

Drug Diversion: How to Avoid Becoming an Unwitting Participant

Kimberly New, JD, RN International Health Facility Diversion Association June 29, 2016



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- The overarching goal of PCSS-O is to offer evidence-based trainings on the safe and effective prescribing of opioid medications in the treatment of pain and/or opioid addiction.
- Our focus is to reach providers and/or providers-in-training from diverse healthcare professions including physicians, nurses, dentists, physician assistants, pharmacists, and program administrators.



Educational Objectives

- At the conclusion of this activity participants should be able to:
 - Define the scope of the problem of healthcare facility drug diversion in the United States.
 - Describe methods of diversion and how transaction analytics can be used for identification.
 - Describe measures physicians can take to protect themselves from being implicated in diversion schemes.



Sources of Diversion

The most common sources of diverted medications were from:

- 1. Drug dealers
- 2. Sharing and trading
- 3. Legitimate medical practice
- 4. Illegitimate medical practice (i.e. pill mills)

5. Theft

(Cicero et al., 2011)



Scope of the Problem

- All facilities face this issue
- Diversion can't be prevented entirely
- Substantial safety, regulatory and legal risk
- Mitigate risk with formal program, transparency and culture of accountability



What's at Stake

Patient Harm:

- Receiving care from impaired provider
- Untreated pain
- Exposure to bloodborne pathogens like Hep C, HIV or to unsafe substances.







What's at Stake

- DUI accidents
- "Ga Anesthesia Assistant Arrested For DUI Propofol In Wrong Way Crash"





What's at Stake

Impact on Diverting Staff:

- Arrest and criminal prosecution
- Civil liability
- Loss of license/imposition of fines by licensing board
- Health related consequences
- Overdose and death

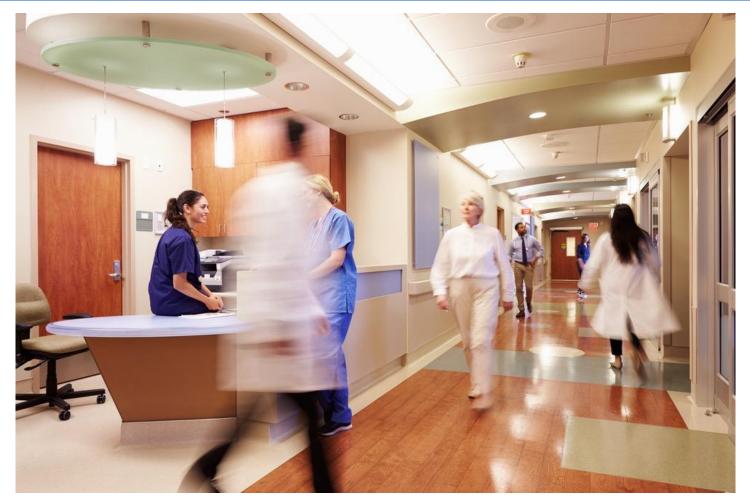


Ongoing Risks

- 7,200 McKay-Dee and Davis Hospital patients could have been exposed to hepatitis C
- Over 5,000 Scripps Health, Swedish Hospital, Honor Health and Northwest Hospital & Medical Center patients offered hepatitis C testing
- More than 200 patients seen at Shore Medical Center notified of potential exposure to hepatitis C



What Does a Diverting Staff Member Look Like?





Who and Why?

- According to a study by the National Council of State Boards of Nursing, approximately 15% of healthcare staff struggle with drug dependence at some point in their career.
- High achiever, stellar employee
- Significant stress in personal life
- Night shift
- Prefer vulnerable patient population
- Likes increased autonomy and less supervision
- Agency worker or traveler
- Legitimate prescription for drug being diverted

Generally, healthcare personnel divert for personal use and are extremely secretive about it. (National Council of State Boards of Nursing, 2012)



Occupational factors

- Suppression of feelings and emotions
- Compassion fatigue and burnout
- Physical demands of job
- Injuries and chronic pain
- Ease of access to prescriptions and medication
- Knowledge and sense of control





Where Can Diversion Occur?

 Anywhere controlled subtances are found by anyone intent on diverting





Drugs of Choice

Injectables:

- Hydromorphone
- Morphine
- Fentanyl
- Propofol

Pills and liquids:

- Hydrocodone
- Oxycodone







Drugs of Choice

- Benzodiazepines (lorazepam, alprazolam, clonazepam)
- Drugs to ease withdrawal and enhance impact of opioid (ondansetron, promethazine, diphenhydramine)
- Others (cyclobenzaprine, gabapentin, ketorolac)
- Anesthesia gases

(Fang et al. 2009)



How Are They Caught?

For the Dates 5/1/2016 to 5/31/2016

Anomalous Usage

Group/Sort by: SiteID, NursingUnitID, ItemName/Qty-WtdQty Desc, UserID

Selected Criteria: Date Period BETWEEN 5/1/2016 AND 5/31/2016									UserName	Tlrans	Nt	Wtd Qty	Рор	Mean	UIF	UOF	SDev			
Systems IN (Omnicell) Nursing Units IN (ER) Transaction Types IN (WAS Med Classes IN (Class 5; Cl Levels IN (Approaching; Mild	ass 4;	Class										Site: Nursing 0775064 D R	Unit: EF	6 5	Midazolam Pf 5MG Inj	40	4	6.5	9.8	6.99
StdDev > 3												0775122			Morphine Preserv Free 4Mg Inj	120	7	18.0	27.0	5.37
Population > 3												V	32	32						
Report Options: Weighted=False; Print Head	er=Fal	lse; Di	splay=l	JserName;	My items Trans	sactions	=Transact	tions/Pa	tient			C S V	25	25						
User Name	Trar	nsC nt	Qty	Wtd Qty		Рор	Mean	UIF	UOF	SDev		т М	24	24						
Site: Nursing Unit: ER						1	M	22	21											
0705673				Fetanyl 1	IOO Mcg Inj	104	6	9.0	13.5	11.5 5		<u>т</u> М	20	18						
P	52	87										OD	17	16						
B P B A R A R A R C E D	29	55										C	15	16						
B	32	47				_						C	15	15						
A												X								
R	26	34										D	16	15						
A	30	33										Ī	15	15						
R	12	19										C	14	15						
C	15	18										Ľ								
Ē												R	15	15						
D	10	15										P	14	14						
M	10	11										R	10	10						
												W	13	13						



How Are They Caught?

Hot List Audit: Total Count

May 2016

Station	Reason Selected	User Name	Count	Mean	STD	UAM
	Cancelled Transaction Summary		11	2.268	1.924	4538
	Discrepancy Transaction Summary		15	2.818	3.660	3.328
	Refilled Transaction Summary		82	14.000	20.988	3.240
	Percocet Usage Summary		26	4.512	4.862	4.420
	Hydromorphone Usage Summary		24	4.034	4.851	4.116
	Benzodiazepine Usage Summary		7	2.278	1.565	3.017
	Discrepancy Transaction Summary		55	4.943	9.656	5.184
	Cancelled Transaction Summary		50	7.652	9.452	4.480
	Refilled Transaction Summary		460	39.538	95.456	4.405
	Benzodiazepine Usage Summary		20	3.692	3.896	4.186
	Morphine Usage Summary		23	6.342	5.111	3.259
	Oxycodone Usage Summary		14	3.552	3.334	3.134
	Discrepancy Transaction Summary		37	4.862	8.110	3.963
	Refilled Transaction Summary		204	23.667	46.265	3.898
	Cancelled Transaction Summary		29	4.758	6.865	3.531
	Cancelled Transaction Summary		28	4.758	6.865	3.386
	Wasted Transaction Summary		12	2.913	2.795	3.251



Month to Month Comparison

	Date Ra	ltem: 07 Item	Site: *(Area:	Omorphone 2mg INJ *(0,1,2,3,4,5,6) action day: 1.07	-			
User Name	Name User ID Total Doses ¹ Ti Da			Doses Per Transaction Day	Num of STD Dev Above Avg	² % Chance of Type\Error		
Betty	****	8	2	4	3.9	0.01756		
Kelsie	elsie **** 10		3	3.33	33 3.01			
Carol	****	20	10	2	1.24	**		
Lisa	****	24	12	2	1.24	**		
Date Range: 11/1/2015 0:00:00.00 – 11/30/2015 23:59:59.99 Page 1 Site: *(All) Area: Item: 0705780 – HYRDOmorphone 2mg INJ Item Control Levels: *(0,1,2,3,4,5,6) Average dose/transaction day: 1.27 Standard Deviation: 1.01								
User Name	Jser Name User ID Total D		¹ Transaction Days	Doses Per Transaction Day	Num of STD Dev Above Avg	² % Chance of Type\Error		
Sheryl	****	5	1	5	3.68	0.03218		
Carol	****	57	12	4.75	5 3.43			
Kelley ***** 3 1		1	3	1.71	**			

Month to Month Comparison

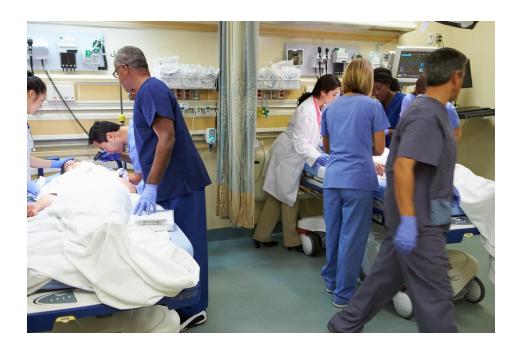
Date Range: 12/1/2015 0:00:00.0 – 12/31/2015 23:59:59.99 Page 1 Site: *(All) Area: Item: 075780-HRDROmorphone 2mg INJ Item Control Levels: *(0,1,2,3,4,5,6) Average dose/transaction day: 1.48 Standard Deviation: 1.04										
User Name	User Name User ID Total Doses 1 Transaction Doses Per Num of Std Dev 2 % Chance of Transaction Days Above Avg Type/Error									
Tressa	****	5	1	5	3.4	0.07627				
Carol	****	48	10	4.8	3.21	0.13092				
Pauline	****	7	2	3.5	1.95	**				
Mia	Mia ***** 37		13	2.85	1.32	**				
	Date Range: 1/1/2016 0:00:00.0 – 1/31/2016 23:59:59.99 Page 1 Site: *(All) Area: Item: 075780-HRDROmorphone 2mg INJ Item Control Levels: *(0,1,2,3,4,5,6) Average dose/transaction day: 1.48 Standard Deviation: 1.04									
User Name			¹ Transaction Days	Doses Per Transaction Day	Num of Std Dev Above Avg	² % Chance of Type/Error				
Carol	****	53	11	4.82	3.4	0.08063				
Tressa	****	9	2	4.5	3.09	0.18624				
David	****	10	3	3.33	1.97	**				

Month to Month Comparison

			tem: 075780 – H Item Control L Average dos	00 – 2/29/2016 23: Site: *(All) Area: IYDROmorphone 2 evels: *(0,1,2,3,4 e/transaction day: d Deviation: 1.02	mg INJ ,5,6)	ge 1
User Name	User ID	Total Doses	1 Transaction Days	Doses Per Transaction Day	Num of Std Dev Above Avg	² % Chance of Type Error
Carol	****	68	12	5.67	4.36	0.00456
Julie	****	7	2	3.5	2.24	**
Reggie	****	14	5	2.8	1.56	**
Grace	****	8	3	2.67	1.43	**

Case of ER Nurse CPOE Scheme

- Nurse allowed to input orders for controlled substances in CPOE
- MD electronic verification of orders





Orders Input on Discharged Patients

Status Account #	DEP ER
Reg Date/Time Facility	05/03, 12:20
Location	EMERGENCY DEPARTMENT
Stated Complaint Chief Complaint	ABD PAIN Abdominal Pain
ED Location Area Station Group	PODC
Arrival Date/Time Arrival Mode Triaged At Time Seen by Provider Discharge Date/Time Discharge Disposition	05/03/15, 12:20 Private Car 05/03, 12:29 05/03, 13:16 05/03, 15:54 Discharge to Home
Status Priority Condition	Discharged Triage 3 Stable

ED Physician ED Nurse Primary Care Provider Family Physician Insurances Discharge Referrals

Discharge Forms

Hydromorphone removed for this patient at 19:08



Diversion Scheme Lasted Over a Year

- All falsified orders electronically verified by the physicians
- In many instances the physician never had a role in caring for the patient



Orthopedic Nurse with Crisis

- Nurse well respected and admired
- "I am going on a weekend trip and forgot to arrange for a refill on my oxycodone"
- MD Jones agreed to prescribe enough for her to get by until Monday



Orthopedic Nurse with Crisis

• So did MDs Smith, Miller, Price and Patel





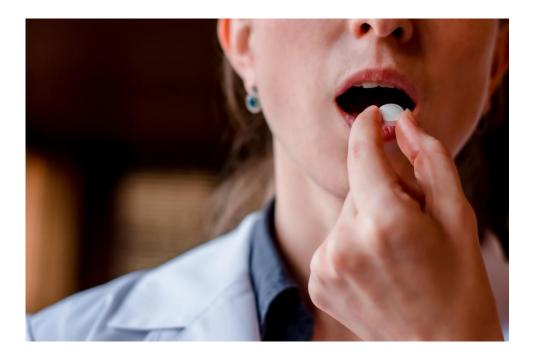
Patient on Comfort Measures

- Nurse favorite on unit
- Pulled three doses of hydrocodone during the night
- Failed to document administration
- When confronted, stated Dr. Chang gave me a verbal order but at the end of the shift he refused to sign the order



Patient on Comfort Measures

- Dr. Chang interviewed
- "She is a lovely nurse and an extremely good nurse, but I never gave those verbal orders"





Patient Difficulty Filling Script

- Dr. Haynes has a busy office practice with several staff
- Dr. Haynes regularly rounds on her patients when they are inpatients at ABC Hospital Center
- Ms. Roberts was recently admitted to the hospital and given a new prescription for pain medication by Dr. Haynes
- Ms. Roberts calls to complain that she can't get her prescription filled because she has received too many similar prescriptions in the last month



Patient Difficulty Filling Script

- Dr. Haynes calls the pharmacy to protest and learns that she has allegedly written several prescriptions for Ms. Roberts in the past 6 months, all of which have been picked up
- What could Dr. Haynes have done to detect this scheme before it had been going on for several months?



Patient Difficulty Filling Script

 Ultimately Dr. Hayne's nurse, who also works at ABC Hospital Center is caught trying to pick up a fraudulent prescription for Ms. Roberts





Using Pandora or RxAuditor When a Concern Exists

- When you have a concern about a staff member, voice it early
- Most hospitals have ongoing diversion auditing by nursing leadership and pharmacy
- The individual may already be on a watch list
- Analytics programs can be used to identify diversion schemes and abnormal usage for a particular staff member

(Maslakowski, et al. 2012)



Report Therapeutic Failure and Unrelieved Pain

- There have been many cases in which a patient has had unrelieved pain despite approriate therapy
- Tampering must always be a consideration
- Consider the case of the elderly patient who didn't want to "bother" the nurses...



In Conclusion

- Diversion by healthcare personnel is a common occurrence
- Diverting staff may try to get medical staff to assist in a diversion scheme
- Patients may suffer unrelieved pain or worse
- Most hospitals have the technology to review staff of concern



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PCSS-O Colleague Support Program and Listserv

- PCSS-O Colleague Support Program is designed to offer general information to health professionals seeking guidance in their clinical practice in prescribing opioid medications.
- PCSS-O Mentors comprise a national network of trained providers with expertise in addiction medicine/psychiatry and pain management.
- Our mentoring approach allows every mentor/mentee relationship to be unique and catered to the specific needs of both parties.
- The mentoring program is available at no cost to providers.

For more information on requesting or becoming a mentor visit: <u>www.pcss-o.org/colleague-support</u>

 Listserv: A resource that provides prompt responses to practice related questions/cases from our PCSS mentors and other experts in the field. To join email: pcss-o@aaap.org.





PCSS-O is a collaborative effort led by American Academy of Addiction Psychiatry (AAAP) in partnership with: Addiction Technology Transfer Center (ATTC), American Academy of Neurology (AAN), American Academy of Pain Medicine (AAPM), American Academy of Pediatrics (AAP), American College of Physicians (ACP), American Dental Association (ADA), American Medical Association (AMA), American Osteopathic Academy of Addiction Medicine (AOAAM), American Psychiatric Association (APA), American Society for Pain Management Nursing (ASPMN), International Nurses Society on Addictions (IntNSA), and Southeast Consortium for Substance Abuse Training (SECSAT).

> For more information visit: <u>www.pcss-o.org</u> For questions email: <u>pcss-o@aaap.org</u>



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