

Identification and Prevention Strategies for Medication Diversion

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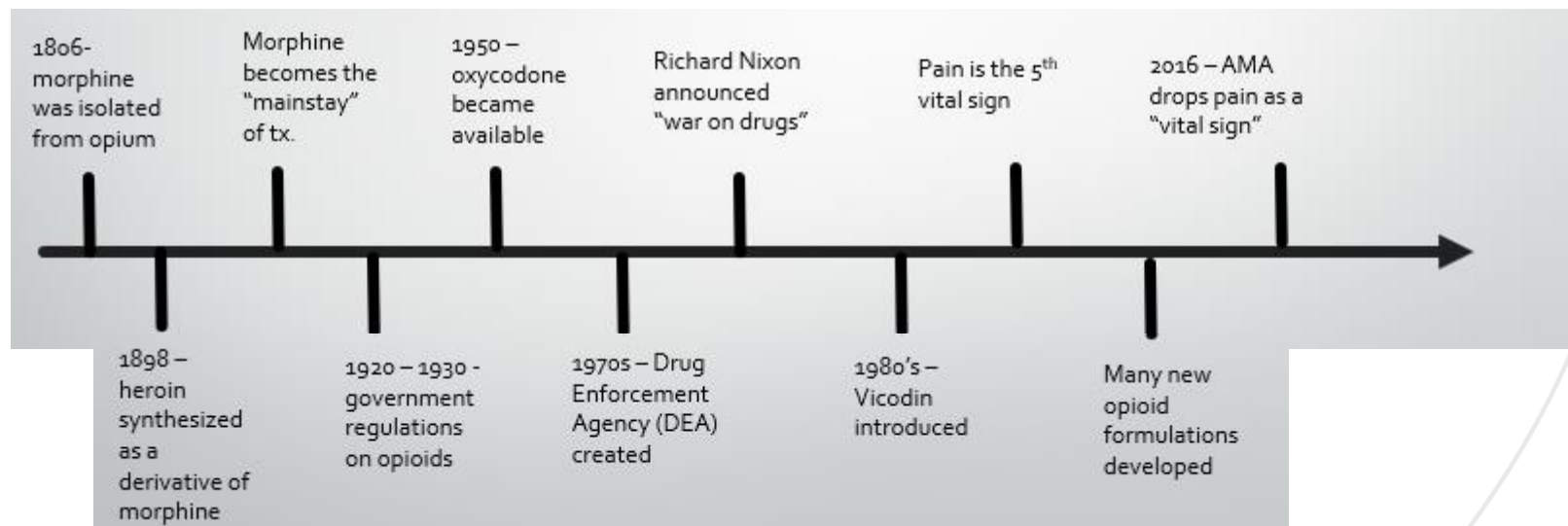
October 12, 2022



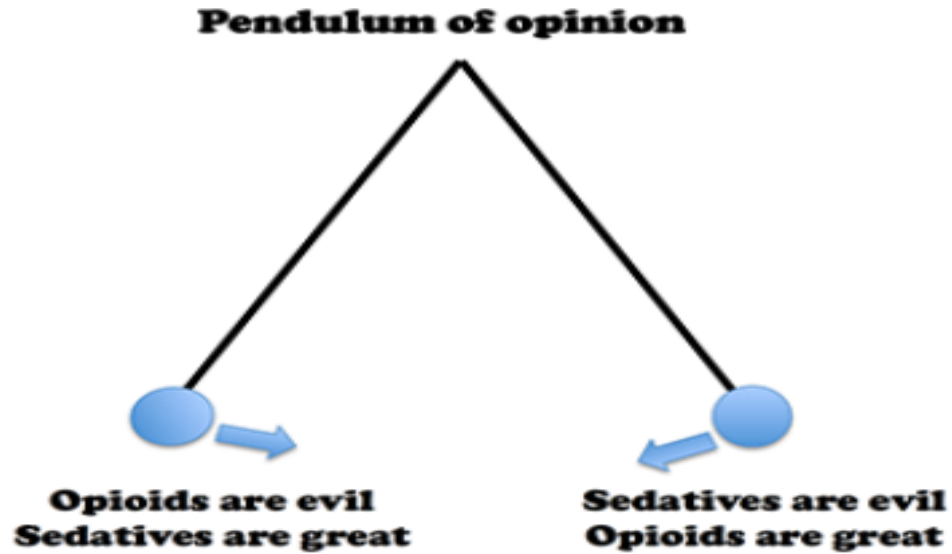
Objectives

- Define drug diversion and understand some of the costs associated with it
 - Determine who may be at risk for diverting medications
- Identify patient care and behavioral indicators that may be seen when a person is diverting medications
- Understand strategies available to help prevent drug diversion in the healthcare setting

History of Opioids

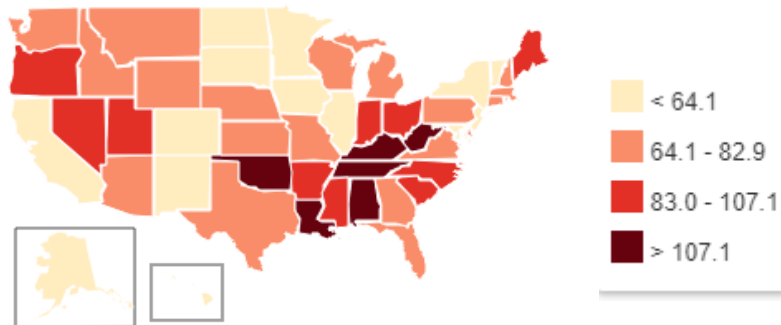


Opioid Pendulum

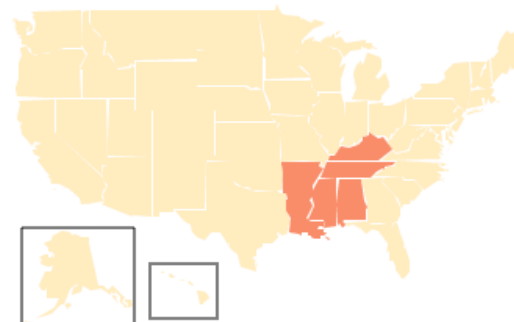


Opioid Dispensing Rates

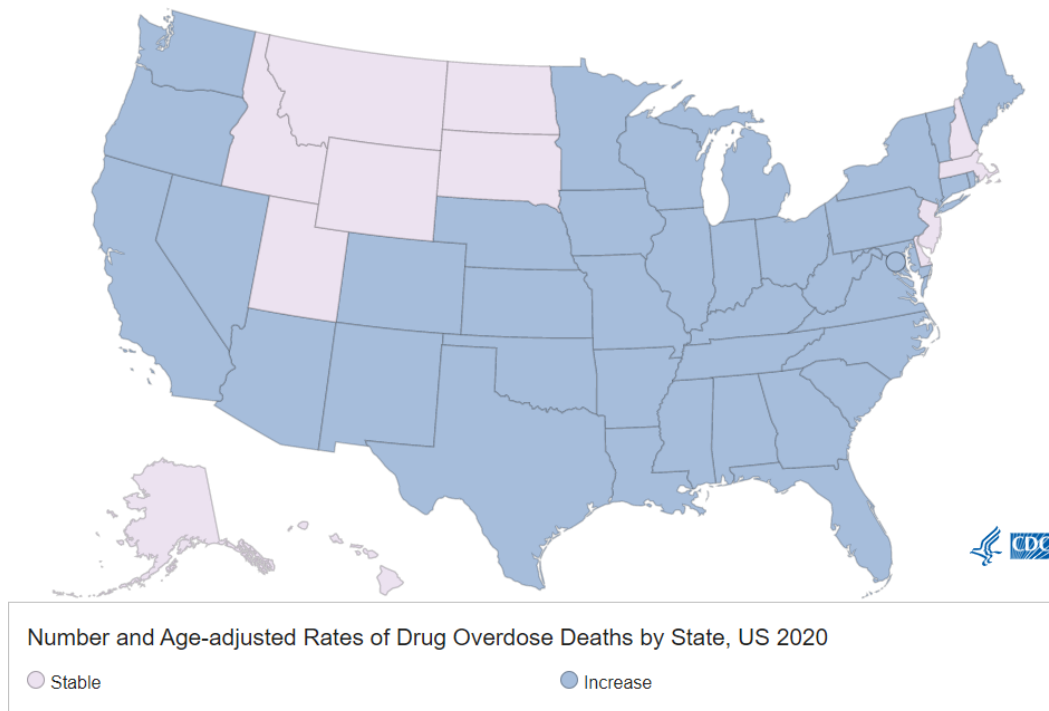
2006



2020



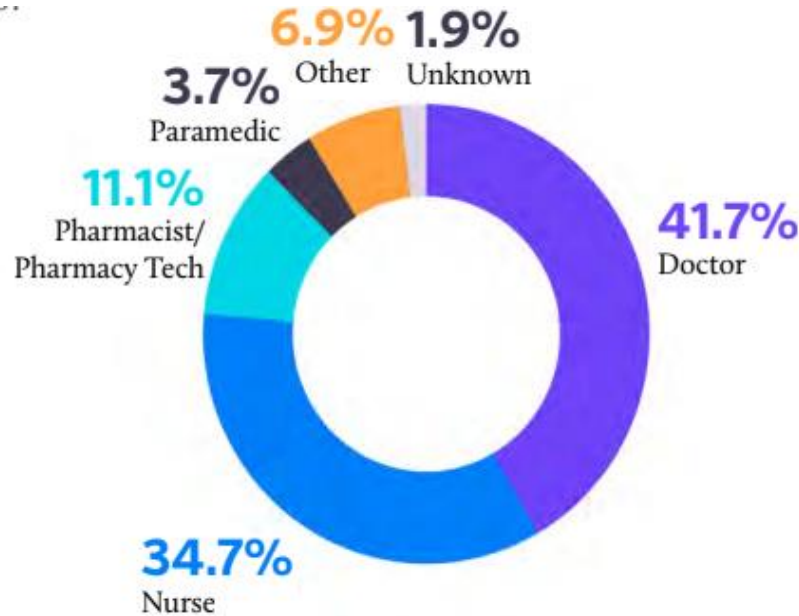
Drug Overdose Deaths



What is Drug Diversion

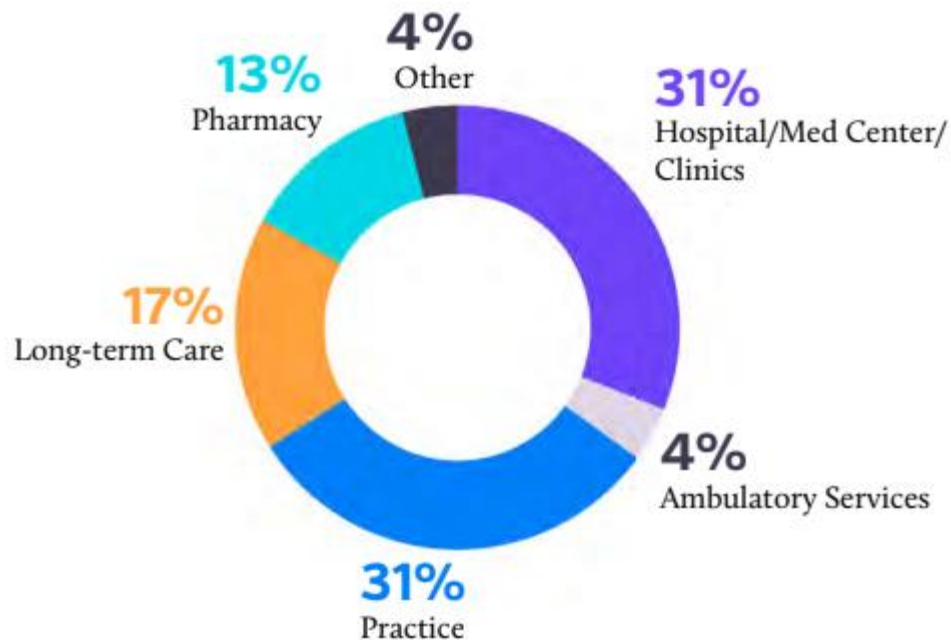
- Diversion: the unlawful use or distribution of medications in a way that was not intended by the prescriber of those medications
 - Considered theft regardless of intended use
 - Most commonly, it involves a controlled substance medication
- Diversion is relatively common among healthcare workers
 - Not routinely/openly discussed
- May go undetected for a significant amount of time

Medication Diversion by Role



Some researchers say as many as 10% of all medical professionals will divert drugs from their workplace at some point in their career.

Medication Diversion by Setting



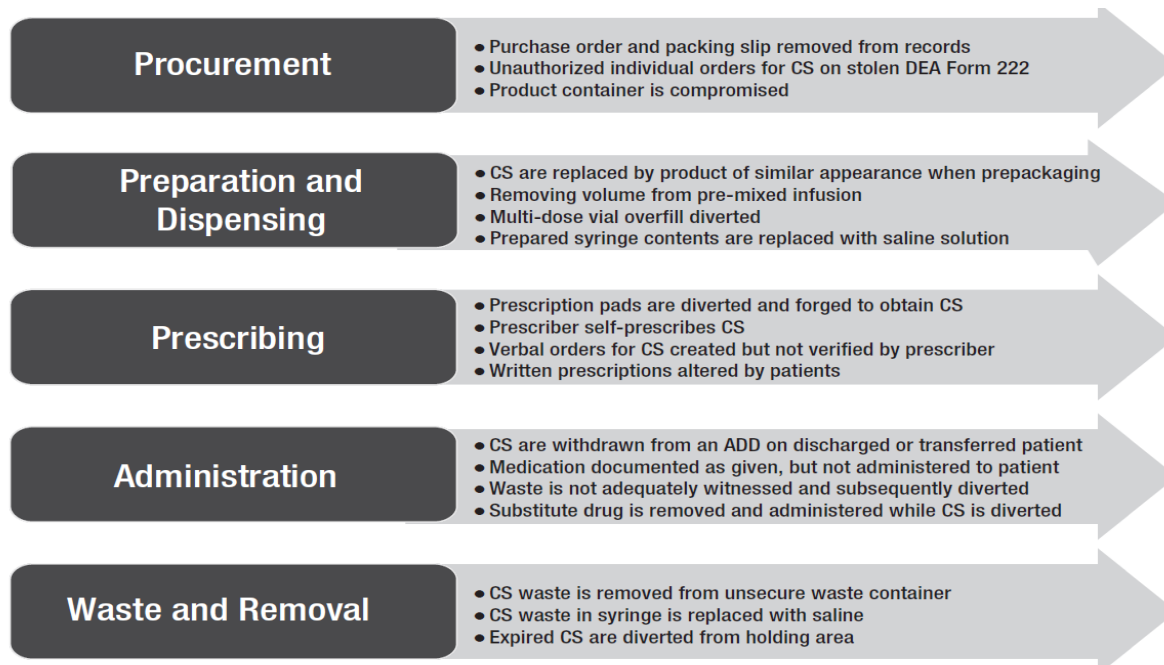
Common Medications being Diverted

Drug Class	Examples of Drugs Within a Drug Class
Anabolic Steroids	methyltestosterone, testosterone
Central Nervous System Depressants	Barbiturates: pentobarbital Benzodiazepines: alprazolam, diazepam
Hallucinogens	ketamine
Opioids	diphenoxylate, fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, oxycodone, oxymorphone
Stimulants	amphetamine, dextroamphetamine, methamphetamine, methylphenidate

Needle in a Haystack???



Risk Points of Drug Diversion

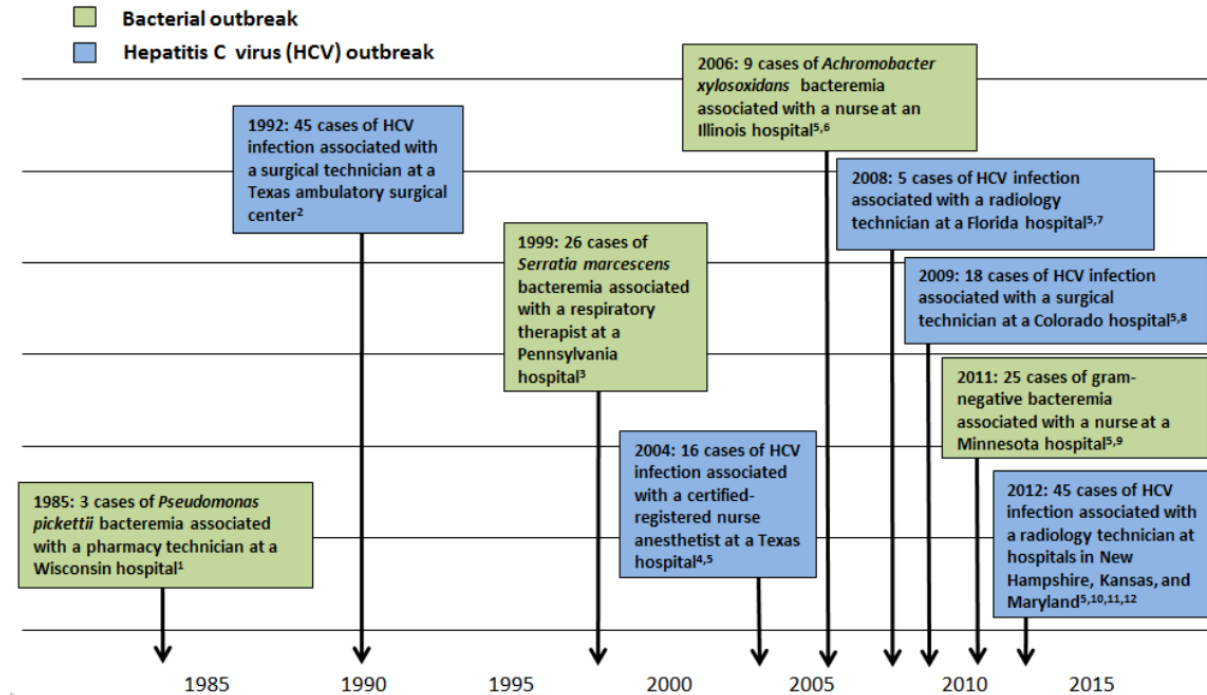


- “a procedural sedation nurse was found to have a secret pocket sewn inside her uniform top in which she dropped syringes and substituted them with syringes filled with saline”
- “a radiology tech with hepatitis C diverted unused fentanyl syringes intended for administration to patients and 5 patients became infected with the virus”
- “an EVS team member rummaged through sharps container withdrawing miniscule amounts left over in the bottom of vials”
- “a nurse with an eating disorder pocketed furosemide and gave the patient doses of acetaminophen in its place”
- “a pharmacy technician stole 4 doses of Neulasta at a time (\$2600/dose). Over a 3 year period, there was a \$14 million loss to the cancer center”

Cost of Drug Diversion

- \$\$\$ - medication lost/diverted
- Billing insurance for fraudulent prescriptions
- loss of reputation for institution
- Risk of Infection
- Impaired healthcare workers
- Fines from DEA
- Lack of pain control and/or treatment for patients

Risk of Infection



Indicators for Potential Diversion



Patient Care Indicators

- Inconsistent or incorrect charting
- Displays inconsistent work quality with times of high and low efficiency
- Offers to medicate other nurses' patients on a regular basis
- Obtains larger dose of narcotics when the ordered dose is available, the documents
- Requests to care for specific patients
- Illustrates specific narcotic use with patients under his/her care
- His/her patients reveal consistent pain scale patterns or complain that narcotics are not having the desired effect (especially when administered as needed) only on that shift
- Frequent or lengthy ADC activity by an individual outside of common medication administration times

Behavioral Indicators

- Isolates self from others, eats meals alone, avoids staff social events
- Frequent, unexplained disappearances during shift
- Often shows up on days off to finish work or retrieve forgotten items
- Frequently volunteers to work extra shifts
- Frequent spills or wastes of narcotics
- Chaotic home/personal life
- Refused to comply with narcotic diversion investigational procedure
- Medications in uniform pockets or taken home

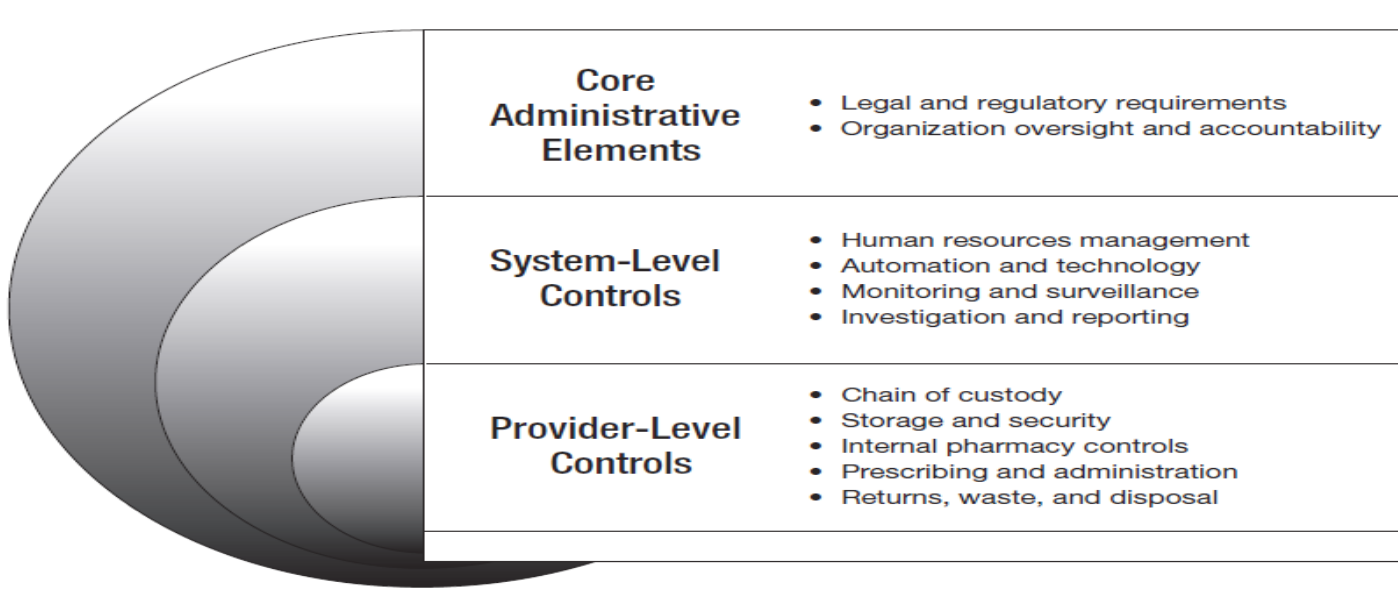
Automated Dispensing Cabinet Indicators

- Frequent or unwarranted override withdrawal of meds
- Early withdrawal of doses (more often than ordered frequency)
- Simultaneous withdrawal of like medications (two different pain meds)
- Frequent “cancelled” transactions
- Frequent “inventory” transactions
- Unexpected increase in med utilization
- Suspicious verbal orders (following an override withdrawal, unusually high dose or frequency)

Strategies to Prevent Diversion



Components of Drug Diversion Detection Program



Diversion Assessment Added Activity from 07/23/2022 through 08/22/2022 NEW



Added by Protenus Aug 24, 2022 5:00 PM based on data available Aug 24, 2022

Suspicion Score
96

Unreconciled Drugs
No

Incidents
44

Statistics Ordered by Z-Score

Peer Group ADCs: BA-PACU1, BA-PACU2

DESCRIPTION	MEAN	Z-SCORE	SUSPICION
34 dispenses or cancellations of drug pair 1000676 Dilaudid (HYDROMorphone Inj *PF*) and 1891949 Zofran (Ondansetron Inj 2 mg/mL) within 10 minutes of each other.	2.02	14.52	Very Suspicious
74 wastes of controlled drugs in the user's peer group.	13.16	3.37	Very Suspicious
21 order overrides for controlled drugs in the user's peer group.	2.84	3.28	Very Suspicious
9 dispensations of 1871541 - Demerol (Meperidine Inj) in the user's peer group.	3.33	2.45	Suspicious
112 dispensations of controlled drugs in the user's peer group.	27.32	2.43	Suspicious
10 returns (10 to bin, 0 to stock, 0 to pharmacy) of controlled drugs in the user's peer group.	1.89	2.34	Suspicious
This user performed an average of 8.0 dispensations of controlled drugs per shift.	2.78	2.07	Suspicious
20 total returns (10 to bin, 10 to stock, 0 to pharmacy).	5.50	1.80	Suspicious
The average time that elapsed between the first and last dispensation for each of the user's shifts is 7.3 hours.	6.55	0.25	
This user's longest shift utilizing the ADC machines lasted 10.5 hours.	10.10	0.12	

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Audits – things to look for

- Unreconciled medications
- Delayed administration/waste
- Batch wasting
- Waste partners
- Change in custody
- Waste full dose
- Pain scale patterns
- Dispense, administer, waste/return timing

Prevention Strategies

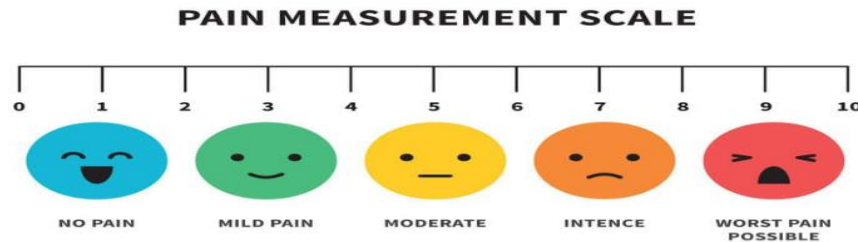
- Only remove current dose of medication for your patient
- Properly document medication administration and pain scores
- All wastes of medications must have a documented witness
- Do not be a “virtual witness” to medication wasting
- Do not loan your ID badge or pass codes to anyone
- Return unused medications according to procedure
- Report/resolve medication discrepancies promptly
- Report attempted inappropriate access to medications when identified
- Change ADC password every 6 months

- Avoid removing multiple doses of the same medication at the same time
- Pulling multiple doses at once requires you to “hold onto” unused doses for longer than needed
 - Higher potential for misplacing med
 - Med could get mixed up with different patient meds
 - Med could be taken home inadvertently



One Moment
One Task
One Priority
One FOCUS

- Pain scores can provide accurate picture to patient care
 - Why are we administering meds if pain score is 0?
 - Why are we not giving meds if pain score is 10?
- Are pain scores consistent from shift to shift?
- Is pain re-assessment documentation missing?



- “I just wasted this... can you be my witness?”
- “look, there is 50mcg waste in this syringe!”
- Rhetorical question: How many of you have fallen victim to poor waste practices?





Team members who handle controlled substances are expected and empowered to “see something, say something.”

Reporting Obligations

- The facility MUST report drug diversion incidents to all relevant federal and state agencies
- DEA must be notified immediately in the event of the theft or significant loss of a controlled substance
 - DEA 106 forms
- State laws vary, but reporting is mandatory in a majority of the states
 - Board of Pharmacy
 - Board of Nursing
 - Other state regulatory bodies

Ethical Obligations

- The ethical principles of benevolence (the duty to benefit another) and justice (the equal or comparative treatment of individuals) obligate health care professionals to provide humane care to all patients



Autonomy

Respect a person's freedom to choose what's right for them



Beneficence

All choices for a patient are made with the intent to do good



Non-maleficence

Do no harm



Justice

Treat and provide care fairly to all patients

Summary

- Drug Diversion is very common
- If we don't look for it, we won't find it
- Each scenario of drug diversion is different
 - Tools can help identify potential issues
 - Objective data cannot tell the full picture
- We all have an obligation to report suspicious activity
 - We owe it to our patients
- Resources are available for those who need assistance

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