Prevention, Surveillance and Investigation of Controlled Substance Misuse in the Workplace: The Nurse Leaders’ Role

https://www.youtube.com/watch?v=ILQ0QQqojKM
Every day, more than 90 Americans die after overdosing on opioids.\textsuperscript{1} The misuse of and addiction to opioids—including prescription pain relievers, heroin, and synthetic opioids such as fentanyl—is a serious national crisis that affects public health as well as social and economic welfare. The Centers for Disease Control and Prevention estimates that the total "economic burden" of prescription opioid misuse alone in the United States is $78.5 billion a year, including the costs of healthcare, lost productivity, addiction treatment, and criminal justice involvement.\textsuperscript{2}
In 2015...

12.5 million
People misused prescription opioids¹

2.1 million
People misused prescription opioids for the first time³

33,091
People died from overdosing on opioids²

2 million
People had prescription opioid use disorder⁴

15,281
Deaths attributed to overdosing on commonly prescribed opioids²,⁵

828,000
People used heroin¹

9,580
Deaths attributed to overdosing on synthetic opioids²,⁶

135,000
People used heroin for the first time¹

12,989
Deaths attributed to overdosing on heroin²,⁷

$78.5 billion
In economic costs (2013 data)⁸


Updated May 2017. For more information, visit:  http://www.hhs.gov/opioids/
Purpose

- Provide an overview of nurses’ legal responsibility for narcotic control, inventory and surveillance.

Goals

- Reduce the risk of patient harm.
- Reduce regulatory and legal risk to the organization.
- Implement best practices and resources to prevent and increase awareness of substance abuse and diversion.
Objectives

- Identify signs and symptoms of abuse and diversion.

- The nurse leader will be able to describe the actions necessary to investigate potential drug diversion activities.

- Discuss best practice strategies for investigation/reporting requirements when drug diversion has been suspected, detected or confirmed.
The National Institute of Drug Abuse estimates that 10% of U. S. adults abuse drugs during their life times. Accurate statistics are difficult to obtain because drug abuse and addiction are often cloaked in silence.

- The American Nurses Association (ANA) estimates that 6–8% of nurses use alcohol or drugs to an extent that is sufficient to impair professional performance.

- About 10% of nurses become dependent on drugs, which is right in line with the incidence of drug addiction with that of the general U. S. population.

- Currently there are almost 3 million nurses employed in the country, which means that there are nearly 300,000 who abuse or are addicted to drugs.

- If you work with 10 nurses, one of them is likely to be struggling with addiction.

- Drug addiction is a major health risk among nurses and other healthcare professionals.

- Of the hundreds of cases that come before the State of Ohio Board of Nursing each month, well over half of them deal with addiction.

- The Delaware State Board of nursing—35% of all new complaints for discipline center on substance use, dependence or abuse issues.

- In New York, practicing nursing while impaired by alcohol or drugs is considered professional misconduct and will be subject to penalties.
Impact on Patients and Organization

- Impairment puts patients at risk for (*reckless endangerment*)
- Strong likelihood of denying patients appropriate pain relief (*abuse of a vulnerable individual*)
- Falsification of records (*fraud*)

- Theft (*care, time*)
- Inaccurate documentation
- Fraudulent billing and liability
- Impact Community confidence
Infectious Disease Exposure from Contaminated Needles & Drugs

**Narcotics Control and Injection Safety**

**Outbreaks Associated With Drug Diversion by HCs**

- **1985**
  - 3 cases of *Pseudomonas pickettii* bacteremia associated with a pharmacy technician at a WI hospital

- **1990**

- **1992**
  - 45 cases of HCV infection associated with a surgical technician at a TX ambulatory surgical center

- **1999**
  - 26 cases of *Serratia marcescens* bacteremia associated with a respiratory therapist at a PA hospital

- **2000**
  - 16 cases of HCV infection associated with a certified registered nurse anesthetist at a TX hospital

- **2004**
  - 2006
  - 9 cases of *Achromobacter xylosidans* bacteremia associated with a nurse at an IL hospital
  - 2008
  - 5 cases of HCV infection associated with a radiology technician at a FL hospital
  - 2009
  - 18 cases of HCV infection associated with a surgical technician at a CO hospital
  - 2011
  - 25 cases of gram-negative bacteremia associated with a nurse at a MN hospital
  - 2012
  - 45 cases of HCV infection associated with a radiology technician in NH, KS, and MD

Centers for Disease Control and Prevention. Risks of healthcare-associated infections from drug diversion.

Centers for Disease Control and Prevention. Risks of healthcare-associated infections from drug diversion.
Definitions

**Substance Abuse**

- Any use of drugs in a manner deviating from medically approved or socially acceptable patterns of use either on a single occasion, or episodically.

**Substance Abuse Disorder**

- Substance Use Disorder refers to substance use and/or substance dependence. It is the damaging use of harmful substances, including alcohol, marijuana, opioids, and other drugs (Health and Human Services, 2015).

- The state of dependency on mind altering chemicals with continuing use that persists despite negative consequences (National Council State Boards of Nursing, [NCSBN]) 2011).

**Addiction**

- A medical disorder marked by the compulsive use of chemicals (drugs or alcohol) and the inability to stop using them despite all the problems caused by their use (NCSBN, 2011).
Drug Diversion:

- “Diversion means the transfer of a controlled substance from a lawful to an unlawful channel of distribution or use” (Uniform Controlled Substances Act, 1994).


- Drug Diversion is a term used to describe a variety of activities used to obtain drugs illegally. It is most commonly used to refer to the misappropriation of drugs from a patient, health care employer or another source. (National Council State Boards of Nursing, 2011).
Signs & Symptoms of Substance Abuse & Drug Diversion

<table>
<thead>
<tr>
<th>Impairment</th>
<th>Drug Diversion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Behaviors</strong></td>
<td><strong>Behaviors</strong></td>
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<tr>
<td>Severe mood swings, personality changes</td>
<td>Consistently uses more drugs for cases than colleagues</td>
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<tr>
<td>Frequent or unexplained tardiness, work absences, illness or physical complaints</td>
<td>Frequent volunteering to administer narcotics, relieve colleagues of casework, especially on cases where opioids are administered</td>
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<tr>
<td>Elaborate excuses</td>
<td>Consistently arrives early, stays late, or frequently volunteers for overtime</td>
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<tr>
<td>Underperformance</td>
<td>Frequent breaks or trips to bathroom</td>
</tr>
<tr>
<td>Difficulty with authority</td>
<td>Heavy wastage of drugs</td>
</tr>
<tr>
<td>Poorly explained errors, accidents or injuries</td>
<td>Drugs and syringes in pockets</td>
</tr>
<tr>
<td>Wearing long sleeves when inappropriate</td>
<td></td>
</tr>
<tr>
<td>Confusion, memory loss, and difficulty concentrating or recalling details and instructions</td>
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<tr>
<td>Visibly intoxicated</td>
<td></td>
</tr>
<tr>
<td>Refuses drug testing</td>
<td></td>
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<tr>
<td>Ordinary tasks require greater effort and consume more time</td>
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<tr>
<td>Unreliability in keeping appointments and meeting deadlines</td>
<td></td>
</tr>
<tr>
<td>Relationship discord (e.g., professional, familial, marital, platonic)</td>
<td></td>
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<tr>
<td><strong>Signs</strong></td>
<td><strong>Signs</strong></td>
</tr>
<tr>
<td>Physical indications (e.g., track marks, bloodshot eyes)</td>
<td>Anesthesia record does not reconcile with drug dispensed and administered to patient</td>
</tr>
<tr>
<td>Signs indicative of drug diversion* (see right column)</td>
<td>Patient has unusually significant or uncontrolled pain after anesthesia</td>
</tr>
<tr>
<td>Deterioration in personal appearance</td>
<td>Higher pain score as compared to other anesthesia providers</td>
</tr>
<tr>
<td>Significant weight loss or gain</td>
<td>Times of cases do not correlate when provider dispenses drug from automated dispenser</td>
</tr>
<tr>
<td>Discovered comatose or dead</td>
<td>Inappropriate drug choices and doses for patients</td>
</tr>
</tbody>
</table>

*Signs indicative of drug diversion should be specifically addressed in the right column.

Source: Addressing Substance Use Disorder for Anesthesia Professionals position statement and policy considerations (www.AANA.com/AddressingSUD)
Warning Signs of Potential Diversion

- Change in job performance
- Request of change in shift
- Absences from the unit for extended periods
- Frequent trips to the bathroom
- Arriving late or leaving early
- Making an excessive number of mistakes, including medication errors.
Diversion Methods

- **Removal of medication when not needed**
  - Often initial method of diversion
  - Very difficult to detect
  - Falsification of records

- **Removal for discharged patient**

- **Removal of duplicate dose**
  - May not be caring for patient
  - May be preceptor

- **Removal of/diversion from fentanyl patches**
  - Removal of gel with syringe and needle
  - Keeping new patch for self and putting used patch on patient
Prevention, Surveillance & Detection

What is your responsibility?
## Schedules of Controlled Substances

### Schedules (include some non-narcotic drugs)

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Criteria</th>
<th>Drugs</th>
<th>Prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I</strong></td>
<td><strong>High potential for abuses, no accepted medical use in treatment,</strong> and lack of accepted safety for use under medical supervision.</td>
<td>Opiates, opiate derivatives, psychedelic substances, depressants, and stimulants: Include heroin, marijuana (currently approved for medical use in some states), peyote, GBH, MDMA AKA as “Ecstasy,” LSD, mescaline, and MMDA.</td>
<td><strong>None allowed in the US.</strong></td>
</tr>
<tr>
<td><strong>II</strong></td>
<td><strong>High potential for abuse, currently accepted medical use in treatment,</strong> and abuse may lead to severe psychological or physical dependence.</td>
<td>Cocaine, opium, morphine, methadone, Ritalin®, Concerta®, Focalin®, oxycodone, oxymorphone, fentanyl, hydromorphone, hydrocodone (pure), codeine (/&gt; 90 mg per unit dose), secobarbital, meperidine, pentobarbital, and amphetamines.</td>
<td>May be directly dispensed by practitioner to user or with a written prescription. (Some limited emergency situations allow for oral prescription). No refills are allowed and prescriptions must be retained but practitioners may provide a patient with multiple prescriptions for the same controlled substance to allow the patient to receive a 90-day supply for legitimate medical purpose, but each prescription must indicate the earliest date by which it can be filled.</td>
</tr>
<tr>
<td><strong>III</strong></td>
<td><strong>Potential for abuse less than for schedule I or II drugs, currently accepted medical use in treatment,</strong> and abuse may lead to moderate or low physical dependence or high psychological dependence.</td>
<td>Anabolic steroids, intermediate-acting barbiturates (talbutal), buprenorphine (Buprenex®), dihydrocodeine, ketamine, hydrocodone/codeine when compounded with an NSAID, marinol, and paregoric.</td>
<td>May be directly dispensed by practitioner to user or with written or oral prescription, with a 6-month or 5-refill limitation without renewal by practitioner.</td>
</tr>
<tr>
<td><strong>IV</strong></td>
<td><strong>Low potential for abuse compared to Schedule III drugs, currently accepted medical use in treatment,</strong> and abuse may lead to limited physical or psychological dependence compared to Schedule III drugs.</td>
<td>Benzodiazepines (Xanax®, Librium®, Klonopin®, Valium®), benzodiazepine-like drugs (Ambien®, zopiclone, zaleplon AKA Sonata®), long-acting barbiturates (phenobarbital), partial agonist opioid analgesics (Talwin®), butorphanol (Stadol®), stimulant-like drugs (modafinil), pentazocine, and antidiarrheal drugs (difenoxin).</td>
<td>May be directly dispensed by practitioner to user or with written or oral prescription, with a 6-month or 5-refill limitation without renewal by practitioner.</td>
</tr>
<tr>
<td><strong>V</strong></td>
<td><strong>Low potential for abuse compared to Schedule IV drugs, currently accepted medical use in treatment,</strong> and abuse may lead to limited physical or psychological dependence compared to Schedule IV drugs.</td>
<td>Cough suppressants with low-dose codeine, antidiarrheals with low does opium or diphenoxylate, pregabalin (Lyrica®), dezocine, pyrovalerone, and centrally-acting antidiarrheals when mixed with atropine (Lomotil®).</td>
<td>For medical purposes only.</td>
</tr>
</tbody>
</table>
Controlled Substances Policy

3. Administration and documentation
   c. Before removing the ordered controlled substance, the authorized individual must **count the remaining controlled medication** in the open bin, and enter the number into the Omnicell® ADU.

   d. upon completion of this transaction, and after administering the controlled substance to the patient, the authorized individual will **document** in the patient’s record through approved mechanism (MAR) Anesthesia Record, or Pain Management Administration/Assessment Record.

   a. **only the authorized individual removing the Controlled Substance should administer the medication**, unless in those cases when a registered nurse removes a medication for a LIP where they are not permitted under nursing policy to administer based on the route of administration (i.e. IV push).

4. Count discrepancies of Controlled Substances
   b. **All discrepancies must be resolved and documented in the Omnicell® ADU by the end of each shift**.

   c. The Nurse Manager or Charge nurse will direct the investigation of any discrepancy in controlled substance count to identify the cause of the discrepancy.

   d. the time and personnel involved in the discrepancy, is indicated by the Nurse manager or designee. Those identified may not leave the unit until the discrepancy has been resolved.

   e. All medication administration records should be verified for patients with orders for the controlled substance in question compared with the entries on the report to assure all administered doses have been correctly accounted for and recorded.

5. Drug Loss Waste or Contamination
   c. **Documentation of waste** in Omnicell® ADU can be done with a witness at the time of withdrawal of the controlled substance from the ADU or by returning to the Omnicell® ADU with a witness after the controlled substance has been administered to the patient.

   d. Wasted doses should be handled as follows:
      4. Prepared controlled substance infusions (e.g. morphine, hydromorphone, etc.) should be discarded in the presence of a witness and recorded in the Omnicell® ADU.
      5. Prefilled syringes which have been determined to be contaminated or where the protective seal has been broken should be wasted, witnesses and recorded in the Omnicell ADU on the unit.

6. Controlled Substance Audits
   a. Nursing–Medacist–Monthly

   The Department of Pharmacy will review monthly all nurses on the Medacist Rx Diversion Index with a standard deviation of 3.0 or greater and everyone identified by Medacist with a Medium or High Risk triageRx Triangle on the RxDiversion Index for two shifts of high volume.

   If additional discrepancies are observed, the Department of Pharmacy will notify the Department of Nursing and remove the nurse’s ability to remove controlled substances while the Department of Nursing interviews the nurse involved.

https://www.youtube.com/watch?v=S8jX6W4Hlw
Policy: Omnicell General Procedure of Operations

- **User Access**
  - Pharmacy, Nursing Services, and other designated departments will utilize the Omnicell ® Automated Dispensing Unit (ADU) to store dispense, charge and account for controlled substance and PRN medications used in patient care.
  - The employee's sign-on identification and secure personal password will serve as the employee's confidential electronic signature in the ADU.
  - Users understand that transaction records will be used for trending data and will be available to regulatory agencies.

- **Medication Removal & Return**
  - Upon completion of the transaction, the person (who removed the medication) shall document medication administration in the patient’s record through the approved mechanism (MAR, anesthesia record, etc).
  - The inventory amount must be verified whenever accessing a cabinet for the drug/item being removed (for Controlled Substances).

- **Wasted Medications**
  - Two licensed personnel must document controlled substances that are wasted at the Omni Supplier: the person who wastes the medication and a witness. The witness must physically witness all wastes, including discarded PCA doses.

- **Daily Discrepancy Reports**
  - Each time a discrepancy occurs, the user should print a discrepancy report at the Omnicell® dispensing station.
  - All discrepancies for controlled and non–controlled drugs should be addressed with an attempt to solve them as soon as they are discovered. All discrepancies must be resolved at the end of each shift.
Controlled substance activity (including but not limited to procurement, usage, discrepancies, diversion, and loss) must be monitored on a regular basis as a joint effort between pharmacy, nursing, and security.

All controlled substance discrepancies must be addressed immediately.

If the discrepancy cannot be resolved, nursing and/or pharmacy supervision must be contacted.

Controlled Substance Activity/Diversion Monitoring Procedure/Guidelines:

- Use of Controlled Substance Auditor: User falling outside of parameters will require MAR & Documentation review

In the event of theft, loss or possible diversion:

- Notify Director of Pharmacy/designee, security, Nursing Leadership and complete occurrence report within 24 hours of discovery
- If investigation determines diversion, report incident to AED, Corporate Security
- Follow guidelines for notification of local and federal governmental agencies
Clinical Nurse Workflow: Administration and wasting of a controlled substance

- Patient Medication Order verified and on patient EMAR
  - Nurse obtains medication from Omnicell® (ADC) for administration
  - If dose = full vial or syringe RN administers via appropriate route etc. BCMA on MAR
  - If dose = partial vial or syringe RN (best practice—waste excess before administration)
    - RN finds witness

- Controlled substance (CS) removed from ADC with witness
  - RN draws up the dose with witness
  - Rn wastes excess dose with witness documents waste prior to administration

- RN administers dose utilizing BCMA

- CS should be fully accounted for (waste and administration = what was removed)
  - Time constraints around administration
    - CS must be administered within 30 minutes after removal from Omnicell®
    - Documentation of waste is required to be completed within 30 minutes of administration (if this does not happen—concerns over where it is stored)
    - If removed but not administered—a witnessed waste or return must happen within 30 minutes

- Chain of custody—
  - RN removing medication is responsible for what happens to the medication and should be the administering nurse whenever possible.
Recommended Surveillance Practices

- Automated dispensing device reports are reviewed by Pharmacy and Patient Care Services Managers
  - Compare device activity with medication administration records
  - Patient response to medication is evaluated against medication administration record, documentation of response, and patient interview to Verify receipt of medication and pain control
  - Compare shift-to-shift medication administration
- Good practice is for nurse leaders to conduct random patient interviews
Case Study

- What is the Investigation process?
- Who is notified?
- What are the questions to ask RN during the investigative process
  - https://www.youtube.com/watch?v=5nR2kBCTNjc
Investigation of Diversion

- Multiple reporting requirements exist,
  - including reports to the Drug Enforcement Agency (DEA)
  - State Pharmacy Board,
  - Professional licensing boards, and
  - In some states, the Attorney General.

- State licensing boards conduct independent investigation.
What are your Responsibilities

According to the Drug Enforcement Agency (2013):

- You have a legal and ethical responsibility to uphold the law, and protect society from drug abuse.
- You have a professional responsibility to appropriately administer controlled substances.
- You have a personal responsibility to protect all patients.
- You must become aware of the potential situations where drug diversion can occur and safeguards that can be enacted to prevent this diversion.
References


