Learning Objectives

Following completion of this activity, participants will be able to:

— Identify practices that support medication safety and eliminate risks for drug diversion.
— Discuss interventions to minimize diversion of controlled substances through supply chain management.
— Recognize components of a diversion stewardship program that are essential in light of the recent increase in job-related stressors.
Diversion and the Healthcare Practitioner

- 1 in 10 health professionals struggle with addiction or abusing drugs not prescribed
- Healthcare workers pattern of drug abuse and dependency is unique to the general population
  - Tends to follow drug availability
  - See the positive effects drugs have on patients
  - Comfort level with use
  - I’m in control

Faces of Diversion

- Kerri
  - Worked in the ED for 15 years
  - Loved her job and was well liked
  - Didn’t show up for a family event
  - Found deceased in her apartment with an arsenal of used syringes
Prevention of Drug Diversion in the Healthcare Setting

Expect Diversion
- No news is not good news
  • We are lucky, we don't have any issues
- Outcomes of diversion
- Opioid stewardship

Error Reduction Strategies and Diversion Prevention
- Forcing functions
- Barriers and fail-safes
- Automation and computerization
- Redundancies
- Standardization and protocols
- Performance shaping factors (e.g., checklists, reminders)
- Rules and policies
- Education
- Information
- Don't make mistakes / be careful

Supporting Safety and Eliminating Risk
- Structure
  • Response process
- Procurement
  • Ready-to administer; exact dose required; single dose; avoid waste; avoid dilution
- Compounding
  • Avoid if possible; if necessary, avoid partial vials/bottles and consider overfill
- Technology
  • Maximize use of technology throughout the process

Improve system reliability
Improve human reliability
Prevention of Drug Diversion in the Healthcare Setting

ISMP Resources to Support Safety

Creating a Culture of Controlled Substance Oversight and Hospital Wide Engagement

The Catalyst for Change

By Willoughby Marano, The Atlanta Journal-Constitution

May 18, 2020
Prevention of Drug Diversion in the Healthcare Setting

“Pharmacy trusts us it’s ok”
“I purchased this order but I can go ahead and receive it too if you are busy”

“It’s a lot of waste, but it is what it is”
“Just go ahead and submit we will deal with it later”

“I carry the controlled substance in my pocket its just more convenient”
“I brought the PCA key home with me”

“He is a great nurse who is always willing to witness for colleagues”
“There is a discrepancy but I have to go to lunch”

“Trust” but “Verify”
‘Doverey, No Proverey’ – President Ronald Reagan

— Patient care was often cited as one of the reasons why workaround needed to be utilized
— There were less restrictions on buyer access in case they needed to above and beyond and help with receiving too
— Procedural areas historically lacked automation and “just in time” processes were seen as more provider friendly
— Check and balances existed but meaningful accountability did not always back them up
— No diversion problems detected could mean a bigger problem is brewing

The Culture Shift
A comprehensive overhaul of controlled substance programmatic oversight and involvement

Identify the trend to lead the initiative and what additional action is needed
Engage hospital leadership and the C-suite sponsors recognizing it takes more than pharmacy for a comprehensive program
Develop action plan and determine risk stratification
Identify the team to lead the initiative and what additional or repurposed positions are needed
Prevention of Drug Diversion in the Healthcare Setting

The Art of Perpetual Inventory

Lifecycle of controlled substances

- When it comes to controlled substances, healthcare facilities should be able to account for every dosage form from order generation to administration.
- Utilization of controlled substance management system within an integrated automated dispensing cabinet
- Controlled substance order generation based on specific hospital unit utilization or established par levels
- All par level adjustments can be tracked and documented in the automated dispensing cabinet systems
- Medication can be requested and tracked through software preventing medication from disappearing from safe to floor

Traceability of Controlled Substance Management

Controlled Substance Movement

- Most all transactions occur through automated dispensing cabinets
- Even PRN and patient specific doses
- Direct hand to hand delivery of non-automated dispensing cabinet stock with signature confirmation
- All issues and comments documented in the automated dispensing cabinets

Controlled Substance Reconciliation

- Documentation of waste within the electronic system
- Mechanism of witness also within system
- Controlled Substance Administration Record linked to patient EMR for documentation
- Returns can also be linked to healthcare employee and patient

Segregation of Duties

Reduce opportunity for diversion and concealment

- Pharmacy
- Pharmacy leader
- Pharmacist
- Administrator
- Nurse
- Physician

Automation helps propose the order based on validated pars
Pharmacy buyer reviews the proposed order and splits it to WAC, GPO, 340B
Pharmacy leader reviews and submits the final order each day
Pharmacist receives order and against initial order submission
Automation verifies what was proposed as the order is received inside the vault
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Proactive Process Review and Monitoring
Becoming more proactive rather than reactive

- Selecting a third party software to establish an ongoing review of automated dispensing cabinet data
  - Selection has migrated from third party auditing software to now artificial intelligence that has learning capabilities
- Running reports with relevant frequency and create robust follow up
  - Being intentional with the data and requiring real-time review and feedback
- Establishing benchmarks for all areas of the hospital
  - Continuously reassessing as changes in practice or treatments occur

Safe Handling of Controlled Substances
Best practices for administration of medications

- Utilization of closed loop technology regarding all transactions to insure appropriate dose was administered
- Utilizing the smallest dosage form possible to reduce waste or medication error
- Consistently utilize same NDC and dosage form to create consistent practice across the hospital areas
- Avoiding bulk dosage forms but sending up all doses in patient specific forms
- Ensuring barcode scanning on all products administered throughout the hospital utilizing RFID tracking when possible
- Using pre-filled ready to administer syringes to reduce compounding and product manipulation after dispense

COVID-19 Considerations
How controlled substance management may change during a pandemic

- Individuals wearing face masks may be less likely to be identified
  - Utilization of individual username and biometric id is important
- Increase number of traveler nurses or health professionals
  - Establish temporary privilege to access automated dispensing cabinets
- Controlled substances may be stored in non-traditional areas
  - Utilize medications with tamper-resistant packaging or shrink wrap
  - Purchase medications that deter diversion by reducing waste and have hard plastic shell, especially in areas with less oversight
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Warning Signs
Situations to be aware of that can be associated with diversion

Characteristics:
- Individuals who frequently volunteer to witness or administer controlled substances on behalf of their colleague
- Excessive late/early administrations
- Constant use of large dosage forms requiring significant waste
- Carrying medications around in pockets while not caring for a patient

Symptoms:
- Major life changes or injuries
- Frequent disappearances from the floor
- Periods of high and low productivity that is not consistent with colleagues on the same unit
- Float or Night Shift staff not familiar with the unit

Internal Control Escalation Pathway
When your processes and detection work

Suspected Diversion
- Cycle Count stock if necessary
- Patient case review and response
- Interview Personnel if needed

Charge Nurse
- Perform review utilizing data and trending
- Protect Patient
- Contact CNO and Pharmacy Administrator on Call

Nursing Unit Director
- Notify CS Program Coordinator
- Notify HR and/or Risk Management as appropriate
- Access data reports and product (if relevant)

Pharmacy Administrator On Call

End Goal
Outcomes we are looking for as measures of success

- Executive sponsors receive a report out on controlled substance management regularly
- There is tight control within pharmacy operations and several different segregation of duties
- Technology is leveraged for oversight and security controls
- Medications are supplied in the smallest ready to use dosage form possible including controlled substances used in procedural areas
- Pharmacy has a reputation for following up and investigating suspicious behavior or medication utilization
- Data is readily available, retrievable, and in a useful format. Dashboards provide near-time detection statistics and cases investigated
Prevention of Drug Diversion in the Healthcare Setting

“I feel like pharmacy is always watching”
“Whenever you have a discrepancy make sure to document in the system”
“Pharmacy makes my job easier by giving me a pre-filled syringe with the exact dose”
“I’m only going to witness you if I can evaluate it myself”
“If you follow the system pharmacy has laid out you will feel safer as a nurse and practice without worry”
“Our procedures are very clear”
“Our data can be pulled easily, let me show you”
“This is a unique situation, let me reach out to pharmacy for their recommendation”

Prevention of Drug Diversion in the Healthcare Setting

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Mass General Hospital
— 1,100 bed academic medical center and clinics across Boston-metro area
— 2.5 million control substances dispensed annually
— 28,000 employees
  • 3,800 nurses, 2,400 physicians, 400 pharmacy employees, 450 anesthesia providers
— Automation
  • 180 automated dispensing machines
  • 90 anesthesia workstations
Prevention of Drug Diversion in the Healthcare Setting

Critical Program Requirements
1. Drug diversion task force
2. Staff education and competencies
3. Machine learning surveillance
4. Investigations
5. Reporting

Machine Learning Surveillance
- Missing drug alerts
- Gaps in documentation
- Full waste transactions
- Delays in administration
- Delays in documentation
- Dispense off clock
- Pain scales
- Monitor in eScribe data

Critical Program Requirements
6. Auditing
7. Use of technology
8. Pharmacy controls
9. Human resources
10. Multi-disciplinary collaboration
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Pharmacy Controls
- Ordering, receiving, distribution, storage, returning
- Product selection to reduce risk
  - Ready-to-use
  - Tamper evident
  - Error-reduction
  - Ability to reduce product waste and waste documentation

Impact of COVID-19
- Expansion of ICU units
- Redeployed nurses and physicians
  - More discrepancies, overrides
  - Travelers
  - Areas closed that store control substances
- High volume of control substance purchases and utilization
  - Remote storage location security and surveillance
- Practice changes - limited access into patient room
  - Wasting and witnessing
- Lax federal and state requirements
- Field hospitals

COVID-Related Considerations

May 18, 2020
COVID-Related Considerations

- Mental health impact to healthcare providers and opportunities for diversion and abuse
- Maintain daily surveillance and evaluate trending reports
- Consider accountability audit
- Password and access cleanup
- Recovery - reverting back to the new normal

Challenges

- Goal to have comprehensive drug diversion program
- Manual process with limited resources
- Strategies to reduce the risk
  - Product selection
  - Surveillance system
- Little direction from DEA
- Multidisciplinary collaboration
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