

Hospital Based Strategies to Tackle the Opioid Epidemic

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Learning Objectives for Pharmacists

1. Share global, national, and state data on the opioid use disorder (OUD) epidemic
2. Discuss policies for managing OUD with medication assisted treatment (MAT) and naloxone in the hospital and overcoming potential barriers
3. Evaluate administration of naloxone formulations to manage an opioid overdose and describe state laws regarding naloxone access
4. Review strategies and community outreach programs that hospitals implemented to address OUD in Illinois



Global, National and State Data on the Opioid Epidemic

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Conflict of Interest

The speaker (Abby Kahaleh) has no conflicts of interest to disclose.



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Opioid Use Disorder (OUD) Epidemic¹⁻⁴

- According to World Health Organization, 275 million (5.6%) used drugs at least once
- In 2016, 27 million suffered from OUD
- Overdose caused 33% of all drug-related deaths
- Opioid analgesics that are prescribed to millions of patients annually to treat moderate to severe pain
- In 1996, the physicians were urged to treat pain as the fifth vital sign.
- Past 20 years, there has been an increase in opioid medication prescribing
- Centers for Disease Control and Prevention (CDC) predicted that opioid misuse alone costs the United States \$78.5 billion a year
- Costs: Health care services, lost productivity, addiction treatment, and criminal justice involvement.



Opioid Use Disorder Epidemic⁵⁻⁹-II

- In May 2018, the president of the U.S. declared OUD as a public health crisis
- Estimated 2 million are opioid dependents
- OUD affects all demographics
- From 2002 to 2017 there has been a 4.1-fold increase in deaths due to opioids misuse
- There is a critical need to reduce the abuse potential of opioid medications since studies indicate that abuse of prescription opioids is a strong risk factor for heroin use.
- In 2015, the total opiate-related overdose deaths was 33,091



Opioid Use Disorder Epidemic¹⁰-III

- In primary care settings, many patients are treated for chronic pain syndrome
- Some patients are started on opioids in the emergency room
- Majority of patients perceive that the non-opioids medications are ineffective and “the only medication that works is oxycodone”
- Primary care providers are faced with the challenge to convince the patients that chronic opioid use has deleterious effects, including dependency, respiratory suppression and even death.



Illinois Opioid Use Disorder

- According to the National Institute on Drug Abuse (drugabuse.gov):
 - In 2017, there were 2,202 drug overdose deaths
 - Rate of 17.2 deaths per 100,000 persons
 - Rise from 127 deaths in 2014 to 1,187 deaths due to synthetic opioids (mainly fentanyl)
 - Rise in deaths due to heroin from 844 in 2014 to 1,251 deaths (past three years)
 - Deaths from prescription opioids doubled from 343 to 844



Role of Pharmacists

- Pharmacists can educate health care professionals and patients
- Optimizing medications use, prescribing appropriate medications, and advising on tailoring the medications appropriate use
- Gender, and age patient populations.
- Pharmacists, fellows, residents, and pharmacy students play a vital role
- Recommending safer options for pain management that are more effective among high-risk patients.



Role of Academicians

- Academic leaders should ensure the relevance of pharmacy education
- Including content on emerging trends and immediate crises
- Incorporating preventive measures into the pharmacy curricula
- Considering the spiritual aspects of health could be beneficial
- Adding critical knowledge of OUD management
- Enhancing skills using workshops, webinars, and TED talks
- Establishing interdisciplinary courses



Role of Future Pharmacists

- Engaging in didactic, experiential, and extracurricular learning activities
- Modifying didactic curricula in pharmacy programs to include pain management, mental health, and treatment of opioids dependency
- Addressing the OUD in Experiential education and co-curricular activities
- Developing community outreach programs by including students' visits to various communities to assess patients' needs and challenges



National Initiatives, Research, & Resources¹¹⁻¹⁹ |

- American Association for Colleges of Pharmacy (AACCP) conducted a survey to identify the level of involvement different pharmacy schools have in tackling the OUD crises
- Areas include advocacy, education, practice, research and the role of the student, collaborations and specific activities
- Association of American Medical Colleges (AAMC) evaluated medical school curricula for content and medical education training regarding opioid prescribing and pain management



Global Initiatives, Research, Resources¹¹⁻¹⁹-II

At the University of Sydney, a concerted effort has been made to include several elements into the pharmacy curriculum:

- The elements of safe, responsible dispensing of restricted substances including opioids in the pharmacy
- Facilitating research studies devoted to advocacy for PDMP implementation, and the enhancement of interprofessional communication and collaboration
- The introduction of naltrexone injections as rescue medication supplied by pharmacists without prescription/s.



Global Initiatives, Research, Resources-III

- Understanding and implementing scrutiny of opioid prescriptions, specifically examining the prescription for correct prescribing and detection of fraudulent presentations
- Exercising clinical judgement as to the appropriate choice and dosage form/strength of opioid for the patient per prescription
- The role of implicit bias in patient care specifically in relation to indigenous people and people of diverse backgrounds and opioid use.



Global Initiatives, Research, Resources-IV

- The role of empathy and care in the dispensing and provision of opioids.
- The importance of respect for patient autonomy
- Ethical responsibility and sensitivity towards all patients
- The importance of pharmacists' awareness of and participation in harm minimization policies and procedures in the context of opioid use and misuse
- The rationale behind the recent up scheduling of previously scheduled 'OTC pain medicines containing codeine, now categorized as 'Prescription Only' medicines
- What to do in the case of identifying a fraudulent prescription for restricted substances.



In 2015, how many people died as a result of drug use globally?

- A. 4,000
- B. 50,000
- C. 45,000
- D. 450,000



In 2017, how many people died in the U.S. due to opioid overdose?

- A. 47,600
- B. 4,760
- C. 4,670
- D. 4,600



In 2017, how many people died due to opioid overdose in IL?

- A. 202
- B. 2,202
- C. 20,000
- D. 200,000



Recommendations ²⁰⁻²¹

- Health care professionals and educators need to rethink how we approach this disorder
- Focus should be on prevention, stop the problem from spreading, and implementing a multipronged approach to addressing this epidemic
- Substance abuse system should be accessible, and easy to find to better manage patients and support their family
- Educators and health care professionals, including pharmacist, need to be educated on “best practices” for OUD treatment



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Potential Opioid Withdrawal Interventions for Hospital Systems

Andrew Merker, PharmD, BCPS, BCIDP, AAHIVP



Conflict of Interest

The speaker (Andrew Merker) has no conflicts of interest to disclose.



Do you currently have policies in place at your institution detailing the use of buprenorphine and/or methadone?

No

No - but currently
in development

Yes

Do you have a clinical protocol in place for managing patients with opioid use disorder?

No

No - but currently
in development

Yes

Opioid Use Disorder (OUD) - Overview of Symptoms and Management



Opioid Withdrawal Symptoms¹

- Timeline
 - Depends on half life of opioid
 - Short acting opioids: begin at 12 hours, peak at 36 - 72 hours, taper over 4 - 7 days
- Symptoms
 - Pupillary dilation
 - Lacrimation
 - Rhinorrhea
 - Piloerection
 - Yawning, sneezing
 - Nausea/vomiting/diarrhea
- Clinical Opioid Withdrawal Score (COWS)



Medication Assisted Therapy¹

- Use of opioid agonists to assist in management of OUD
 - Buprenorphine, methadone
 - Reduce illicit opioid use, increase retention
- Alpha-2 agonists potential alternative
 - Opioid agonists generally preferred
 - Non-narcotic, avoid opioid side effects
 - No additional certification necessary, less restrictions



Methadone²

- Dosing (oral)
 - Pain: 2.5 - 5 mg q8h - q12h
 - OUD: 10 - 30 mg daily initially, titrate
- Mechanism: Mu-agonist
- Onset: 30 - 60 minutes
- Duration: 4 - 8 hours (single dose) to 22 - 48 hours (multiple doses)
- Half life: 8 - 59 hours
- Elimination: < 10% unchanged in urine
- Metabolism: CYP3A4, 2B6, 2C19, 2C9, 2D6 (inactive)
- Monitoring: EKG, COWS, respiratory depression



Buprenorphine³

- Dosing (oral)
 - OUD: 8 mg total day one, increase over several days (goal 16 mg/day)
 - Initiate > 12 hours after short acting opioid
 - Initiate > 24 hours after long acting opioid
- Mechanism: Partial mu-agonist
- Onset: 30 - 60 minutes
- Half life: 37 hours
- Elimination: 70% feces
- Metabolism: CYP3A4 (active)
- Monitoring: COWS, respiratory depression, precipitated withdrawal



Buprenorphine

- Several unique formulations available
- Sublingual
 - Must NOT be swallowed
 - Co-formulated with naloxone
- ER Injection
 - Monthly injections
- Subdermal implant
 - Lasts up to 6 months



Methadone vs. Buprenorphine

Opioid Agonist	Advantages	Disadvantages
Methadone	Highly opioid tolerant patients Decreased cost	Prolonged qTc Increased toxicity
Buprenorphine	Less prescribing restrictions Partial mu-agonist Novel formulations available	Precipitate withdrawal



Which opioid agonist do you feel more comfortable utilizing for admitted patients with opioid use disorder?

Buprenorphine

Methadone

Symptomatic Therapy

- Nausea/vomiting (metoclopramide, prochlorperazine)
- Pain (acetaminophen, NSAIDs, cyclobenzaprine)
- Diarrhea (loperamide)
- Anxiety/agitation (benzodiazepines*)
- Sweating/cramps/tremor (clonidine)
- Adjunctive therapy
 - Important when initiating opioid agonist for OUD
 - Assist in symptomatic relief between opioid agonist doses
 - * Caution if using benzodiazepines with opioid agonist therapy



Questions to ask if initiating OUD management

- Day/time of last opioid use?
- Which opioid was used?
- Amount of opioid use per day?
- Past experience of withdrawal symptoms?
- Documented COWS?
- What is the admission reason?
- Are opioids expected to be administered for non-OUD pain?
- Are there any potential drug interactions?
- Does the patient have a prolonged qTc?



Established Clinic Patients

- Important to contact clinic and continue opioid agonist
 - Dose
 - Last taken
 - Amount dispensed to patient and when received (if applicable)
 - Discuss with patient
- Avoid dose adjustments if possible
 - Discuss with clinic
- Not continuing clinic agent/dose can lead to...
 - Withdrawal
 - Decreased tolerance at discharge
 - Complications due to lack of OUD management
 - Leaving against medical advice (AMA)



Federal Laws Relating to Buprenorphine and Methadone for OUD



Buprenorphine and Methadone Dispensing

- Narcotic Addict Treatment Act of 1974⁴
 - Providers must be registered for dispensing opioids in setting of OUD
 - Rules for narcotic treatment programs (NTP)
 - NTPs are licensed through federal government
- Title 21 Code of Federal Regulations (21 CFR)⁵
 - Part 1306.07: Administering or dispensing of narcotic drugs
 - Discusses who can dispense narcotics for detoxification
 - Includes exceptions



1306.07 - Administering or dispensing of narcotic drugs⁵

- a. A practitioner may administer or dispense directly (but not prescribe) a narcotic drug listed in any schedule to a narcotic dependant person for the purpose of maintenance or detoxification treatment if the practitioner meets both of the following conditions:
 1. The **practitioner is separately registered** with DEA as a NTP
 2. The **practitioner is in compliance with DEA regulations** regarding treatment qualifications, security, records, and unsupervised use of the drugs pursuant to the ACT



1306.07 - Administering or dispensing of narcotic drugs⁵

- b. Nothing in this section shall prohibit a physician who is not specifically registered to conduct a narcotic treatment program from administering (but not prescribing) narcotic drugs to a person for the purpose of **relieving acute withdrawal symptoms** when necessary **while arrangements are being made** for referral for treatment. Not more than **one day's medication** may be administered to the person or for the person's use **at one time**. Such emergency treatment **may be carried out for not more than three days** and **may not be renewed or extended**.



1306.07 - Administering or dispensing of narcotic drugs⁵

- c. This section is **not intended to impose any limitations** on a physician or authorized hospital staff to administer or dispense narcotic drugs in a hospital **to maintain or detoxify a person as an incidental adjunct to medical or surgical treatment of conditions other than addiction**, or to **administer or dispense narcotic drugs to persons with intractable pain** in which no relief or cure is possible or none has been found after reasonable efforts.



Drug Addiction Treatment Act (DATA) 2000⁶

- Waives DEA requirement for NTP registration
- **Only for buprenorphine**
- Originally for physicians
 - Comprehensive Addiction and Recovery Act (CARA) 2016
- Physicians may treat 30 - 100 patients
- Requires training
- “X” status DEA number
- Pharmacist can check status
 - <https://www.samhsa.gov/bupe/lookup-form>



An Example of Institutional Interventions for OUD Management



Why initiate MAT during hospitalizations?^{7,8,9}

- Have a chance to discuss with patient
- Potentially more resources available to initiate and continue
 - Social work
 - Pharmacists
 - Increased monitoring
 - Clinic linkage
- Lack of DATA waivers and underutilization of MAT
 - 16% psychiatrists (41% overall), 3% primary care physicians
 - 35% eligible VA patients received MAT
 - Lack of institutional support can hinder buprenorphine prescribing



Utilizing Evidence Based Medicine (EBM)¹

- Using opioids (morphine) instead of buprenorphine
 - Short acting
 - Potential toxicity
 - Not assisting with overall problem
- Abstinence vs. MAT
 - MAT (with methadone or buprenorphine) preferred
 - EBM shows increased retention with decreased mortality, opioid use with MAT



Potential Opioid Withdrawal Related Interventions

- Buprenorphine and Methadone Policies
 - Who can prescribe
 - Outpatient/inpatient
 - Procedure for established clinic patients
- Hospital guidelines
 - Clinical recommendations
 - Protocol for initiating, monitoring
 - Inductions and clinic linkage
- Naloxone dispensing
- Substance abuse screening



Why Mount Sinai Hospital addressed

- Mount Sinai Hospital patient population
 - Approximately 10 - 15% adult medicine patients use illicit opioids
- Prevent patient harm
 - Leaving against medical advice
 - Complicate ongoing management for non-OUD problems
 - Loss of opioid tolerance at discharge
 - Methadone related toxicities
 - Buprenorphine precipitated withdrawal
- Increase provider, pharmacy, and nursing awareness
 - Federal laws
 - Standardize dosing, administration, monitoring



What Mount Sinai Hospital Has Implemented

- Increased DATA-2000 waiver providers
 - Emergency Department
 - Hospitalists
- Provided education
 - Medical
 - Nursing
 - Pharmacy
- Created order set
 - COWS
 - Buprenorphine preferred opioid agonist
 - Provided recommended doses
 - Symptomatic management orders



Impact of Order Set Implementation

Month/Year	Methadone Doses Administered	Buprenorphine Doses Administered	Total Opioid Agonist Doses Administered	Order Set Utilization (# instances)
November 2017	361	33	393	NA
January 2018	431	28	450	NA
November 2018	139	152	291	NA
January 2019*	208	165	373	48

* Data obtained three weeks into month, projected over remainder of month



Potential Provider Barriers

- Need a champion
 - Initiated by director of psychiatry, hospitalist
 - Chief Medical Officer support
- Discuss importance
 - Emergency Department
 - Hospitalists
- DATA-2000 course
 - Time
 - Cost
- Linking patients to clinics



Potential Nursing Barriers

- Implement COWS training
- Confusion occurred after training
- COWS not ordered
- Ongoing issues
 - COWS ordered, not performed
 - Buprenorphine administration without COWS



Potential Pharmacy Barriers

- Costs
- Understanding rules/laws
- Education on buprenorphine
- Education on buprenorphine vs. methadone
- Dosing
- Special circumstances
 - Surgery patients, concurrent opioids
 - Prolonged qTc on methadone



Future Mount Sinai Hospital Endeavors

- Medication Assisted Therapy
 - Increase inpatient inductions
 - Increase emergency department inductions
 - Increase DATA-2000 providers in clinics
 - Substance abuse consult service
- Naloxone dispensing
 - Working on framework for dispensing to patients directly
 - Retail pharmacies dispense



Recommendations for OUD Related Interventions

- Find current gaps, areas for improvement
- Interprofessional effort
 - Medicine, nursing, pharmacy, social work
- Find small interventions first
 - Naloxone prescriptions at discharge
 - Update/institute relevant policies
 - Clinical guideline
 - Create order sets
- Medication Assisted Therapy
 - Emergency Department and inpatient inductions
 - DATA-2000 status in institution associated clinics
 - Form partnerships with established clinics



Which of the following is a potential pharmacy related barrier for implementing hospital policies relating to managing opioid use disorder?

Assessing pharmacy workflow as how to perform naloxone education and dispensing to patients

Federal laws prohibit administration of buprenorphine to inpatients with opioid withdrawal

Increased methadone cost compared to buprenorphine

Obtain "Narcotic Treatment Program" status from the DEA prior to implementation

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Evaluating naloxone access – updates & laws specific to IL

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Medical Center



Conflict of Interest

The speaker (Tran Tran) has no conflicts of interest to disclose.



Still Not Enough Naloxone Where It's Most Needed

Despite huge overall increase in prescribing, more needed in rural areas

[Español \(Spanish\)](#)

Press Release

Embargoed Until: Tuesday, August 6, 2019, 1:00 p.m. ET

Contact: [Media Relations](#)

(404) 639-3286

The overdose-reversing drug naloxone saves lives – but only if it's readily available when an overdose occurs.

Despite a huge increase in naloxone prescribing in recent years, CDC researchers report in the latest [Vital Signs](#) study published today that far too little naloxone is being dispensed in many areas of the country that need it the most.

Moreover, too few doctors are prescribing naloxone to patients receiving high-dose opioids or opioids plus benzodiazepines or to those with a substance use disorder as recommended by CDC's [Guideline for Prescribing Opioids for Chronic Pain](#).

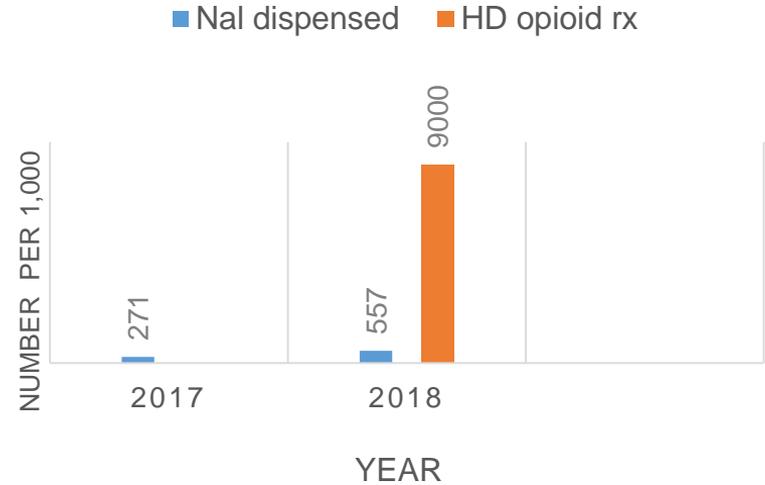
CDC Vital Signs Report accessed Aug 6, 2019 <https://www.cdc.gov/media/releases/2019/p0806-naloxone.html>



What has been done?

- PCP wrote only 1.5 naloxone rx per 100 high-dose opioid prescriptions – and over half of naloxone prescriptions required a copay.
- Highest-dispensing counties were dispensing naloxone 25x more than lowest-dispensing counties

GAP BETWEEN NALOXONE DISPENSED AND CDC RECOMMENDATIONS



Nal = naloxone, HD = high dose (defined as ≥ 50 morphine mg equivalents per day) per person

Guy GP Jr., Haegerich TM, Evans ME, Losby JL, Young R, Jones CM. Vital Signs: Pharmacy-Based Naloxone Dispensing — United States, 2012–2018. MMWR Morb Mortal Wkly Rep 2019;68:679–686. DOI: <http://dx.doi.org/10.15585/mmwr.mm6831e1external icon>.



Harm reduction

- “We need to help pharmacists and other healthcare providers improve the safety and effectiveness of pain management,”

- Gery P. Guy Jr., Ph.D., M.P.H., senior health economist, CDC’s National Center for Injury Prevention and Control.

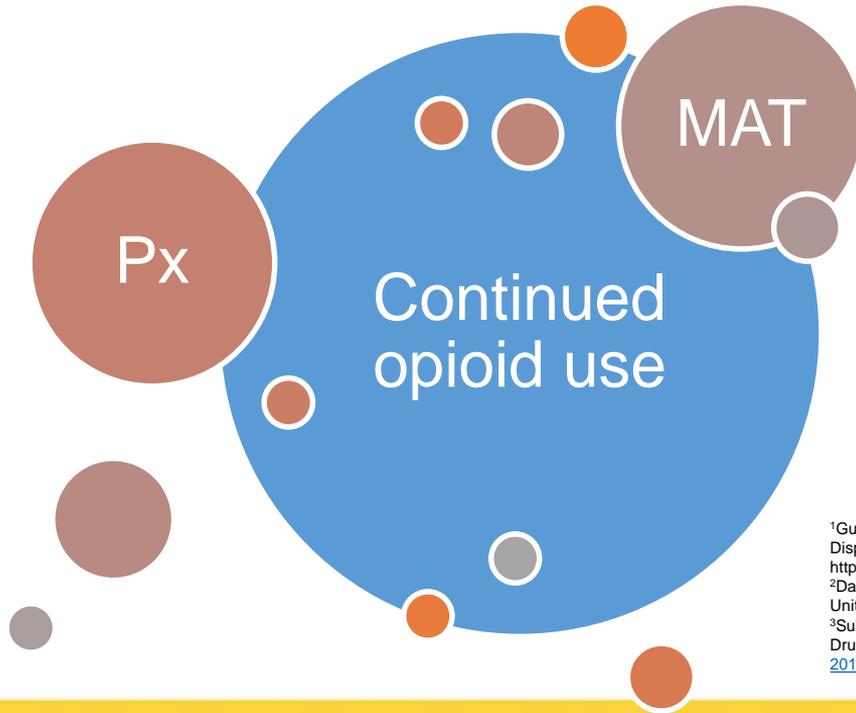
Alex Azar, Secretary, Department of Health and Human Services

“Thousands of Americans are alive today thanks to the use of naloxone,” said HHS Secretary Alex Azar. “Giving people a chance to survive an opioid overdose and safely enter recovery is one of the five key pillars of our HHS strategy for ending the overdose epidemic. With help from Congress, the private sector, state and local governments, and communities, targeted access to naloxone has expanded dramatically over the last several years, but today’s CDC report is a reminder that there is much more all of us need to do to save lives.”



Complexity of the opioid crisis

- All can benefit from naloxone



- 38 million high dose opioid rxs (2018)¹
- 20% of adult Americans have chronic pain (2016)²
- 2.1 million with opioid use disorder (2017)³

*2-3 x more likely to overdose without MAT

¹Guy GP Jr., Haegerich TM, Evans ME, Losby JL, Young R, Jones CM. Vital Signs: Pharmacy-Based Naloxone Dispensing — United States, 2012–2018. MMWR Morb Mortal Wkly Rep 2019;68:679–686. DOI: <http://dx.doi.org/10.15585/mmwr.mm6831e1>external icon.

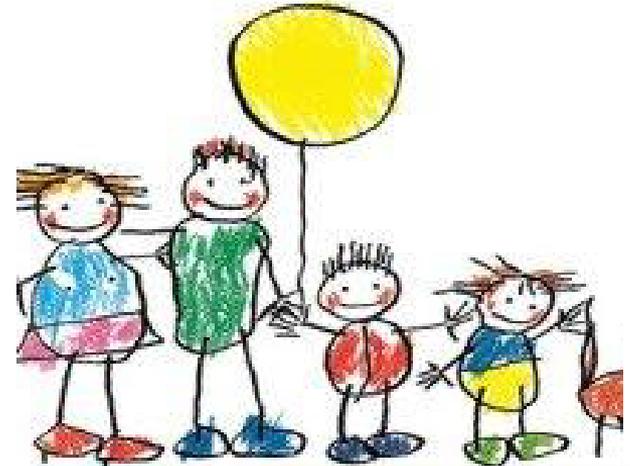
²Dahlhamer J, Lucas J, Zelaya, C, et al. Prevalence of Chronic Pain and High-Impact Chronic Pain Among Adults — United States, 2016. MMWR Morb Mortal Wkly Rep 2018;67:1001–1006

³Substance Abuse Center for Behavioral Health Statistics and Quality. Results from the 2016 National Survey on Drug Use and Health: Detailed Tables. SAMHSA. <https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2016/NSDUH-DetTabs-2016.htm>. Published September 7, 2017. Accessed March 7, 2018.



Naloxone to protect families

- individuals who are NOT prescribed opioids are 3x more likely to die of an opioid overdose if they live in a home where someone has filled an opioid prescription.



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JAMA Internal Medicine | [Original Investigation](#)

Association of Opioid Overdose With Opioid Prescriptions to Family Members

Nazleen F. Khan, ScM; Brian T. Bateman, MD, MSc; Joan E. Landon, MS; Joshua J. Gagne, PharmD, ScD

[+](#) Supplemental content

IMPORTANCE Prescription opioid misuse is a public health problem that leads to overdose. Although existing interventions focus on limiting prescribing to patients at high risk, individuals may still access prescription opioids dispensed to family members.

2% of women have 'persistent' opioid use after childbirth

JAMA
Network | **Open**™



Original Investigation | Obstetrics and Gynecology

Rates of New Persistent Opioid Use After Vaginal or Cesarean Birth Among US Women

Alex F. Peahl, MD; Vanessa K. Dalton, MD; John R. Montgomery, MD; Yen-Ling Lai, MSPH, MS; Hsou Mei Hu, PhD, MBA, MHS; Jennifer F. Waljee, MD

- Up to 75% post delivery report having unused opioid at home ranging from what is the equivalent of 10 -20 oxycodone 5 mg tablets
- Among women with unused tablets, 63% to 95% have not disposed of the excess medication
- Risk of diversion given 20% of patients report sharing prescription medications



Successful efforts so far...

- Good Samaritan Law provide liability protection to overdose responders.
- All 50 U.S. states and the District of Columbia have enacted legislation to expand access to naloxone.
- Community-based distribution of naloxone to e.g., people with OUD and their friends and family, resulted >26,000 lives saved from 1996–2014 (MMWR, 2015)



Proactive Models

- Univ of Texas at Austin – Naloxone in AEDs/Med Cabinets (J Amer Col Hlth, 2018)
- Univ of Texas at Austin – Pharmacy student training (Cur Phar Tech Learn, 2018)
- NY Univ Sch of Med – M1 student training (Subst Abuse, 2017)
- Midwestern University Chicago College of Pharmacy student-run “Nalox-now” trained over 1000 people since inception Oct. 2017

07.29.19

With Empathy in Mind, Sidney Kimmel Medical College Students Receive Narcan at White Coat Ceremony

By Mike Bederka

For the first time, each incoming Sidney Kimmel Medical College student received a Narcan kit to help reverse an opioid overdose.

Vice Provost for Student Affairs [Dr. Charles Pohl](#) urged the 270 members of the Class of 2023 to be advocates for those without voices. “With this dose of Narcan, you have the ability to save a life today,” he said during the White Coat Ceremony at the Crystal Tea Room on July 26.



Each student received a Narcan kit, which includes two doses of the nasal spray that can help reverse an opioid overdose.



Public Health Response

- Everyone has a role to play
 - naloxone developed in 1971 and developed as IN approved in 2015.
- Officials have tried to put it into the hands of virtually anyone who might encounter a person overdosing
- Prescribing and dispensing (pharmacy-based distribution) of naloxone is critical
 - only 20% of naloxone was sold to retail pharmacies in 2018

Patient-Centered Approach to Naloxone Counseling

...ing on and increasing access to naloxone is a major way that pharmacists can help combat the opioid epidemic. However, naloxone is a sensitive topic for patients and their families. Patients may have had negative experiences with naloxone in the past or before their admission. Think of naloxone counseling as an open-ended discussion and be able to personalize it to individual patients. A successful naloxone teaching should result in the patient: 1) being able to recognize overdoses (or "breathing emergencies") and understanding how to administer naloxone 2) feeling confident in teaching family/friends about the administration of naloxone, and 3) obtaining naloxone.

1. GET TO KNOW THE PATIENT

- Use your judgment as to whether you should mention naloxone right away. It is courteous to ask how the patient is doing first.
- If you are unsure if the patient is familiar with the addiction medicine team, you may do a general introduction of yourself as a pharmacy student learning how to counsel on naloxone. This may help put the patient at ease.
- It is always a good idea to use patient-friendly terminology (e.g. "breathing emergency"), but you may not need to do so with experienced individuals.
- Before counseling, it is important to gauge how much information you actually need to provide. Many patients have experienced an overdose firsthand – no need to teach what the signs of an overdose are! Questions to address with the patient include:
 - Do they have any experience giving and/or receiving naloxone? How many times?
 - What happened when the naloxone was given? How many doses were given? Was 911 called? How long did ambulance take to arrive? Ask for a walk-through.
 - What form of naloxone was it (Narcan, mucosal atomizer, IM kit, Evzio)?
 - Do they live with someone? Do they also use?
 - Does the patient use alone or with others? If with others, do they have access naloxone?
 - If they have naloxone, where did they obtain it from? (pharmacy, needle exchange, Chicago Recovery Alliance)

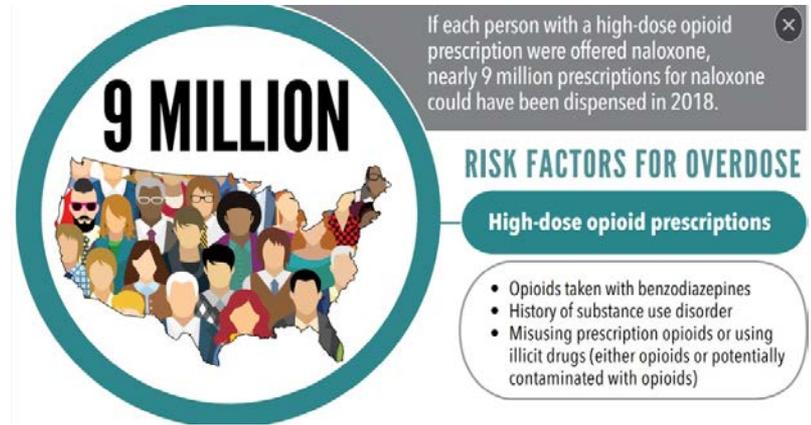


Four naloxone formulations

	Narcan Nasal Spray				Evzio Auto-Injector	
Product comparison						
		(Product not yet released ²)			 (yellow & purple) (Formulation to be discontinued ³)	 (blue & purple)
X (for IV, IM, SC)	X X			X	X X	
X				X		
X						
X				X		
1 mg/mL	4 mg/0.1 mL	2mg/0.1mL	0.4 mg/mL	4 mg/10 mL	0.4 mg/0.4mL	2 mg/0.4mL
Store at 59-86 °F Fragile: Glass.	Store at 59-77 °F Excursions from 39-104 °F		Store at 68-77 °F Breakable: Glass.		Store at 59-77 °F Excursions from 39-104 °F	
\$\$	\$\$		\$		\$\$\$	
Prescription variation						
Two	Two		Two		Two	
#2 2 mL Luer-Jet™ Luer-Lock needleless syringe plus #2 mucosal atomizer devices (MAD-300)	#1 two-pack of two 4 mg/0.1 mL intranasal devices	#1 four-pack of four 2 mg/0.1 mL intranasal devices	#2 single-use 1 mL vials PLUS #2 3 mL syringe w/ 23-25 gauge 1-1.5 inch IM needles	#1 10mL multidose vial PLUS #2 3 mL syringe w/ 23-25 gauge 1-1.5 inch IM needles	#1 two-pack of two 0.4 mg/0.4 mL prefilled auto-injector devices	#1 two-pack of two 2 mg/0.4 mL prefilled auto-injector devices

Capture ALL patients at Risk

- COPD, asthma, OSA, impaired respiratory function
- CHF, Afib
- Smoking, alcohol
- Concomitant CNS depressants (antihistamines, BZD, sleep agents)
- Obesity, elderly, organ dysfunction
- OUD, family history of SUD, history of overdose



<https://www.cdc.gov/vitalsigns/naloxone/index.html>



Know how to manage a breathing emergency from opioids

Carry naloxone

still have potency years after expiration date

Giving naloxone:

1 Check for

- ✓ Extreme sleepiness
- ✓ No response if you say their name or shake them
- ✓ Blue lips, fingernails
- ✓ Breathing less than 8 breaths/min or not at all

2 Call 911 and Give naloxone

- ✓ The law* protects you - Don't be afraid to call for help!
- ✓ If no reaction in 3 minutes, give a second dose

3 Do rescue breathing/chest compressions and stay until help arrives

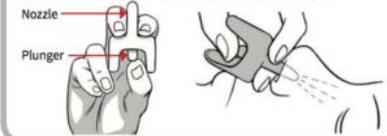
- ✓ Follow 911 dispatcher instructions

What is naloxone and how d

Naloxone reverses opioid overdose. Naloxone works Follow the instructions below for your naloxone pro

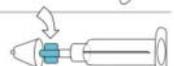
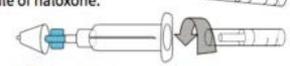
Nasal spray

This nasal spray needs no assembly and can be sprayed up one nostril by pushing the plunger.



Nasal spray with assembly

This requires assembly. Follow the instructions below.

- 1** Take off yellow caps. 
- 2** Screw on white cone. 
- 3** Take purple cap off capsule of naloxone. 
- 4** Gently screw capsule of naloxone into barrel of syringe. 
- 5** Insert white cone into nostril; give a short, strong push on end of capsule to spray naloxone into nose: **ONE HALF OF THE CAPSULE INTO EACH NOSTRIL.** 
Push to spray.
- 6** If no reaction in 3 minutes, give second dose.

Language matters – Stigma shames

Skillfully navigate the conversation

NOT this

- Overdose
- Abuse/misuse
- Display mistrust
- Ignore, delegitimize others
- Addict/drug user

USE this

- Breathing emergency
- Risk factors
- Fire extinguisher analogy
- I hear that a lot
- Person with OUD



Know IL laws – and realities...pharmacists still not dispensing



69 West Washington Street, Suite 3500 • Chicago, Illinois 60602-3027 • www.dph.illinois.gov

Illinois Naloxone Standing Order

This Standing Order is issued by the Chief Medical Officer of the Illinois Department of Public Health, effective on the date below. It authorizes Naloxone Entities to obtain and/or distribute naloxone, mucosal atomizer devices, syringes and other components of the naloxone kit to those who may assist an individual with an opioid-related overdose. Naloxone Entities may include pharmacies, pharmacists, or opioid overdose prevention and naloxone distribution (OEND) programs. This Standing Order is made pursuant to the Other Drug Abuse and Dependency Act (20 ILCS 301.5-33) and Executive Order 17-05.

Naloxone Kits:

Intramuscular Naloxone Kits containing, at a minimum:

- Two (2) 1 ml single-use vials naloxone hydrochloride (0.4mg/ml)(NDC 00409-1215-01, 0641-6132-25) or one (1) 10 ml multi-use vial of naloxone hydrochloride (0.4 mg/ml)(NDC 01)
- Two (2) 23-25 gauge, 1-1.5 inch intramuscular sterile needles with Two (2) 3 mL syringes
- Overdose prevention information pamphlet with step-by-step instructions for use

Multi-step Intranasal Naloxone Kits containing, at a minimum:

- Two (2) Lucr-Jet luer-lock sterile syringes prefilled with naloxone hydrochloride (2mg/2mL 3369-01)
- Two mucosal atomization devices
- Overdose prevention information pamphlet with step-by-step instructions for use.

Single-step Intranasal Naloxone Kits containing, at minimum:

- One (1) box containing two (2) Evzio® Nasal Spray Devices (4mg)(NDC 69547-353-02) containing four(4) , Narcan® Nasal Spray Devices (2mg) (NDC 69547-212-04)
- Overdose prevention information pamphlet with step-by-step instructions for use.

Auto-injector Kits containing the following:

- One (1) box containing two (2) Evzio® naloxone HCl injection 2 mg/0.4 ml pre-packed 60842-051-01) containing 2 auto-injectors with audio instructions and 1 training device
- Overdose prevention information pamphlet with step-by-step instructions for use.

Dispense at minimum one (1) naloxone kit to the entity trained to receive the medication in a Naloxone Standardized Protocol. Unlimited refills are authorized.


IL License: 036.119676
NPI:1902094360
September 6, 2017

Physician's Signature and License No. and NPI No. Date

Jennifer Lavden, MD, PhD
September 6, 2018

Physician's Name (Print) Order Expiration Date

Lali's law

Under the law, any individual or group accident or health insurance plan amended, delivered, issued, or renewed after September 9, 2015, which otherwise provides prescription drug coverage, including those purchased on the state's **Affordable Care Act Marketplace**, must provide coverage for at least one opioid antagonist like naloxone. These plans must also provide coverage for both medically necessary short-term acute and longer-term clinical stabilization SUD treatment services. Moreover, the state Medicaid program will cover both *all* FDA approved opioid antagonists and, without any preauthorization requirements, *all* FDA approved forms of **medication-assisted treatment (MAT)** prescribed for the treatment of alcohol or opioid dependence.

Finally, the law will implement a public education program to increase awareness about the state's **overdose Good Samaritan law**, which encourages overdose bystanders to summon medical assistance by providing protection against criminal prosecution for certain controlled substance possession offenses, increase access to **drug courts** that promote treatment over incarceration, and impose new data reporting requirements that will allow for **better research** on the overdose epidemic.

Removed insurance barriers Provided liability protections

Hospital is an ideal opportunity to dispense naloxone



IHPI BRIEF:
**Understanding Opioid
Prescribing After Surgery**



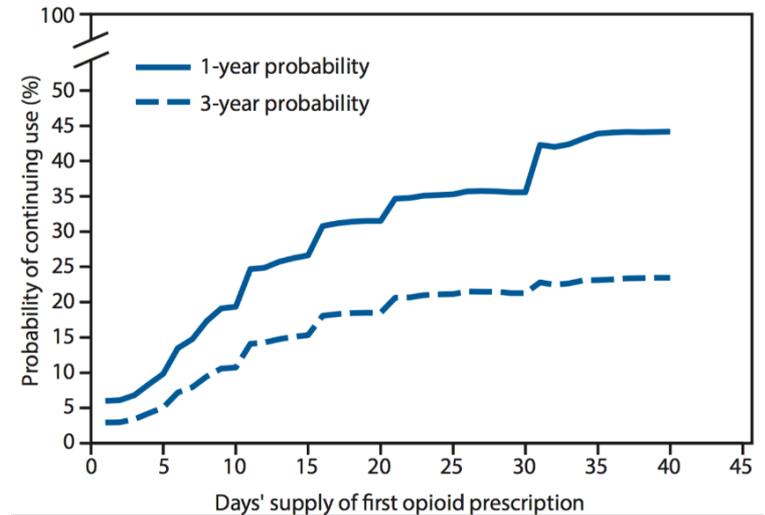
Image removed due to copyright. Refer to citation.

Association of opioid prescribing with opioid consumption after surgery in Michigan Howard, R., Fry, B., Gunaseelan, V., Lee, J., Waljee, J., Brummett, C., Campbell, D., Seese, E., Englesbe, M., & Vu, J. (2018). JAMA Surgery. PMID: 30422239

doi:10.1001/jamasurg.2018.4234

<https://ihpi.umich.edu/news/ihpi-briefs/opioid-rx>

FIGURE 1. One- and 3-year probabilities of continued opioid use among opioid-naïve patients, by number of days' supply* of the first opioid prescription — United States, 2006–2015



Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015. March 2017 MMWR. Morbidity and mortality weekly report 66(10):265–269 DOI: 10.15585/mmwr.mm6610a1



Hospital based initiatives

- ED take home kits
- PharmD counseling on the floor
- Department training (pharmacists, hospitalists, psychiatrists, APP, ED nurses, PA students, requests keep coming)
- Train the trainer
- Order the rx – get it delivered to floor

Chicago-area hospitals sending opioid overdose patients home with antidote



By LISA SCHENCKER
CHICAGO TRIBUNE | OCT 16, 2018 | 10:00 AM

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SUIT | The Role of Pharmacists

<https://www.rushu.rush.edu/rush-medical-college/departments/psychiatry/section-addiction-medicine/suit-substance-use-intervention-team/suit-role-pharmacists>



Make it EASY

Patient Name: John Doe Date of Birth: _____

Address: _____ Date Prescribed: Novem



Naloxone 4mg actuation
spray

Administer as directed
PRN breathing
emergency

Dispense #1 (two doses)

2 refills

Medications

Code	Name	Formulary
140382	NALOXONE 0.4 MG/0.4 ML INJECTION, AUTO-INJECTOR	No
6772	NALOXONE 0.4 MG/ML INJECTION	Yes
700103	NALOXONE 0.4 MG/ML INJECTION (NEO)	Yes
600184	NALOXONE 0.4 MG/ML INJECTION (PEDS)	Yes
355406	NALOXONE 0.4 MG/ML INJECTION (ROPH)	No
351019	NALOXONE 0.4 MG/ML ORAL SOLUTION	Yes
51893	NALOXONE 0.4 MG/ML SYRINGE	No
51894	NALOXONE 1 MG/ML SYRINGE	Yes
150961	NALOXONE 2 MG/0.4 ML INJECTION,AUTO-INJECTOR	No
351169	NALOXONE 2 MG/2 ML INTRA-NASAL SOLUTION	Yes
301278	NALOXONE 2 MG/250 ML NS IV INFUSION (RCMC)	No
300414	NALOXONE 2 MG/500 ML IV INFUSION	No

Even if hospital based implementation is slow, you can

- ensure naloxone is readily available in local pharmacies used by patients (take extra steps to ensure access)
- monitor for overdose risk, prescribing or dispensing naloxone if risk factors are present
- participate in and offer naloxone training and education
- find ways to reduce out-of-pocket costs for patients and cover naloxone prescriptions without prior approval
- know state laws regarding access and disseminate that information to clinicians, patients, and families.
- reduce stigma of prescribing, dispensing, and carrying naloxone





You're not alone



- Change behavior NOT just increase knowledge
- Learn from others experiences, avoid common pitfalls
- We are all here to help
- Working together vs. in isolation produces much greater impact
- Form allies
- Stay true to your goal (training better HCP, providing better care, saving lives)

Discussion: Review of Strategies Implemented by Area Hospitals

