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Perioperative Opioid Stewardship

Lyen C. Huang, MD, MPH, FACS, FASCRS

Assistant Professor of Surgery, University of Utah

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Comagine Health

- Comagine Health is a nonprofit organization committed to improving outcomes in health care.
- Comagine Health provides:
  - Training for nursing homes, emergency departments, and clinics on opioid use disorder processes
  - Diabetes, blood pressure and chronic kidney disease process improvement

Adrienne Butterwick is a senior improvement advisor at Comagine Health. She is here to talk with you about Comagine Health resources and trainings.

AButterwick@comagine.org | (801) 892-6646

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Objectives

- Provide an evidence-based patient-centered approach to opioid prescribing after surgery
- Describe how promoting the disposal of leftover opioids is critical to opioid stewardship
- Outline best practices for co-prescribing naloxone

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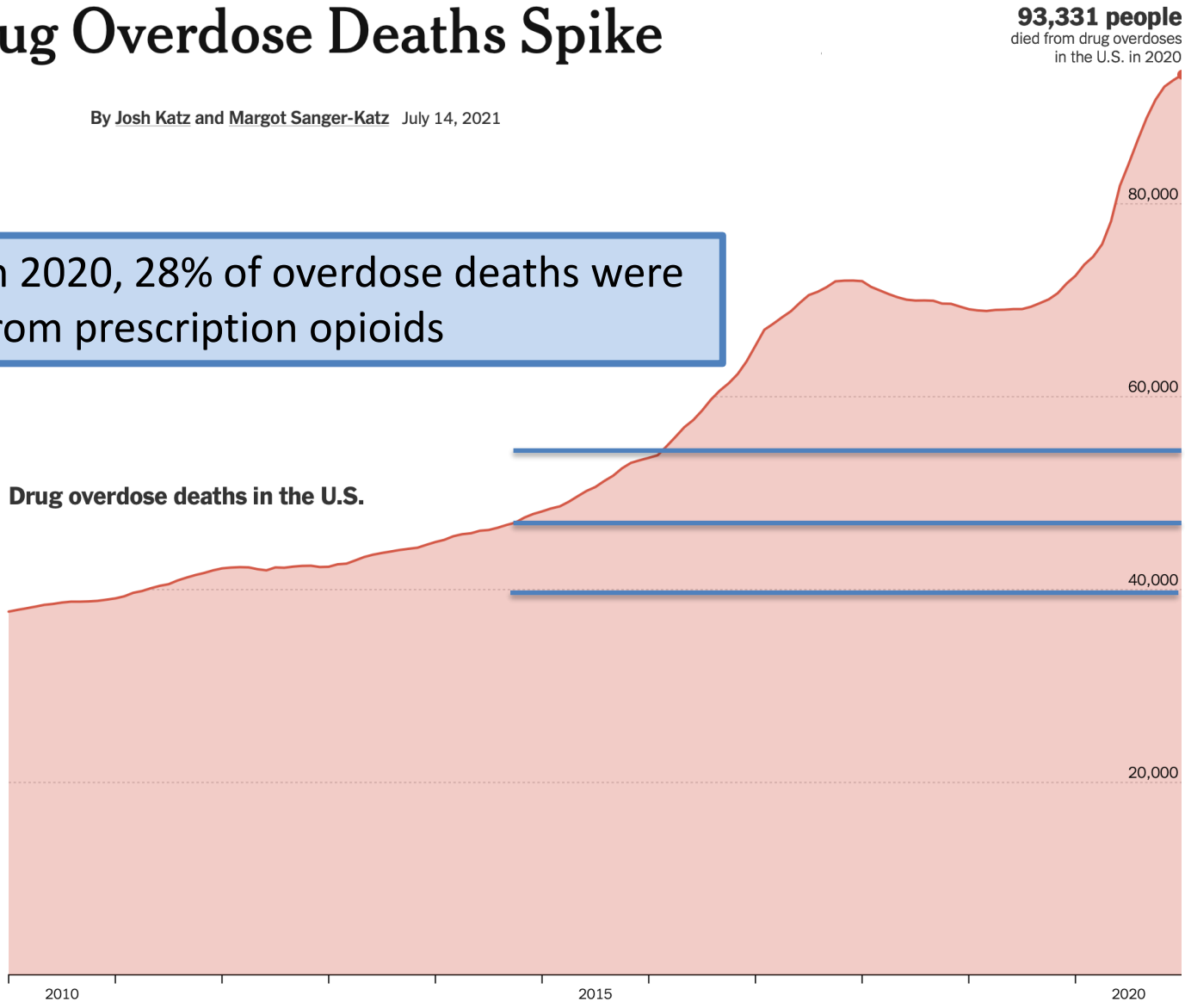
Opioid Crisis

‘It’s Huge, It’s Historic, It’s Unheard-of’: Drug Overdose Deaths Spike

By Josh Katz and Margot Sanger-Katz July 14, 2021

In 2020, 28% of overdose deaths were from prescription opioids



Source: Centers for Disease Control and Prevention

https://www.nytimes.com/interactive/2021/07/14/upshot/drug-overdose-deaths.html

WE ARE CONTRIBUTING TO THE CRISIS

- >64 million operations/year
- 60-92% have leftover opioids
  - 2/3 of misusers got them from family or friends
  - First exposure for many leading to future illicit drug use
  - Threefold increase in poisoning and overdoses for children
- 0.3-15% opioid-naïve patients are still using opioids 90 days after surgery

Shah A. MMWR Morb Mortal Wkly Rep. 2017
Lee JS. J Clin Oncol 2017
Cicero 2018
Compton 2016

THE PARABLE OF THE RIVER

37% of prescriptions are for opioids
10% of all opioid prescriptions in the US
11% of prescription opioid overdoses

Evidence-based Approach to Opioid Prescribing After Surgery

OPEN
OPIOID PRESCRIBING ENGAGEMENT NETWORK

Prescribing Recommendations

Procedure	Oxycodone 5 mg tabs
Appendectomy – Lap or Open	0-10
Colectomy – Lap or open	0-15
Ileostomy/Colostomy	0-15
Open small bowel resection	0-20

NEW ENGLAND SURGICAL SOCIETY ARTICLE

Guideline for Discharge Opioid Prescriptions after Inpatient General Surgical Procedures

Maureen V Hill, MD, Ryland S Stucke, MD, Sarah E Billmeier, MD, MPH, Julia L Kelly, MS, Richard J Barth Jr, MD, FACS

Discharge day	Oxycodone 5 mg tabs
POD 1	15
POD 2 – used 0 pills	0
POD 2 – used 1-3 pills	15
POD 3 – used ≥4 pills	30

Table 1.

Johns Hopkins Expert Panel Recommendations for Ideal Range of Oxycodone 5-mg Tablets to Prescribe to Opioid-Naïve Patients on Discharge after Undergoing Select Procedures

Procedure	Range (minimum-maximum)
General surgery	
Laparoscopic cholecystectomy (procedure 1)*	0—10
Laparoscopic inguinal hernia repair, unilateral (procedure 2)*	0—15
Open inguinal hernia repair, unilateral (procedure 3)*	0—10
Open umbilical hernia repair	0—15
Breast surgery	
Partial mastectomy without sentinel lymph node biopsy (procedure 4)*	0—10
Partial mastectomy with sentinel lymph node biopsy (procedure 5)*	0—15
Thoracic surgery	
Video-assisted thoracoscopic wedge resection	0—20
Orthopaedic surgery	
Arthroscopic partial meniscectomy	0—10
Arthroscopic ACL/PCL repair	0—20
Arthroscopic rotator cuff repair	0—20
ORIF of the ankle	0—20
Gynecologic surgery and obstetric delivery	
Open hysterectomy	0—20
Minimally invasive hysterectomy	0—10
Uncomplicated cesarean delivery	0—10
Uncomplicated vaginal delivery	0
Urologic surgery	
Robotic retropubic prostatectomy	0—10
Otolaryngology	
Thyroidectomy, partial or total	0—15
Cochlear implant	0
Cardiac surgery	
Coronary artery bypass grafting	0—20
Cardiac catheterization	0

THE PROBLEM WITH ARBITRARY GUIDELINES

- Many of us are already prescribing less than the guidelines
  - Univ. of Utah, Partners HealthCare, Mayo Clinics are all prescribing below guidelines
  - But we're still overprescribing by 3-6x

Robinson (2022) "Comparing Clinician Consensus Recommendations to Patient-reported Opioid Use Across Multiple Hospital Systems", Ann Surg

THE NEED FOR PATIENT-CENTERED OPIOID PRESCRIBING

Major abdominal surgery at the University of Utah

- Many use no opioids prior to discharge (48h - 13%; 24h – 25%)
  - *Every patient received an opioid prescription*
  - Prescribed median of 8 oxycodone 5 mg tablets

- 1/3 of patients had high pain and opioid needs (≥60 MME consumed 24 hrs before discharge)
  - 82% given a prescription that will last **<48 hrs**

Bleicher (2021) "Patient-centered Opioid Prescribing: Breaking Away From One-Size-Fits-All Prescribing Guidelines", J Surg Res

WHAT ARE WE DOING?

	Actual
Prescription size (median)	15 (10-20)
Opioid Rx avoided	0
Consumed tabs (median)	3 (0-11)
Leftover tabs (median)	10 (5-15)
Leftover tabs (total)	604

Bleicher (2021) "Use of post-discharge opioid consumption patterns as a tool for evaluating opioid prescribing guidelines", Am J Surg

CURRENT PRESCRIBING IS CONSISTENT OR BETTER THAN ARBITRARY GUIDELINES

	Actual	Dartmouth	Mayo	Michigan
Prescription size (median)	15 (10-20)	15 (15-30)	15 (15-30)	15 (10-15)
Opioid Rx avoided	0	24	0	0
Consumed tabs (median)	3 (0-11)	-	-	-
Leftover tabs (median)	10 (5-15)	13 (3-27)	13.5 (8-22)	10 (5-15)
Leftover tabs (total)	604	686	833	498

24-HOUR PRE-DISCHARGE OPIOID CONSUMPTION (PDOC)

	Actual	Dartmouth	Mayo	Michigan	2x24 hr PDOC
Prescription size (median)	15 (10-20)	15 (15-30)	15 (15-30)	15 (10-15)	6 (2-12)
Opioid Rx avoided	0	24	0	0	24
Consumed tabs (median)	3 (0-11)	-	-	-	-
Leftover tabs (median)	10 (5-15)	13 (3-27)	13.5 (8-22)	10 (5-15)	2.5 (0-8.7)
Leftover tabs (total)	604	686	833	498	169

14% patients got more opioid pills because of their pre-discharge needs

Safe and Effective Pain Control *After Surgery*

facs.org/safepaincontrol

What is safe and effective pain control?

Safe pain control is the use of medication and other therapies to control pain with the least amount of side effects.

Your surgical team will work with you to:[1]

- **Screen** for current opioid use and risk for overuse
- **Use alternatives** to opioids whenever possible
- **Educate you** about:
  - Using the lowest dose of opioids for the shortest amount of time
  - Safely getting rid of any unused opioids
  - Knowing the signs of opioid overdose

What is the goal of pain control?

The goal of pain control is to:

- Minimize pain
- Keep you moving
- Help you heal

All members of your surgical team (including nurses and pharmacists) are committed to stopping opioid abuse and long-term use following surgery.

What are my options for safe and effective pain control?

Your surgical team will talk with you about your pain control options.

Your pain plan will be based on your:

- Operation
- Pain history
- Current medications

A combination of therapies and medications will be used together for better pain control after your surgery.[2]

From the operating room to home—your surgical team cares about your best recovery.

SURGICAL PATIENT EDUCATION PROGRAM
Prepare for the Best Recovery

American College of Surgeons
Inspiring Quality: Highest Standards, Better Outcomes
100+years

AMERICAN COLLEGE OF SURGEONS
DIVISION OF EDUCATION
Blended Surgical Education and Training for Life®

Colorectal surgery and surgical oncology

- **2x 24-hour PDOC**
- Ok to prescribe no opioids
- Max prescription size = 30 tablets
- No restriction on the opioid medication
- Pre-operative and pre-discharge education
- Logbooks
- Naloxone co-prescribing

Promoting Disposal of Leftover Opioids

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Stanford | Stanford-Lancet Commission on the North American Opioid Crisis

Recommendation 5a: Policymakers in the USA should implement more effective procedures to reduce the supply of excess opioid pills.

https://opioids.stanford.edu/recommendation-5a

Created by M Yudi Maulana from Noun Project

Drop boxes

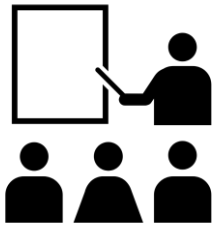
0.3% of controlled meds are disposed in drop boxes

Only 9% of patients dispose

Takeback events

4-12% of returned meds are controlled substances

Created by Gan Khoon Lay from Noun Project



Patient education

8-51% disposal rate after intervention

Financial incentives

30% returned after being paid $5/pill (max $60)

Created by Max Hancock from Noun Project

Home disposal bags

55-57% of adults disposed

72% of parents disposed

Created by Viral faisalovers from Noun Project

Stokes (2019) "Home Disposal Kits for Leftover Opioid Medications After Surgery: Do They Work? J Surg Res

HOME DISPOSAL KITS

U of U systemwide distribution

- Every patient filling an opioid or benzodiazepine prescription
- 77% of surgery patients with leftover opioids dispose
- Only 8% do not plan to dispose

Naloxone Co-Prescribing

Naloxone Prescriptions

- When naloxone is co-prescribed with opioids, the risk of opioid overdose may decrease *even if the naloxone prescription does not get filled*

- Naloxone co-prescription appears to serve as an important educational and culture-changing strategy
- The CDC began recommending co-prescriptions in some cases, outlined in the CDC's 2016 Guidelines

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https://nida.nih.gov/publications/drugfacts/naloxone

Patients at Risk

- History of opioid poisoning, intoxication or overdose
- History of substance or opioid use disorder
- Suspected illicit or non-medical opioid user
- Taking benzodiazepines or drinking alcohol with opioids

- At risk of returning to a high dose to which they are no longer tolerant (e.g., patients recently released from prison)
- Patients taking >50 MME/day (~7 tablets of oxycodone 5 mg)
- Receiving rotating opioid medication regimens
- Extended-release or long-acting opioid medication
- New methadone or buprenorphine Rx for opioid use disorder

- Respiratory, cardiac, renal disease, or smokers

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JAMA. 2016;315(15):1624-1645. doi:10.1001/jama.2016.1464
Published online March 15, 2016.

Starting the Conversation

Providers or staff can counsel patients on the role of naloxone

- It's important to emphasize that opioids carry risks, and the patient is not being targeted or singled out.
- Ask what the patient knows about naloxone.
- Ask open-ended questions like "what concerns do you have?" and "what questions do you have about this medicine?"
- Encourage the patient to discuss naloxone with family and friends to ensure they are prepared to use it.

Opioid Safety Language

- The word “overdose” has negative connotations and *prescription opioid users may not relate to it.*
- Instead of using the word “overdose,” consider using language like “accidental overdose,” “bad reaction” or “opioid safety.” You may also consider saying:
  - “Opioids can sometimes slow or even stop your breathing.”
  - “Naloxone is the antidote to opioids—to be [sprayed in the nose/injected] if there is a bad reaction where you can’t be woken up.”
  - “Naloxone is for opioid medications like an epinephrine pen is for someone with an allergy.”

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https://www.chcf.org/wp-content/uploads/2017/12/PDF-NaloxoneOpioidSafetyProviders.pdf

Points to Remember

- Naloxone rapidly reverses an opioid overdose. It attaches to opioid receptors and reverses and blocks the effects of other opioids.
- Naloxone is a safe medicine. It only reverses overdoses in people with opioids in their systems.
- Naloxone only works in the body for 30 to 90 minutes. Patients may need multiple doses.
- In some areas, you can get naloxone from pharmacies with or without a personal prescription from community-based distribution programs, or local health departments. Cost may be a barrier.

https://www.chcf.org/wp-content/uploads/2017/12/PDF-NaloxoneOpioidSafetyProviders.pdf

Prescription Example

Patient Name: John Doe Date of Birth: _____

Address: _____ Date Prescribed: November 18, 2016

℞

Narcan Nasal Spray 4mg
#1 (Two Pack)
Administer as directed PRN for
suspected overdose

DAW / No Substitution

Refills: 2

Prescriber: Sue Smith, MD

Signature: _____

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Citations

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Questions?

Lyen Huang - lyen.huang@hsc.utah.edu

Jamee Millsap - jmillsap@comagine.org

Adrienne Butterwick - AButterwick@comagine.org

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