

## Moving Opioid Misuse Prevention Upstream

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### Objectives

Understand that opioid misuse is a disease and break the stigma associated with his condition

Identify roles of the pharmacy technician in opioid misuse and overdose prevention

Apply concepts learned to perform a patient intake screening using the tools provided

### Opioid Statistics

In most countries, the use of opioid prescriptions is limited to acute hospitalization and trauma (CDC).

New evidence has shown that non-opioid medications are just as effective for pain management as opioids.

As many as 1 in 4 patients receiving long-term opioid therapy struggles with opioid addiction,

Keels et al. Effect of opioid vs Nonopioid Medications. JAMA. 2018;319(9):972-982.  
Banta-Green et al. Opioid use behaviors, mental health and pain. Drug Alcohol Depend 2009;104:34-42.  
Bresnahan et al. Risk factors for drug dependence among out-patients on opioid therapy in a large US health-care system. Addiction 2010;105:1776-82.  
Fleming et al. Substance use disorders in a primary care sample receiving daily opioid therapy. J Pain 2007;8:573-82.



### The 3 P's of Pharmacy

- Patient
- Prescription
- Professional

### Opioid Statistics

Nearly half of all opioid overdose deaths involve a prescription opioid (CDC).

Many of those abusing prescription opioids or even heroin had a prescription medication as their entry point

Among post-op patients, 92% received an opioid prescription, but 63% of the pills went unused, and 1/3 of patients used none of the pills.

Cropton et al. Prescription opioid abuse: problems and responses. Prev Med. 2015;80:2-6.  
Cicero et al. The changing face of heroin use in the United States. JAMA Psychiatry. 2014;71(7):823-826.  
Danzon et al. "I'm not afraid of those ones just 'cause they've been prescribed": perceptions of risk among illicit users of pharmaceutical opioids. Int J Drug Policy. 2012;33(1):174-184.  
Harrigan. Mayo News Network, April 19, 2018.  
Keels et al. Effect of opioid vs Nonopioid Medications. JAMA. 2018;319(9):972-982.



## Pharmacy's Role

Pharmacy's current approach has been more defensive than proactive.

- PDMP
- Refusal to fill

But pharmacist have a key role to play in disease prevention and health promotion.

Compton et al. Prescription opioid abuse: problems and responses. *Prev Med.* 2015;80:5-9.  
Cicero et al. The changing face of heroin use in the United States. *JAMA Psychiat.* 2014;71(7):821-826.  
Dunlavy et al. "The not afraid of those ones just 'cause they've been prescribed": perceptions of risk among illicit users of pharmaceutical opioids. *Int J Drug Policy.* 2012;23(5):374-384.



## Pharmacy's Role



## Respiratory Depression

Contributing variables: (increase risk or make respiratory depression more pronounced)

- COPD, asthma, other respiratory disease → **This is how people die of overdose!**
- Obstructive sleep apnea
- Relief of pain
- High opioid dose
- Concomitant meds: general anesthetics, tranquilizers, alcohol, or sedative-hypnotics

Antagonists reverse (ie. naloxone, naltrexone)



## Reward Pathway



In nature—rewards usually come only with effort and after a delay.

- Opioids provide a shortcut.
- Flood the nucleus accumbens with dopamine.
  - The pleasure is not serving survival or reproduction—Our brains are not equipped to withstand all this dopamine
  - Chronic use = overwhelmed receptor cells call for a shutdown.
  - The natural capacity to produce dopamine in the reward system is reduced, while the need persists and the drug seems to be the only way to fulfill it. The brain is losing its access to other, less immediate and powerful sources of reward. Addicts may require constantly higher doses and a quicker passage into the brain. It's as though the normal machinery of motivation is no longer functioning; they want the drug even when it no longer gives pleasure.

Adapted from July 2004 issue of Harvard Mental Health Letter



## Words matter...

Brown-noser	Strategic relationship navigator
Glutton	Person with an insatiable appetite
Assertive Feelings Manipulator	Bully
World Leader	Tyrannical dictator
Addict	Patient with substance use disorder
Abuser	Person with chronic disease



## Risk Factors for Opioid Misuse/Opioid Use Disorder

Environmental Factors + Genetic Factors + Drug Factors = Risk Total

Early life stress	1 <sup>st</sup> degree relative	Rapid-acting drug
Parental controls	Opioid receptors	Unlimited Rx
Age		
Pain		
Poverty/unemployment		



Kaye, et al. Pain Physician. 2017;20:S93-S109

## Risk Factors for Opioid Misuse/Opioid Use Disorder

- History of Substance Use Disorder
- History of cocaine abuse (4x higher risk)
  - History of alcohol abuse (2.6x higher risk)
  - Current daily nicotine use

Chronic Pain

Mental Health Disorders

- Diagnosis of major depression, psychosis, PTSD
- Use of psychotropic medications (especially benzodiazepines)



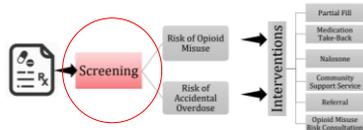
## Nonopioid alternatives for pain treatment

Regular exercise	Hydrotherapy
Physical therapy	Biofeedback
Acupuncture	Massage therapy
TENS units	
Relaxation and/or mindfulness training	
Cognitive Behavioral Therapy	
Gabapentin/Pregabalin	
SNRI / TCA antidepressants	**May actually be less expensive than opioid treatment overall.

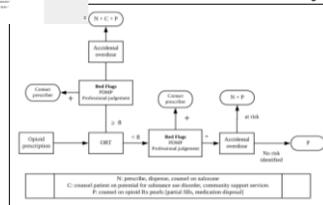


Gore, et al. Pain Practice. 2012.

## Screening Leads to Interventions



## ... in the Community Pharmacy





## Payment

- Patient
- Insurance coverage
    - Pharmacist NPI
    - Pharmacist to register with North Dakota Medicaid
    - Cash
- Third party prescribing
- Emergency response



## ND Overdose Prevention and Immunity Law

According to ND Law, any individual (family, friends, community member) is protected from civil or criminal liability for giving naloxone for a suspected opioid overdose. North Dakota Century Code 23-01-42



## Common Questions

- Do I incur added liability by prescribing and dispensing naloxone?
- Am I just perpetuating the opioid problem by dispensing naloxone?
- Will people be offended if I offer naloxone?
- Others?

Buzali et al. Preventing Opiate Overdose Deaths: Examining Objections to Take-Home Naloxone. J Health Care Poor Underserved. 2010 Nov; 21(4).  
T.C. Green et al. J Am Pharm Assoc (2017) 57.



## Workflow

- Technician Responsibilities
- Distribute Patient Intake Form
  - Input information into RedCap
- Pharmacist responsibilities
- Review patient intake form
  - Follow Opioid Triage Tool process
  - Prescribe naloxone when necessary
  - Patient education

