“Opioids, The Here and Now?”

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Disclosure

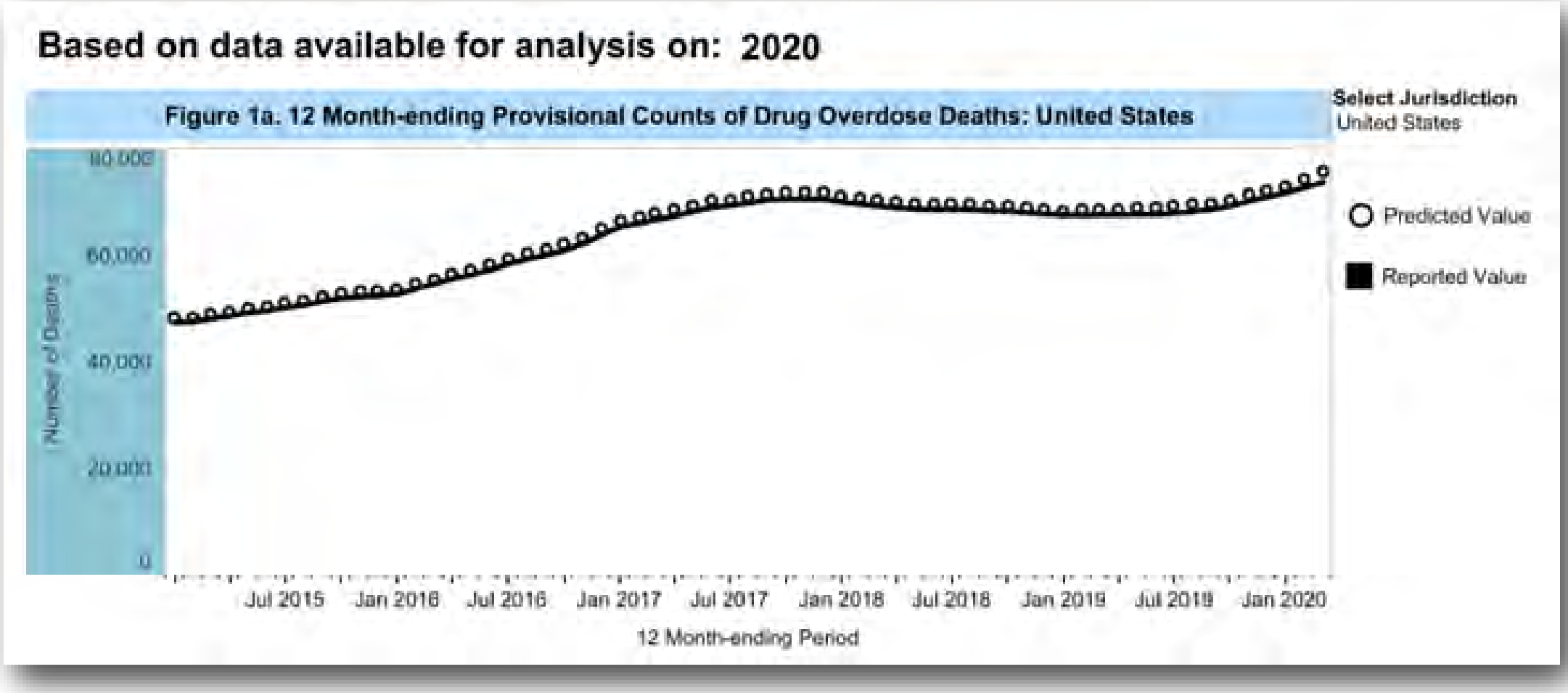
- No financial disclosure

Objectives

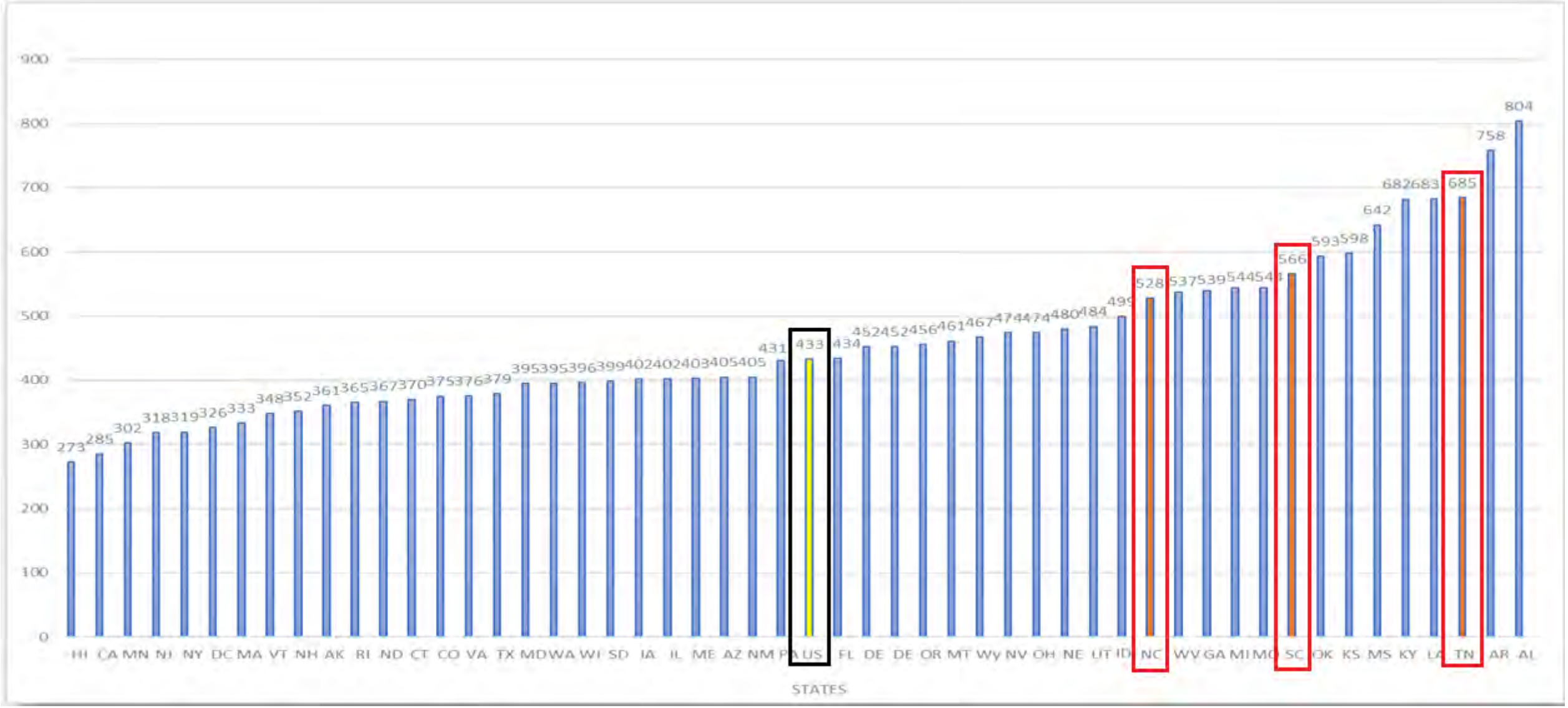
- Review the current opioid epidemic in the U.S and South Carolina
- Discuss the how we arrived in this situation
- Identify resources for improvement of the opioid epidemic
- Overdose prevention strategies

So Where are We?

US Overdose Deaths

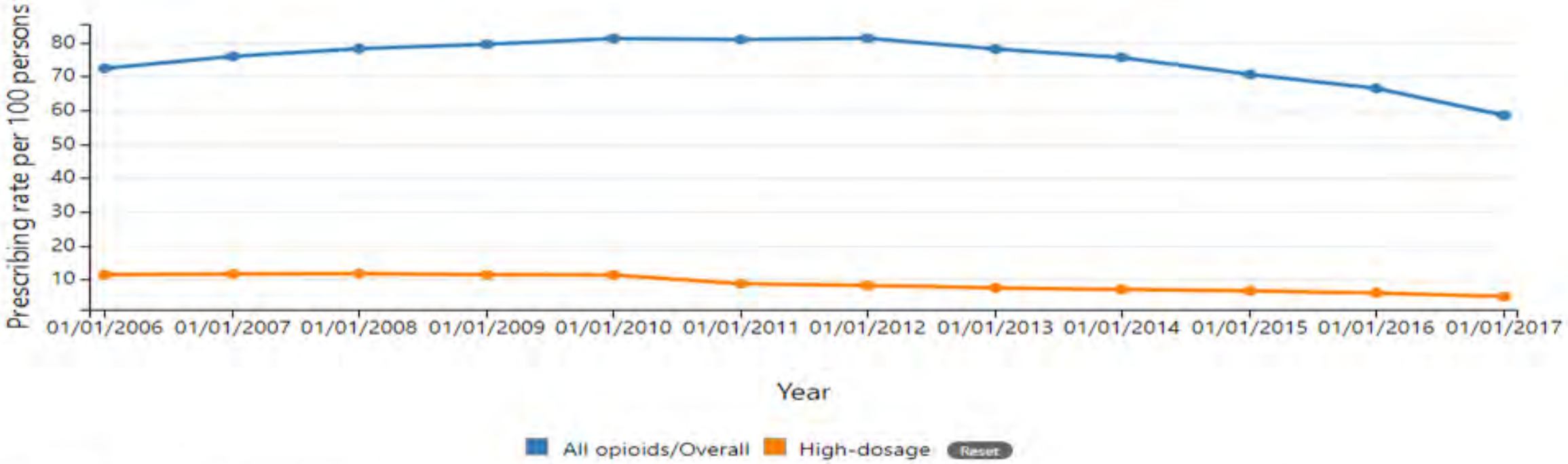


US Opioid Dispensing Rate, 2020



https://www.cdc.gov/drugoverdose/rxrate-maps/state2020.html

U.S. Trends in Opioid Prescribing & High Doses

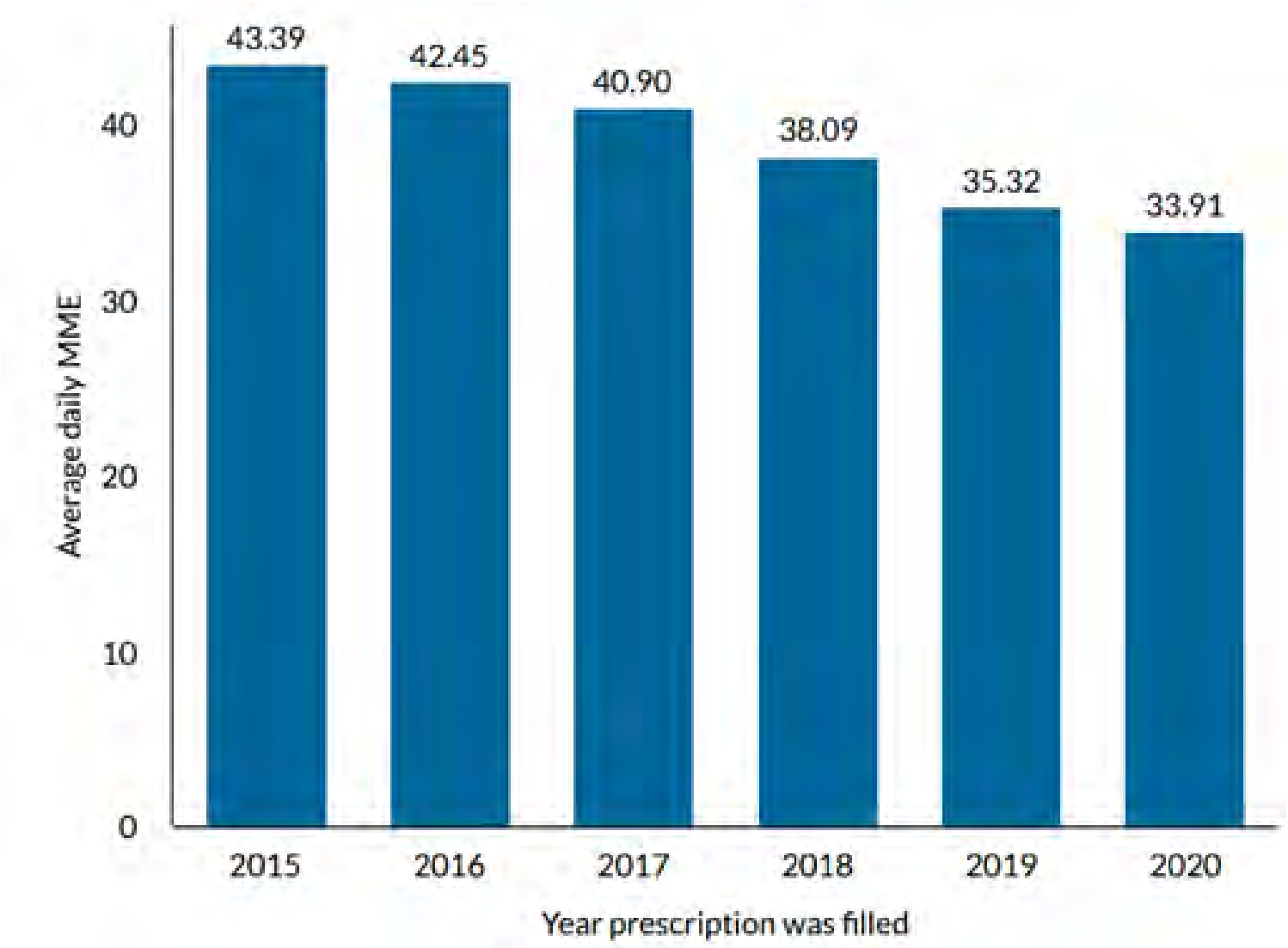


Source: IQVIA® Transactional Data Warehouse

Data Table

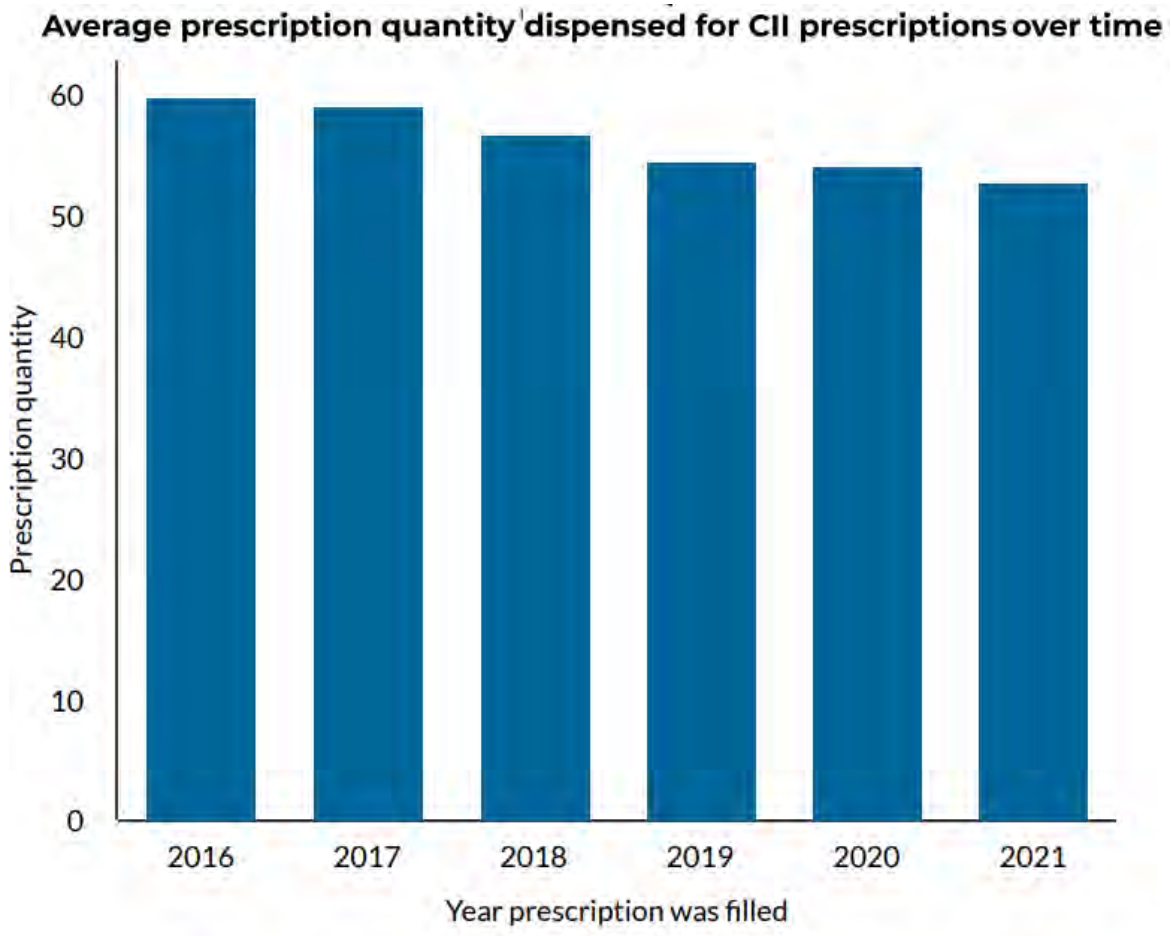
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
All opioids/Overall	72.4	75.9	78.2	79.5	81.2	80.9	81.3	78.1	75.6	70.6	66.5	58.5
High-dosage	11.5	11.7	11.8	11.5	11.4	8.8	8.3	7.6	7.1	6.7	6.1	5

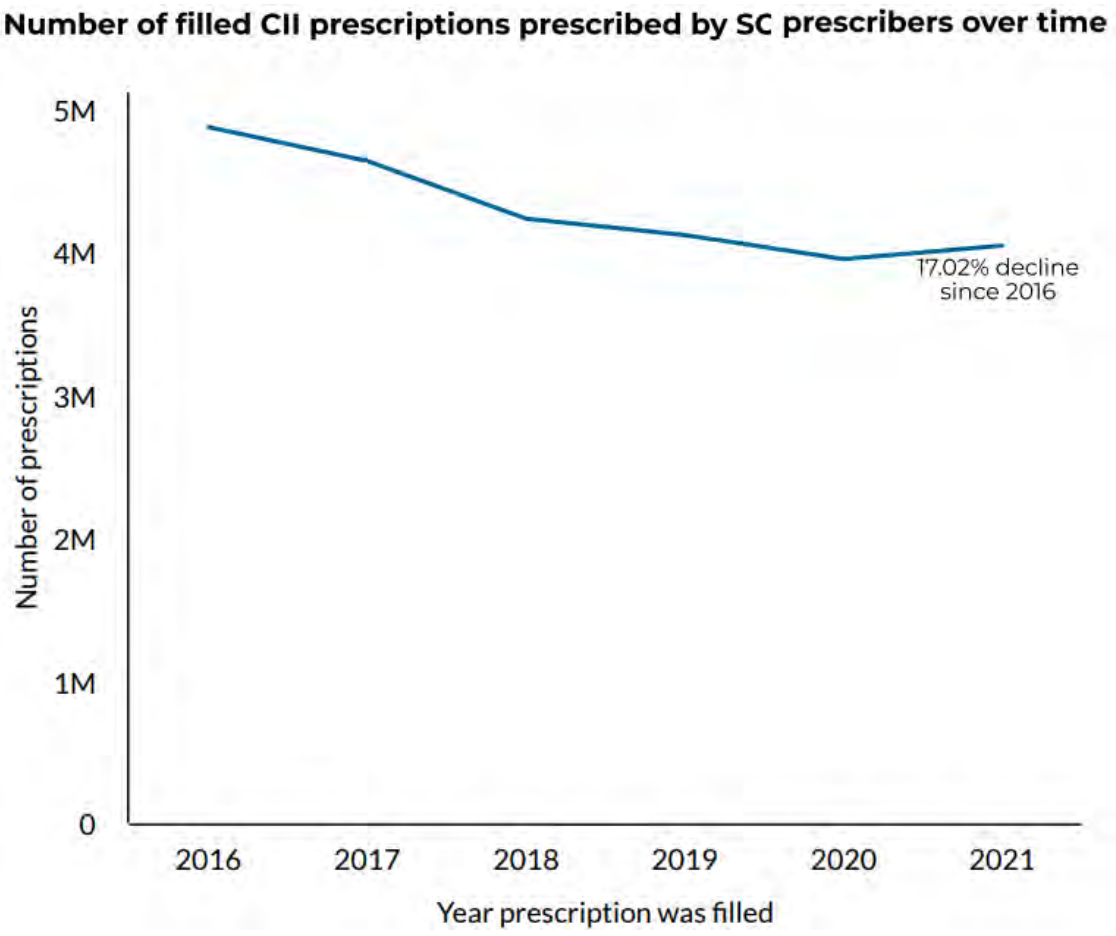
SC Average Daily MME of Prescriptions



https://justplainkillers.com/wp-content/uploads/2021/10/PMP_Final_Report.pdf

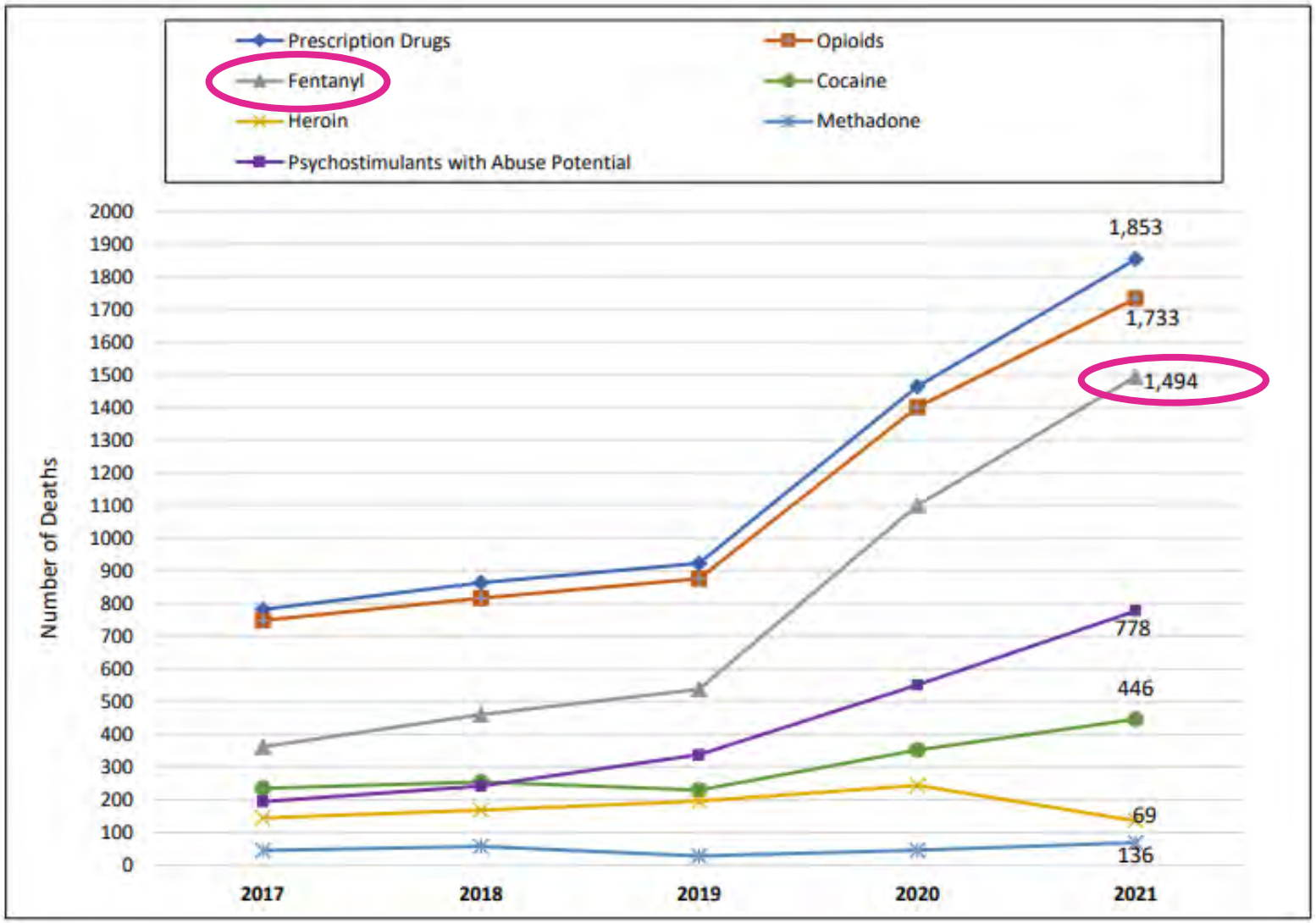
SC Opioids Quantity vs. Filled Over Time





https://justplainkillers.com/wp-content/uploads/2022/05/2021-pmp-annual_final_version.pdf

SC Overdose Deaths (2017-2021)

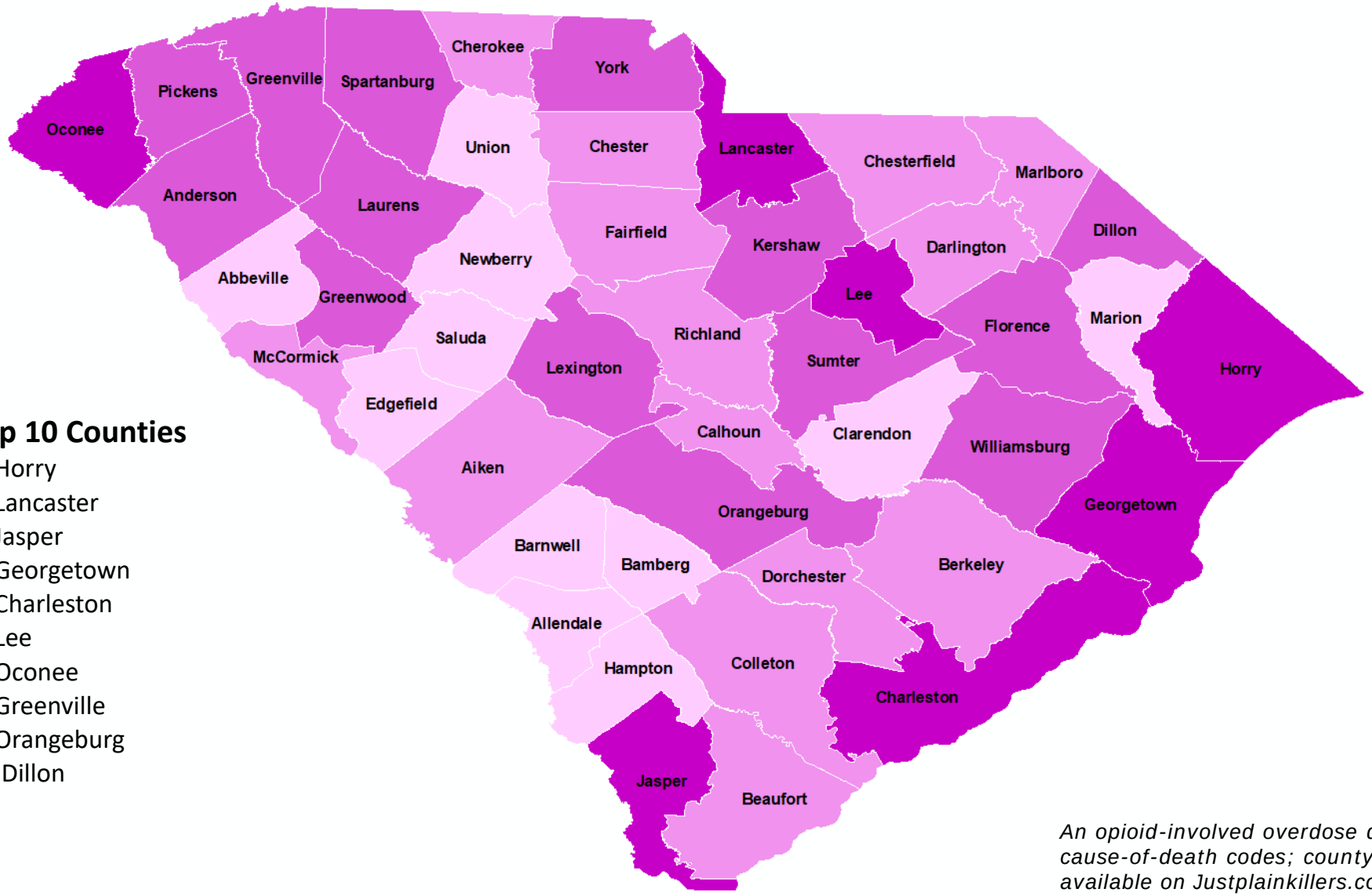


78.5% of overdose deaths involve Fentanyl

https://scdhec.gov/sites/default/files/media/document/Drug%20Overdose%20Report%202021.pdf

Burden Measure- Opioid-involved Overdose Deaths

(Rate per 100,000 population)

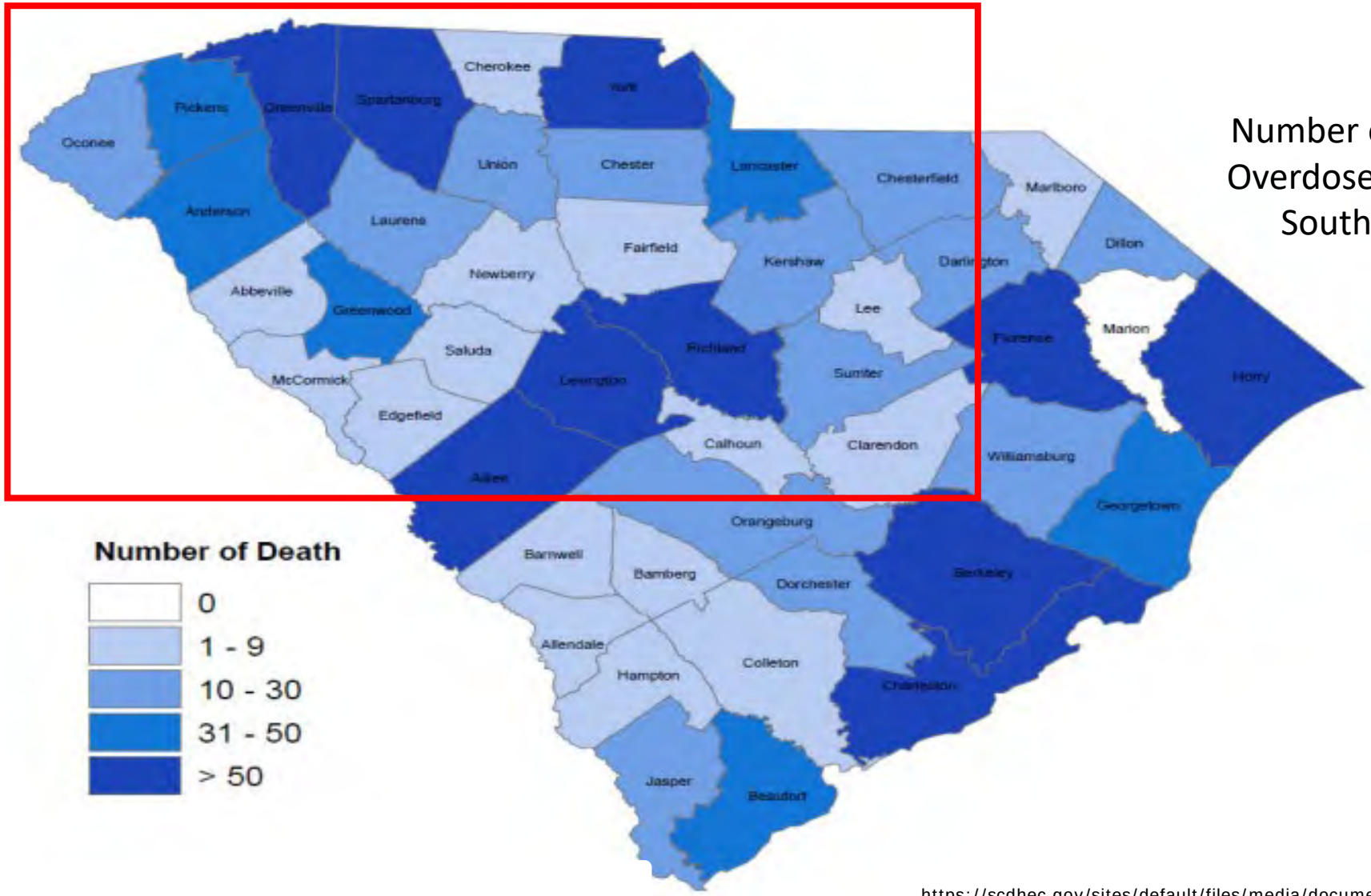


Top 10 Counties

1. Horry
2. Lancaster
3. Jasper
4. Georgetown
5. Charleston
6. Lee
7. Oconee
8. Greenville
9. Orangeburg
10. Dillon

An opioid-involved overdose death is classified by ICD-10 cause-of-death codes; county mortality count & rate data available on Justplainkillers.com/data

Case for Change: Prisma Health



Number of Opioid-Involved Overdose Deaths by County South Carolina, 2021

https://scdhec.gov/sites/default/files/media/document/Drug%20overdose%20report_2020_V1.pdf

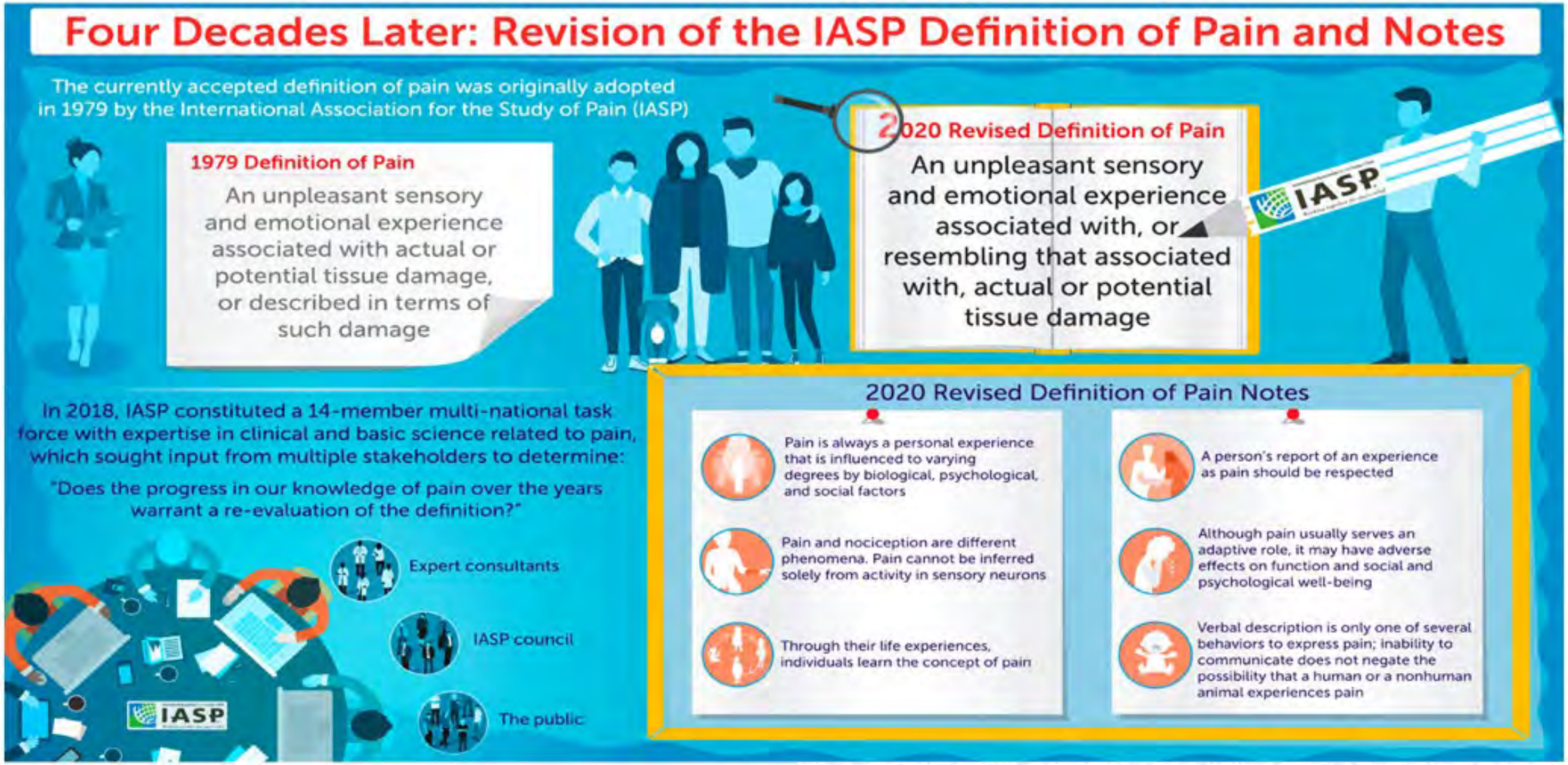
Barriers and Challenges

Healthcare Culture

Whose Responsibility?

"I specialize in referrals to specialists!"

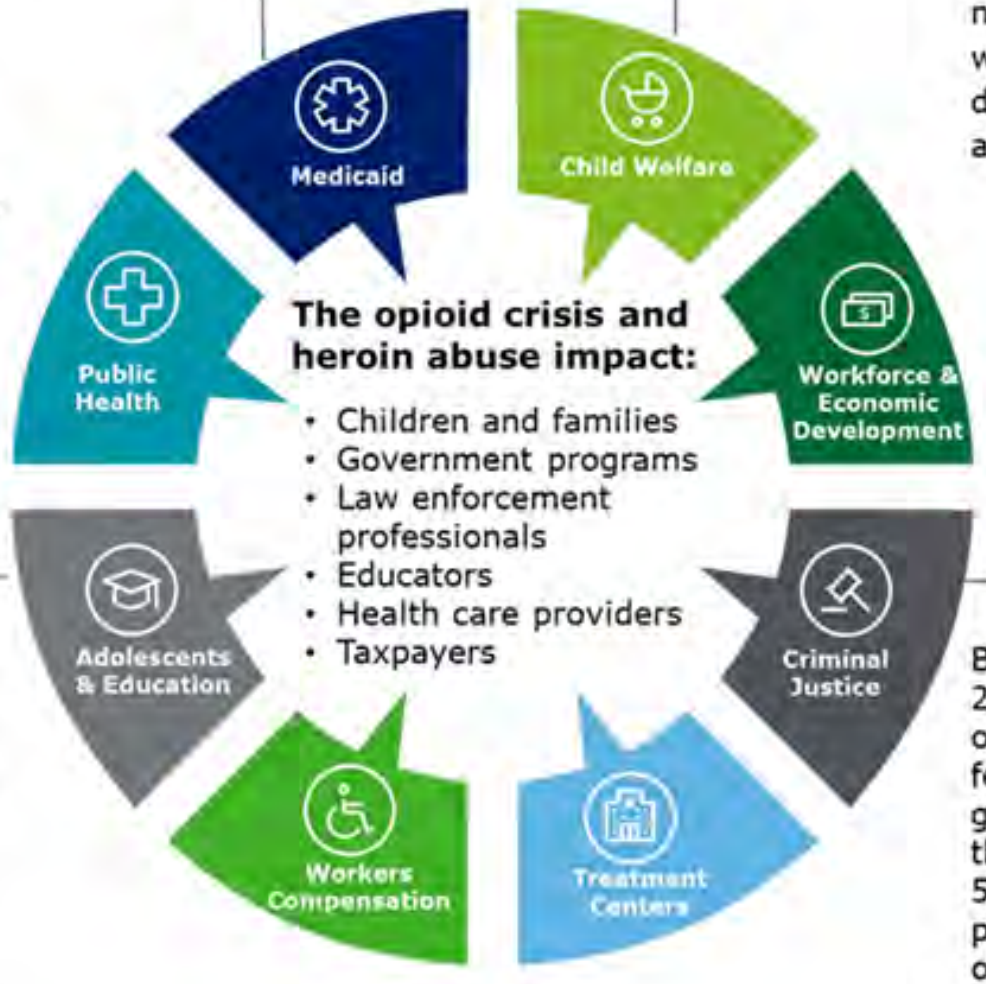
Pain?



The revised IASP definition of pain: concepts, challenges, and compromises Raja *et al.* (2020) | Pain
DOI: 10.1097/j.pain.0000000000001939

Societal Impact

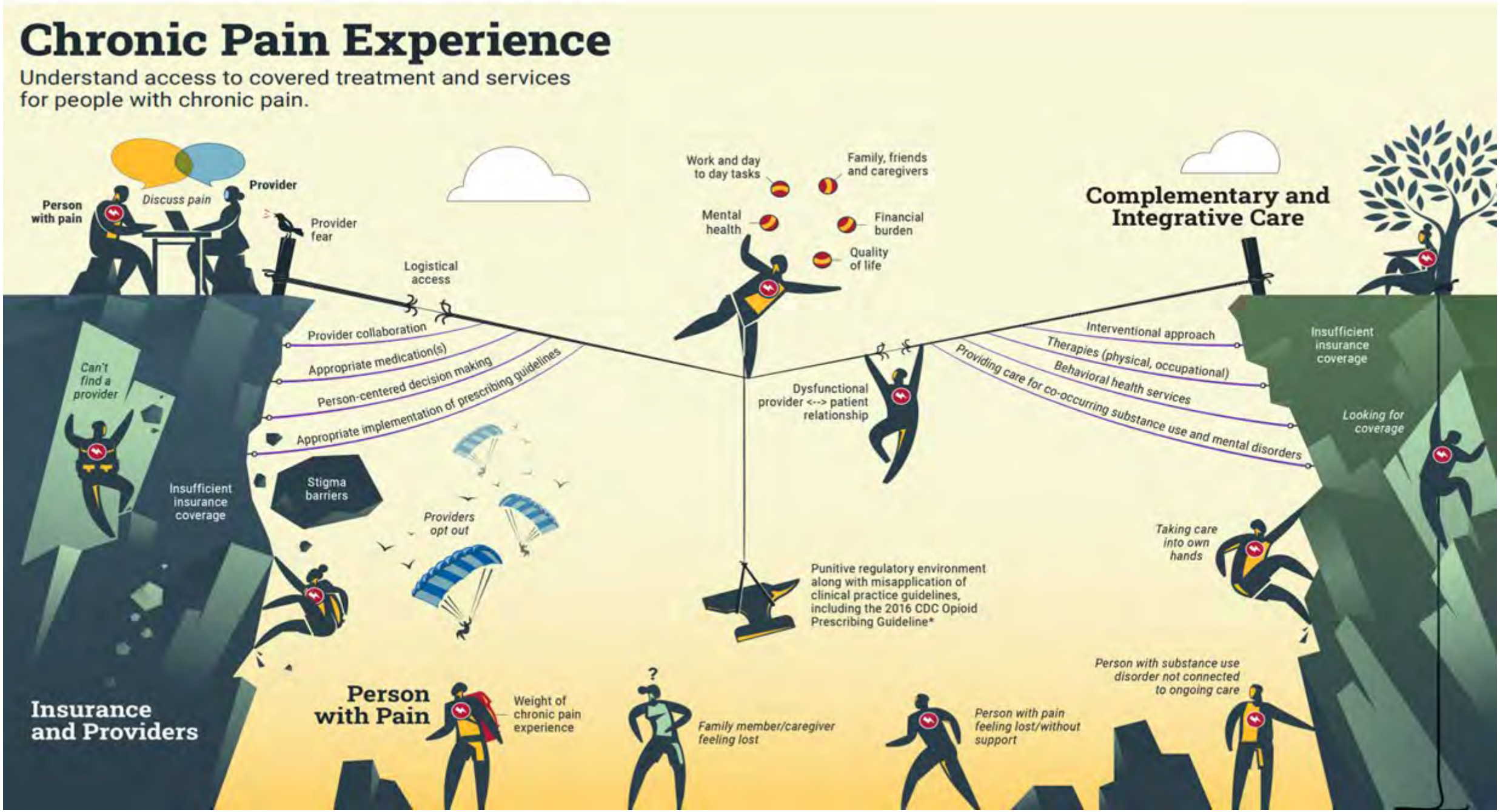
Opioid addiction increases:
- Patient load
- Strain on emergency rooms and medical offices
- Costs for detoxification programs



The increasing number of child welfare cases are due to parental abuse of drugs.

A 2012 study showed that 16% of teens had misused a prescription painkiller at least once.

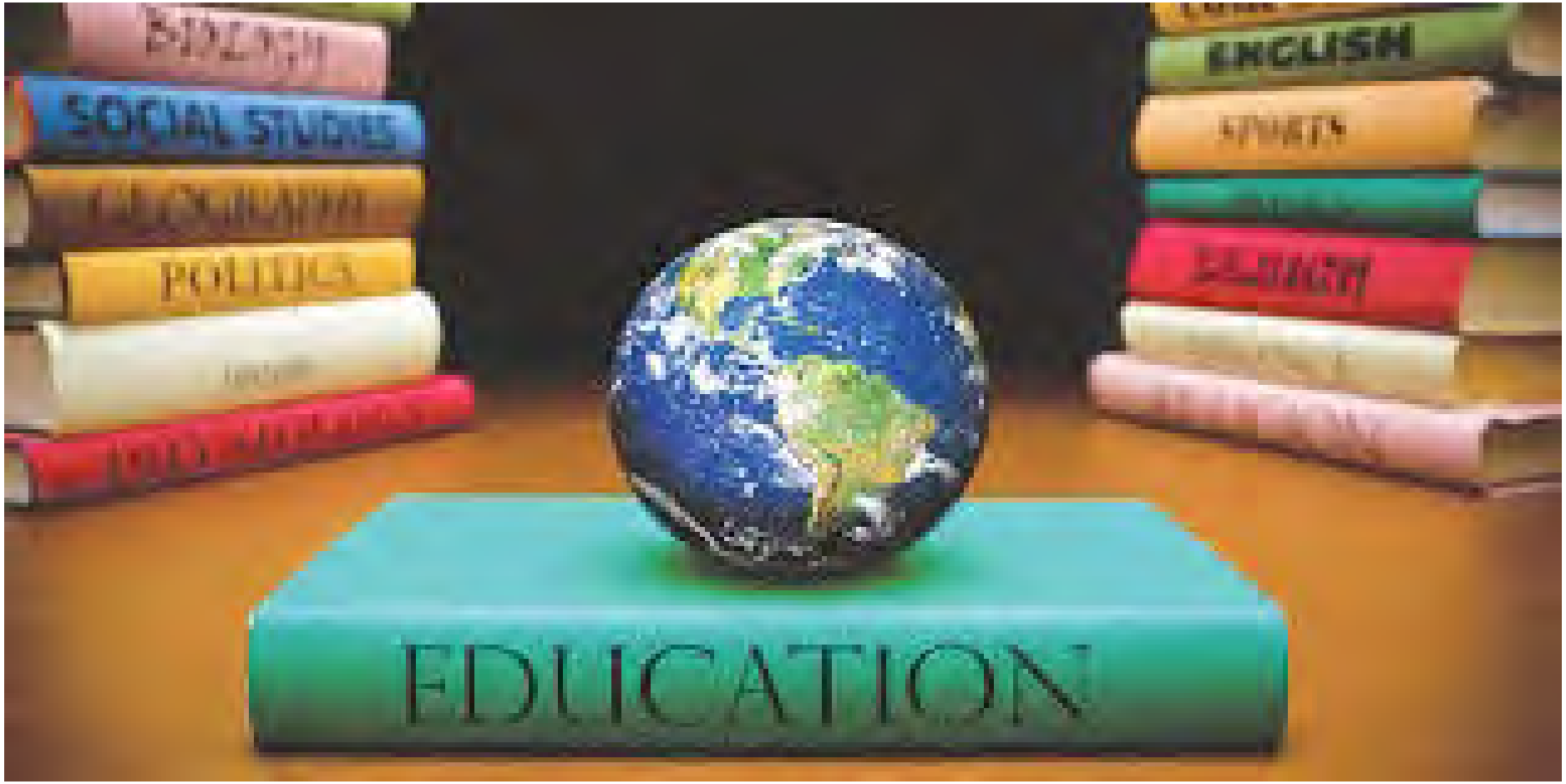
Between 1998 and 2012, the number of drug offenders in federal prisons grew by 63%. By the end of 2012, 52% of federal prisoners were drug offenders.

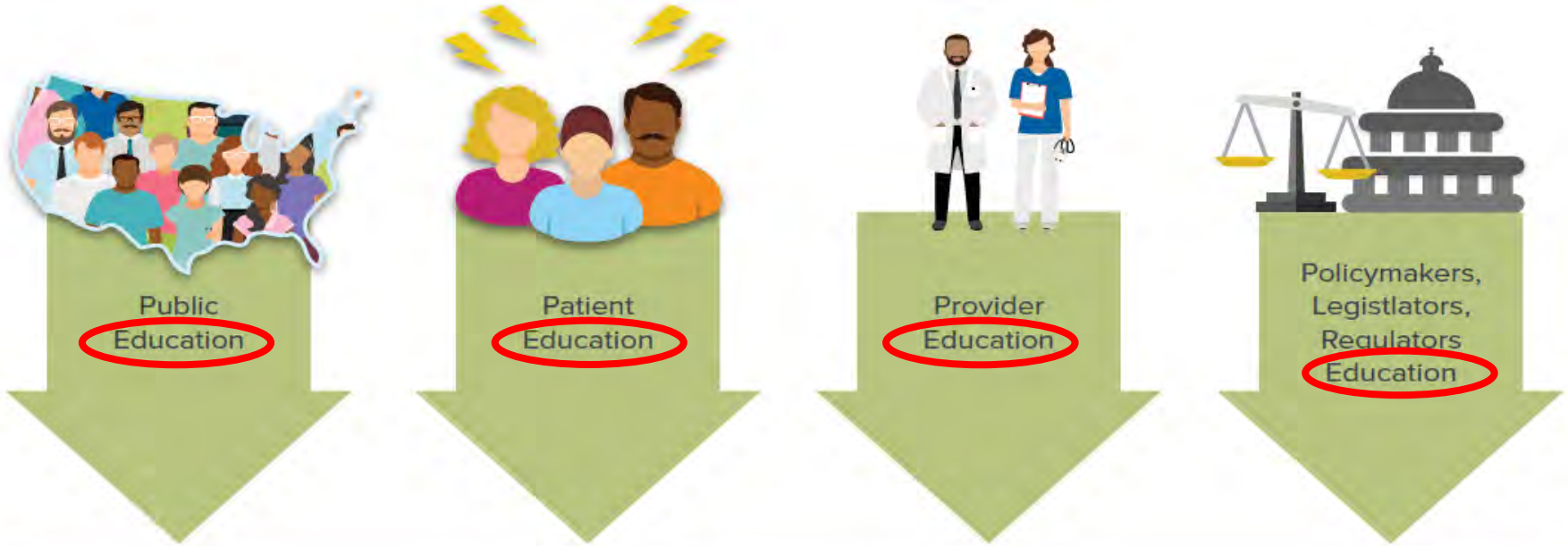


Strategies

Which Bucket are Patients in?

Strategy #1: Education… Education…





+ Effective, patient-centered care
+ Optimize patient functional outcomes
+ Appropriate use of pain medication
+ Eliminate stigma
+ Reduced risk through risk-benefit assessment

Figure 19: Education Is Critical to the Delivery of Effective, Patient-Centered Pain Care and Reducing the Risk Associated With Prescription Opioids

Pain Medicine, Volume 21, Issue 1, January 2020

Patient Education

- Get an accurate medication history
  - Identify naive vs. tolerant pain patients
- Set realistic pain expectations for patients
  - Begins with education in anesthesia pre-assessment
  - Nurse liaisons communicating pain plan of care to patients
- Focus on function, not pain score
- Alternative therapies
  - Non-pharmacological therapies (ice, heat, positioning, quiet time)
  - Multimodal therapy
  - Explain risks of opioids including side effects
- Use whiteboards as a communication tool

Hospital Prescriber Influence on Persistent Users

- Studies have shown:
  - 10% risk of chronic opioid usage after “cancer” surgery
  - 5-6% risk of persistent usage of opioids postoperatively
  - 15-25% of post op medication are consumed
  - 50% of opioid use is for nonmedical purposes and are obtained from friends and/or family

4 of 5 new heroin users describe starting with prescription opioids

J Clin Oncol. 2017 Dec 20;35(36):4042-4049
AMA Surg. 2017 Jun 21;152(6)
Ann Surg. 2017 Apr;265(4):709-714

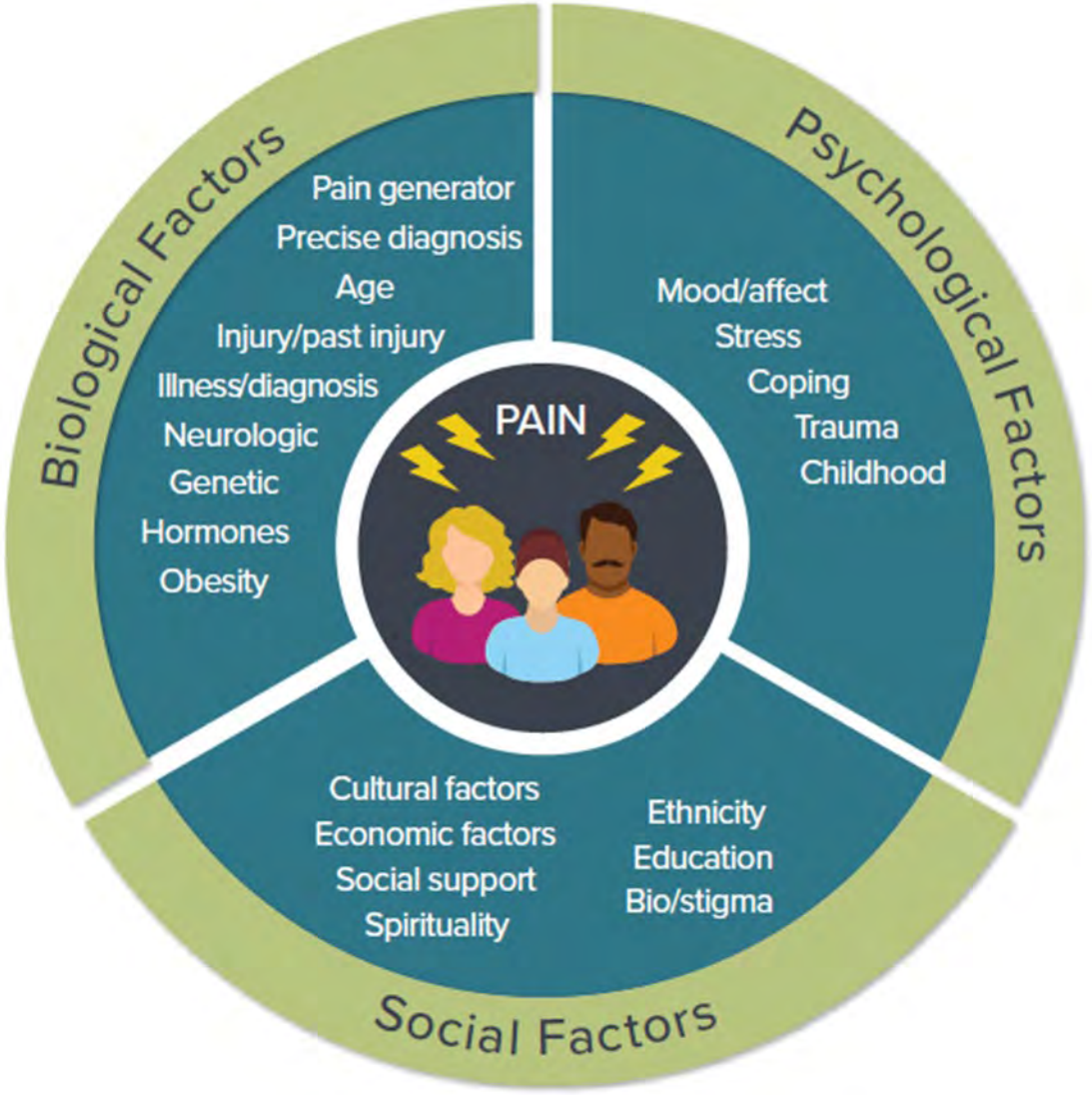
Local, State, and Federal Involvement

ECHO gReenville
Empowering Communities for Healthy Outcomes

SOUTH CAROLINA OPIOID EMERGENCY RESPONSE TEAM

CaroNova

Strategy #2: What Factors Influence Pain ?



Where to Start?

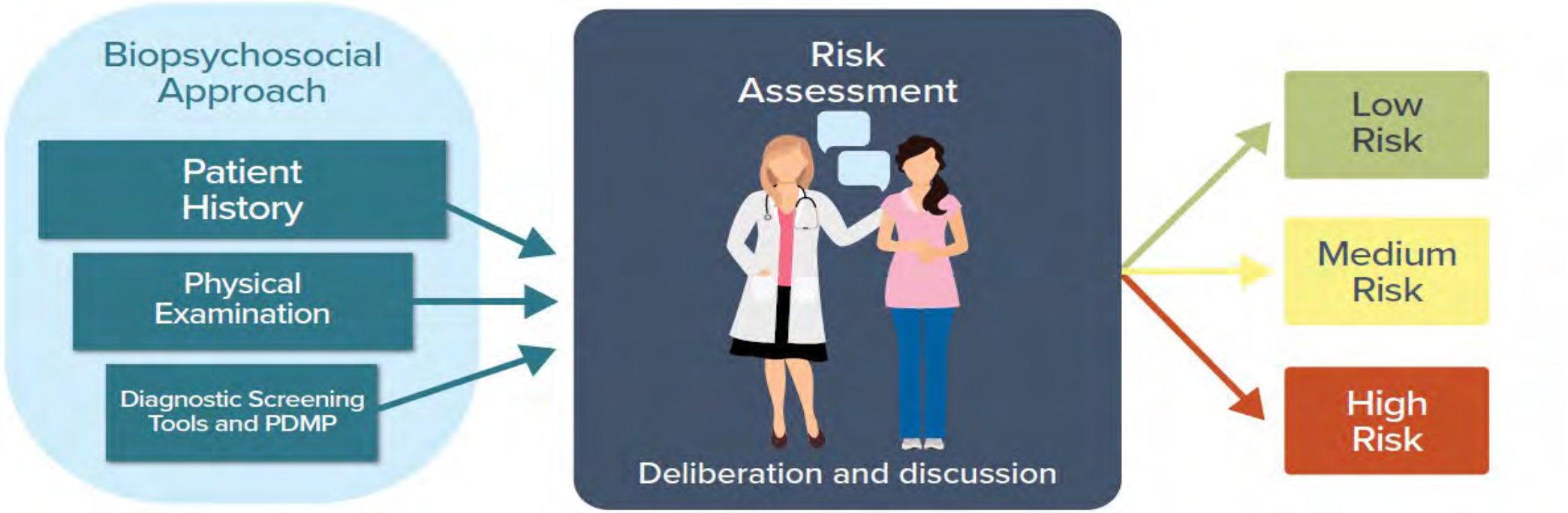


Figure 17: A Risk Assessment Is Critical to Providing the Best Possible Patient-Centered Outcome While Mitigating Unnecessary Opioid Exposure

Pain Medicine, Volume 21, Issue 1, January 2020

Positive and Negative factors

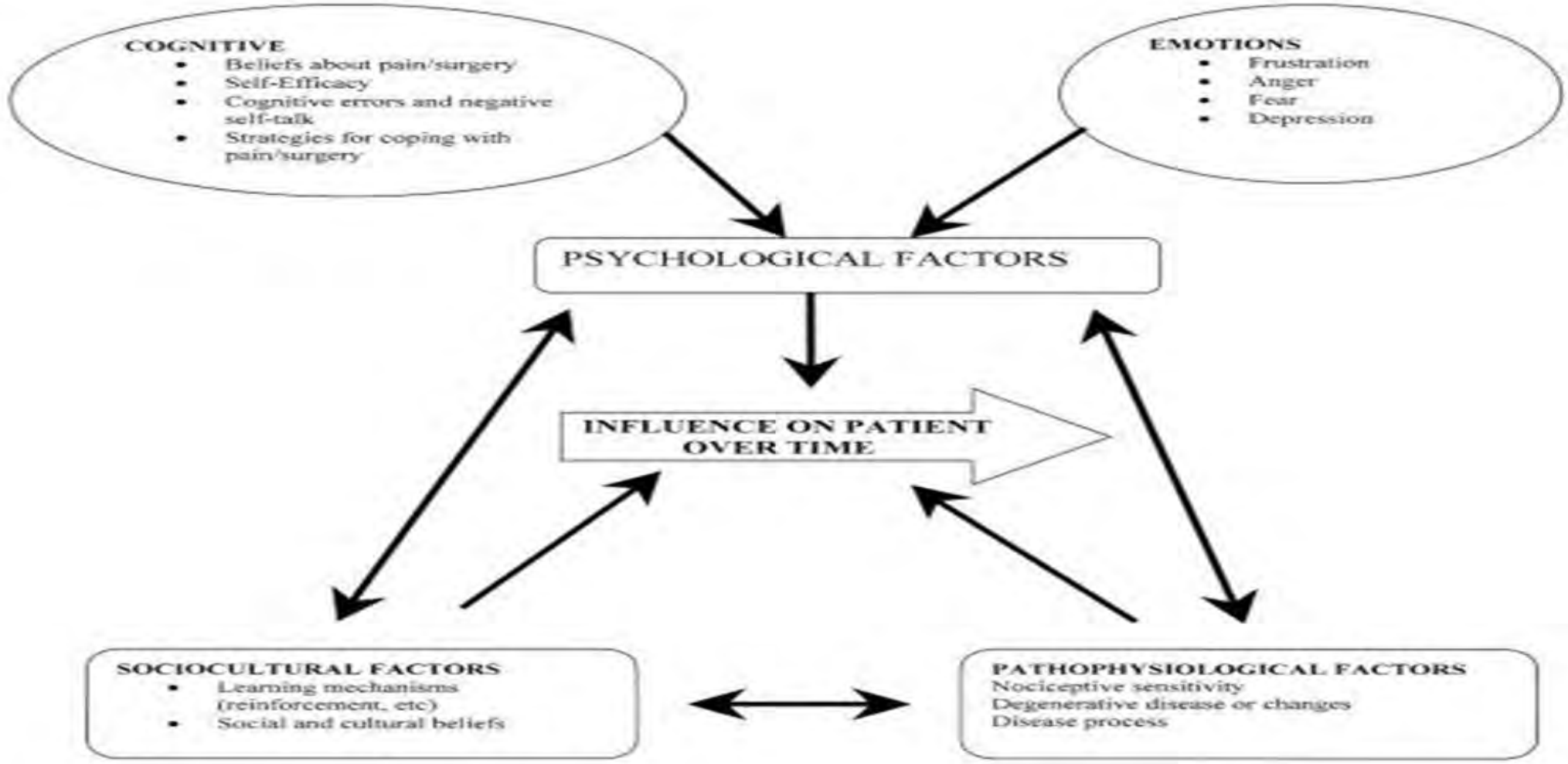
Table 1. Main factors influencing the pain chronification process.

Positive factors	Negative factors
Social support (marriage/family)	Poor health status
High level of education	Type (e.g. neuropathic) and severity of pain
Coping strategies	Depression
Work satisfaction	Stress
Appropriate communication with HCPs	Litigation
Adequate self-recognition	Fear avoidance
	Perceived injustice
	Catastrophizing

Abbreviation. HCPs, health care professionals.

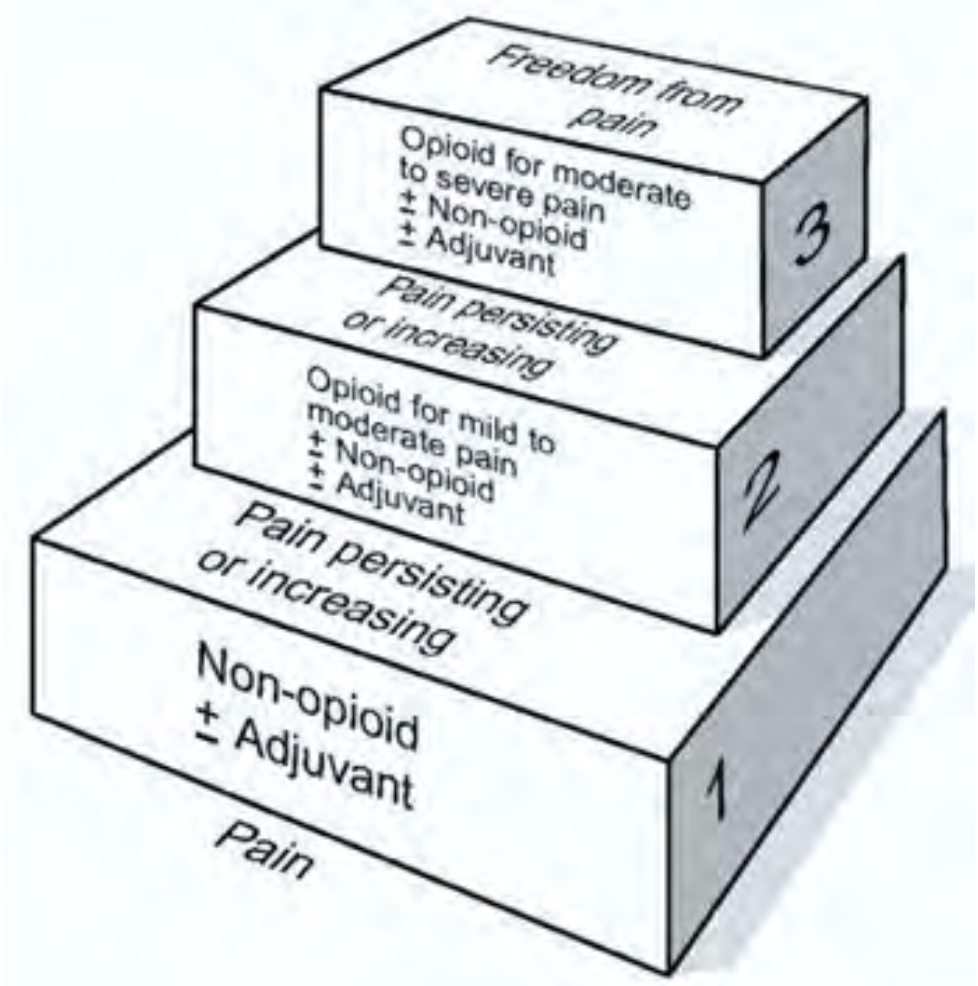
Current Medical Research and Opinion, 34:7, 2018, 1169-1178

MIXED: The Most Common Type of Pain



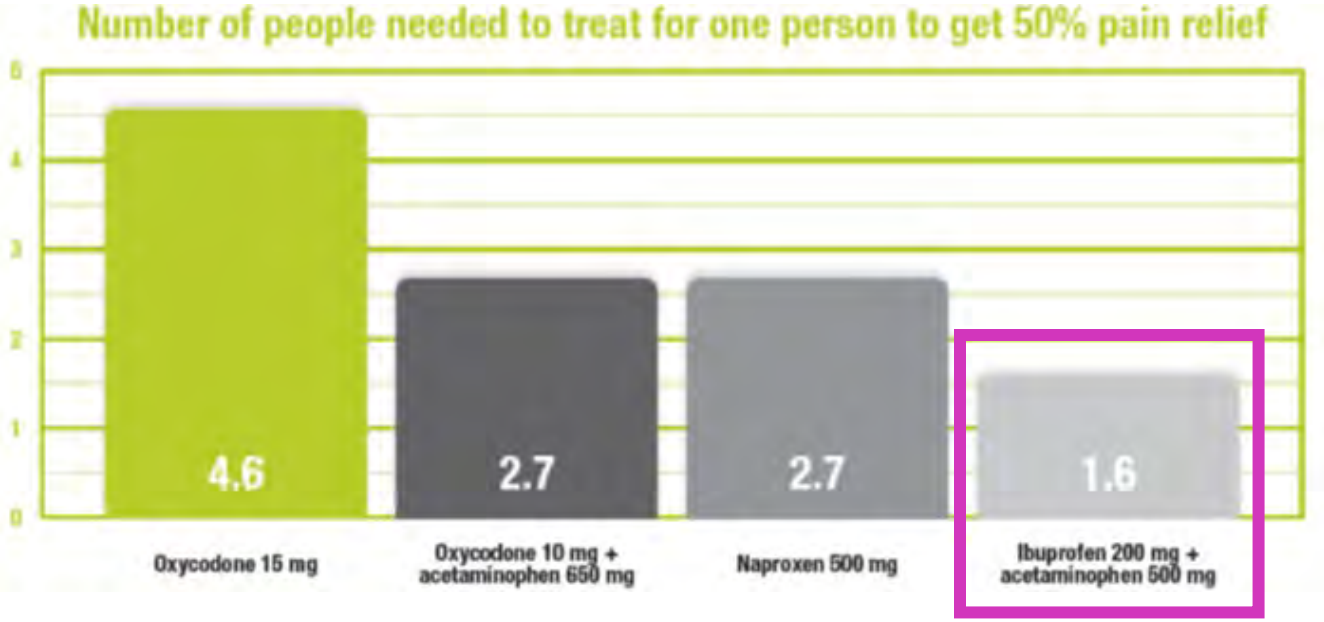
Which Bucket are Patients in?

Strategy #3: Opioid Alternatives



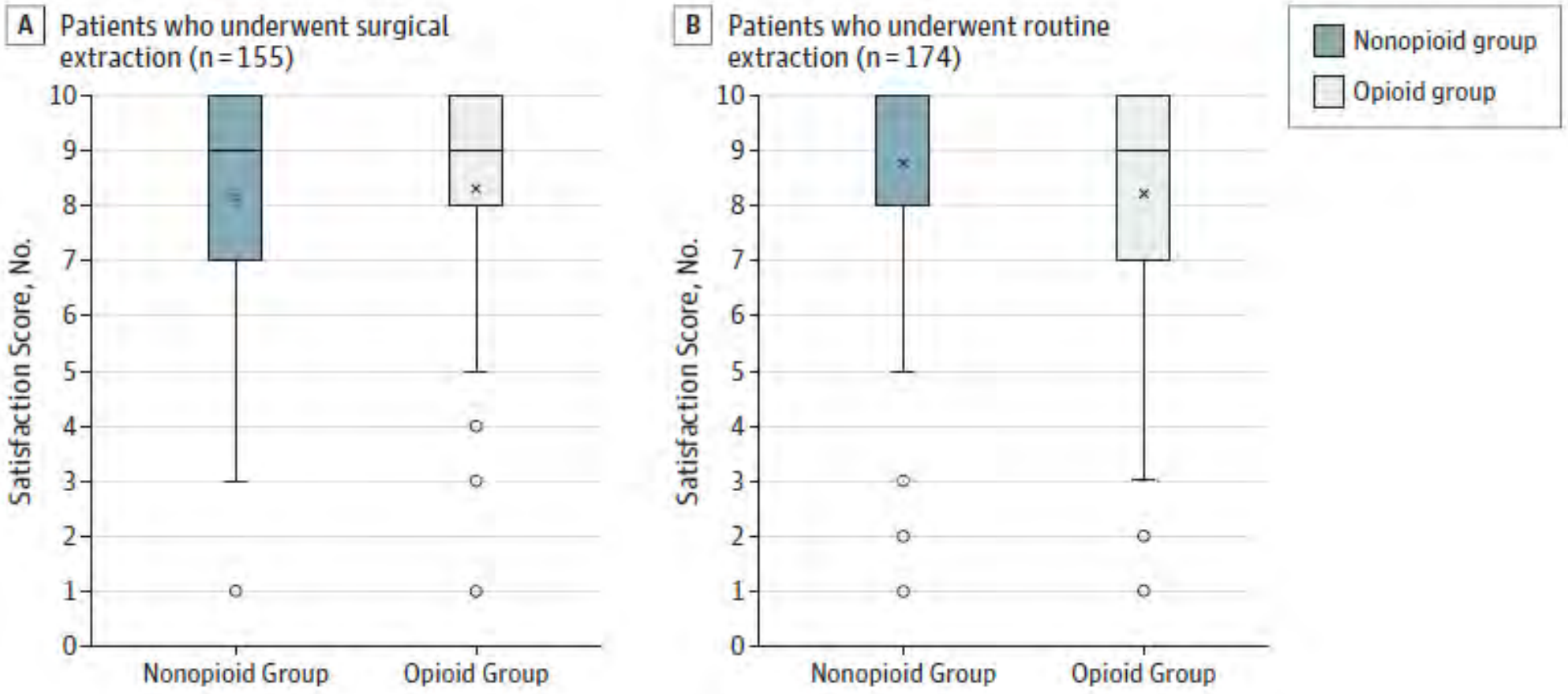
Non-Opioid Comparable Data

Medication	# of patients studied	NNT
Diclofenac 100 mg	545	1.8
Celecoxib 400 mg	298	2.1
Ibuprofen 400 mg	5456	2.5
Naproxen 400 mg	197	2.7
Ibuprofen 200 mg	3248	2.7
Oxycodone 10 mg + acetaminophen 1000 mg	83	2.7
Morphine 10 mg intramuscular	948	2.9
Oxycodone 5 mg + acetaminophen 325 mg	149	5.5
Tramadol 50 mg	770	8.3



Cochran.org, 2014
Bandolier, 2007

Patient Satisfaction



No Difference Between the Groups

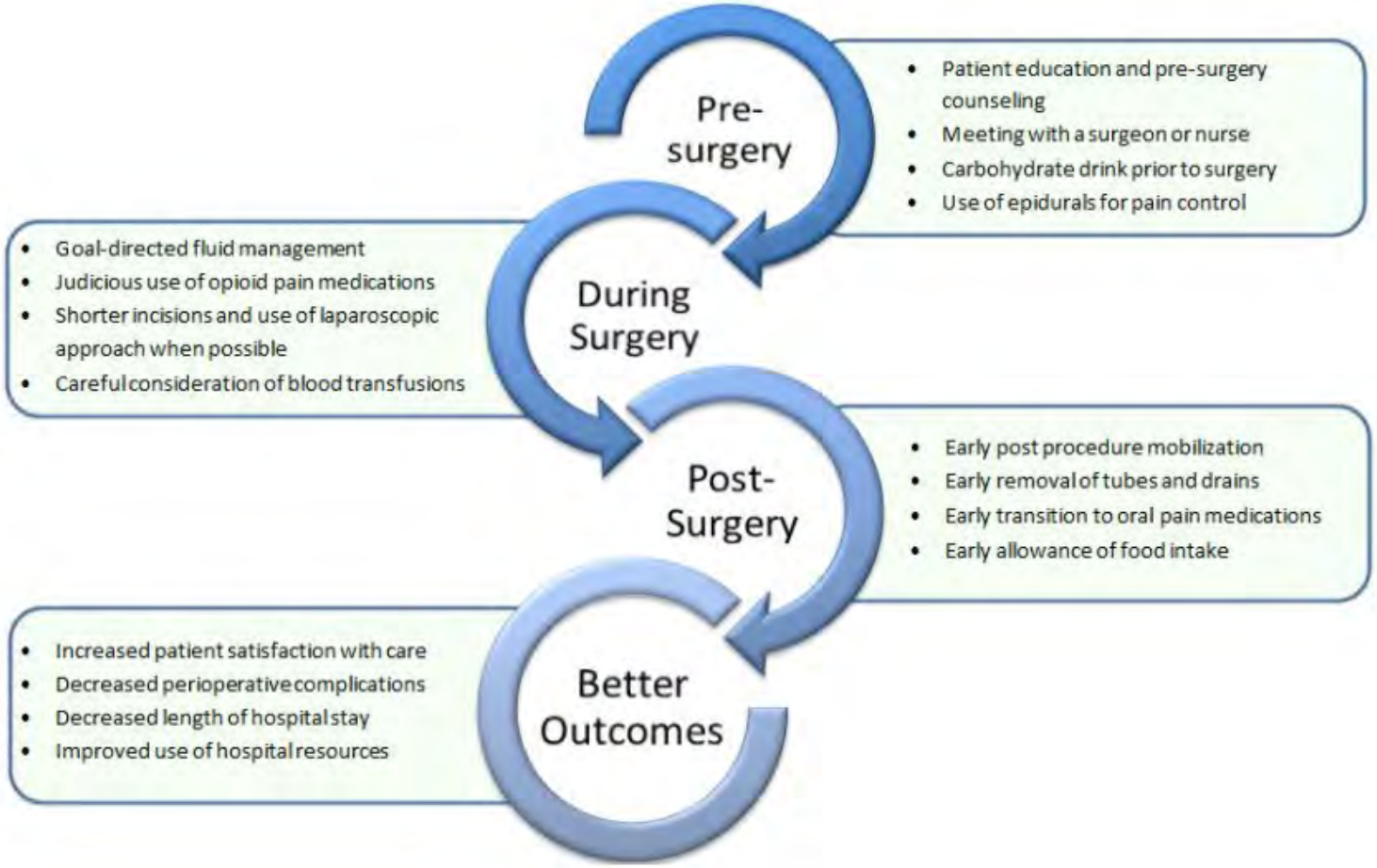
JAMA Network Open. 2020;3(3):e200901. doi:10.1001/jamanetworkopen.2020.0901

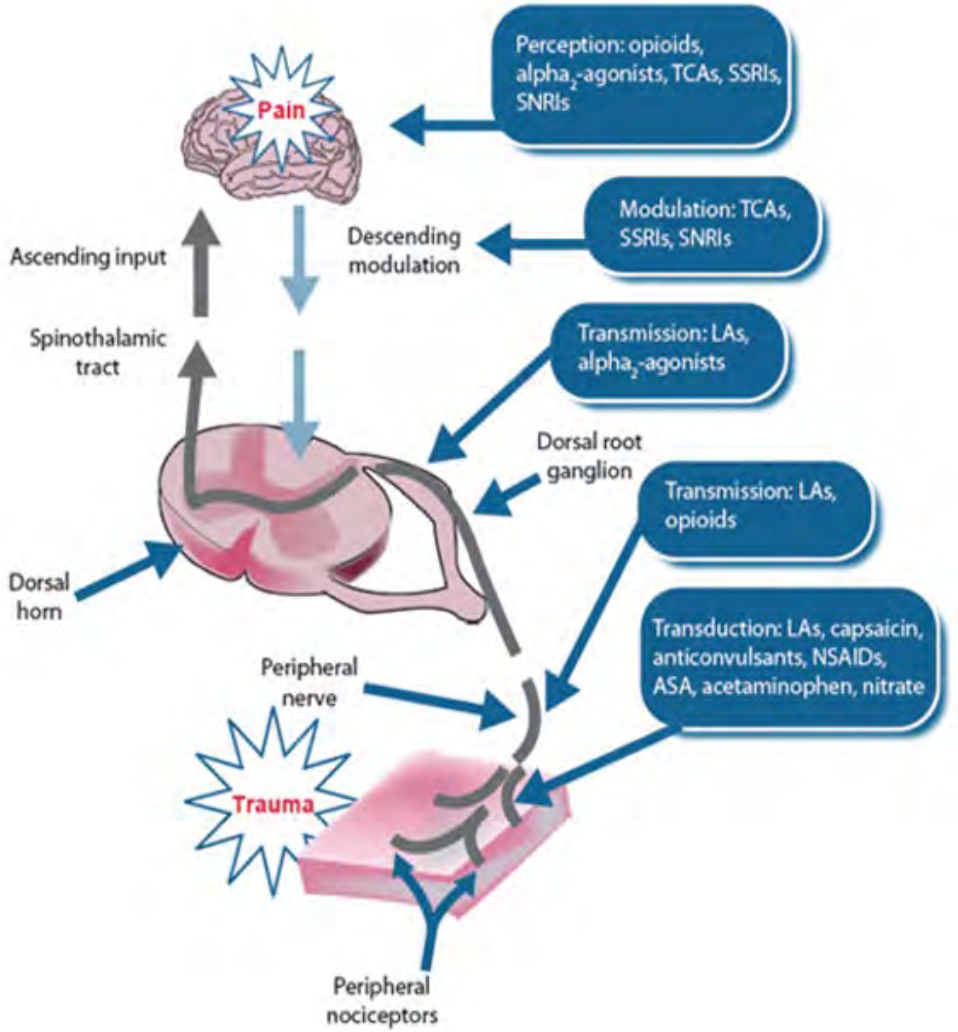
Magic in a Bottle !!

AND

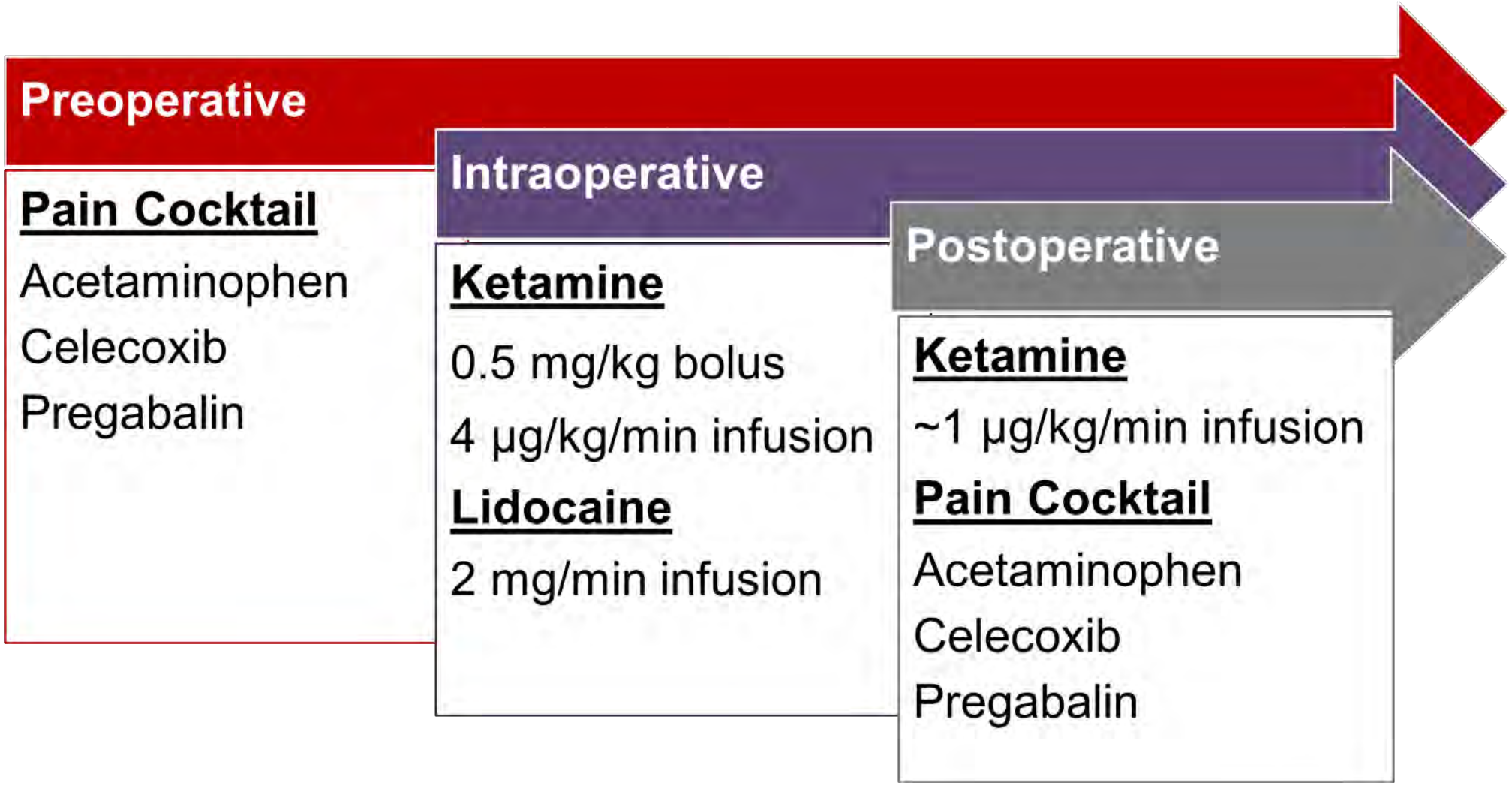
VS

Anesthesia: Enhanced Recovery After Surgery (ERAS)





Enhanced Recovery After Surgery Programs



Moving the Needle in South Carolina

JOINT ADVISORY OPINION ISSUED BY THE SOUTH CAROLINA STATE BOARDS OF MEDICAL EXAMINERS, NURSING AND PHARMACY REGARDING THE USE OF LOW DOSE KETAMINE INFUSIONS FOR THE MANAGEMENT OF PAIN THROUGHOUT THE GREENVILLE HEALTH SYSTEM[1]

The State Boards of Medical Examiners, Nursing and Pharmacy hereby approve this request, but emphasize that the approval of low dose Ketamine infusions for the management of pain applies **only** to the Greenville Health System. Any other provider interested in developing a similar program should submit a request for review and input from the Healthcare Collaborative Committee.

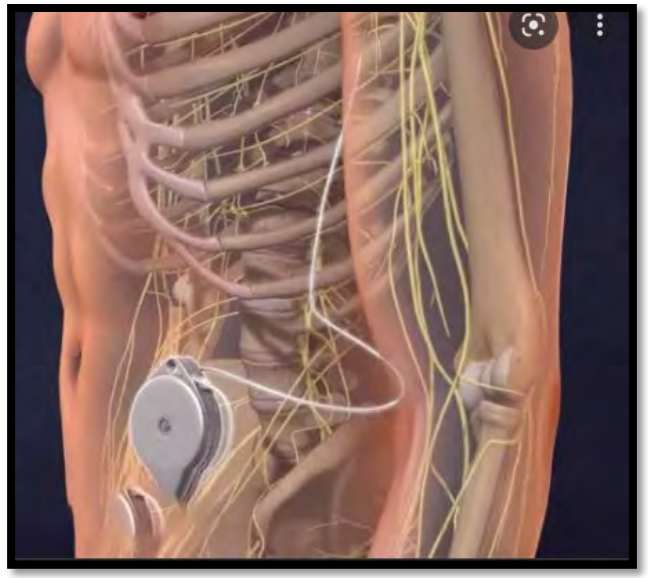
Formulated: April 12, 2019

Revised: December 6, 2019; July 10, 2020[1]

The South Carolina State Board of Medical Examiners, the South Carolina State Board of Pharmacy, and the South Carolina State Board of Nursing acknowledge that:

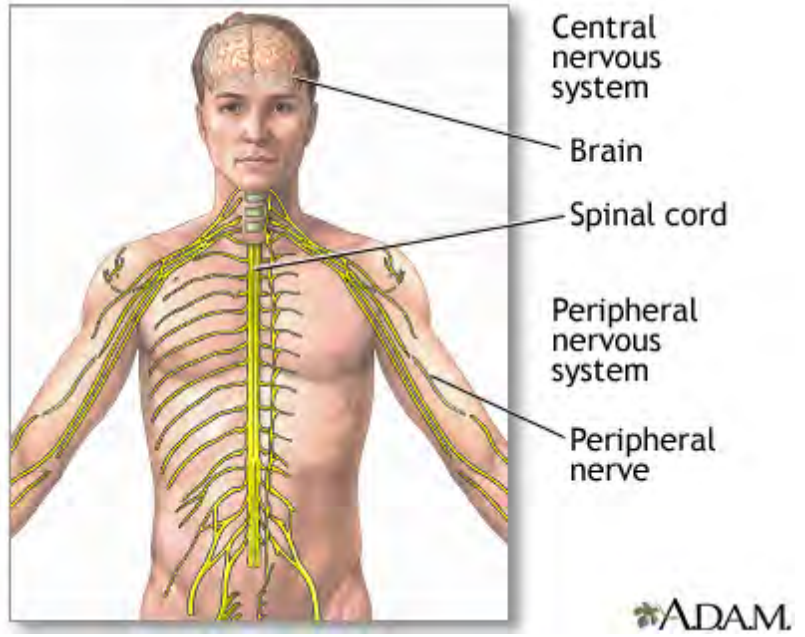
It is within the scope of practice for an RN to administer/monitor low dose Ketamine via continuous infusion and intravenous push (in ED and PACU ONLY) with physician orders for specific cases of acute pain management in patients who with opioid-tolerance, intractable post-operative pain, poorly controlled chronic pain, palliative care, or patients suffering from extreme opioid side effects in an acute care setting.

Alternatives to Opioids (ALTO®)
Acute Pain Protocols



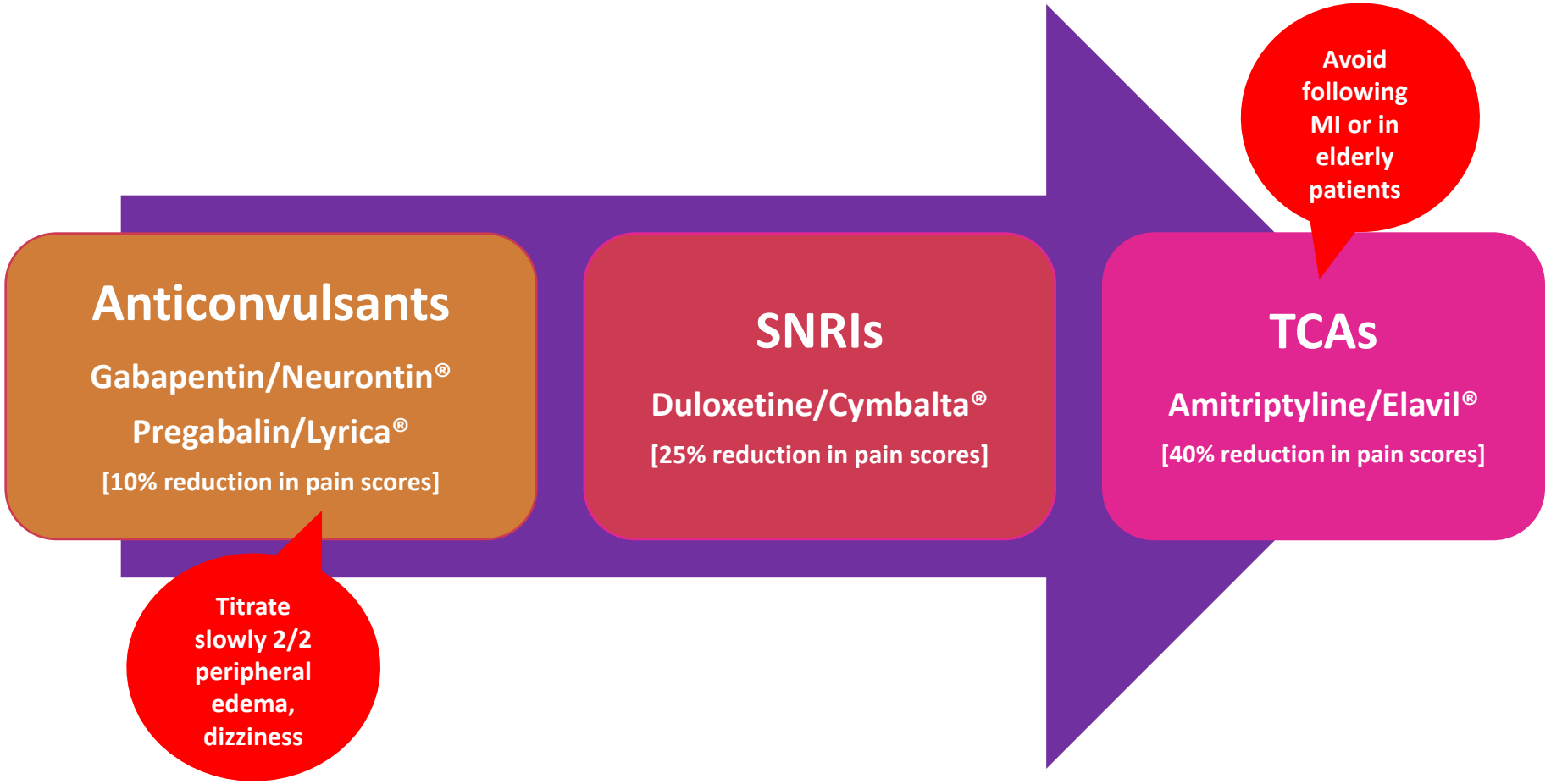
Neuropathic Pain

- Affects 6-8% of the general population
- Central and peripheral nervous system mechanisms
  - Incited by inflammation, metabolic issues, or trauma
    - Ectopic peripheral foci
    - Peripheral reorganization or central sensitization
- Common symptoms
  - Burning
  - Numbness
  - Tingling
  - Stabbing
  - Shock-like pain
  - Pins and needles



Pract Neurol 2013;13(5):292-307

Approach: Neuropathic Pain



SNRI = serotonin norepinephrine reuptake inhibitor
TCA = tricyclic antidepressant

Neurology 2011;76(20):1758-65.
Am J Med 2009;122:S22-23.

Strategy #4: Need for Opioids ??

“Opiophobia”

“No pain left behind”

Responsible Opioid Pharmacotherapy

The Real Problem…

People understand me so poorly that they don't even understand my complaint about them not understanding me.

Soren Kierkegaard

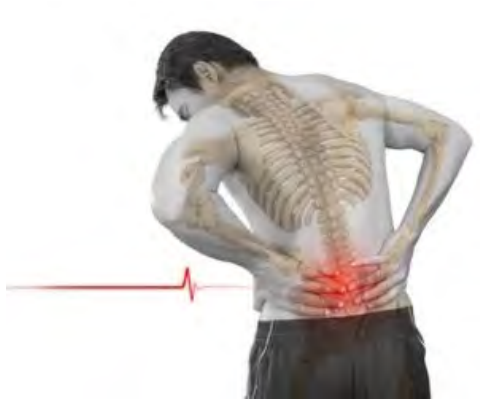
FDA identifies harm reported from sudden discontinuation of opioid pain medicines and requires label changes to guide prescribers on gradual, individualized tapering

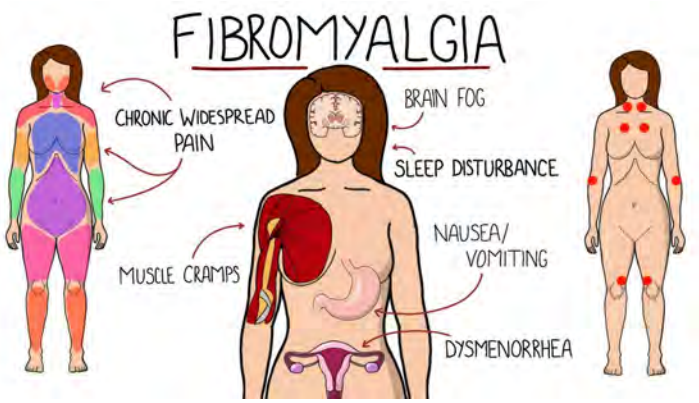
FDA Drug Safety Communication

When should I use opioids?

- Generally approved indications:
  - Acute pain
  - Cancer and cancer treatment related pain
  - Palliative care situations

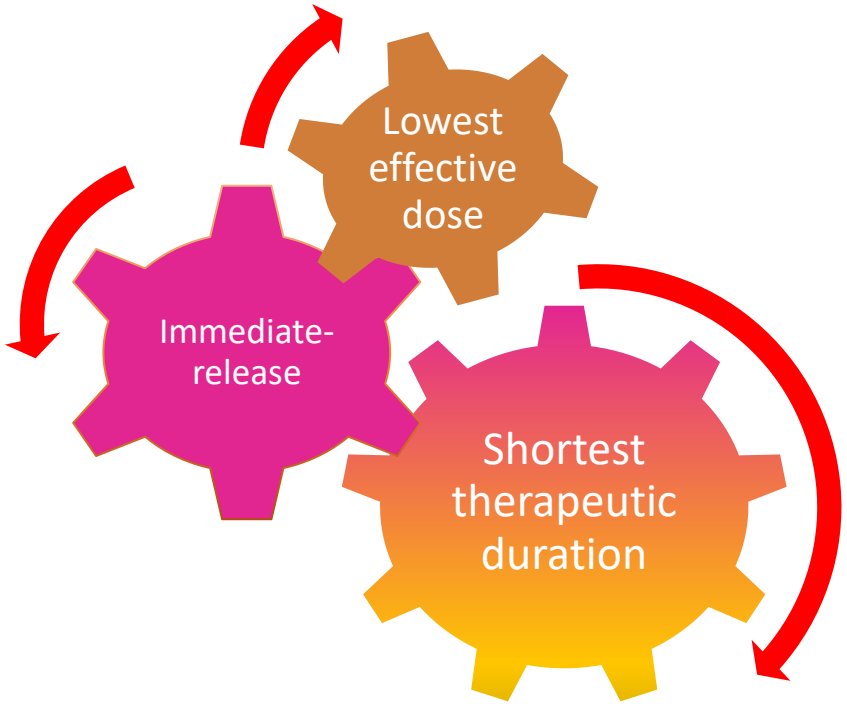
- Generally non-approved indications:
  - Fibromyalgia
  - Headaches
  - Chronic non-malignant pain





Treatment of Acute Pain

- Chronic opioid use often starts with treatment of acute pain
- **1 of 8** opioid naïve patients who receive narcotics after a procedure becomes persistent users
- Patients traditionally use less than **15% of total opioid RX**



3 days or less will usually be sufficient…

<u>>7 days rarely needed</u>

<u>Practice Changes:</u>

Re-evaluation of patient

Re-engagement in pain management plan

N Engl J Med 2016; 374:1501-1504
CDC Guideline for Prescribing Opioids for Chronic Pain; 2016.
http://turnthetiderx.org/treatment/

Converting Agents

Agent	Equianalgesic dose	
	PO (mg)	IV (mg)
Morphine	30	10
HydroMORphone	7.5	1.5
Fentanyl	N/A	0.1
Meperidine	300	75
Codeine	200	130 (not recommended)
OxyCODone	20	N/A
HydroCODone	30	N/A
OxyMORphone	10	1
Nalbuphine	N/A	10
Methadone	Varies (use methadone table)	Controversial

AVOID

Empiric **25-50% reduction** in calculated equivalent is customary

Chronic / Cancer Pain - Who to Wean?

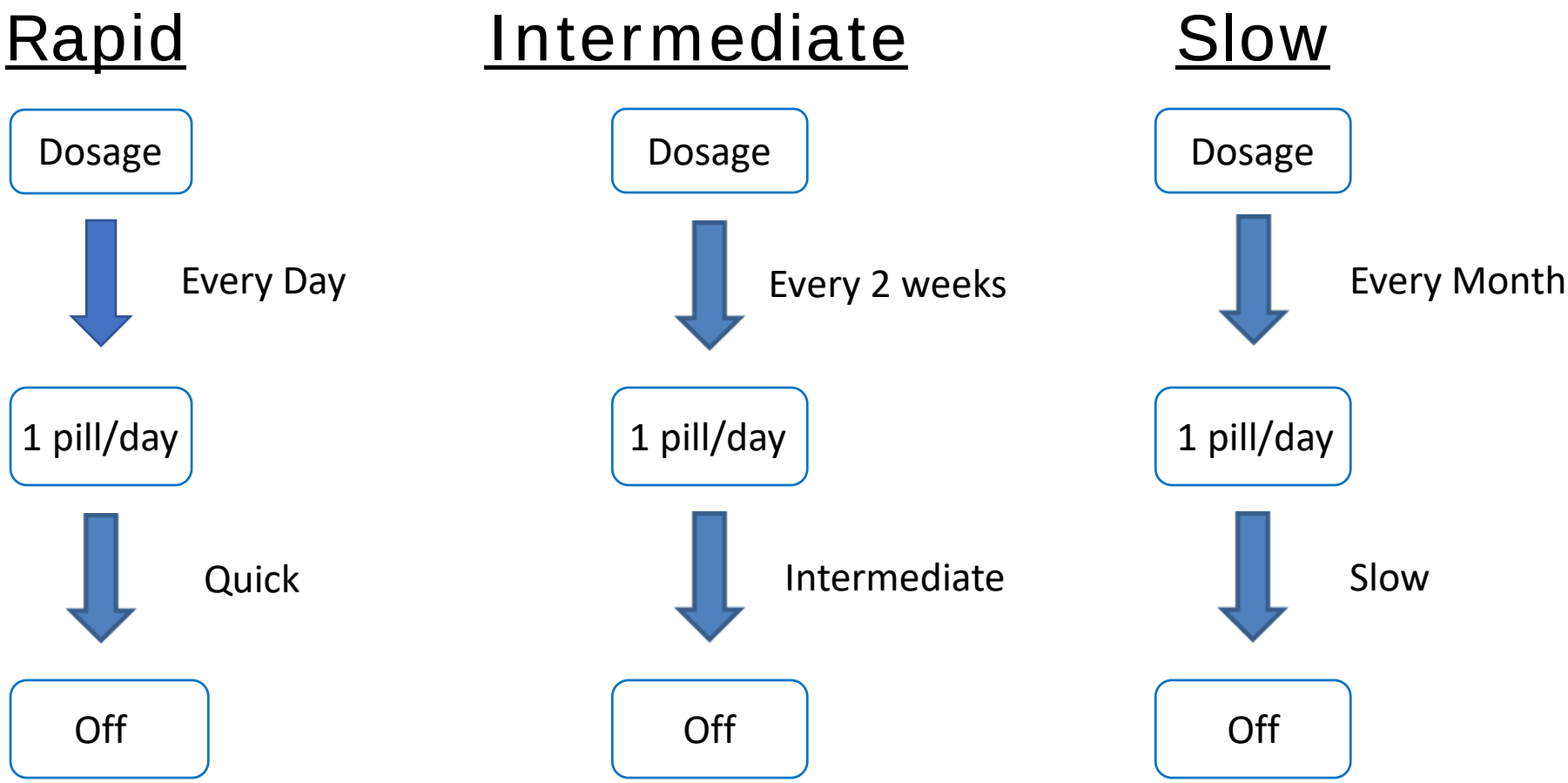
Always Consider the Potential for Opioid Weaning

- Diagnosis = Indication for long term opioids?
- High MMEs or Tolerance?
- Inability to achieve / maintain “relief” or functional goals
- Intolerance to side effects
- Persistent nonadherence
- Deterioration
- Resolution and healing of the painful condition

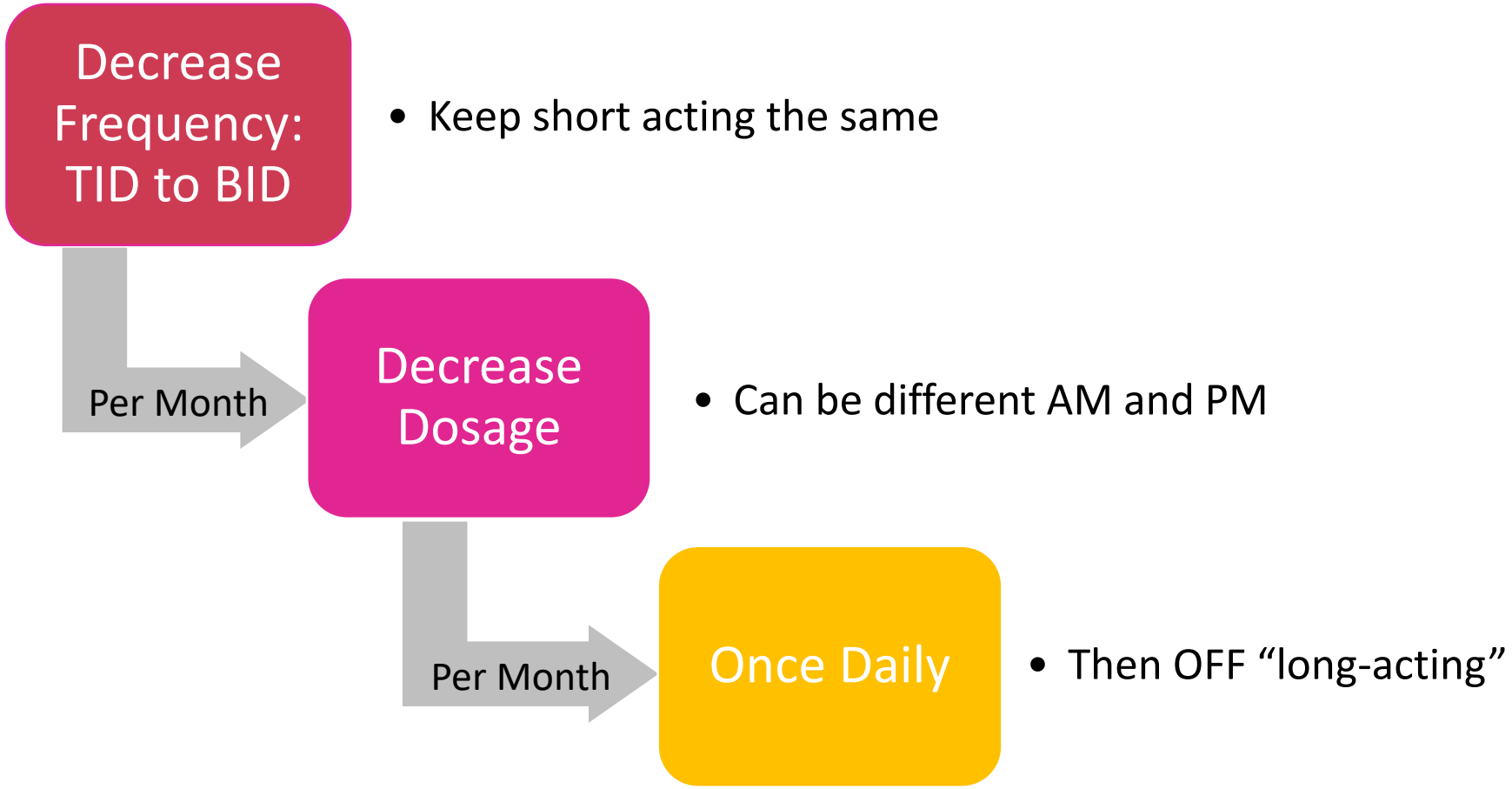
Key is **Communication:**
Discussing of Goals / Pitfalls

Mayo Clinic Proceedings , Volume 90 , Issue 6 , 828 - 842

Basic Opioid Tapering



Long Acting Agent Tapering (SLOW!)



- Keep short acting the same
- Can be different AM and PM
- Then OFF “long-acting”

Long-Acting Example: MSContin Wean

- Decrease MSContin from 90mg PO **TID** to 90mg PO **BID**
- Begin adjusting **PM doses down** once at BID schedule
  - 90mg/60mg …60mg/60mg…45mg/60mg…45mg/45mg…
- Once to the lowest (reasonable) dose adjust to **DAILY**
  - 30mg/30mg convert to 30mg PO DAILY
- Then **OFF**

Weaning Toolkits

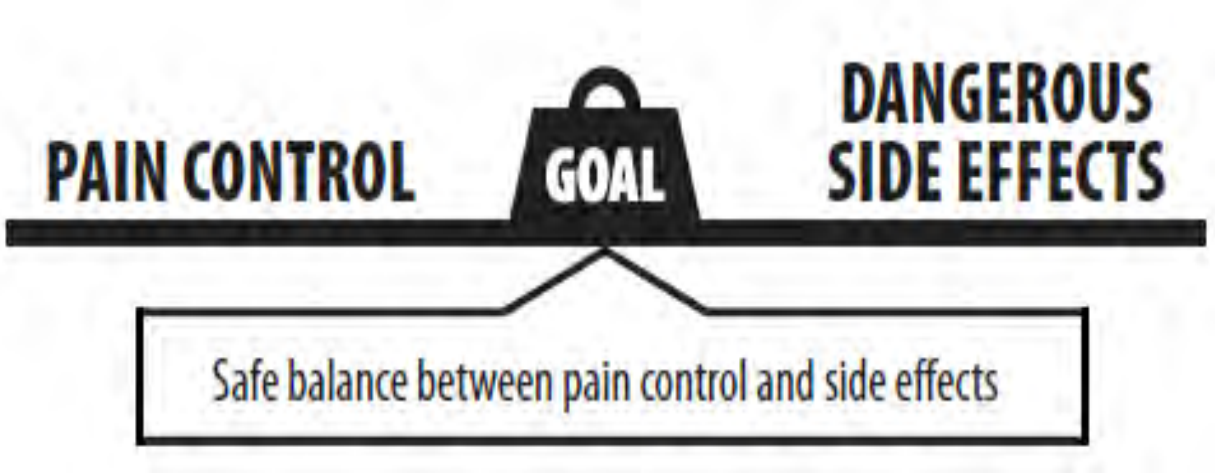
- Dept of Veteran's Affairs:
  - https://www.pbm.va.gov/AcademicDetailingService/Documents/Pain_Opioid_Taper_Tool_IB_10_939_P96820.pdf

Treatment of Withdrawal Symptoms

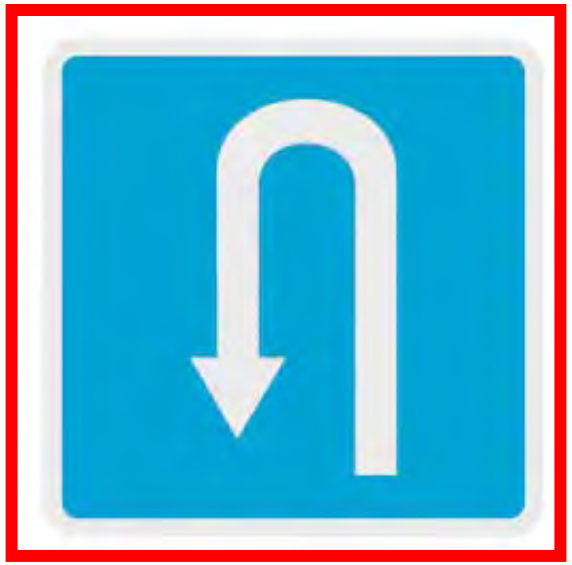
Consider Use of Adjuvant Medications During Taper [9-16] Generally Not Needed if Utilizing a Gradual Taper	
Withdrawal symptoms (not effective for anxiety, restlessness, insomnia, and muscular aching)	○ Clonidine 0.1 -0.2 mg oral every 6-8 hours; hold dose if blood pressure <90/60 mmHg (0.1-0.2 mg 2-4 times daily is commonly used in the outpatient setting) ○ Recommend test dose (0.1 mg oral) with blood pressure check one hour post dose ; obtain daily blood pressure checks; increasing dose requires additional blood pressure checks ○ Reevaluate in 3-7 days; taper to stop; Average duration 15 days ○ Baclofen 5mg 3 x daily may increase to 40 mg total daily dose[6-9] ○ Revaluate in 3-7 days; average duration 15 days ○ May continue after acute withdrawal to help decrease cravings ○ Should be tapered when baclofen is discontinued ○ Gabapentin start at 100-300mg and titrate to 1800-2100mg divided in 2-3 daily doses ○ Can help reduce withdrawal symptoms and help with pain and sleep
Anxiety, dysphoria, lacrimation, rhinorrhea	○ Hydroxyzine 25-50 mg three times a day as needed ○ Diphenhydramine 25 mg every 6 hours as needed
Myalgias	○ NSAIDs (e.g. naproxen 375-500 mg twice daily or ibuprofen 400-600 mg four times daily) ○ Acetaminophen 650 mg every 6 hrs as needed
Sleep disturbance	○ Trazodone 25-300 mg orally at bedtime
Nausea	○ Prochlorperazine 5-10 mg every 4 hrs as needed ○ Promethazine 25mg orally or rectally every 6 hours as needed ○ Ondansetron 8mg every 12 hours as needed
Diarrhea	○ Loperamide 4 mg orally initially, then 2mg with each loose stool, not to exceed 16 mg daily ○ Bismuth subsalicylate 524 mg every 0.5- 1 hour orally, not to exceed 4192 mg/day

Monitor for Opioid-Induced Side Effects

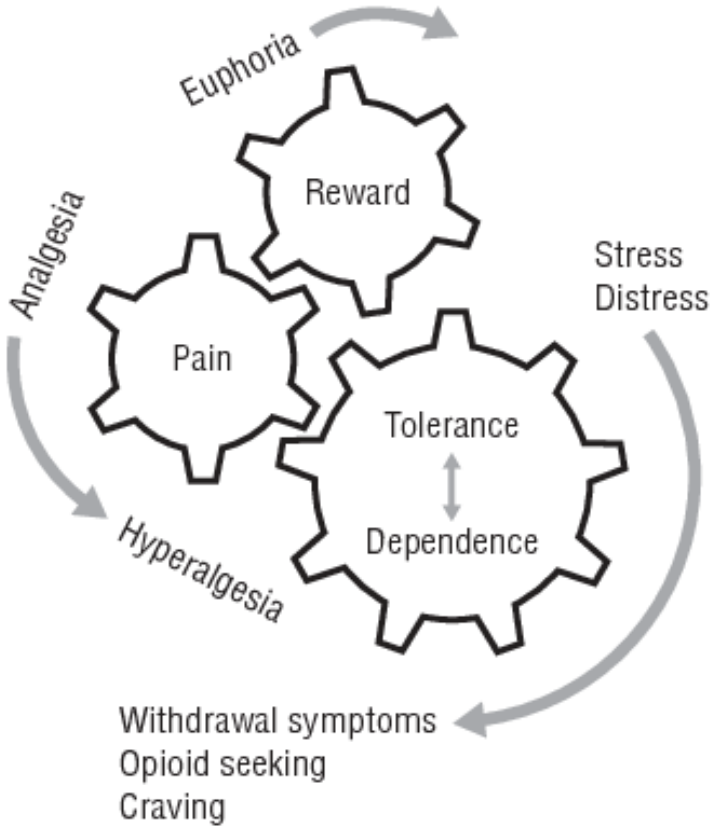
- Key side effects:
  - Respiratory depression (#1)
    - Reduced respiratory effort
    - Reduced respiratory rate
  - Low blood pressure
  - Slow heart rate
  - Confusion or dizziness
  - Constipation
  - Upset stomach
  - Dry mouth

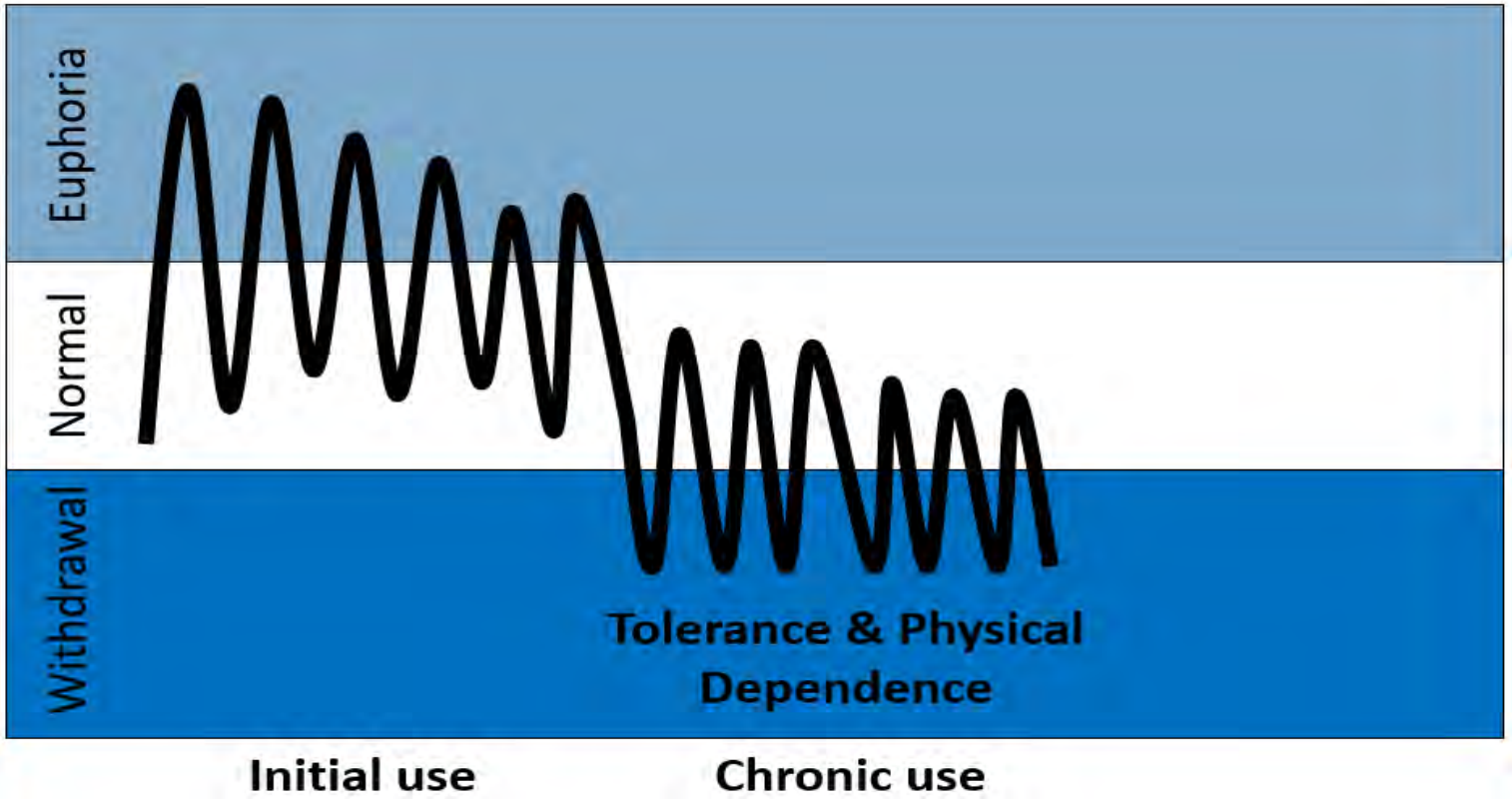


Which Bucket are Patients in?



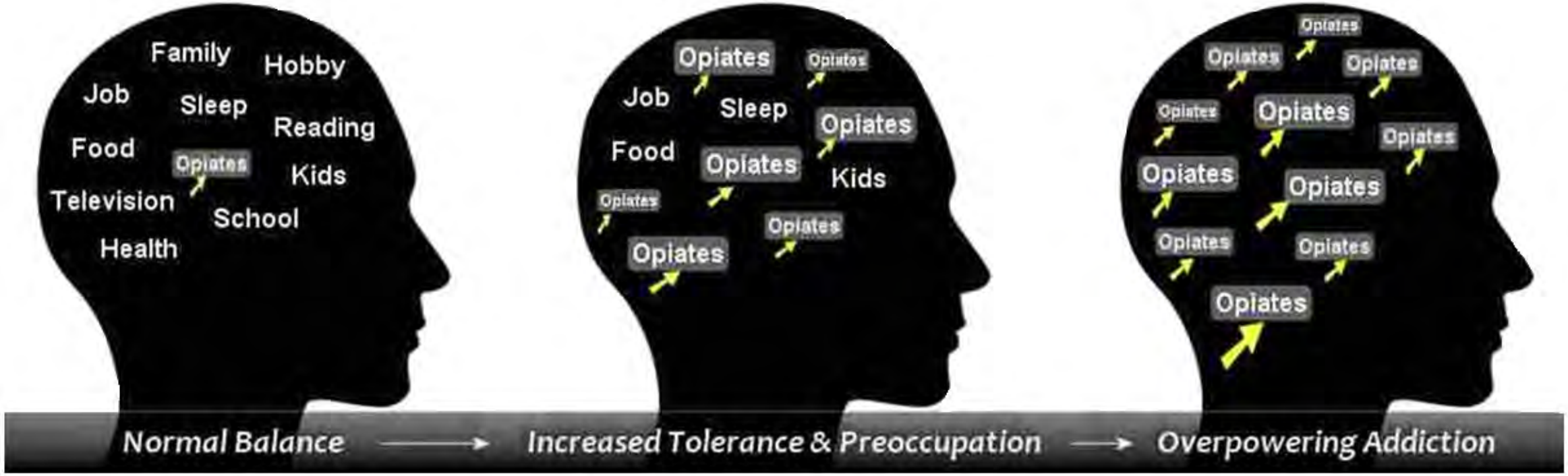
Natural History of Opioid Use Disorder





https://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-supplement.pdf

Progression to Addiction



Substance Use Disorder (SUD)

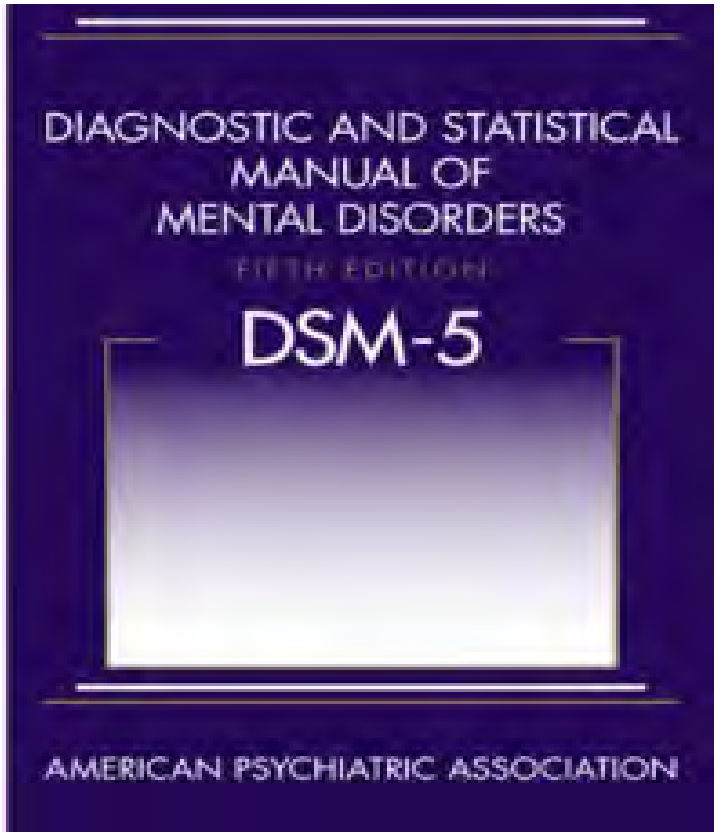


FIGURE 1. DSM-IV and DSM-5 Criteria for Substance Use Disorders

	DSM-IV Abuse[a]		DSM-IV Dependence[b]		DSM-5 Substance Use Disorders[c]	
Hazardous use	X	≥1 criterion	–		X	≥2 criteria
Social/interpersonal problems related to use	X		–		X	
Neglected major roles to use	X		–		X	
Legal problems	X		–		–	
Withdrawal[d]	–		X	≥3 criteria	X	
Tolerance	–		X		X	
Used larger amounts/longer	–		X		X	
Repeated attempts to quit/control use	–		X		X	
Much time spent using	–		X		X	
Physical/psychological problems related to use	–		X		X	
Activities given up to use	–		X		X	
Craving	–		–		X	

[a] One or more abuse criteria within a 12-month period *and* no dependence diagnosis; applicable to all substances except nicotine, for which DSM-IV abuse criteria were not given.
[b] Three or more dependence criteria within a 12-month period.
[c] Two or more substance use disorder criteria within a 12-month period.
[d] Withdrawal not included for cannabis, inhalant, and hallucinogen disorders in DSM-IV. Cannabis withdrawal added in DSM-5.

Am J Psychiatry 2013; 170:834–851

Opioid Misuse in Patients with Cancer Pain

Table 3. Factors Associated with the Risk of Opioid Overdose or Addiction.

Factor	Risk
Medication-related	
Daily dose >100 MME*	Overdose,[8] addiction[8]
Long-acting or extended-release formulation (e.g., methadone, fentanyl patch)	Overdose[14,41]
Combination of opioids with benzodiazepines	Overdose[42]
Long-term opioid use (>3 mo)†	Overdose,[43] addiction[44]
Period shortly after initiation of long-acting or extended-release formulation (<2 wk)	Overdose[45]
Patient-related	
Age >65 yr	Overdose[46]
Sleep-disordered breathing‡	Overdose[47]
Renal or hepatic impairment§	Overdose[48]
Depression	Overdose, addiction[49]
Substance-use disorder (including alcohol)	Overdose,[50] addiction[49]
History of overdose	Overdose[51]
Adolescence	Addiction[52]

Table 4. Mitigation Strategies against Opioid Diversion and Misuse.

Several mitigation strategies for risk assessment of opioid misuse have been proposed.[74] These include the following:

Screening tools to identify patients with a substance-use disorder. Such tools include the Opioid Risk Tool; the Screener and Opioid Assessment for Patients with Pain (SOAPP), version 1.0; SOAPP-Revised; and the Brief Risk Interview; or the use of a simple question such as "How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?" since patients who score above a certain threshold (e.g., ≥1 to the sample question) may be at increased risk for opioid abuse.[75]

Use of data from the Prescription Drug Monitoring Program. Such data can be used to identify doctor shopping, which is frequently an indication of drug misuse or diversion.

Use of urine drug screening. Such screening, which can be performed before prescription of opioids and periodically as part of regular follow-up, can provide information on drug use not reported by patients and may help in identifying patients who are not taking their prescribed opioids and might be diverting them.

Doctor–patient agreement on adherence. Such personal contracts can help doctors in monitoring a patient's adherence to prescribed opioid medications.

However, a recent review of the evidence showed that only limited data are available regarding the efficacy of any of these strategies.[76]

N Engl J Med 2016; 374:1253-1263 .DOI: 10.1056/NEJMra1507771

Treatment for Opioid Use Disorder

Medication assisted treatment

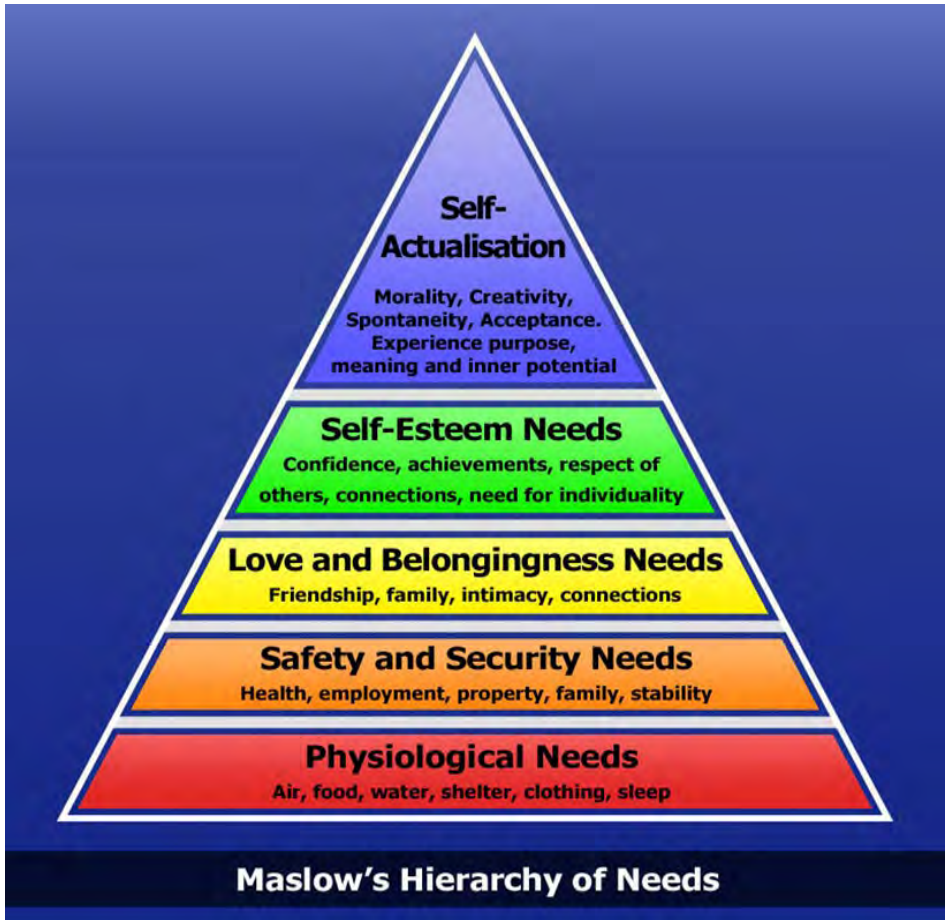
- Treat withdrawal symptoms only!!
  - Buprenorphine
  - Methadone

Psycho-Social support

- Behavioral counselling
- Family/social support network

↓ Triggers

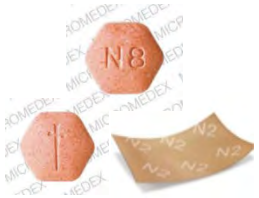
Improve coping strategies



What Is Medication for Opioid Use Disorders?

Methadone

Delivered by Opioid Treatment Providers (OTPs)

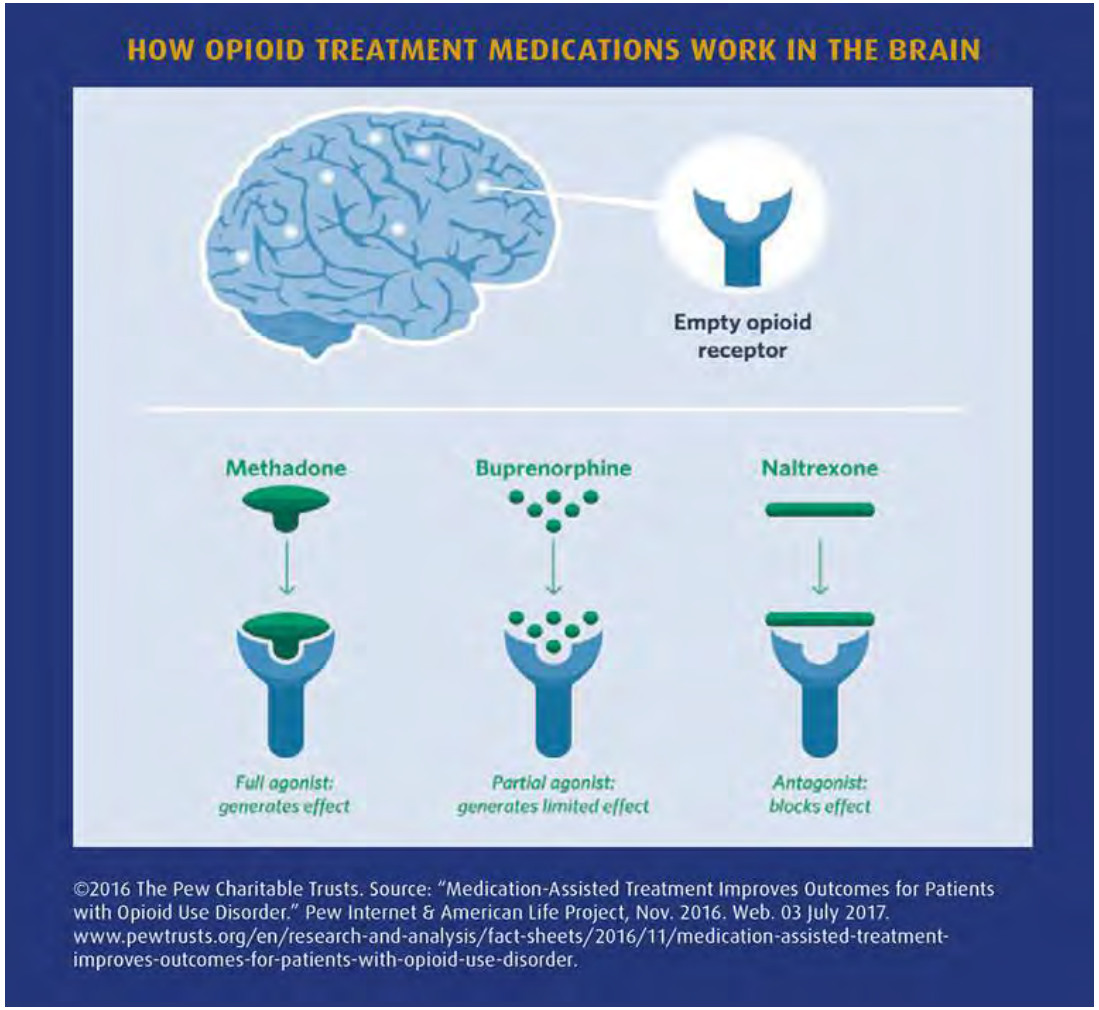


Buprenorphine

Delivered by providers in office-based practice & OTPs

Naltrexone

Delivered by providers in office-based practice



Overdose Prevention

Overdose Risk Factors

- Individuals using medical visits from multiple doctors, specifically those who are not using PDMP
- Users of prescriptions that should belong to others
- Using an opioid after not using it (after detox, jail, etc.)
- Using street drugs with unknown strength or purity
- Use of abusive methods such as snorting or injecting
- Mixing with other drugs or with alcohol

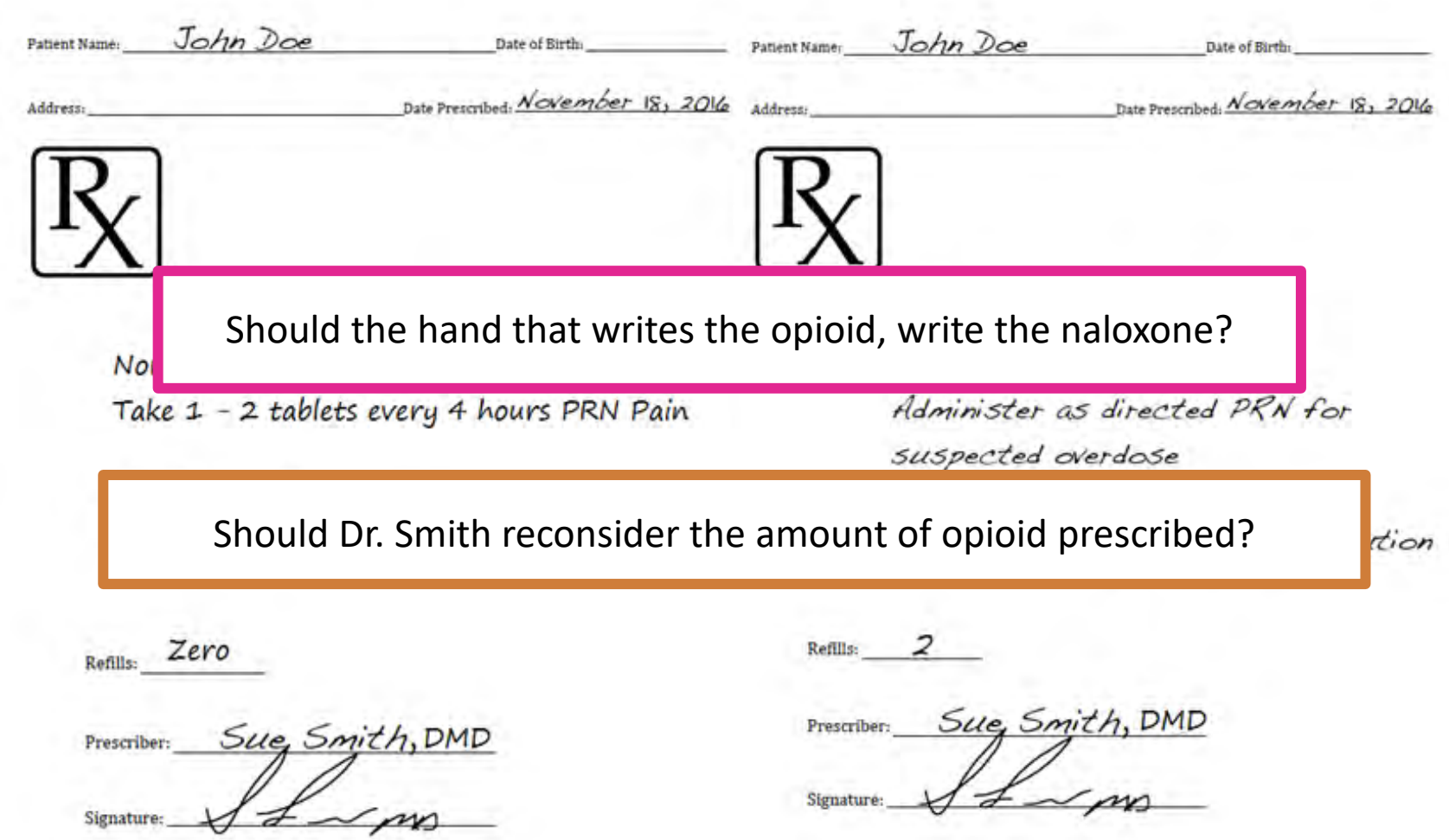
Key Strategies to Reduce Risk

- Discuss opioid risks vs. benefits at **ALL** treatment visits
  - Assess and discuss level of concern with patients
  - Are there alternatives?
  - Is there an opportunity to wean off opioids
  - Diagnosis = Indication for long term opioids?

- Use "**Universal Precautions**"
  - Assume all patients prescribed opioids have some degree of risk
  - Individualize care based on level of risk

Should the patient have nasal naloxone (Narcan) ?

Thoughts on this Picture?

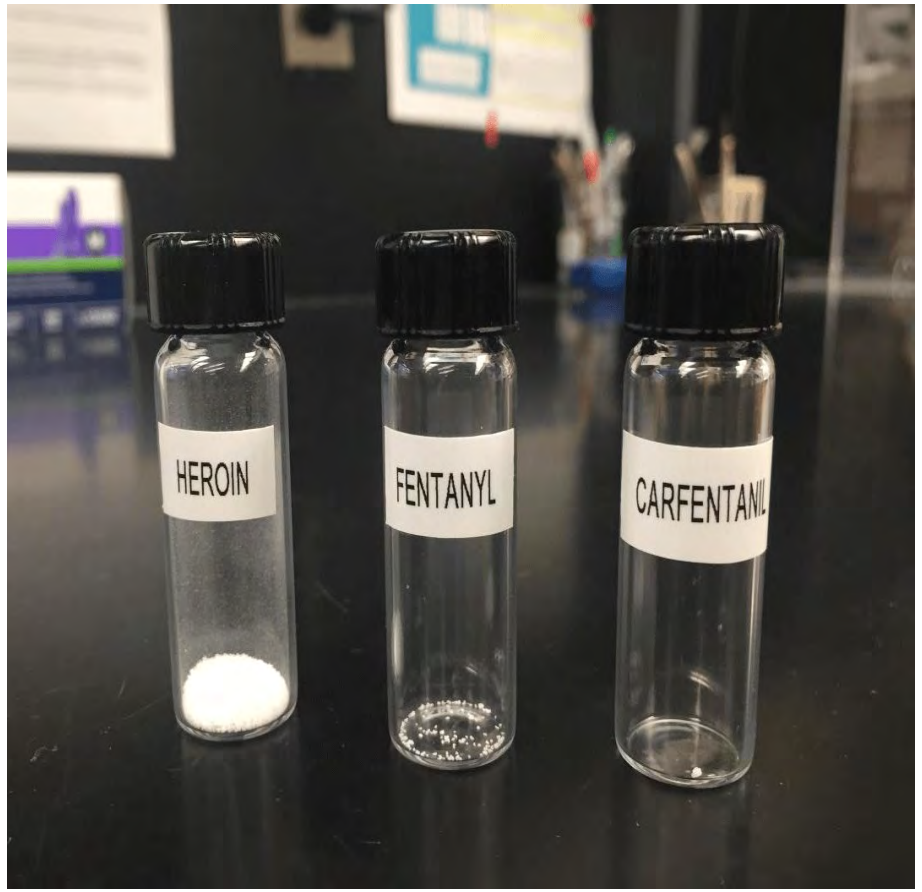


Should the hand that writes the opioid, write the naloxone?

Should Dr. Smith reconsider the amount of opioid prescribed?

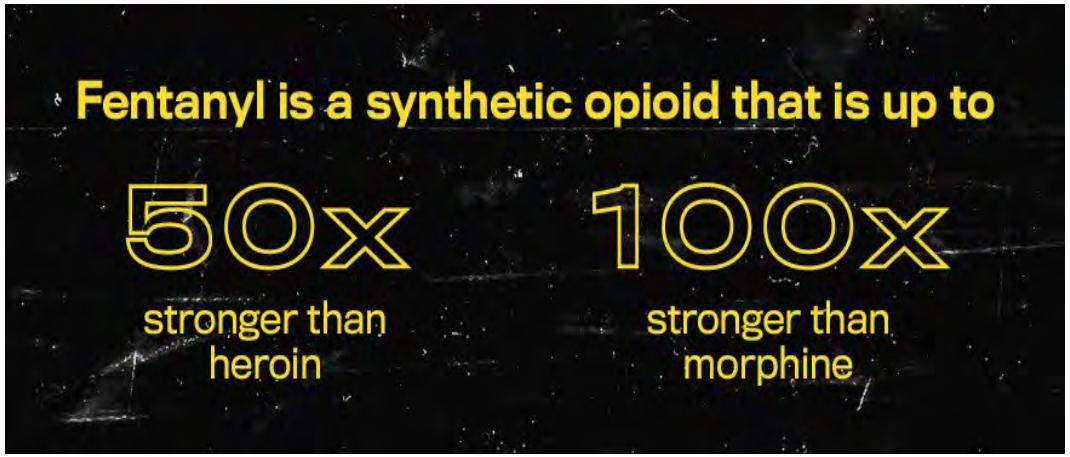
Fentanyl = Can it Be Controlled?

- Positioned for the “internet age”
- Cheap, mass-produced
- Easy to ship
  - Very small amounts
- Easy to sell
  - Encrypted monetary services
- Mixed with various meds
  - Cocaine, heroin, fake pills
- No international control on raw materials



Pardo et al., RAND Corp, 2019

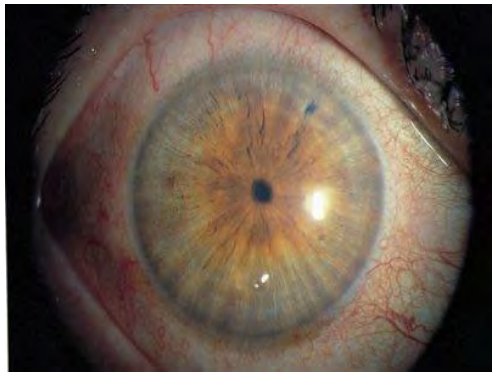
Frame of Reference

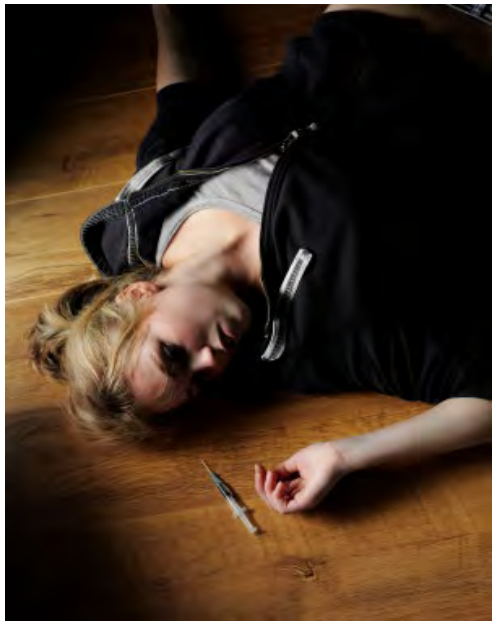


*FAKE
rainbow oxycodone M30 tablets containing fentanyl

Signs of Opioid Overdose

- Breathing slow or shallow (<10 breaths/min) or has stopped
- An overall **blue** or **grayish** appearance
  - Skin, lips and fingernails
- Pulse is slow, erratic, or not present
- **Constricted Pupils**
- **Vomiting**
- Choking or loud snoring noises
- Cardiac Arrest
- Drug paraphernalia found around the patient





Steps in an Opioid Overdose

Naloxone (Narcan)

- Naloxone
  - Pure opioid antagonist
  - Precipitates immediate withdrawal reaction in people who are physically dependent on opioids
    - Dosing: 0.2mg IV every 2-3 minutes to response
- Law Enforcement Officer Naloxone (LEON) program
  - Equipped officers with nasal naloxone for on site administration for drug overdoses
    - Dosing: 4mg / spray in one nostril – may repeat in 5 minutes

First responders administered approximately
7029 doses in 2019 (↑)

Naloxone Administration

Take a deep breath.

Stay calm.

Follow the directions.

⚠CAUTION

Approximately every 11 minutes, someone overdoses on opioids

There are many reasons for opioid overdose emergencies, but most often they happen accidentally and at home.

Often, people taking opioids to manage their pain are unaware of the potential dangers. It is important to know that overdose emergencies can occur at any time, even when opioids are used as directed, especially at higher doses, and when taken with other sedating substances.

Signs and symptoms of opioid overdose can include:

- Unusual sleepiness or unresponsiveness
- Slow or absent breathing
- Slow heartbeat or low blood pressure
- Cold, clammy skin
- Small pupils
- Blue nails or lips

Naloxone Nasal Spray

Quickly reverses the effects of opioids in emergency situations.

When to use:

- During a suspected or known opioid overdose
- When someone who takes opioid medications is unresponsive or not breathing

Step 1

Check for a Response:

- Give the person a light shake, say their name, firmly rub their chest with your knuckles.

Step 2

Administer Naloxone:

- Lay the person on their back.
- Tip head slightly back.
- Remove naloxone from packaging.
- Hold the device with your thumb on the bottom of the plunger and 2 fingers on the nozzle.
- Insert the nozzle into either nostril until your fingers touch the bottom of the nose.
- Press the plunger firmly to release the entire dose.

PEEL

PLACE

PRESS

Step 3

Get Help:

- Call 911.
- Be sure to give the address and say that someone is not breathing.

Step 4

Consider a Second Dose:

- If the person does not start breathing in 2-3 minutes, give a second dose of naloxone, following the same instructions.

Step 5

Place in Recovery Position:

- If the person is breathing but unresponsive, put them on their side to prevent choking if they vomit.

Increasing Availability of Naloxone

- SC Law: Offer Naloxone to patients who meet the following criteria:
  - ANY patient who receives an opioid RX > 50MME / Day
  - ANY patient who receives any opioid RX with an active or new prescription for a benzodiazepine (Prisma Health: or a muscle relaxant)
  - ANY patient who has a documented Substance or Opioid Use Disorder

- Community Distribution Center:
  - "An organization, either public or private, which provides substance use disorder assistance and services, such as counseling, homeless services, advocacy, harm reduction, alcohol and drug screening, and treatment to individuals at risk of experiencing an opioid-related overdose"

- Grant Processes (DAODAS)
  - Research Coordinators / FAVOR / Phoenix Center / Serenity Place
  - Upstate Sites: IM Clinics, GMH/OMH EDs, MFM/OB Clinic

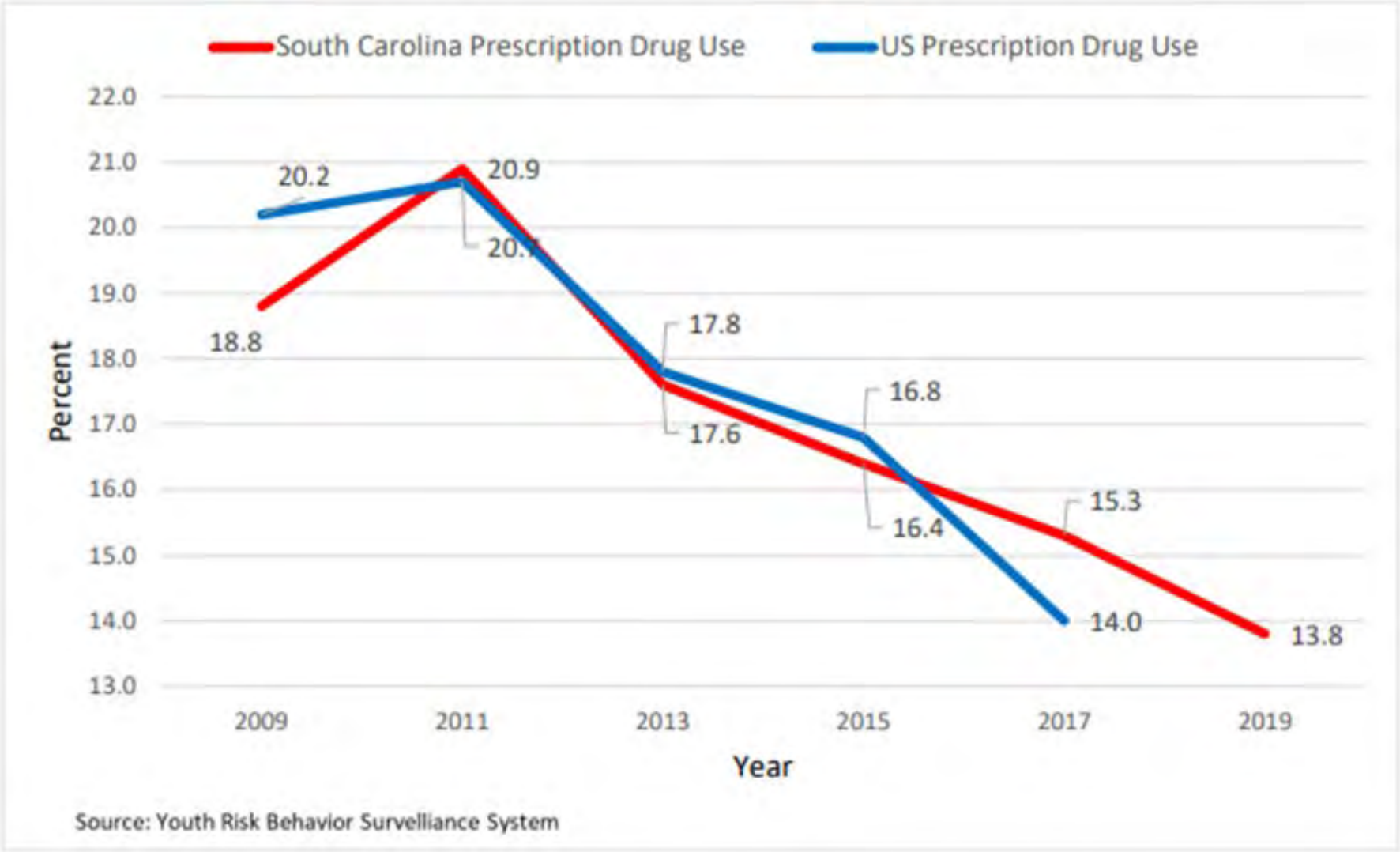
Early Education is Key to Preventing Overdoses

- **33%** of all children exposed to opioids are more likely to abuse them later in life
- School education on dangers of opioids
  - **50% exposed to opioids by 8th grade**
    - Target children at or before **5th grade**
- **Key Protective Strategies:**
  - Foster strong parent-child bonds early in life
  - Define rules and consequences
  - Encourage healthy activities
  - Be a positive role model
  - Get involved…
    - In their social life!
    - At school and in the community

DOS AND DON'TS WHEN TALKING WITH KIDS ABOUT DRUGS OR ALCOHOL[42]

DO explain the dangers using language they understand.	**DON'T** react in anger—even if your child makes statements that shock you.
DO explain why you do not want them to use the substance(s). For example, explain that substances can mess up their concentration, memory, and motor skills and can lead to poor grades.	**DON'T** expect all conversations with your children to be perfect. They won't be.
DO be there when your child wants to talk, no matter the time of day or night or other demands on your time.	**DON'T** assume your kids know how to handle temptation. Instead, educate them about risks and alternatives to temptation so they can make healthy decisions.
DO believe in your own power to help your child grow up without using alcohol, tobacco, or other drugs.	**DON'T** talk without listening.
DO praise your children when they deserve it. This builds their self-esteem and makes them feel good without using drugs or alcohol.	**DON'T** make stuff up. If your child asks a question you can't answer, promise to find the answer so you can learn together. Then follow up.

SC High Schooler Prescription Drug Use

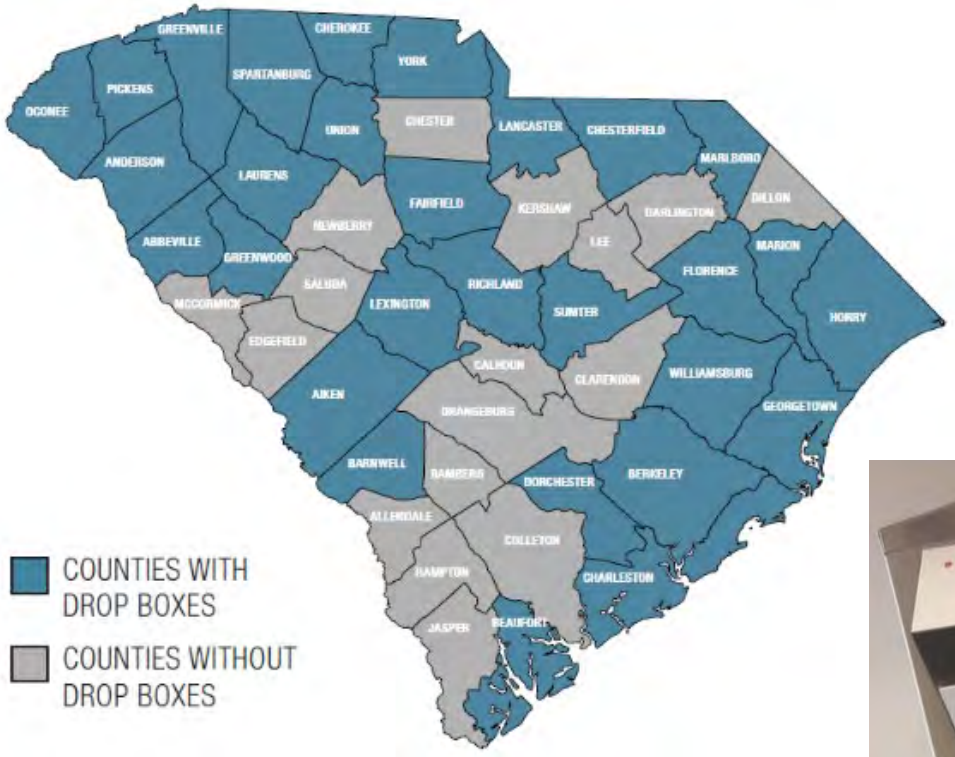


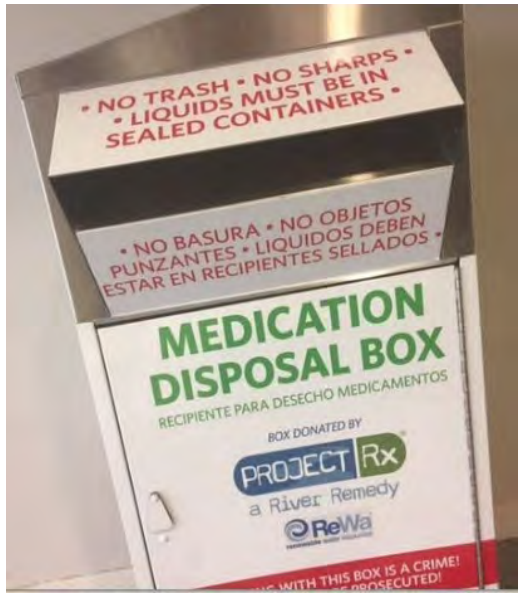
Safe Disposal of Opioids

FDA Medicines Recommended for Disposal by Flushing	
Buprenorphine	Methadone
Fentanyl	Methylphenidate
Diazepam	Morphine
Hydrocodone	Oxycodone
Hydromorphone	Oxymorphone
Meperidine	Tapentadol

For disposal information, specific to another medication you are taking please **visit Drugs@FDA**

SC Drop Boxes & Take Back Programs





stigma
community
funding
education
data
prevention
resources
care
lack
media
people
addiction
reduction
better
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silos
drug
family
families
response
coordination
messaging
services
generational
access
continuum
success
burnout
youth
kids
choice
pain
use
ace
harm
prison
trauma
stories
evidence
behavior
politics
fatigue
attention
evolving
based
barriers
changing
local
health
efforts
come
job
adults
someone
social
children
workforce
change
cultural
crisis
schools
best
parents
reduce
support
physicians

Conclusion

- Opioid epidemic requires a huge cultural shift where all practitioners take responsibility
- State and Federal regulatory bodies are identifying key metrics to identify adoption of opioid reduction strategies
- EDUCATION !! Set REALISTIC patient expectations
- Consider alternative therapies prior to prescribing opioids
- Be INTENTIONAL about opioid prescribing
  - Consider their side effects and long-term benefit for the patient
- Reassess, Reassess, Reassess
- Educate on potential diversion risks and how to safely store/dispose of residual opioid medications

BREAK

“CDC Guidelines” Updated Version?

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Medical Director, Prisma Health Upstate Affiliate Division of Pain Management

Douglas L. Furmanek, PharmD BCCCP

Executive Director, Acute Care Pharmacy Operations – Prisma Health

Disclosure

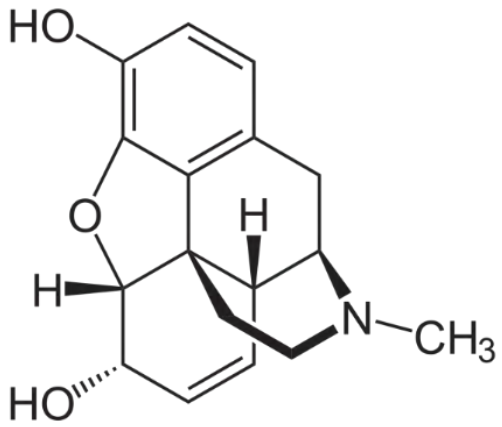
- No financial disclosure

Objectives

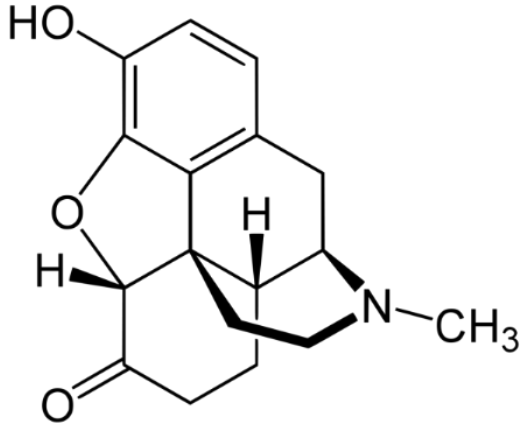
- Analyze the “updated” CDC Opioid Prescribing Guidelines
- Discuss Opioid Stewardship and its impact on the Opioids

“Reality Check”

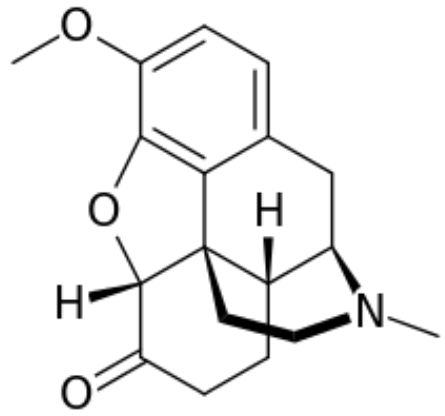
The Why Behind the Reality



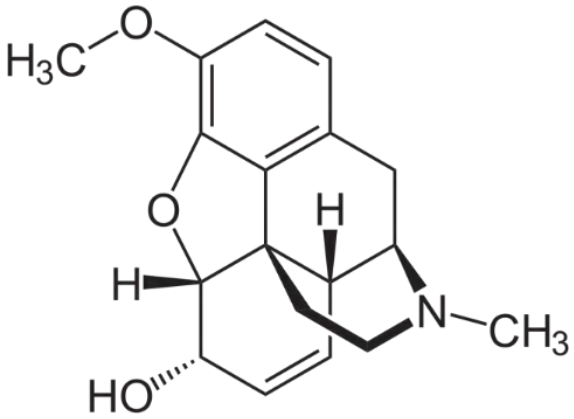
morphine



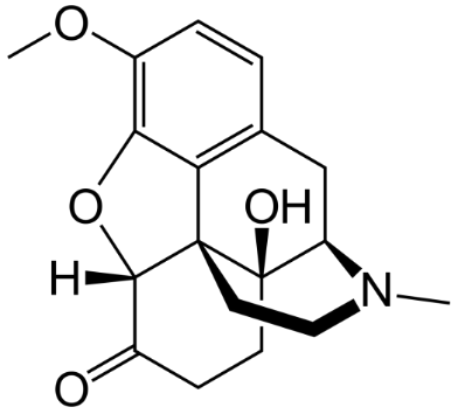
hydrocodone



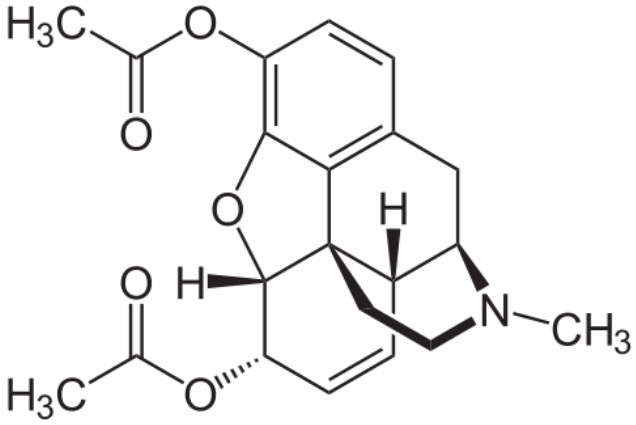
hydromorphone



codeine

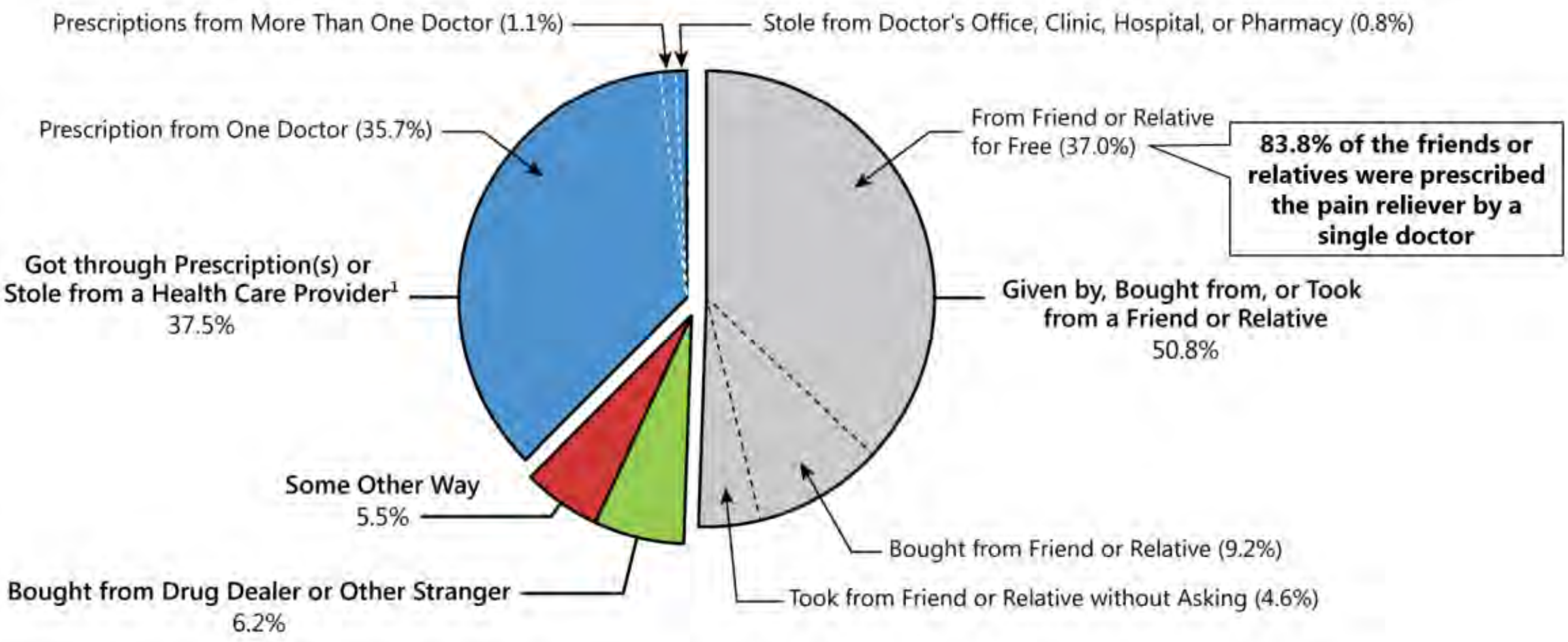


oxycodone



heroin

Source of Opioid Misuse



SAMHSA. (2020). 2019 National Survey on Drug Use and Health

“NEW” CDC Guidelines ??

Federal Oversight

- 2014: C-II designation for hydrocodone
- 2016: CDC Guidelines on Chronic Pain
- 2022: Revised CDC Guidelines

GUIDELINE FOR PRESCRIBING OPIOIDS FOR CHRONIC PAIN

IMPROVING PRACTICE THROUGH RECOMMENDATIONS

CDC's *Guideline for Prescribing Opioids for Chronic Pain* is intended to improve communication between providers and patients about the risks and benefits of opioid therapy for chronic pain, improve the safety and effectiveness of pain treatment, and reduce the risks associated with long-term opioid therapy, including opioid use disorder and overdose. The Guideline is not intended for patients who are in active cancer treatment, palliative care, or end-of-life care.

2016 CMS Opioid Misuse Strategy

- CMS created this strategy to combat non-medical use of prescription opioids, opioid use disorder, and overdose

- Strategy included four priority areas:
  - Implement effective person-centered and population-based strategies to reduce the risk of opioid use disorders, overdoses, inappropriate prescribing, and drug diversion
  - Expand naloxone availability / use / access
  - Expand screening, diagnosis, and treatment of OUD
  - Increase use of evidence-based practices for acute and chronic pain management

Consequences: 2016 CDC Opioid Guidelines

- 2012: Opioid prescriptions peaked at **255 million**
- 2016: **214 million** opioid prescriptions were dispensed
- 2017: Opioid prescriptions **dropped by over 22 million**
  - Prescribers began to deprescribe opioids inappropriately
    - Many dependent patients experienced withdrawal
    - Sought illegal manners of attaining opioids or other drugs (heroin)
- 2019: FDA states the deprescribing of opioids can lead to patient harm from the rapid discontinuation of opioids
  - Providers & patients work together to slowly taper opioid therapy

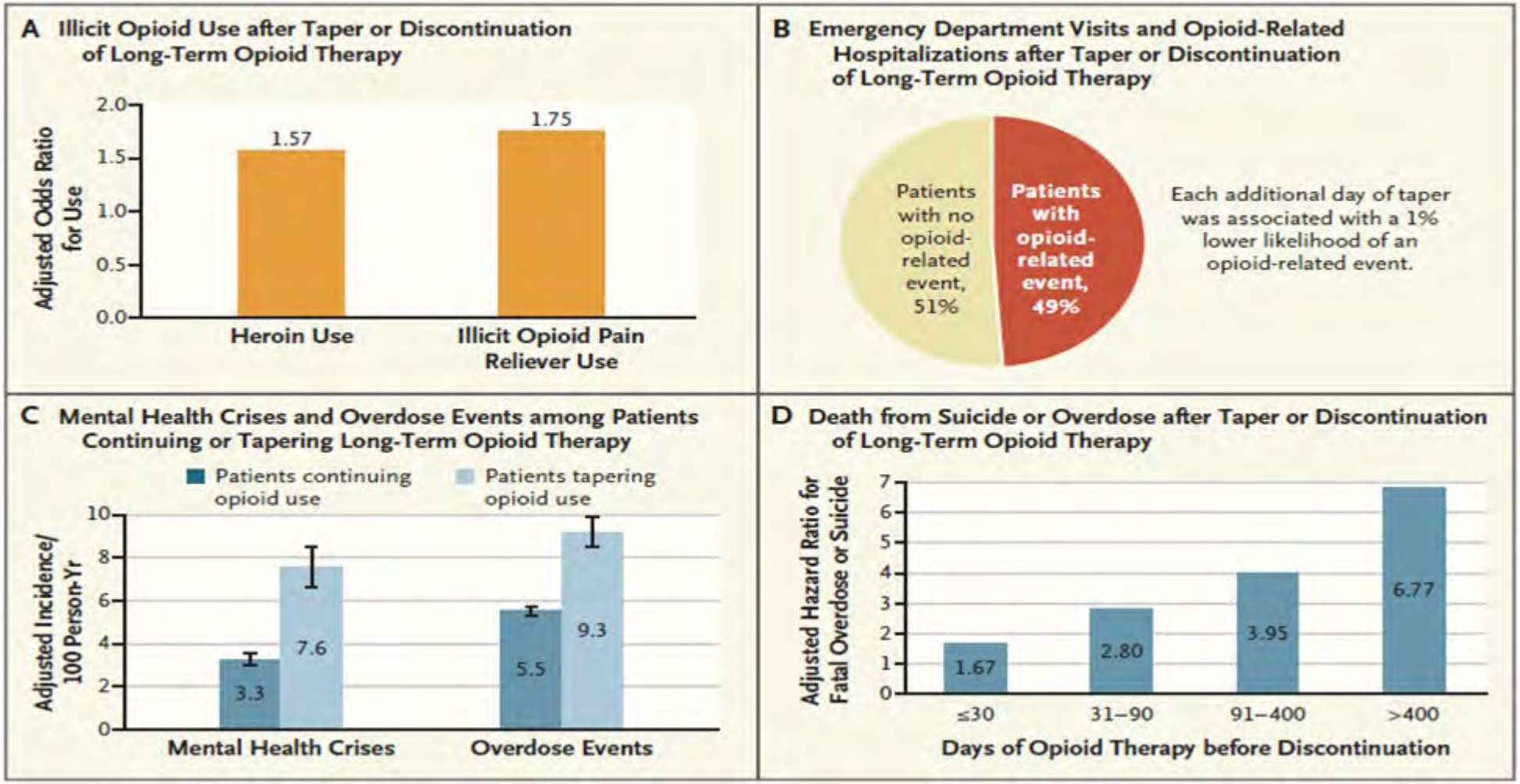
How to Manage?

- August 2019:
  - Pain Management Associates closed in Greenville County
    - Leaving **25000** patients seeking care

- May 2021:
  - Lags Medical Center pain management clinics closed…
    - Leaving **20000** patients without care

Coffin P, et al. N Engl J Med 386:7, 2022,pp 611-613

Risks of Discontinuation



Coffin P, et al. N Engl J Med 386:7, 2022,pp 611-613

Caring for Long-Term Opioid Patients

Steps in Caring for Patients with Chronic Pain Who Have Received Long-Term Opioid Therapy from a Previous Clinician.

1. **Review the case with the former clinician if possible.** Try to develop a treatment plan that slowly adjusts to your style of management while avoiding a radical divergence from the previous plan of care.
2. **Consider providing a therapeutic bridge for the patient until a plan of care is determined, given the risks associated with stopping opioid therapy.** Abruptly tapering or stopping opioid therapy can be dangerous for multiple reasons. Opioids may be crucial for the patient's condition (e.g., sickle-cell disease), and the patient may be at risk for other harms when opioids are tapered or discontinued (see figure).
3. **Develop a patient-centered care plan.** If a taper is needed, empower the patient to make decisions, including which medications to taper first and how fast. Successful tapers may take years.
4. **Assess the patient for opioid use disorder and start discussing medication options right away.** Patients may find it challenging to accept an opioid use disorder diagnosis; give them time.
5. **Document opioid stewardship and the rationale for the treatment plan.** Investigations into opioid prescribing are often based on insufficient documentation.

Coffin P, et al. N Engl J Med 386:7, 2022,pp 611-613

Five Overarching Principles of the Guidelines

- Acute, subacute, and chronic pain need assessed/treated independent of opioid use in the treatment plan
- Recommendations are voluntary and are intended to support, not supplant, individualized, person-centered care
- Use multimodal and multidisciplinary approach to pain management attending to the physical/behavioral health, support services and overall patient well-being
- Avoid misapplying this guideline that might lead to unintended and potentially harmful consequences for patients
- Clinicians, health systems, & payers should address health inequities
  - Educate appropriately and ensure access to affordable, coordinated, and effective pain management regimens

2022: Updated CDC Opioid Guidelines

The 2022 Clinical Practice Guideline **IS**

- A clinical tool to improve communication between clinicians and patients and empower them to make informed, person-centered decisions related to pain care together.
- Intended for primary care clinicians and other clinicians providing pain care for outpatients 18 years or older with:
  - acute pain (duration less than 1 month);
  - subacute pain (duration of 1-3 months); or
  - chronic pain (duration of more than 3 months).
- Intended to be flexible to enable person-centered decision-making, taking into account an individual's expected health outcomes and well-being.

The 2022 Clinical Practice Guideline **IS NOT**

- A replacement for clinical judgment or individualized, person-centered care.
- Intended to be applied as inflexible standards of care across patients, and/or patient populations by healthcare professionals, health systems, pharmacies, third-party payers, or governmental jurisdictions or to lead to the rapid tapering or abrupt discontinuation of opioids for patients.
- A law, regulation, and/or policy that dictates clinical practice or a substitute for FDA-approved labeling.
- Applicable to:
  - Management of pain related to sickle cell disease;
  - Management of cancer-related pain;
  - Palliative care; or
  - End-of-life care.
- Focused on opioids prescribed for opioid use disorder.

2022 CDC guidelines

2022: Updated CDC Opioid Guidelines

The 12 recommendations are grouped into four areas of consideration.

Determining whether or not to initiate opioids for pain

(Recommendations 1, 2)

Selecting opioids and determining opioid dosages

(Recommendations 3, 4, 5)

Deciding duration of initial opioid prescription and conducting follow-up

(Recommendations 6, 7)

Assessing risk and addressing potential harms of opioid use

(Recommendations 8, 9, 10, 11, 12)

Updated guidelines…

Determining Whether or Not to Initiate Opioids for Pain (Recommendations 1 and 2)

1. Nonopioid therapies are at least as effective as opioids for many common types of acute pain. Clinicians should maximize use of nonpharmacologic and nonopioid pharmacologic therapies as appropriate for the specific condition and patient and only consider opioid therapy for acute pain if benefits are anticipated to outweigh risks to the patient. Before prescribing opioid therapy for acute pain, clinicians should discuss with patients the realistic benefits and known risks of opioid therapy (recommendation category: B; evidence type: 3).
2. Nonopioid therapies are preferred for subacute and chronic pain. Clinicians should maximize use of nonpharmacologic and nonopioid pharmacologic therapies as appropriate for the specific condition and patient and only consider initiating opioid therapy if expected benefits for pain and function are anticipated to outweigh risks to the patient. Before starting opioid therapy for subacute or chronic pain, clinicians should discuss with patients the realistic benefits and known risks of opioid therapy, should work with patients to establish treatment goals for pain and function, and should consider how opioid therapy will be discontinued if benefits do not outweigh risks (recommendation category: A; evidence type: 2).

Selecting Opioids and Determining Opioid Dosages (Recommendations 3, 4, and 5)

3. When starting opioid therapy for acute, subacute, or chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release and long-acting (ER/LA) opioids (recommendation category: A; evidence type: 4).
4. When opioids are initiated for opioid-naïve patients with acute, subacute, or chronic pain, clinicians should prescribe the lowest effective dosage. If opioids are continued for subacute or chronic pain, clinicians should use caution when prescribing opioids at any dosage, should carefully evaluate individual benefits and risks when considering increasing dosage, and should avoid increasing dosage above levels likely to yield diminishing returns in benefits relative to risks to patients (recommendation category: A; evidence type: 3).
5. For patients already receiving opioid therapy, clinicians should carefully weigh benefits and risks and exercise care when changing opioid dosage. If benefits outweigh risks of continued opioid therapy, clinicians should work closely with patients to optimize nonopioid therapies while continuing opioid therapy. If benefits do not outweigh risks of continued opioid therapy, clinicians should optimize other therapies and work closely with patients to gradually taper to lower dosages or, if warranted based on the individual circumstances of the patient, appropriately taper and discontinue opioids. Unless there are indications of a life-threatening issue such as warning signs of impending overdose (e.g., confusion, sedation, or slurred speech), opioid therapy should not be discontinued abruptly, and clinicians should not rapidly reduce opioid dosages from higher dosages (recommendation category: B; evidence type: 4).

Deciding Duration of Initial Opioid Prescription and Conducting Follow-Up (Recommendations 6 and 7)

6. When opioids are needed for acute pain, clinicians should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids (recommendation category: A; evidence type: 4).
7. Clinicians should evaluate benefits and risks with patients within 1–4 weeks of starting opioid therapy for subacute or chronic pain or of dosage escalation. Clinicians should regularly reevaluate benefits and risks of continued opioid therapy with patients (recommendation category: A; evidence type: 4).

Assessing Risk and Addressing Potential Harms of Opioid Use (Recommendations 8, 9, 10, 11, and 12)

8. Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk for opioid-related harms and discuss risk with patients. Clinicians should work with patients to incorporate into the management plan strategies to mitigate risk, including offering naloxone (recommendation category: A; evidence type: 4).
9. When prescribing initial opioid therapy for acute, subacute, or chronic pain, and periodically during opioid therapy for chronic pain, clinicians should review the patient's history of controlled substance prescriptions using state prescription drug monitoring program (PDMP) data to determine whether the patient is receiving opioid dosages or combinations that put the patient at high risk for overdose (recommendation category: B; evidence type: 4).
10. When prescribing opioids for subacute or chronic pain, clinicians should consider the benefits and risks of toxicology testing to assess for prescribed medications as well as other prescribed and nonprescribed controlled substances (recommendation category: B; evidence type: 4).
11. Clinicians should use particular caution when prescribing opioid pain medication and benzodiazepines concurrently and consider whether benefits outweigh risks of concurrent prescribing of opioids and other central nervous system depressants (recommendation category: B; evidence type: 3).
12. Clinicians should offer or arrange treatment with evidence-based medications to treat patients with opioid use disorder. Detoxification on its own, without medications for opioid use disorder, is not recommended for opioid use disorder because of increased risks for resuming drug use, overdose, and overdose death (recommendation category: A; evidence type: 1).

Recommendation categories (on basis of evidence type, balance between desirable and undesirable effects, values and preferences, and resource allocation [cost]).

- **Category A recommendation:** Applies to all persons; most patients should receive the recommended course of action.
- **Category B recommendation:** Individual decision-making needed; different choices will be appropriate for different patients. Clinicians help patients arrive at a decision consistent with patient values and preferences and specific clinical situations.

Evidence types (on basis of study design and as a function of limitations in study design or implementation, imprecision of estimates, variability in findings, indirectness of evidence, publication bias, magnitude of treatment effects, dose-response gradient, and constellation of plausible biases that could change effects).

- **Type 1 evidence**: Randomized clinical trials or overwhelming evidence from observational studies.
- **Type 2 evidence**: Randomized clinical trials with important limitations, or exceptionally strong evidence from observational studies.
- **Type 3 evidence**: Observational studies or randomized clinical trials with notable limitations.
- **Type 4 evidence**: Clinical experience and observations, observational studies with important limitations, or randomized clinical trials with several major limitations.

Whether to Initiate Opioids for Pain (1,2)

- Nonopioids have been shown to be as effective as opioids for common types of acute, subacute, and chronic pain
- Maximize nonpharmacological and nonopioid therapies before considering addition of an opioid therapy
- Discuss the need, risks vs. benefits, and treatment goals with patients prior to initiating opioid therapy
  - Include consideration on when/why/how opioids could be discontinued based on response to treatment goals

Opioid Selection and Dosages (3-5)

- Prescribe immediate-release opioids instead of extended-release and long-acting (ER/LA) opioids
- Prescribe the lowest effective dosage
- Reassess need and dosages of opioids throughout treatment
  - Avoid increasing doses above levels that may not show benefit
- Continue to optimize non-opioid therapies during opioid use
- Consider gradually tapering or lowering doses in patients that do not respond to opioids
  - Do not abruptly stop opioid therapy unless life-threatening conditions

Opioid Risk Tools

- ORT:
  - Prior to initiation
  - 5 questions
- SOAPP-R:
  - Prior to initiation
  - Multiple versions
    - 5, 14, 24 questions
- COMM:
  - Used for patient on opioids
    - 17 questions

Category	Items, No.	Administered By
Patients considered for long-term opioid therapy:		
ORT: Opioid Risk Tool[7]	5	Patient
SOAPP®: Screener and Opioid Assessment for Patients with Pain[8]	24, 14, and 5	Patient
SISAP: Screening Instrument for Substance Abuse Potential[9]	5	Patient
DIRE: Diagnosis, Intractability, Risk, and Efficacy Score[10]	7	Clinician
Assess misuse once opioid treatment initiated:		
PDUQ-p: Prescription Drug Use Questionnaire-patient[11]	31	Patient
COMM: Current Opioid Misuse Measure[13]	17	Patient
PMQ: Pain Medication Questionnaire[14]	26	Patient
PADT: Pain Assessment and Documentation Tool[15]	41	Clinician
ABC: Addiction Behavior Checklist[16]	20	Clinician
Nonopioid general substance abuse:		
CAGE-AID: Cut Down, Annoyed, Guilty, Eye-Opener Tool, Adjusted to Include Drugs[19]	4	Clinician
RAFFT: Relax, Alone, Friends, Family, Trouble[20]	5	Patient
DAST: Drug Abuse Screening Test[21]	28	Patient
SBIRT: Screening, Brief Intervention, and Referral to Treatment[22]	Varies	Clinician
AUDIT-C: Alcohol Use Disorders Identification Test: Consumption[23]	3	Patient
DUDIT-E: Drug Use Disorders Identification Test: Extended[24]	54	Patient

https://www.practicalpainmanagement.com/resource-centers/opioid-prescribing-monitoring/risk-assessment-safe-opioid-prescribing-tools

Ducharme J, Moore S. Opioid Use Disorder Assessment Tools and Drug Screening. Mo Med. 2019 Jul-Aug;116(4):318-324.

Steps That Can Help?

- Pre-Visit
  - Previous plan (following guidelines?)
  - Meeting functional goals
  - Side effects (treatments)
  - Red flags
  - Mitigating strategies
  - Think through what you require
- During Visit
  - Empathy (yes it can be hard sometimes)
  - Impact on Function
  - Planning

Radosh L Family Practice Management. 2022;29 (6): 14-18.

COMMON EXAMPLES OF OPIOID-RELATED BIAS AND EMOTIONAL TRIGGERS

Treating patients on long-term opioids for chronic pain can be fraught with emotional reactions that aren't always based on objective evidence. Here are some examples.

- *"The last patient like this put me way behind."*
- *"He always has some excuse for not going to physical therapy."*
- *"I hate feeling manipulated."*
- *"Whenever I refill his opioids, I feel the nurses are judging me."*
- *"I don't think she needs this opioid, but what's the alternative?"*
- *" The pain management doctor said opioids are not necessarily indicated but then said he will r see the patient again; that gets me so angry. What am I supposed to do?"*
- *"I inherited this mess; it's just not fair."*

STARTING DIFFICULT CONVERSATIONS

The following phrases can help physicians begin conversations with patients about opioid-related care plans.

- *" Given [objective findings/concerning behavior], I'm worried ... I'd like to get a second opinion from someone who has more expertise with these medications."*
- *" We have talked about risks of dependence and hyperalgesia. I'm worried opioids may be causing more pain in the long run ... I'd like to get a second opinion ..."*
- *" A pain management specialist is best able to help you. They have the most experience limiting the tolerance you have developed. Why wouldn't you want to see them? Help me understand."*
- *" This is the second month in a row you ran out of oxycodone early. It is common for bodies to adapt to pain medications and need more over time, but people can also develop dependence. I would like you to see a colleague who can help us determine the next best steps."*
- *" You have had cocaine in your urine, and our contract covers these issues — not as a punishment but as a safety precaution given the prevalence of cocaine contaminated with fentanyl. I want to help and support you, but I need to do what's right for your safety."*
- *" I realize your previous doctor prescribed these differently than I want to prescribe them, but guidelines and recommendations change over time. I want to be sure we are using these as safely as possible. Let's figure out a way we can make this work."*
- *" I am happy to refill your current dose because I don't want you to be without medication, but this is temporary until we get you in the hands of someone who may be able to better assist you. I will reach out to some colleagues to figure out the best plan."*
- *" Some of my other patients have terrible, ongoing physical pain for which we are doing [X, Y, and Z], but in addition they tell me they get angry or anxious about the pain. Do you ever notice that in yourself?"*
- *" The pain is severe and real, but while we are also taking care of that, can we address the pain's impact on your life?"*

Radosh L Family Practice Management. 2022;29 (6): 14-18.

Initial Opioid RX Duration and Follow-up (6-8)

- Do not prescribe quantities greater than what is required for the expected duration of severe pain requiring opioids
- Evaluate risk vs. benefits within 1-4 weeks of starting opioid therapy or after any dosage escalation
- Regularly re-evaluate opioid risk vs. benefits with patients
- Discuss overdose mitigation strategies; offer naloxone

Urine Drug Screen Utilization

1. Is a lab test (CBC, BMP)
2. Aids with clinical reasoning
3. Use for monitoring (PT/PTT)
4. Use for compliance (HgA1C)

Most Important Question before Testing?

- What have you taken?
  - Needs to be documented!

- When have you taken it?
  - Needs to be documented!

Length of Time of Detection

Length of Time Drugs of Abuse Can Be Detected in Urine	
Drug	Time
Alcohol	7-12 h
Amphetamine	48 h
Methamphetamine	48 h
Barbiturate	
Short-acting (eg, pentobarbital)	24 h
Long-acting (eg, phenobarbital)	3 wk
Benzodiazepine	
Short-acting (eg, lorazepam)	3 d
Long-acting (eg, diazepam)	30 d
Cocaine metabolites	2-4 d
Marijuana	
Single use	3 d
Moderate use (4 times/wk)	5-7 d
Daily use	10-15 d
Long-term heavy smoker	>30 d
Opioids	
Codeine	48 h
Heroin (morphine)	48 h
Hydromorphone	2-4 d
Methadone	3 d
Morphine	48-72 h
Oxycodone	2-4 d
Propoxyphene	6-48 h
Phencyclidine	8 d

EIA vs Chromatography (Screen vs. Confirm)

Test	Advantages	Challenges
Enzyme immunoassay (EIA)	▪ Initial screening test, detects the presence of the drug ▪ Cheap, Easy to perform: widely used as a Rapid Point of Care Test (~5mins) ▪ Oxycodone, fentanyl can be detected and confirmed by dipstick	▪ Does not measure the quantity or concentration, in urine. ▪ EIA techniques for heroin or morphine have limited sensitivity for detecting synthetic opioids
Chromatography with Spectrometry	▪ Most sensitive and specific tests, and thus the most reliable and definitive procedures in analytic chemistry for drug detection	Labor intensive and costly

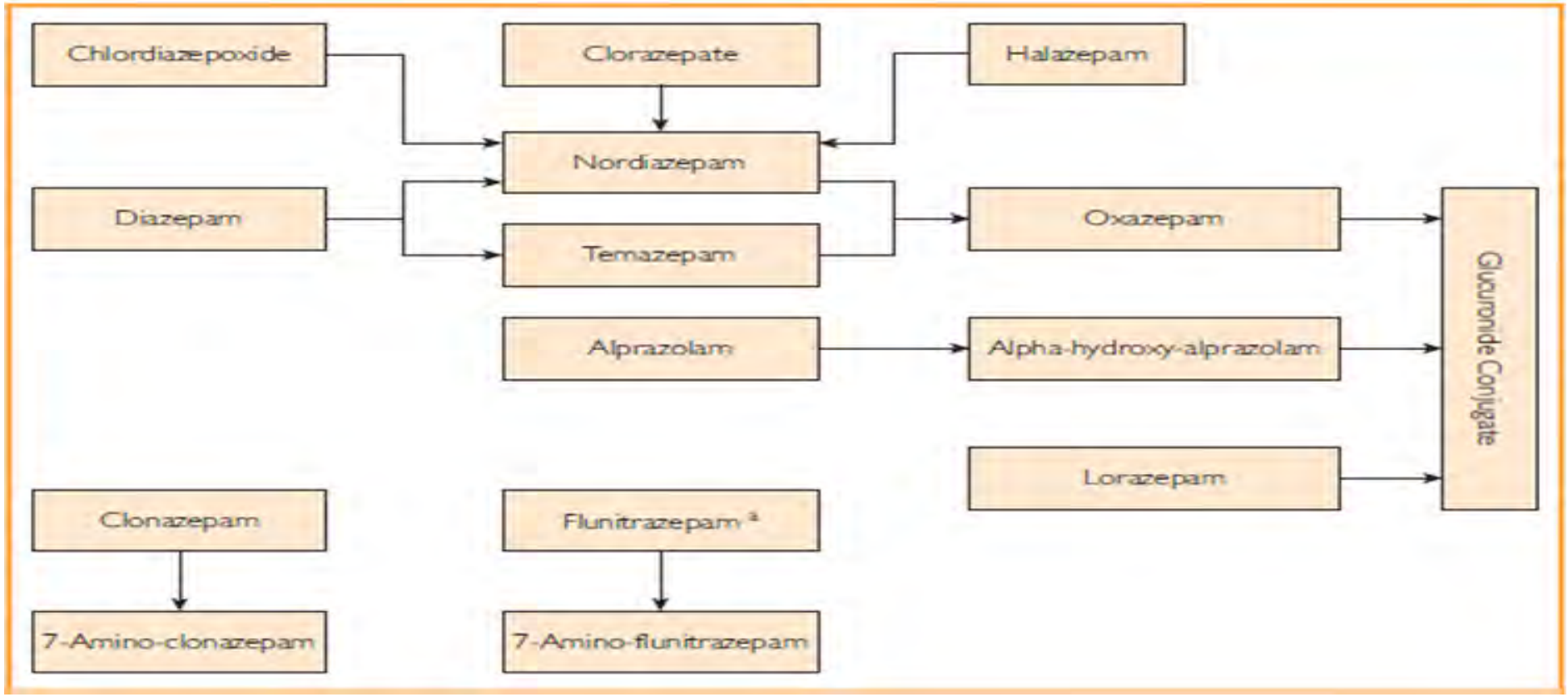
Interpretation of Urine Drug Test (UDT) based on Opioid Prescribed

Opioid prescribed	Order this test to detect opioid prescribed	Expected Results: Method	Expected Results: Result	Unexpected Results (Results that SHOULD NOT be seen)
Buprenorphine (Suboxone®, Subutex®)	GC/MS or LC/MS Buprenorphine	Mass Spectrometry	Buprenorphine / Norbuprenorphine	Buprenorphine / Norbuprenorphine – None Detected
Codeine (Tylenol #3 or #4)	Opiates Immunoassay	Immunoassay	Opiates – Positive	Opiates – Negative by Immunoassay
	GC/MS or LC/MS Opiates	Mass Spectrometry	Codeine, possibly Morphine	Hydrocodone, Hydromorphone, Oxycodone, Oxymorphone, or 6-acetyl morphine (Heroin metabolite)
Fentanyl (Actiq®, Duragesic®)	GC/MS or LC/MS Fentanyl	Mass Spectrometry	Fentanyl and Norfentanyl	Opiates – Positive by Immunoassay
Hydrocodone (Lorcet®, Lortab®, Norco®, Vicodin®)	Opiates by Immunoassay	Immunoassay	Opiates – Positive	Opiates – Negative by Immunoassay
	GC/MS or LC/MS Opiates	Mass Spectrometry	Hydrocodone, possibly Hydromorphone	Codeine, Morphine, Oxycodone, Oxymorphone, or 6-acetyl morphine (Heroin metabolite)
Hydromorphone (Dilaudid®)	Opiates by Immunoassay	Immunoassay	Opiates – Positive	Opiates – Negative by Immunoassay
	GC/MS or LC/MS Opiates	Mass Spectrometry	Hydromorphone	Codeine, Morphine, Hydrocodone, Oxycodone, Oxymorphone, 6-acetyl morphine (Heroin metabolite)
Meperidine (Demerol®)	GC/MS or LC/MS Meperidine	Mass Spectrometry	Normeperidine, possibly Meperidine	Opiates – Positive by Immunoassay
Methadone (Dolophine®, Methadose®)	Methadone Immunoassay	Immunoassay	Methadone – Positive[1]	Opiates – Positive by Immunoassay
	GC/MS or LC/MS Methadone	Mass Spectrometry	Methadone and EDDP	Methadone only
Morphine (Avinza®, Kadian®, MSContin®, MSIR®, Oramorph SR®, Roxanol®)	Opiates Immunoassay	Immunoassay	Opiates – Positive	Opiates – Negative by Immunoassay
	GC/MS or LC/MS Opiates	Mass Spectrometry	Morphine, possibly Hydromorphone if on high dose or chronic Morphine	Codeine, Hydrocodone, Oxycodone, Oxymorphone, 6-acetyl morphine (Heroin metabolite)
Oxycodone ER (Oxycontin®)	Oxycodone Immunoassay	Immunoassay	Oxycodone – Positive	Oxycodone – Negative
	Opiates Immunoassay	Immunoassay	Opiates – Positive, dose > 100 mg/day	Opiates – Negative
	GC/MS or LC/MS Opiates	Mass Spectrometry	Oxycodone and Oxymorphone	Codeine, Morphine, Hydrocodone, Hydromorphone, or 6-acetyl morphine (Heroin metabolite)
Oxycodone (OxyIR®, Percocet®, Tylox®)	Oxycodone Immunoassay	Immunoassay	Oxycodone – Positive	Oxycodone – Negative by Immunoassay
	Opiates Immunoassay	Immunoassay	Opiates – Negative, dose <100 mg/day	Opiates – Positive by Immunoassay, dose >100 mg/day
	GC/MS or LC/MS Opiates	Mass Spectrometry	Oxycodone, Oxymorphone	Codeine, Morphine, Hydrocodone, Hydromorphone, 6-acetyl morphine (Heroin metabolite)
Oxymorphone (Opana®, Opana ER®)	Oxycodone Immunoassay	Immunoassay	Oxycodone – Positive	Opiates – Positive by Immunoassay
	GC/MS or LC/MS Opiates	Mass Spectrometry	Oxymorphone	Codeine, Morphine, Hydrocodone, Hydromorphone, Oxycodone, or 6-acetyl morphine (Heroin metabolite)
Tramadol (Ultram®, Ultracet®)	GC/MS or LC/MS Tramadol	Mass Spectrometry	Tramadol and metabolites	Opiates – Positive by Immunoassay

Immunoassays are only SCREENING tests; the results are not specific for the drug/drug class.
Mass Spectrometry: GC/MS – Gas Chromatography / Mass Spectrometry - testing is specific testing and definitive.
LC/MS – Liquid Chromatography / Mass Spectrometry - testing is specific testing and definitive.
[1]Detection times of methadone in urine can be variable: patients on lower doses (<40mg) of methadone may screen Negative by Immunoassay.

Testing for Benzodiazepines

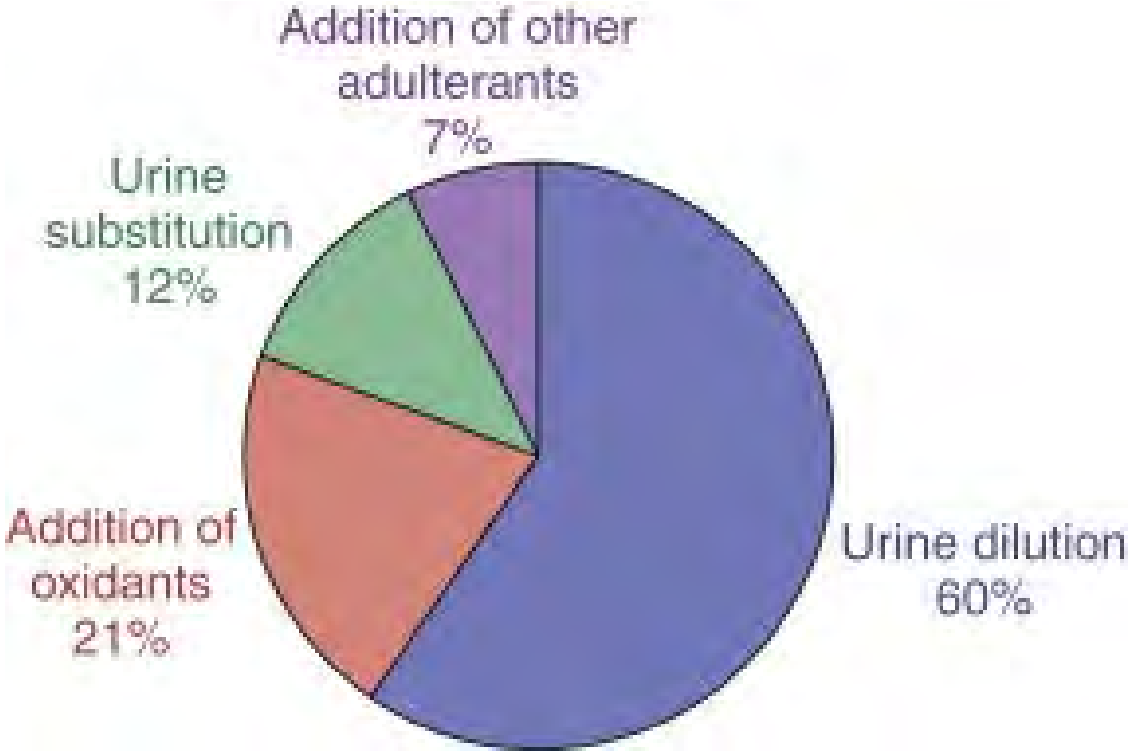
Common benzodiazepines and metabolites are interconverted during metabolism as shown below, so multiple products can be detected after use a single benzodiazepine



Moeller et al., 2017

Adulteration of Samples

- Dilution
- Urine substitution
- Addition of oxidates
- Addition of other adulterants



Mahajan, G, Essentials of Pain Medicine, Chp 46, p 405-418.

Assess risk & Minimize Harm of Opioids (9-12)

- Review PDMP to ensure compliance / minimize overdose risk related to other high-risk medications
- Consider toxicology testing to assess for prescribed medications as well as non-prescribed controlled substances
- Use caution when prescribing opioids in conjunction with benzodiazepines or other CNS depressants
- Offer counselling and medications to treat patients with OUD
- Detoxification without medications is not recommended due to increased risk of resuming drug use / overdose / death

2022 CDC Guideline Summary

- 2022 CDC Guidelines are intended to improve clinician and patient communication about benefits / risks of pain treatment
  - Improve the effectiveness and safety of pain treatment
  - Mitigate pain
  - Improve function and quality of life for patients with pain
  - Reduce risks associated with opioid pain therapy
- Evidence to guide optimal pain management remains limited
- Patient-clinician communication are key to treatment decisions
- Updated guideline can help inform those decisions

Opioid Stewardship

Prisma Health

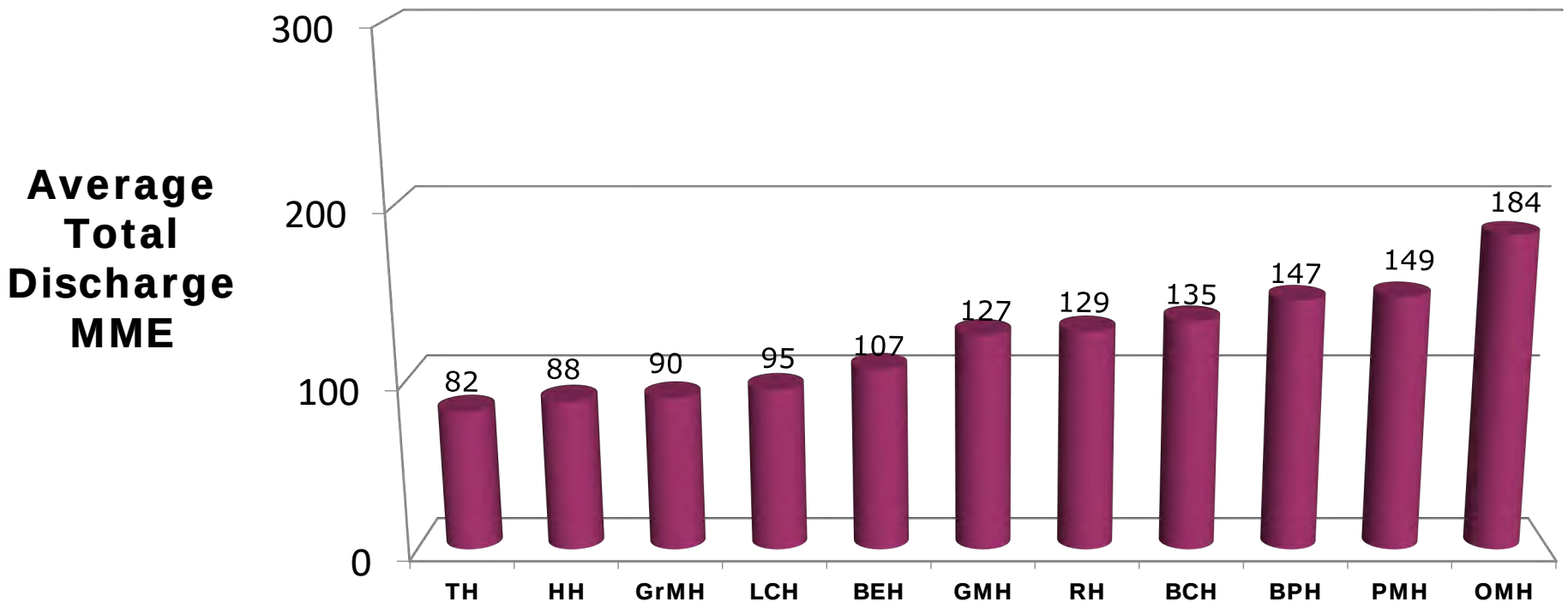
Opioid Metric Terminology Definitions

Terminology	Definition
New opioid prescription (Rx)	No opioid Rx within past 6 months
Chronic Pain	ICD-10 Diagnosis Codes G892, G894
Acute Pain	Any pain other than chronic pain (as defined above)
Long-term opioid therapy	Opioid Rx for ≥90 days in duration, or ≥60 days within a 90-day time frame
Concurrent Rx benzodiazepine	Opioid Rx and Benzo Rx overlap for ≥30 days
Yearly Urine Drug Screen	Within 365 days of Opioid Rx

Prisma Health

Average Opioid Discharge MMEs By Facility

Hospital Encounters (Includes hospitalizations, inpatient and outpatient surgery visits, ED and urgent care visits)

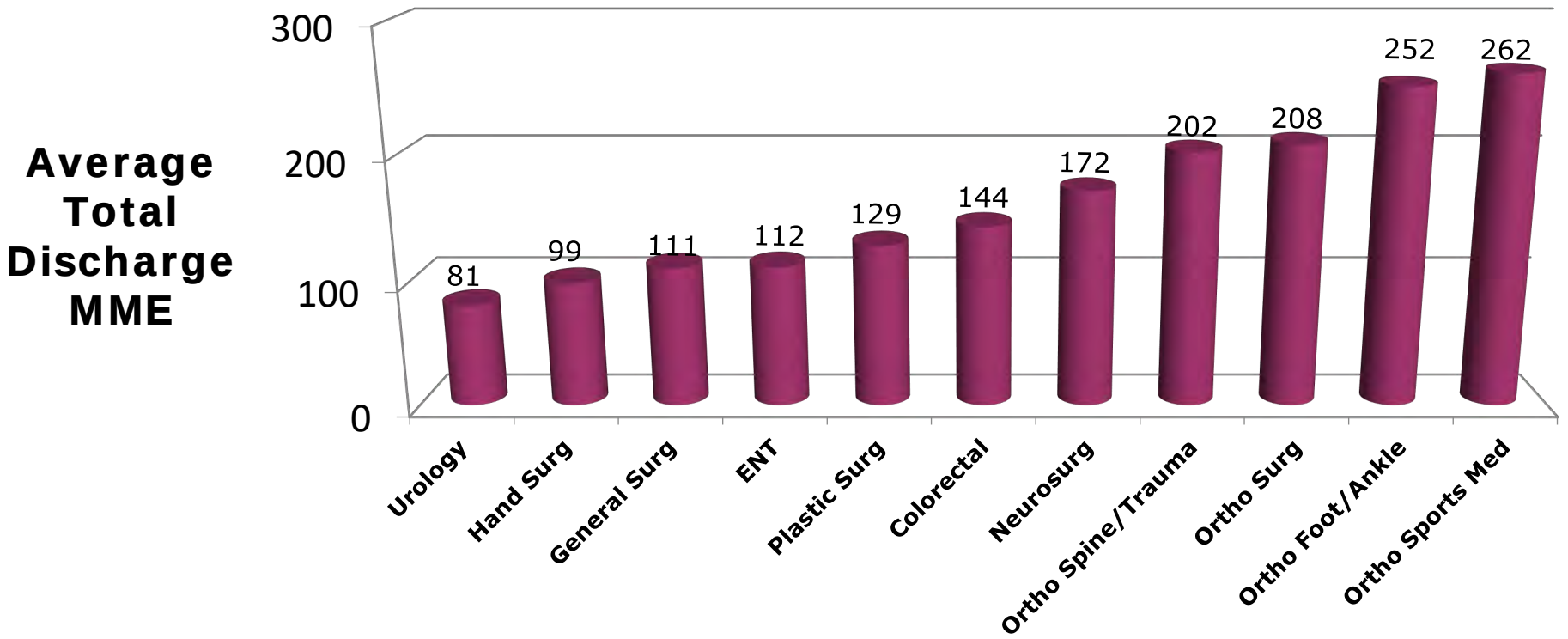


No. of visits with opioid rx	8,079	2,698	3,388	1,905	2,828	14,896	8,656	7,019	4,078	2,622	6,449

Prisma Health

Average Opioid Discharge MMEs By Surgical Provider Specialty

Hospital Encounters (Includes hospitalizations, inpatient and outpatient surgery visits, ED and urgent care visits)



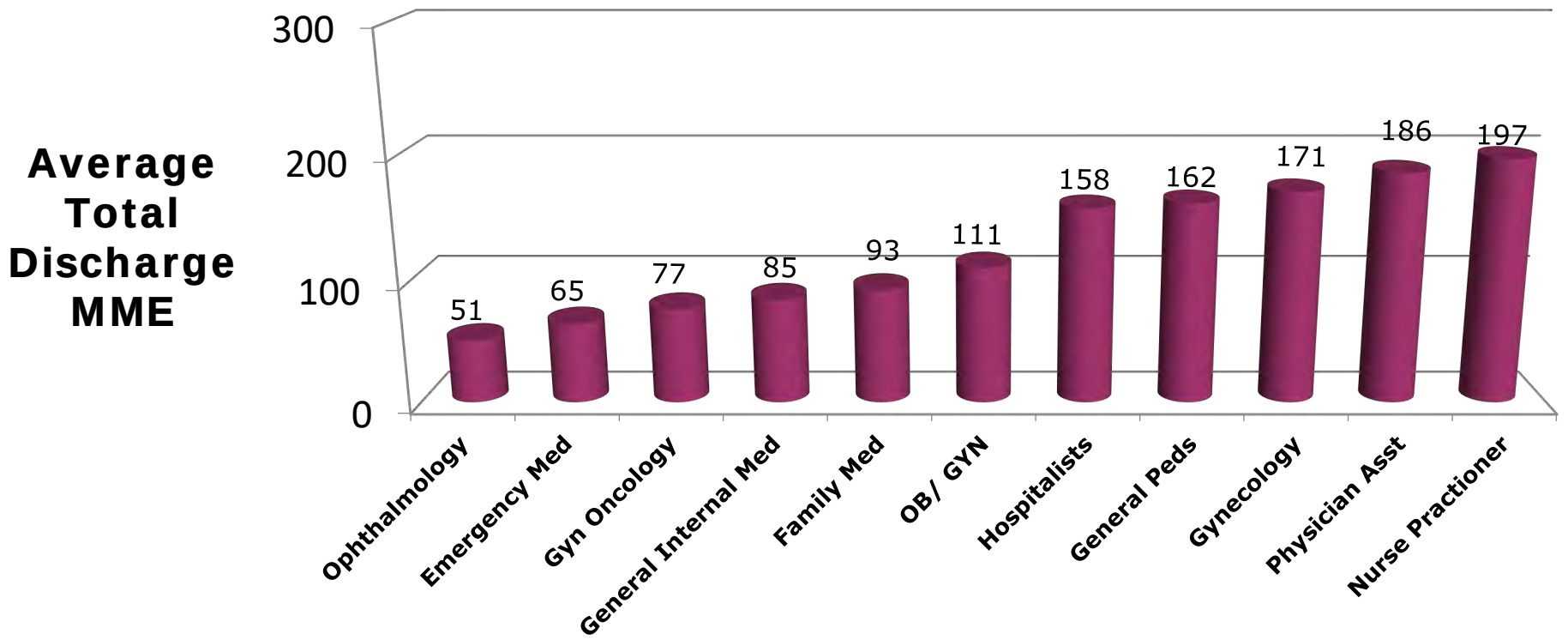
Note: excludes specialties with < 400 Rx

No. of visits with opioid rx	1,541	1,152	11,491	1,330	1,019	710	912	443	6,766	444	781

Prisma Health

Average Opioid Discharge MMEs By Medical Provider Specialty

Hospital Encounters (Includes hospitalizations, inpatient and outpatient surgery visits, ED and urgent care visits)



Note: excludes specialties with < 200 Rx

No. of visits with opioid rx	478	15,427	219	3,283	2,920	7,584	6,185	420	487	1,118	235

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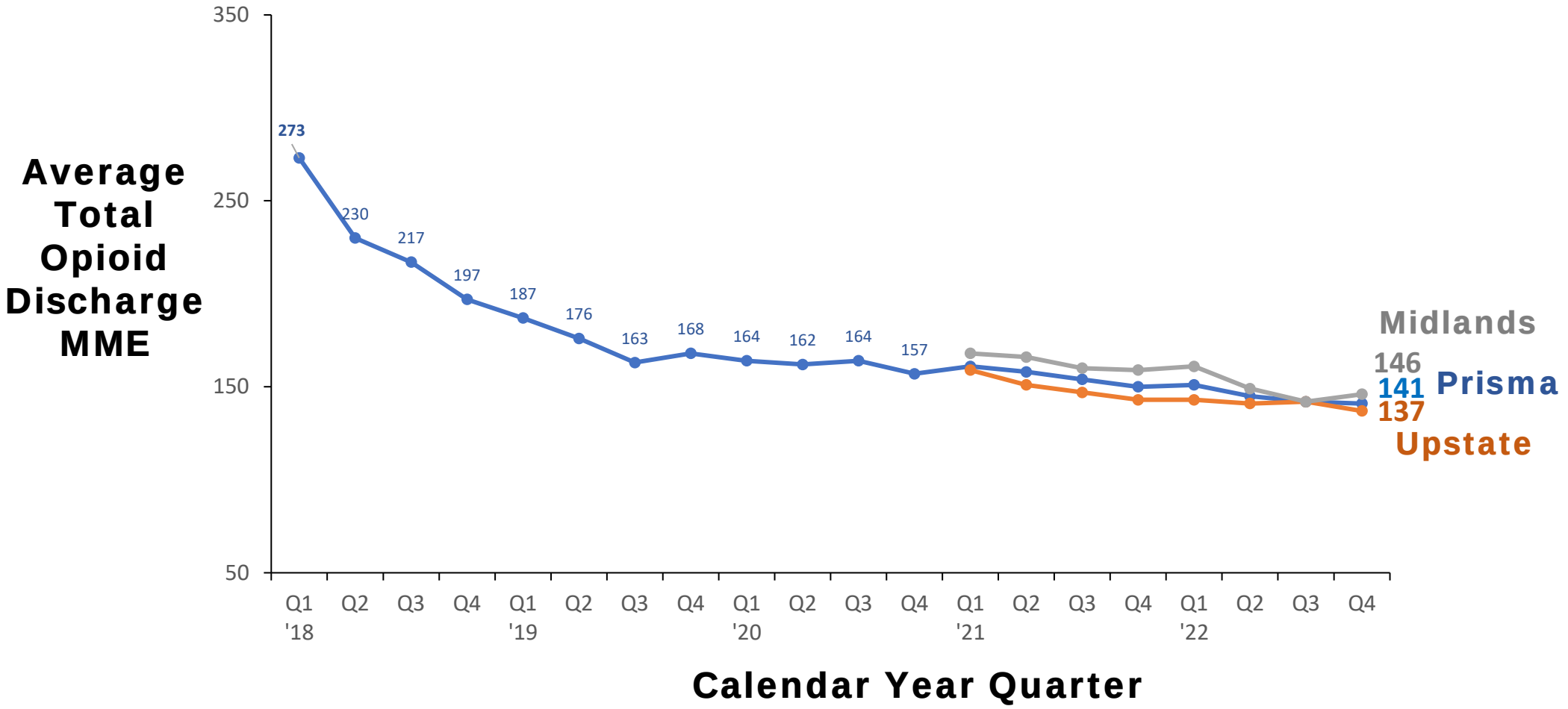
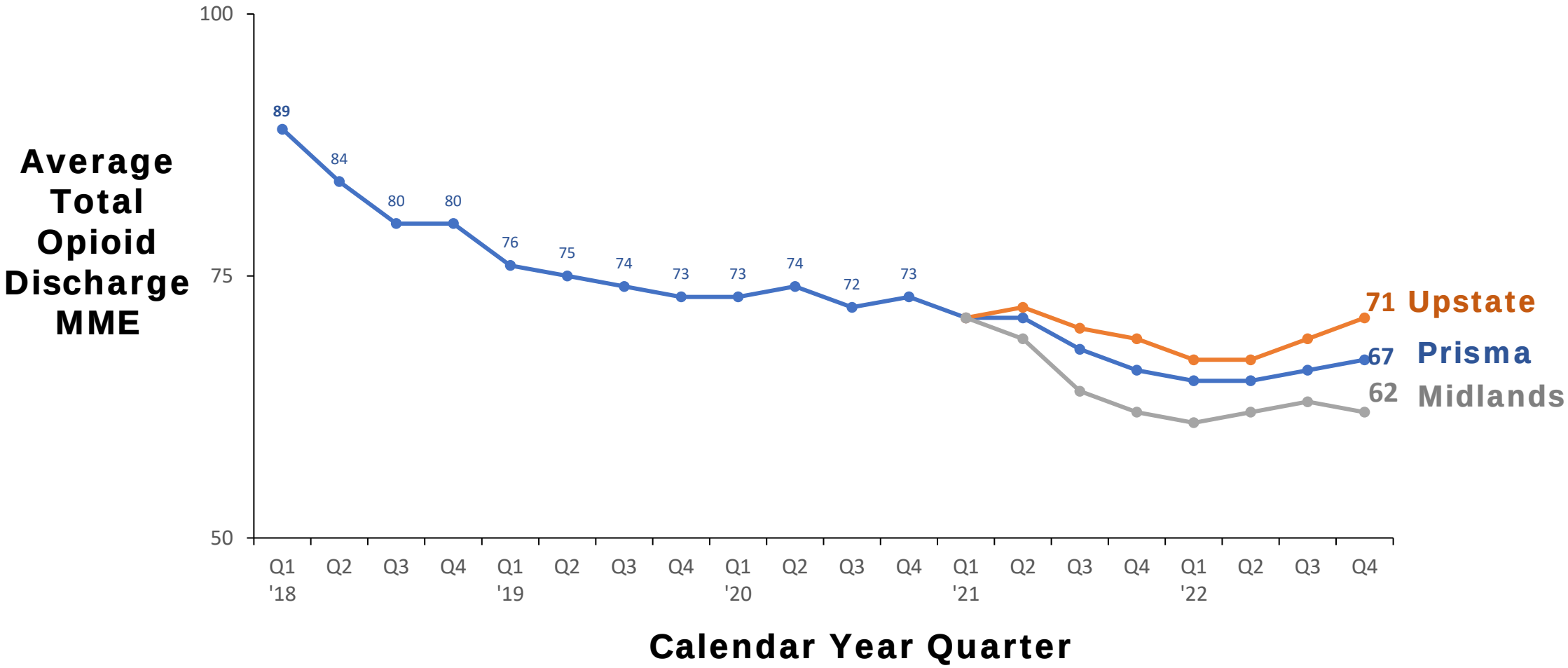
Average Opioid Discharge MMEs for Inpatient and Outpatient Surgery



Prisma Health

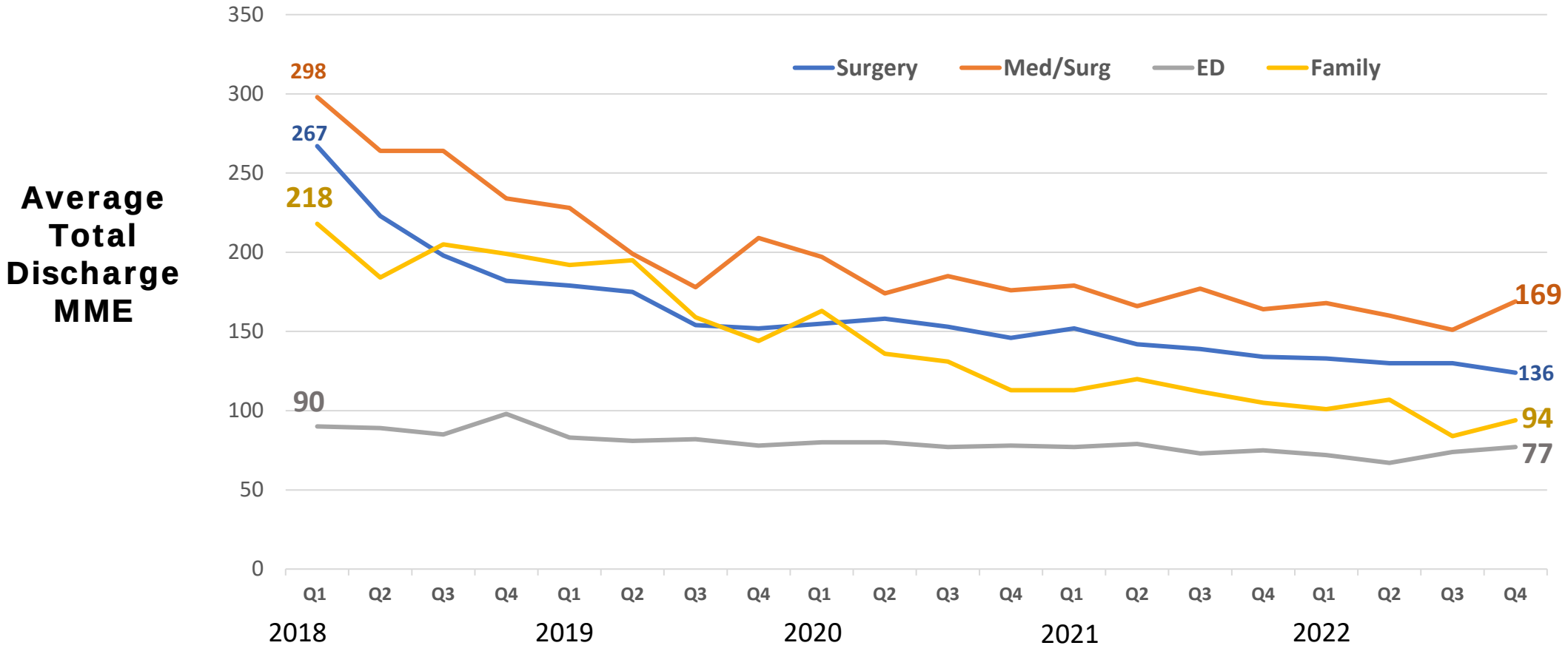
Average Opioid Discharge MMEs for ED and Urgent Care Visits



Prisma Health Greenville Memorial Hospital

Average Total Opioid Discharge MME By Department / Units by Quarter

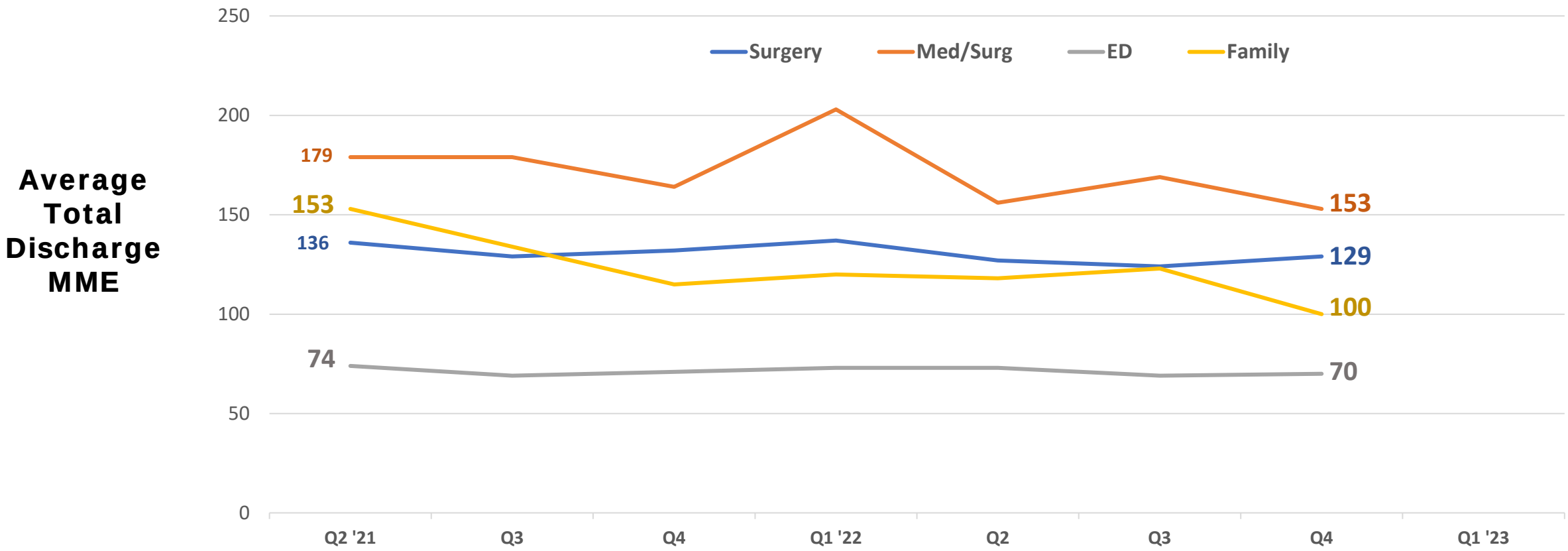
Hospital Encounters (hospitalizations, inpatient and outpatient surgery visits, and ED visits)



Prisma Health Richland Hospital

Average Total Opioid Discharge MME By Department / Units by Quarter

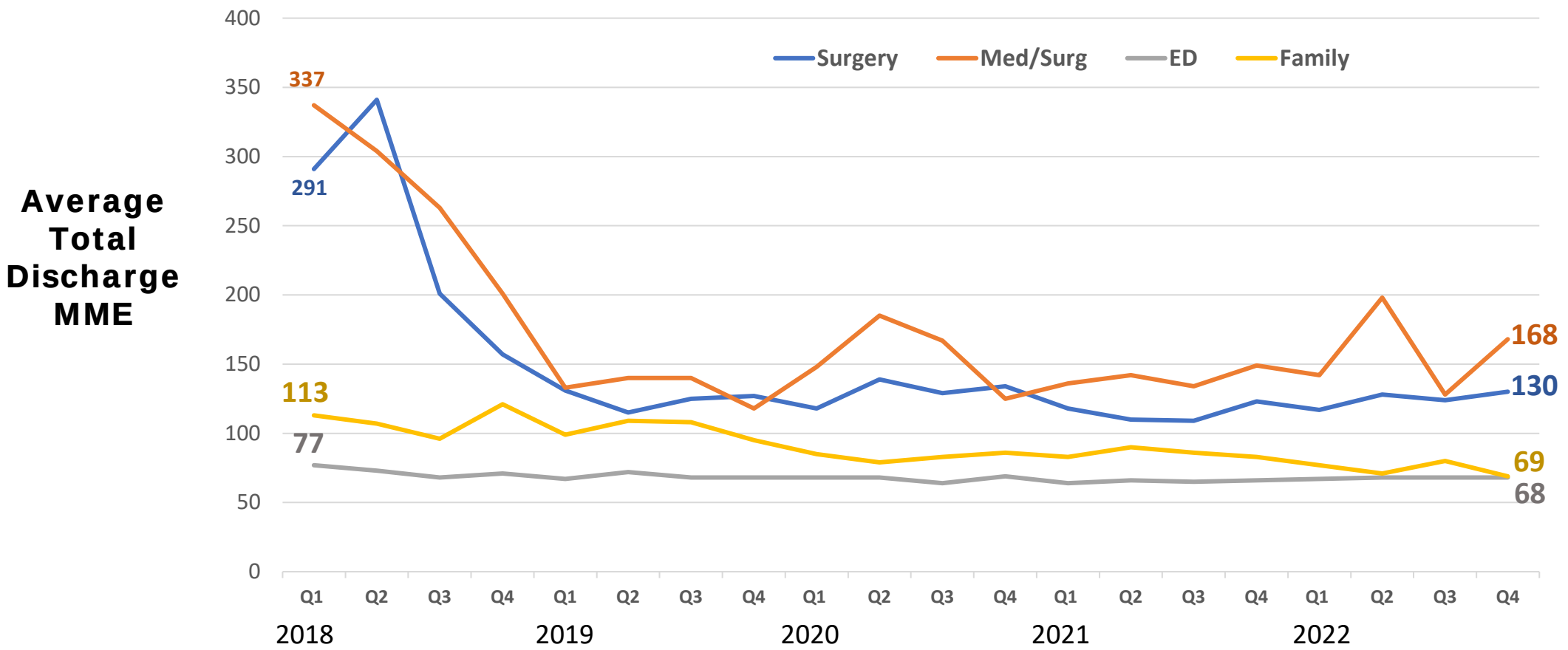
Hospital Encounters (hospitalizations, inpatient and outpatient surgery visits, and ED visits)



Prisma Health Laurens County Hospital

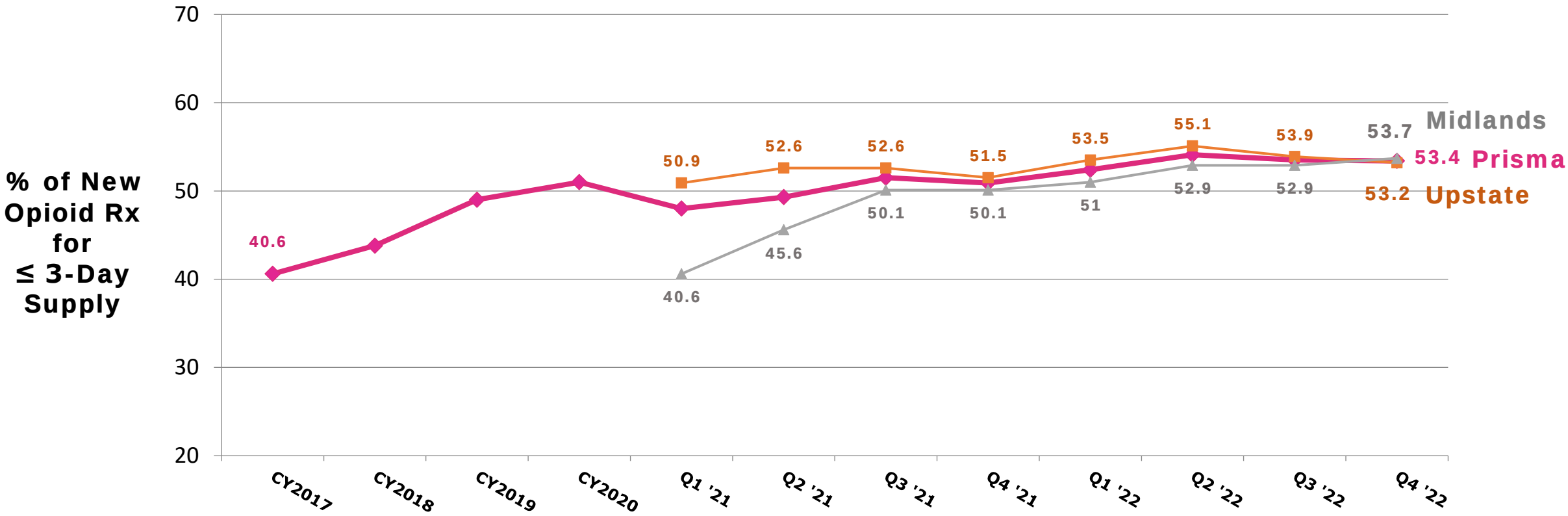
Average Total Opioid Discharge MME By Department/Units by Quarter

Hospital Encounters (hospitalizations, inpatient and outpatient surgery visits, and ED visits)



Prisma Health: All Patient Visits

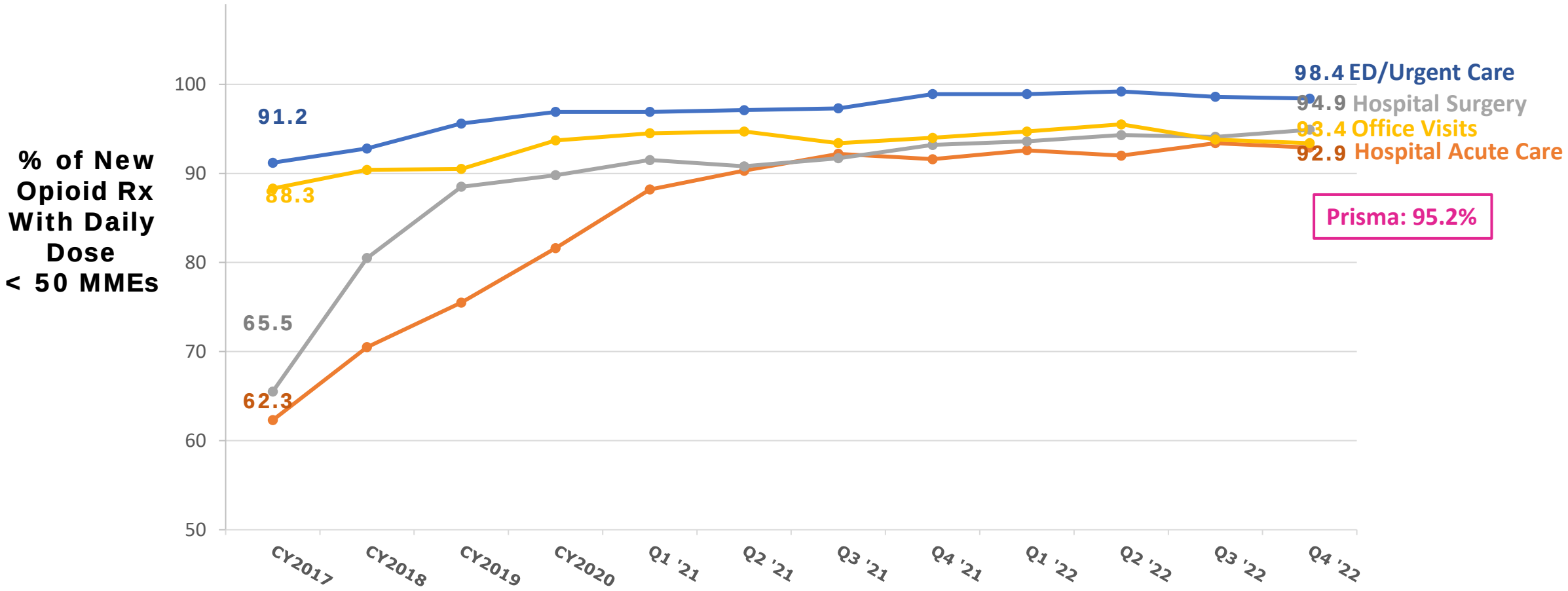
Metric #5: Pts ≥18 yr. with a new opioid Rx for Acute Pain with ≤ 3-Day Supply



Denominator: No. of Visits w/ a New Opioid Rx for Acute Pain	31,929	26,571	27,181	24,797	8,313	13,152	11,864	12,167	11,602	12,326	12,308	13,216

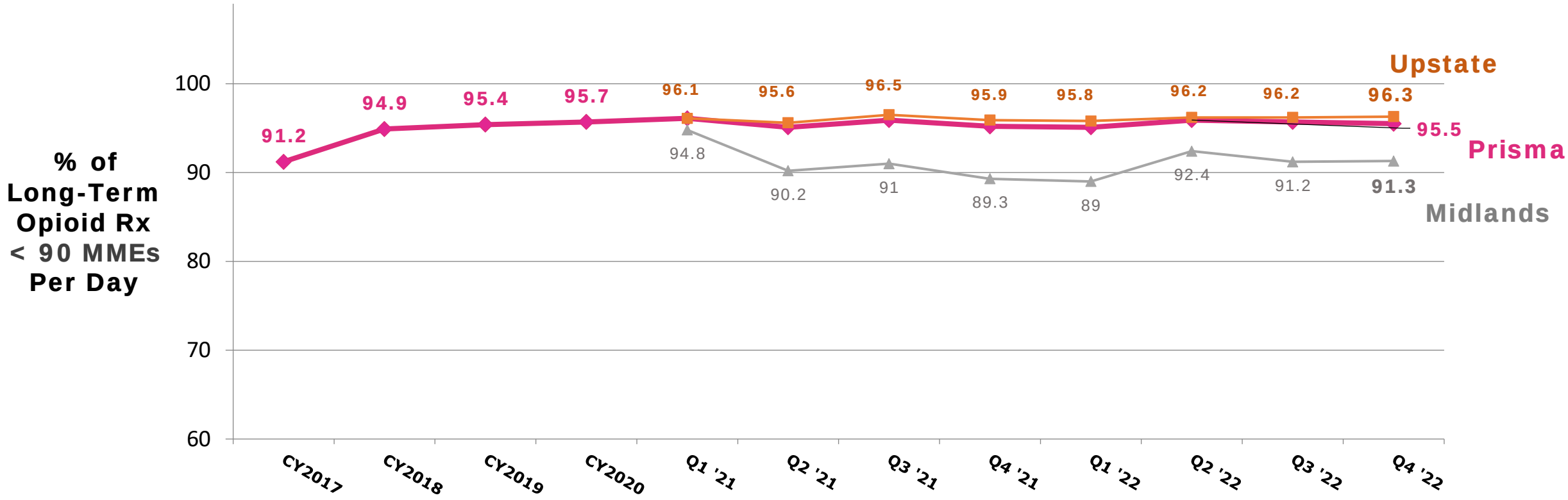
Prisma Health: All Patient Visits by Visit Type

CMS Metric #6: Percent of Pts ≥18 years of age with a new opioid Rx for Acute Pain with Daily Dose < 50 MMEs



Prisma Health: All Patient Visits

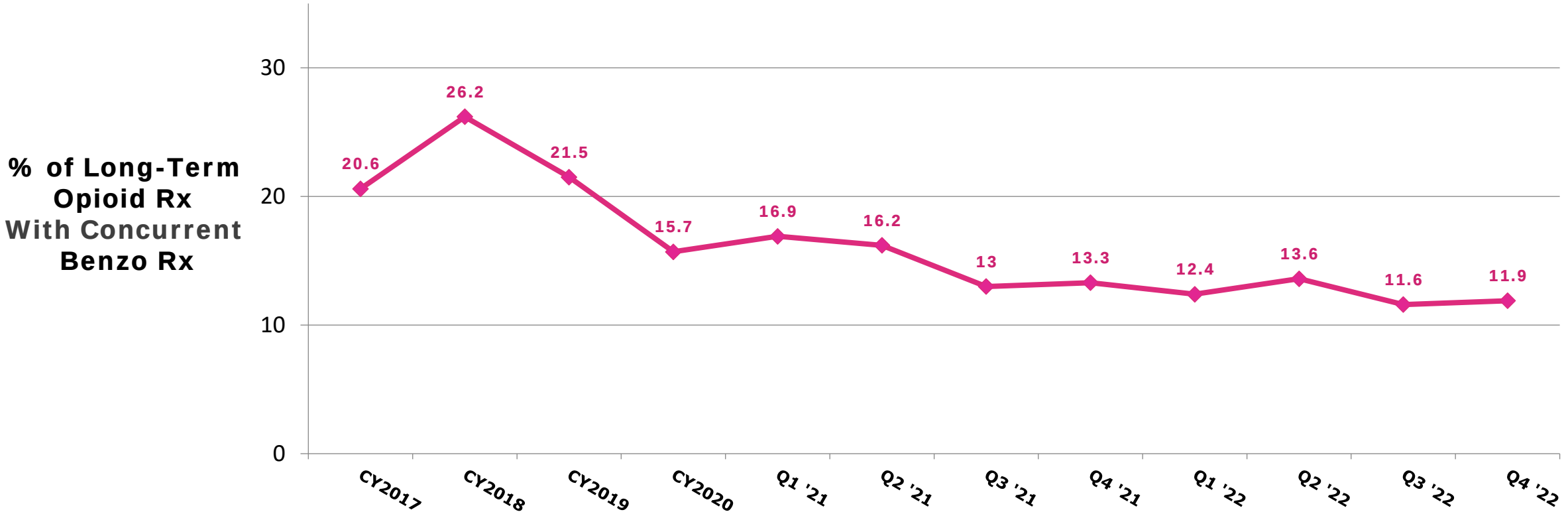
CMS Metric #7: Percent of Pts ≥18 years on long-term opioid therapy who are prescribed < 90 MMEs per day



Denominator: No. of Rxs for Pts on Long-Term Opioid Therapy	11,200	13,099	14,519	12,038	3,013	3,519	3,596	3,719	3,603	3,809	3,785	7,333

Prisma Health: All Patient Visits

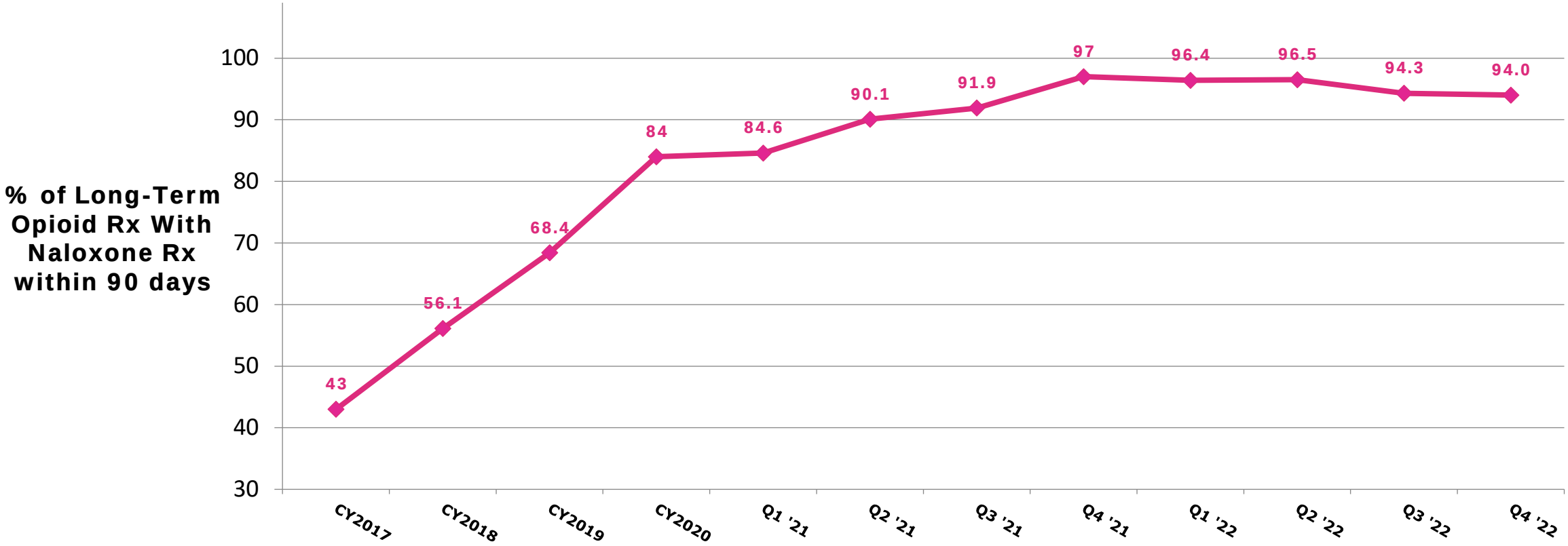
CMS Metric #8: Percent of Pts ≥18 years on long-term opioid therapy with a concurrent Rx for a benzodiazepine



Denominator: No. of Rxs for Pts on Long-Term Opioid Therapy	11,355	13,290	14,683	12,163	3,053	3,553	3,627	3,755	3,633	3,858	3,808	7,410

Prisma Health: All Patient Visits

Metric #10: Percent of Pts ≥18 years of age on long-term opioid therapy of ≥ 50 MME daily with naloxone prescribed within 90 days of opioid Rx



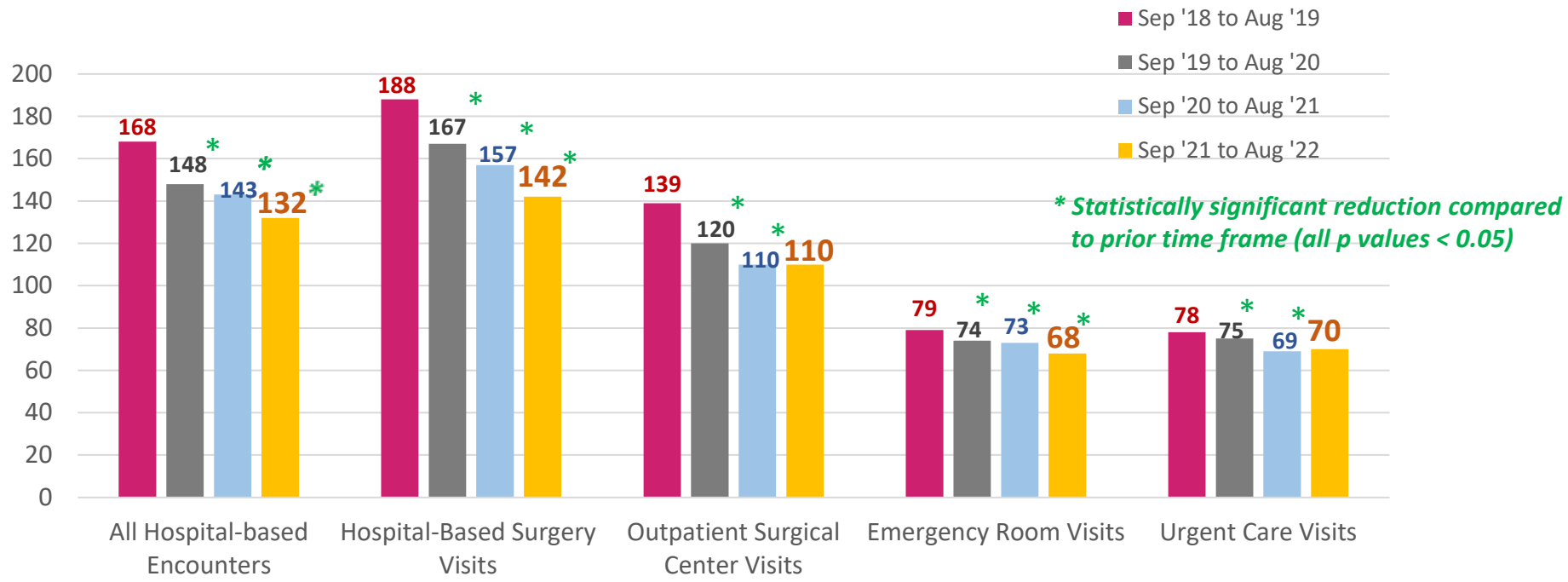
Denominator: No. of Rxs for Pts on Long Term Opioid of ≥50 MME/Day	2,375	1,786	2,025	1,666	403	514	520	533	558	544	505	1,105

Prisma Health

Opioid Average Total Discharge MME (Morphine Milligram Equivalent) by Year

Hospital Encounters (includes hospitalizations, inpatient and outpatient surgery visits, ED and urgent care visits)

Average Total Discharge MME

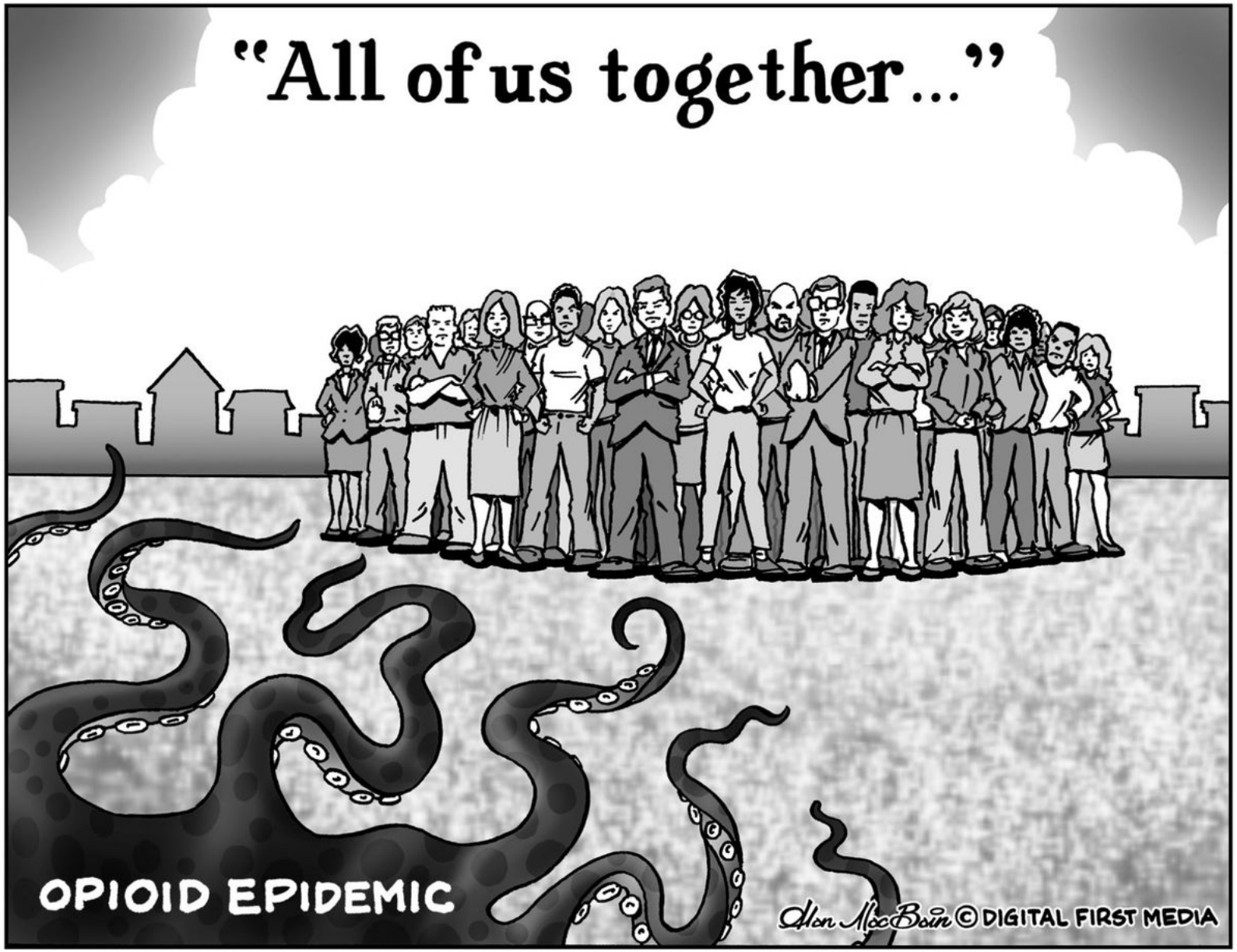


No. of RX Sep ’18 to Aug ’19	31,557	11,353	1,236	9,515	1,126
No. of Rx Sep ‘19 to Aug ‘20	32,409	12,460	1,536	9,415	1,254
No. of Rx Sep ‘20 to Aug ‘21	33,433	12,545	2,185	8,989	1,116
No. of Rx Sep ’21 to Aug ‘22	39,008	14,326	2,782	10,741	1,310

Conclusions

Conclusion

- Opioid epidemic requires a huge cultural shift where EVERYONE takes responsibility
- State and Federal regulatory bodies are identifying key metrics to identify adoption of opioid reduction strategies
- EDUCATION !! Set REALISTIC patient expectations
- Consider alternative therapies prior to prescribing opioids
- Be INTENTIONAL about opioid prescribing
  - Reassess, Reassess, Reassess
- Educate on diversion risks & how to safely store/dispose of opioids CDC Guidelines are guidelines not scripture
- Opioids stewardship can improve your community



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Thank You

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