by prescriber.[1]

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- Prescription pads are diverted and forged to obtain controlled substances.[1]
- Self-prescribed controlled substances by prescriber.[1]
- Volume removed from premixed infusion.[1]
- Multidose vial overfill diverted.[1]
- Prepared syringe contents replaced with saline solution.
- Written prescriptions altered by patients.[1]
- Medication is documented as given but not administered to the patient.[1]
- Excessive pulls for PRN medications for one provider compared to peers.
- Drug dispensing machines show discrepancies or overrides.
- Waste is not adequately witnessed.[1]
- Controlled substance waste is removed from unsecure waste container.[1]
- Controlled substance waste in syringe is replaced with saline.[1]
- Expired controlled substances are diverted from holding area.[1]
- Patients continue to complain about excessive pain, despite documented administration of pain medication.
- Potential falsification of medical records indicated by:
  - Late documentation of certain medications only.
  - Co-workers assisting others in completing documentation.
  - "Batching" assessments and treatments for pain.
- Frequent efforts to help other nurses administer pain medication.
- Unauthorized individual orders for controlled substances on stolen DEA Form 222.[1]

Commonly diverted drugs

Opioid pain relievers, such as:
- Codeine
- Fentanyl (Duragesic®, Actiq®)
- Hydromorphone (Dilaudid®)
- Meperidine (Demerol®)
- Morphine (MS Contin®)
- Oxycodone (OxyContin®)
- Pentazocine (Talwin®)
- Dextropropoxyphene (Darvon)
- Methadone (Dolophine®)
- Hydrocodone combinations (Vicodin, Lortab, and Lorcet)

High-cost antipsychotic and mental health drugs, such as:
- Aripiprazole (Abilify®)
- Ziprasidone (Geodon®)
- Risperidone (Risperdal®)
- Quetiapine (Seroquel®)
- Olanzapine (Zyprexa®)

Benzodiazepines, such as:
- Alprazolam (Xanax®)
- Clonazepam (Klonopin®)
- Lorazepam (Ativan®)

Source: Department of Health & Human Services, Centers for Medicare & Medicaid Services, "Drug Diversion in the Medicaid Program — State Strategies for Reducing Prescription Drug Diversion in Medicaid," January 2012

Safety actions to consider:

Detection of drug diversion is challenging, and even the best efforts have not yet achieved complete eradication of diversion. Patient and workplace safety require effective reliable safeguards to maintain the integrity of safe medication practices to protect against diversion. Diversion prevention requires continuous prioritization and active management to guard against complacency.

There are actions that health care facilities can take to detect diversion quickly and respond appropriately in order to protect patients from harm, using a consistent, standardized approach.[3] There are three essential components health care organizations need to consider when dealing with drug diversion: prevention, detection, and response.

1. Prevention always comes first. Health care facilities are required to have systems in place to guard against theft and diversion of controlled substances. It is important that all staff understand and comply with these protocols, and act in ways to minimize unauthorized access or opportunities for tampering and misuse.
2. Even with such prevention safeguards, health care facilities must have systems to facilitate early detection. These systems can include video monitoring of high-risk areas, active monitoring of pharmacy and dispensing record data, as well as having staff who are aware of and alert for behaviors and other signs of potential diversion activity.
3. Appropriate response for staff can be summarized as "see something, say something." At the institutional level, appropriate responses include establishing a just culture in which reporting drug diversion is encouraged, assessing harm to patients, consulting with public health officials when tampering with injectable medication is suspected, and prompt reporting to enforcement agencies.[4]

Regulatory requirements for reporting drug diversion in health care organizations include the following:

- Drug Enforcement Administration (DEA) — report immediately, per federal regulation (21 CFR 1301.76; 2014)[5]
- State regulatory board and/or professional assistance
- Law enforcement
- Pharmacy board
- Food and Drug Administration (FDA) Office of Criminal Investigations (OCI) for tampering cases
- Office of Inspector General (OIG)

Joint Commission Medication Management (MM) requirements related to drug diversion

MM.08.01.01: *The organization evaluates the effectiveness of its medication management system.*[6]

This evaluation includes reconciling medication information. The elements of performance include:

- Analyze data
- Keep up with best practices
- Identify and implement improvement measures
- Re-evaluate system
- For automatic dispensing cabinets (ADCs), have a policy describing the types of medication overrides to review for appropriateness and frequency.

Resources:

1. Brummond PW, et al. ASHP Guidelines on Preventing Diversion of Controlled Substances. *American Journal of Health-System Pharmacy* 74, Issue 5 (2017) 325-348. doi: http://www.ajhp.org/content/early/2016/12/22/ajhp160919?sso-checked=true#sec-4
2. Kimberly S. New JD BSN RN. "Institutional Diversion Prevention, Detection and Response," https://www.ncsbn.org/0613_DISC_Kim_New.pdf
3. Berge KH and Lanier WL. "Bloodstream Infection Outbreaks Related to Opioid-Diverting Health Care Workers: A Cost-Benefit Analysis of Prevention and Detection Programs," *Mayo Clinic Proceedings* 89, Issue 7 (2014) 866-868. doi: https://doi.org/10.1016/j.mayocp.2014.04.010
4. Berge KH, et al. "Diversion of Drugs Within Health Care Facilities, a Multiple-Victim Crime: Patterns of Diversion, Scope, Consequences, Detection, and Prevention." Mayo Clin Proc 87, no. 7 (2012) 674-682. doi: 10.1016/j.mayocp.2012.03.013
5. U.S. Department of Justice, Drug Enforcement Administration (DEA), Diversion Control Division. Title 21 Code of Federal Regulations, PART 1300-END.
6. The Joint Commission. *2019 Comprehensive Accreditation Manual for Hospitals* (CAMH).

Note: This is not an all-inclusive list.

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