WE STILL NEED TO TALK ABOUT PAIN MEDS?: THE OPIOID EPIDEMIC AND SUBSTANCE USE DISORDER

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GREETINGS
WELCOME
HI
HELLO
HOWDY
GLAD YOU'RE HERE

DISCLOSURES

- Kevin B. Walker MD FASA:
  - Research support from SPR Sprint
  - No direct financial support

THANK YOU'S!

- Doug Furmanek
- Vito Cancellaro
- Alain Litwin
- Richele Taylor
- Necole Stinson
- Rebecca Brannon
- Sara Goldsby
- South Carolina Medical Association

RULES OF ENGAGEMENT!

- Open discussion
- Please be willing to share
- No judgement
- I don’t want to talk the entire time!

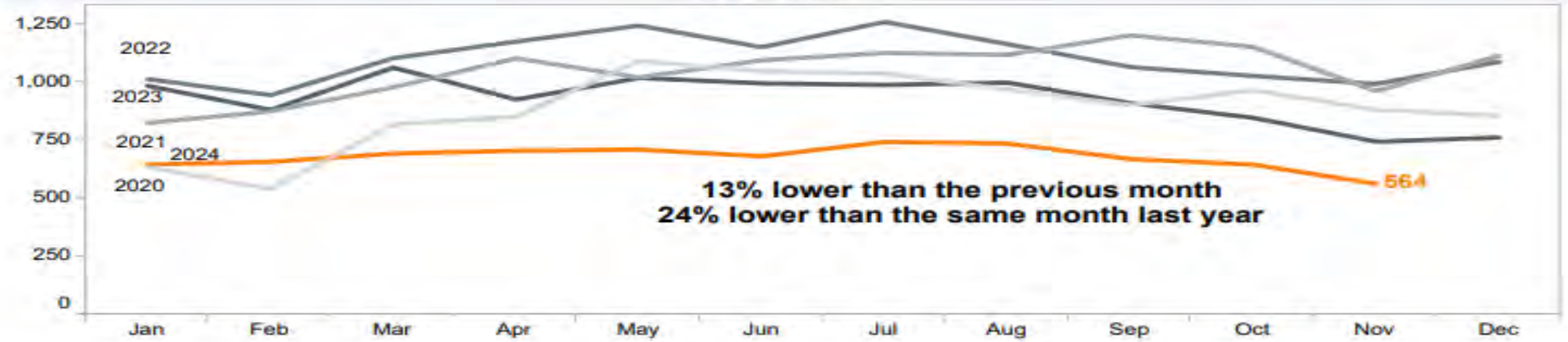
LEARNING OBJECTIVES

- Understand the impact of the opioid epidemic in South Carolina, the "WHY"
- Explain opioid stewardship and how it can improve a health system
- Discuss strategies on who to change your health system's culture through education
- Open discussion of future opportunities

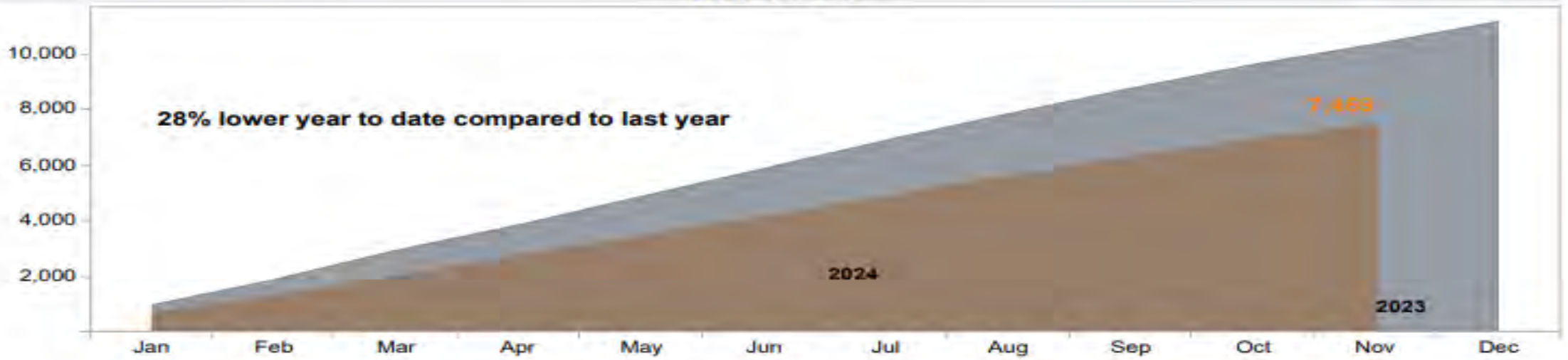

What's the
WHY

Trends

By Month



Year to Date



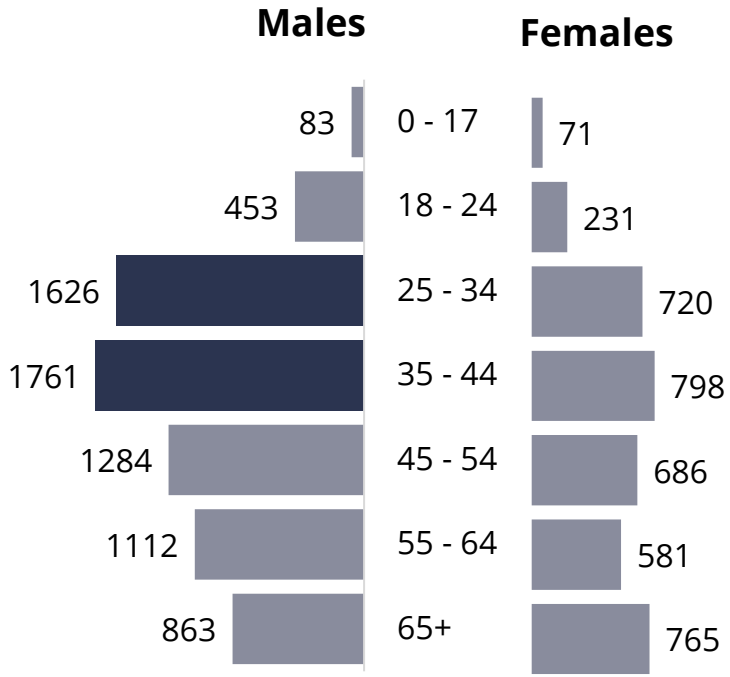
Year 2020 2021 2022 2023 2024

EMS

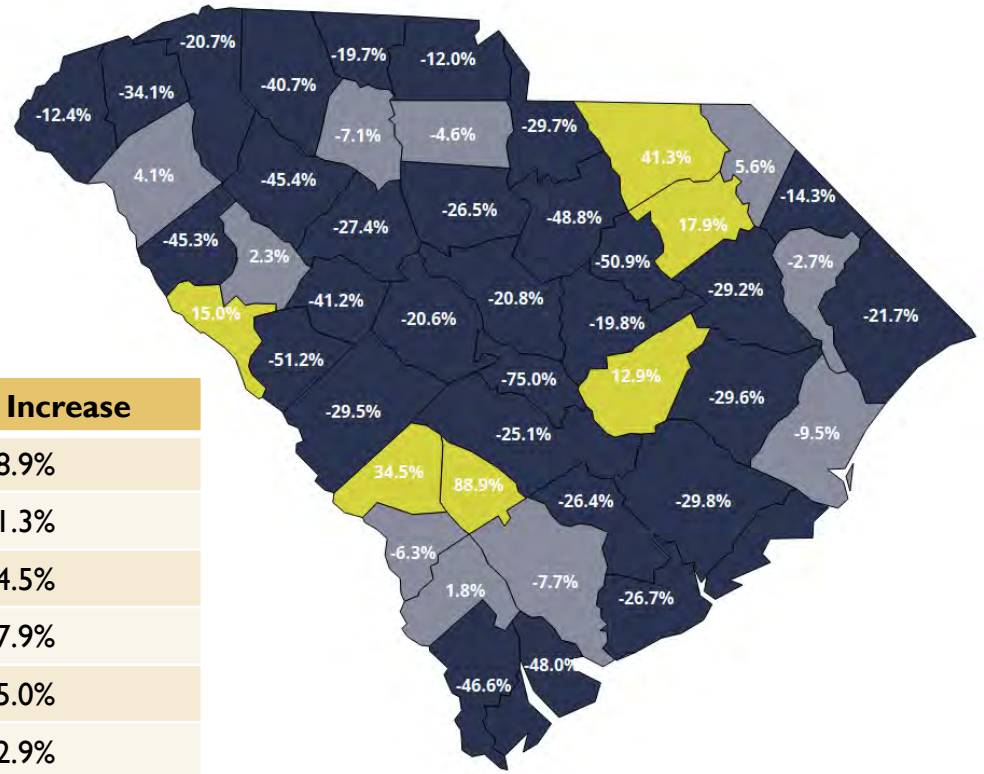
EMS Narcan administrations **decreased 20.9% (14,105 to 11,151)** in SC from the previous year.

Note: This does not represent layperson or first responder Narcan administrations from law enforcement and fire departments.

Men ages **25 – 44** had the highest numbers of EMS Narcan administrations.



31 counties saw declines greater than 10% and **6 counties saw increases** greater than 10%.



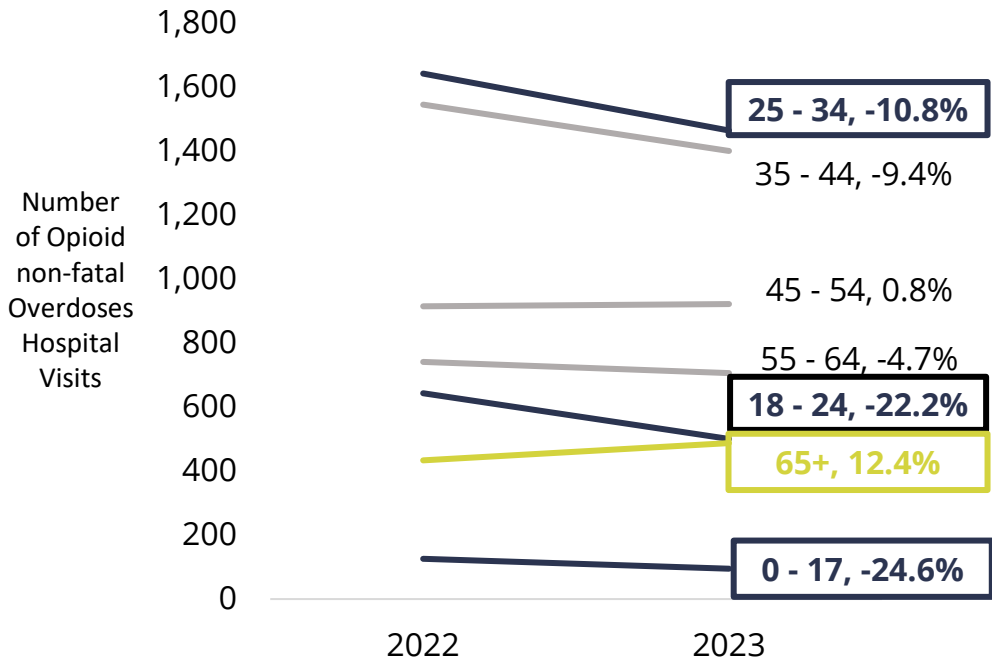
Counties by % Increase	
Bamberg	88.9%
Chesterfield	41.3%
Barnwell	34.5%
Darlington	17.9%
McCormick	15.0%
Clarendon	12.9%

Data Sources: SC DHEC, Bureau of EMS

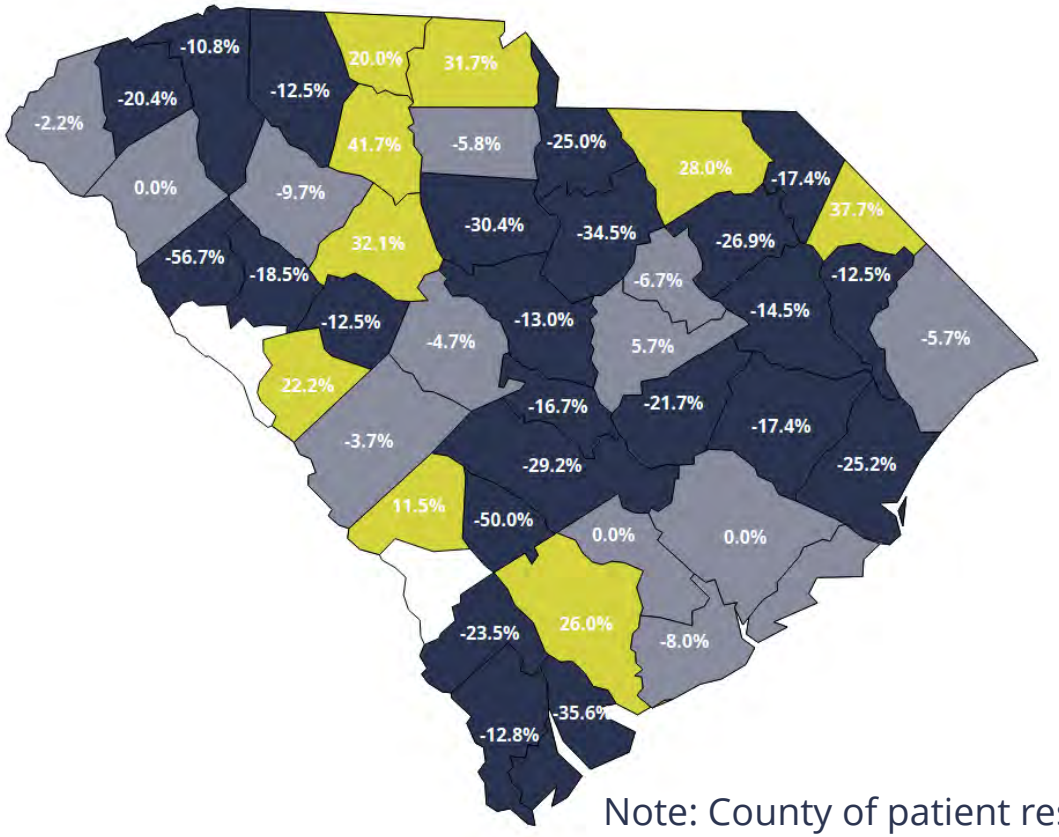
HOSPITAL

Hospital visits for opioid non-fatal overdoses **declined 7.8%** in SC from the previous year.

Opioid non-fatal overdoses were highest in number among ages **25 – 34**, which also experienced a **decline (22.2%)** from 2022 to 2023. Ages **65+** experienced the greatest **increase (12.4%)** from 2022 to 2023.



23 counties saw declines greater than 10% and **9 counties saw increases** greater than 10%.

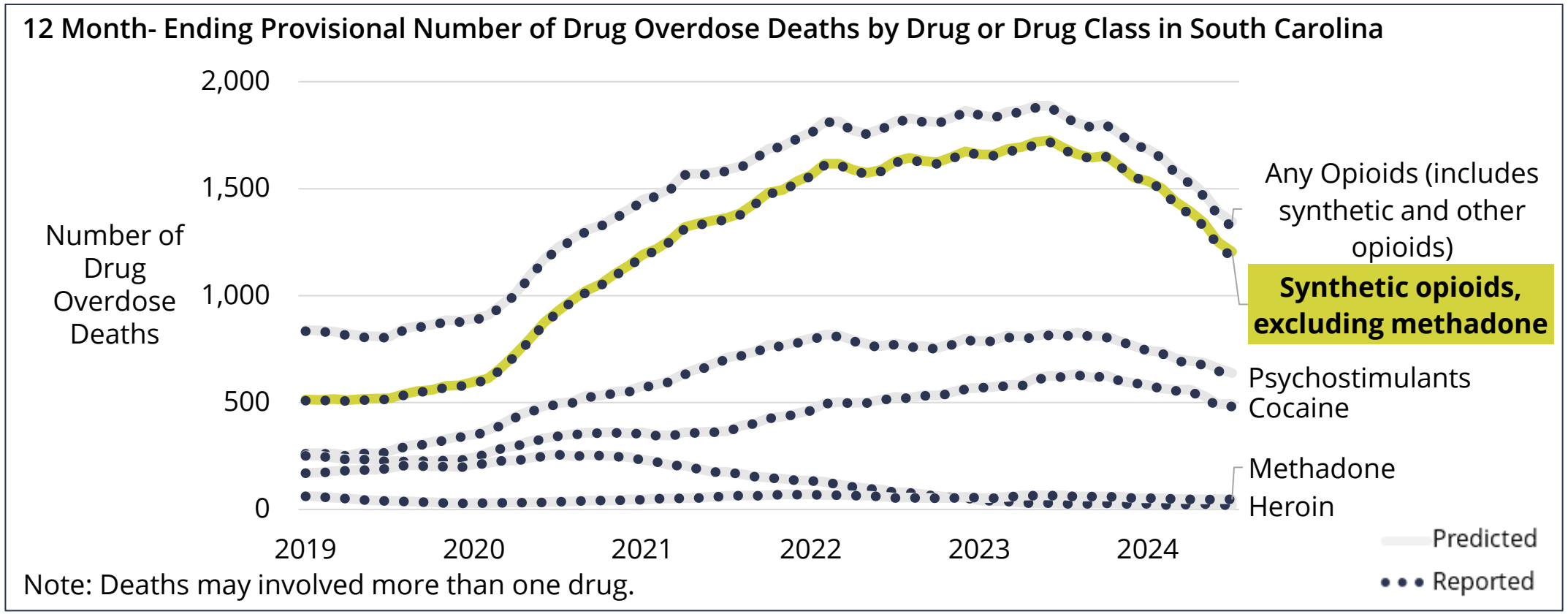


Note: County of patient residence

Data Sources: SC Revenue & Fiscal Affairs Office

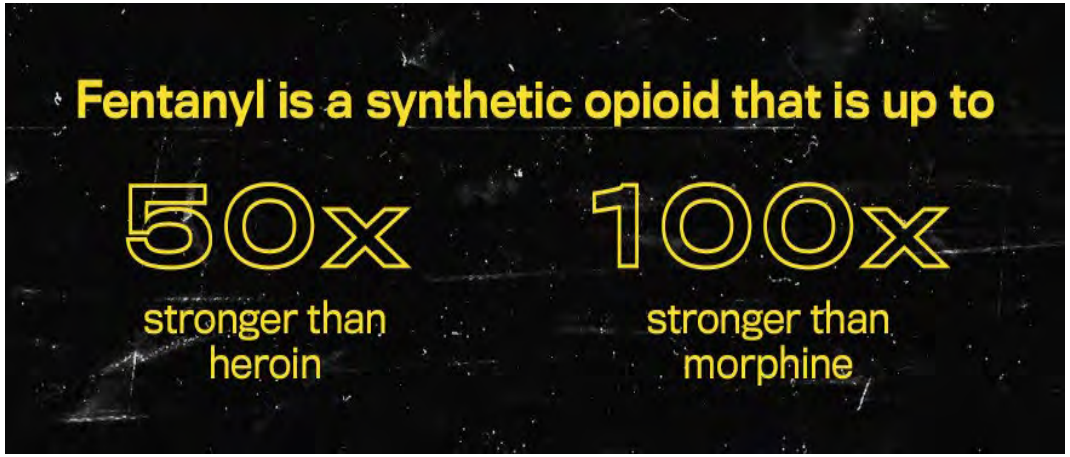
MORTALITY

1,742 (97.1%) of the total predicted overdose deaths for SC in 2023 are estimated to involve synthetic opioids, including fentanyl.[1]



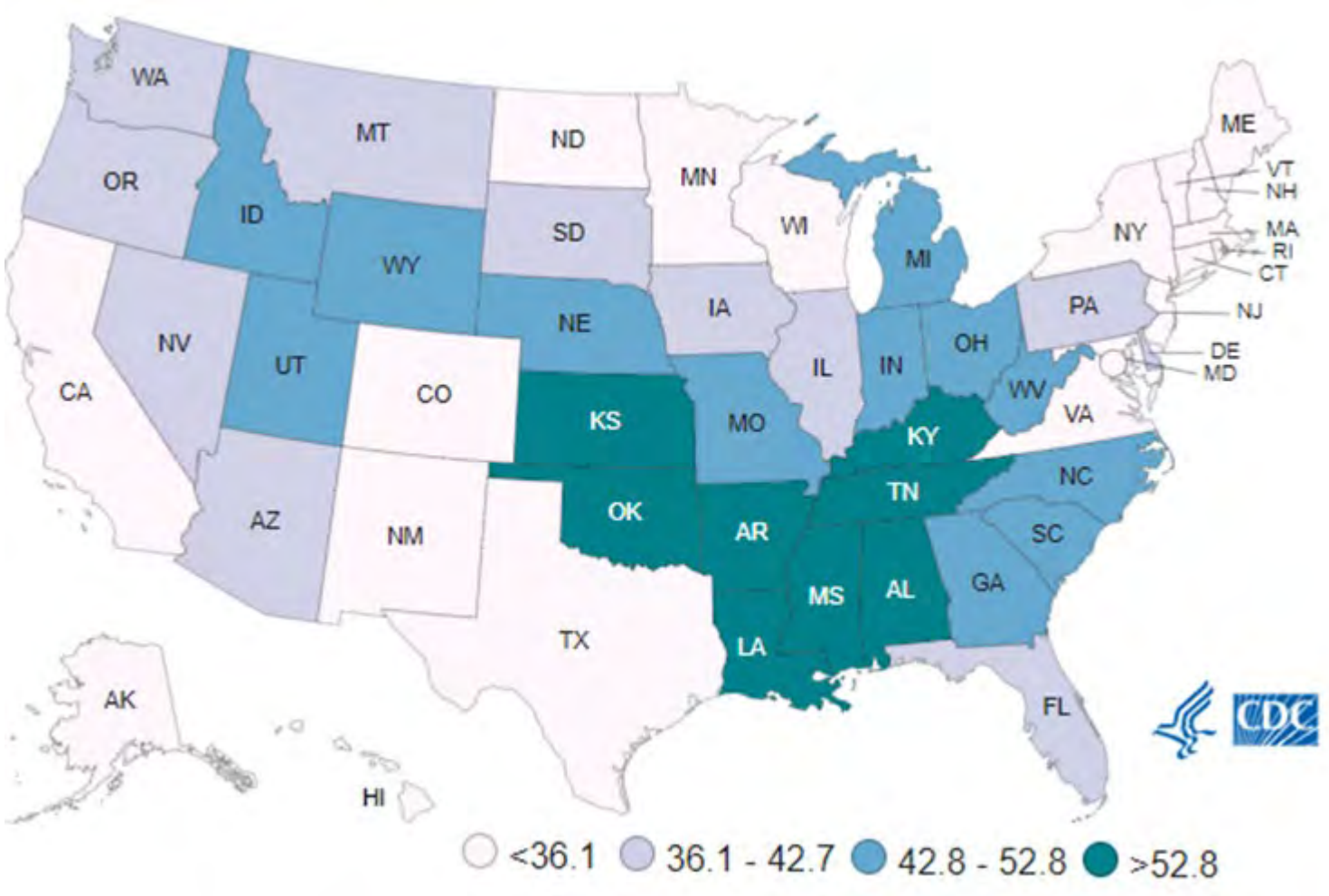
Data Sources: 1 - CDC, National Center for Health Statistics

FRAME OF REFERENCE



*FAKE
rainbow oxycodone M30 tablets containing fentanyl

US OPIOID DISPENSING RATE (PER 100 PERSONS)



Location	Opioid Dispensing Rate
Alabama	74.5
Arkansas	72.2
Louisiana	65.6
Mississippi	64
Kentucky	61.6
Tennessee	61.5
Oklahoma	55.5
Kansas	55.3
Indiana	52.5
South Carolina	51.5

https://www.cdc.gov/drugoverdose/rxrate-maps/state2022.html

PRESCRIPTION

Top 10 Counties by Prescription Drug Type, Prescription Rate per 1,000

Benzodiazepines		
Rank	County	Rate per 1,000
#1	Lexington	551.85
#2	Darlington	548.27
#3	Pickens	501.66
#4	Florence	487.49
#5	Anderson	454.67
#6	Cherokee	447.93
#7	Oconee	445.98
#8	Barnwell	426.66
#9	Greenville	426.01
#10	Bamberg	421.23

Muscle Relaxants		
Rank	County	Rate per 1,000
#1	Bamberg	17.03
#2	Barnwell	13.60
#3	Chester	12.04
#4	Newberry	11.75
#5	Darlington	11.38
#6	Aiken	11.04
#7	Colleton	9.85
#8	Lancaster	9.31
#9	Lexington	8.43
#10	Hampton	8.06

Stimulants		
Rank	County	Rate per 1,000
#1	Charleston	717.10
#2	Pickens	576.77
#3	Greenville	572.40
#4	Lexington	566.77
#5	Florence	563.42
#6	Bamberg	497.07
#7	Greenwood	496.96
#8	Oconee	485.86
#9	Dorchester	482.24
#10	Darlington	453.27

Opioids		
Rank	County	Rate per 1,000
#1	Darlington	1,023.65
#2	Florence	950.53
#3	Dillon	885.15
#4	Colleton	844.91
#5	Barnwell	831.52
#6	Oconee	807.70
#7	Bamberg	784.65
#8	Pickens	782.47
#9	Marion	774.51
#10	Hampton	754.99

Darlington County appeared in the top 10 for all four prescription drug types and out of the four appearances, Darlington ranked in the top 5 three times. Charleston County had a significantly higher stimulant prescribing rate and was ranked #1.

Data Sources: SC DHEC, Prescription Drug Monitoring Program

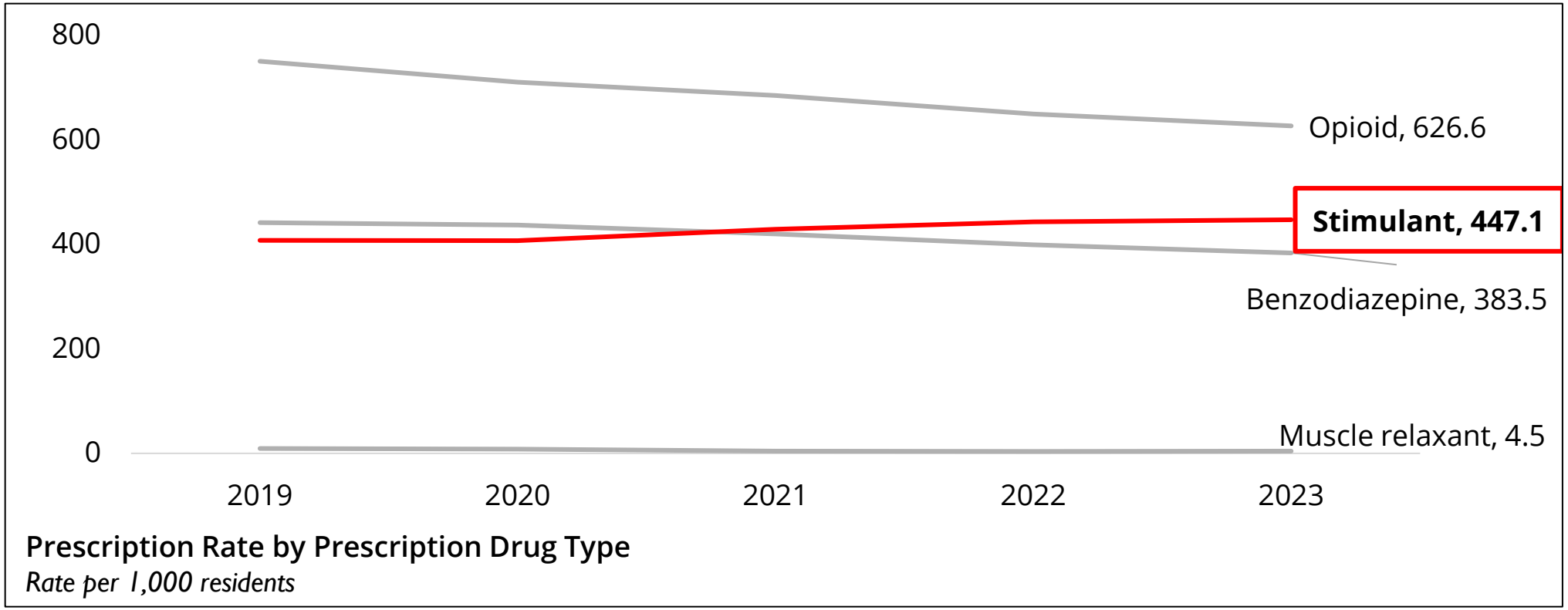
PRESCRIPTION RATES AND TRENDS

Type of Controlled Substance	Highest Prescribing Rate by Age/Sex	Trend in Prescribing Rate from 2022-2023
Opioids	Ages 65+ in both sexes	All age groups for both sexes saw rates decline
Benzodiazepines	Ages 65+ in both sexes	All age groups for both sexes saw rates decline
Muscle Relaxants	Ages 55 – 64 in both sexes	All age groups for both sexes saw rates decline
Stimulants	Ages 0 – 17 for men and 35 – 44 for women	Ages 0 – 24 saw rates decline, meanwhile all other age groups saw rates increase.

Women have higher rates of prescriptions than men, except for stimulants and benzodiazepines among males 0 – 17

Data Sources: SC DHEC, Prescription Drug Monitoring Program

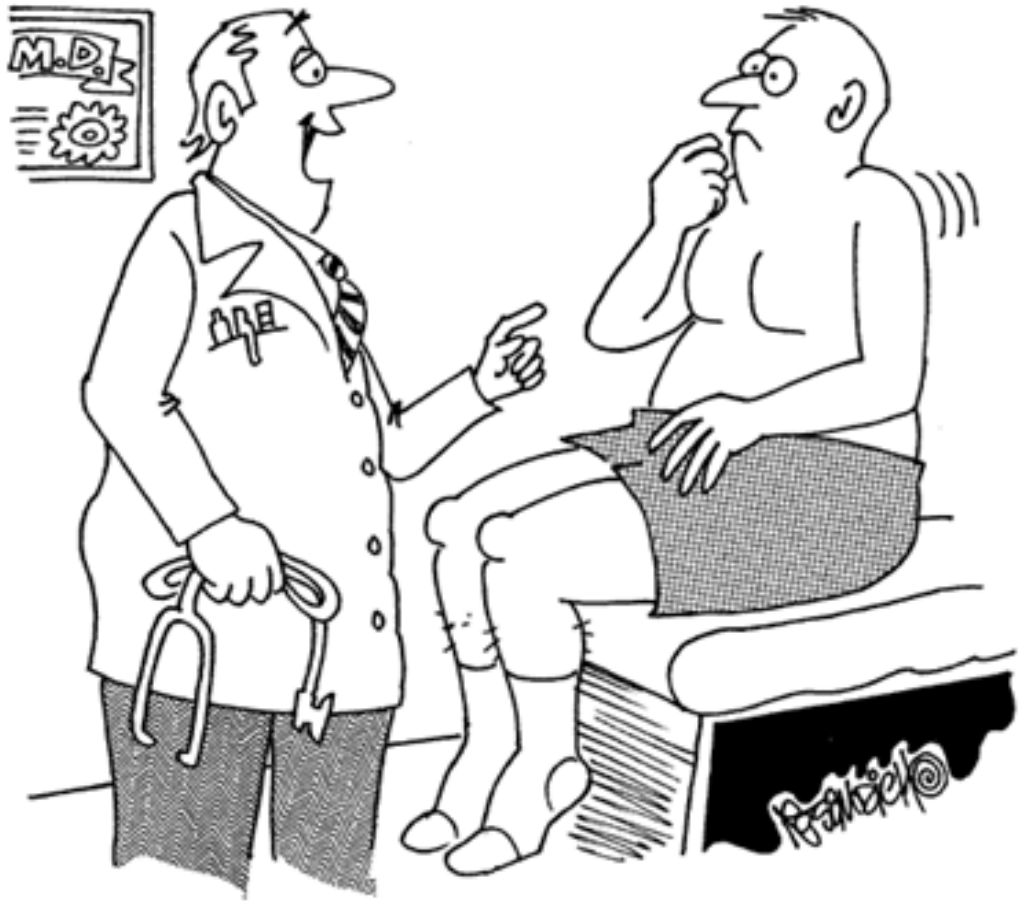
SOUTH CAROLINA PRESCRIBING RATES



- SC's opioid dispensing rate (48.4) was still above the national average (37.5)
- Stimulant prescribing has **Increased 9.6% (407.8 to 447.1)** from 2019 to 2023

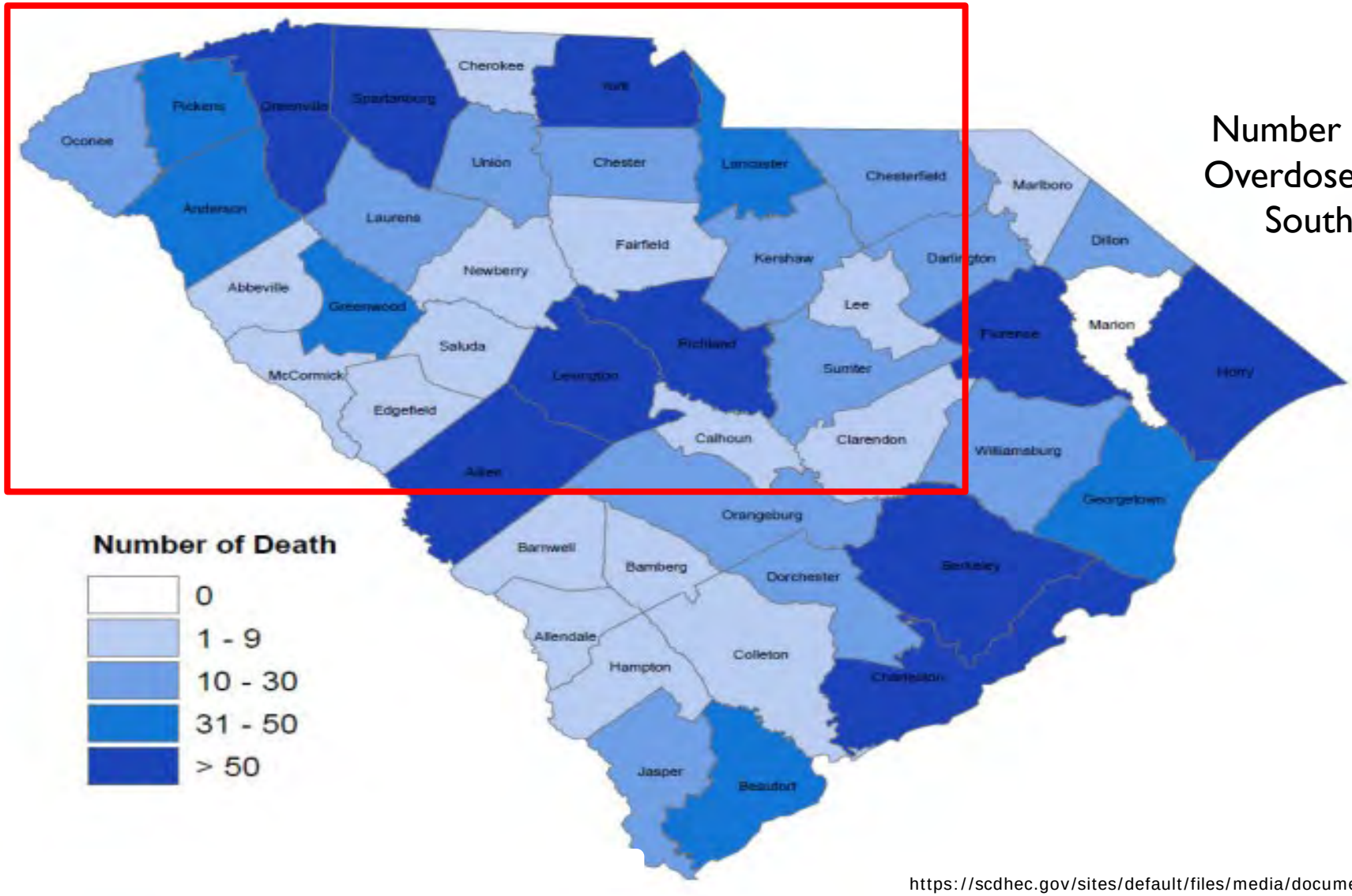
Data Sources: SC DHEC, Prescription Drug Monitoring Program
2 - Opioid Dispensing Rate Maps | Overdose Prevention | CDC

WHOSE RESPONSIBILITY?



"I specialize in referrals to specialists!"

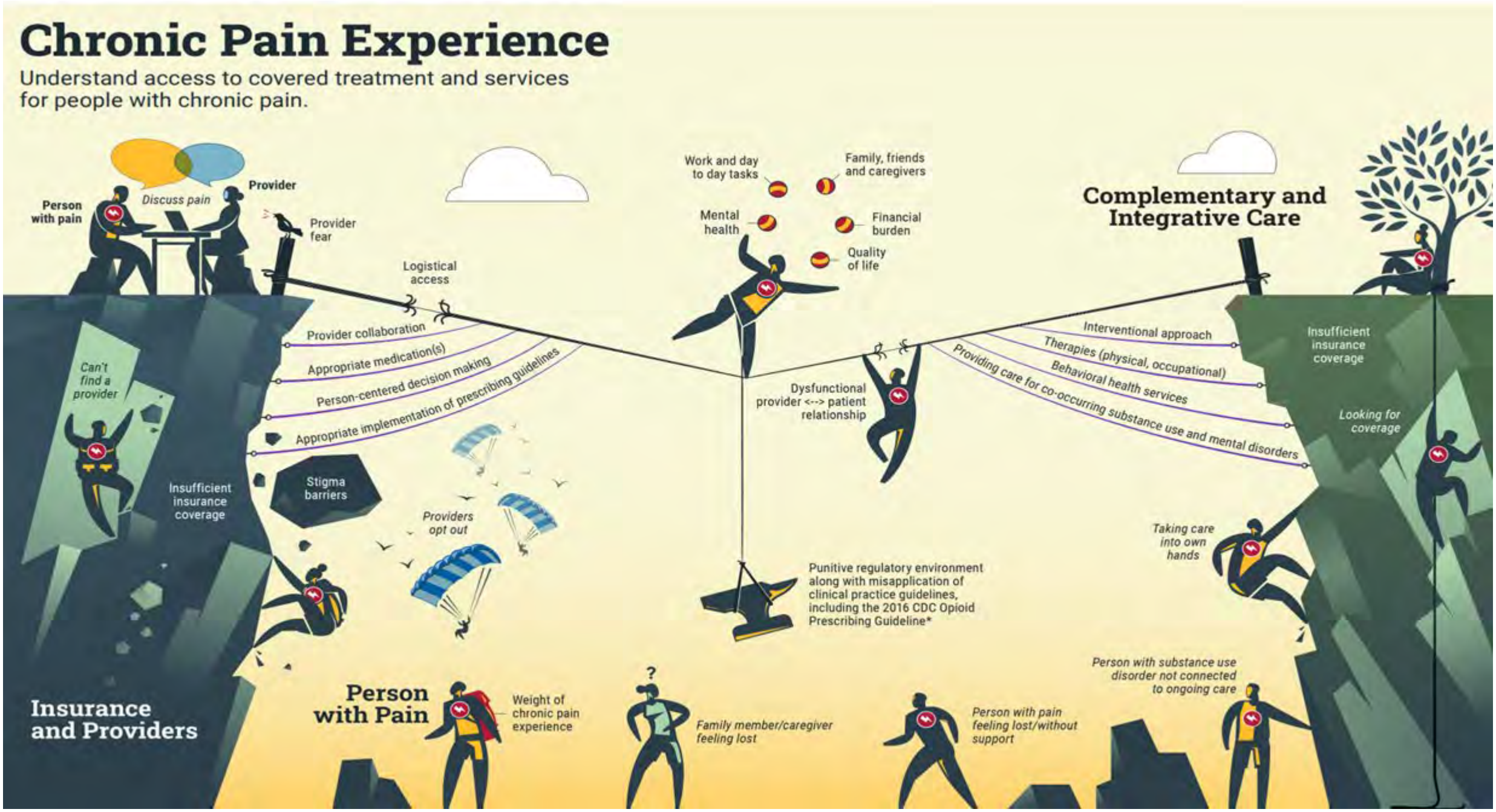
CASE FOR CHANGE: FOR THE SYSTEM I WORK FOR



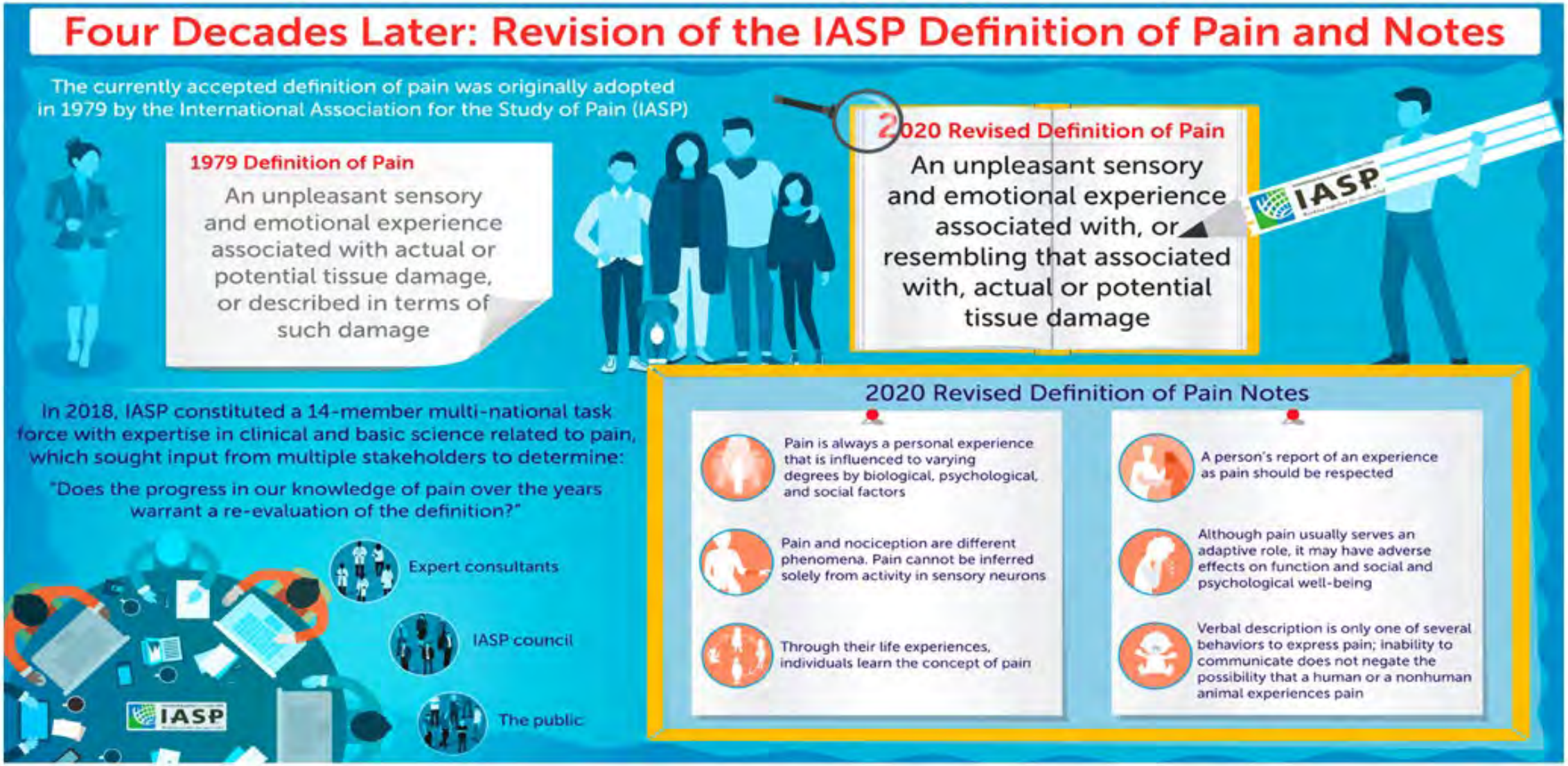
Number of Opioid-Involved Overdose Deaths by County South Carolina, 2021

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

OPIOID EPIDEMIC !!!

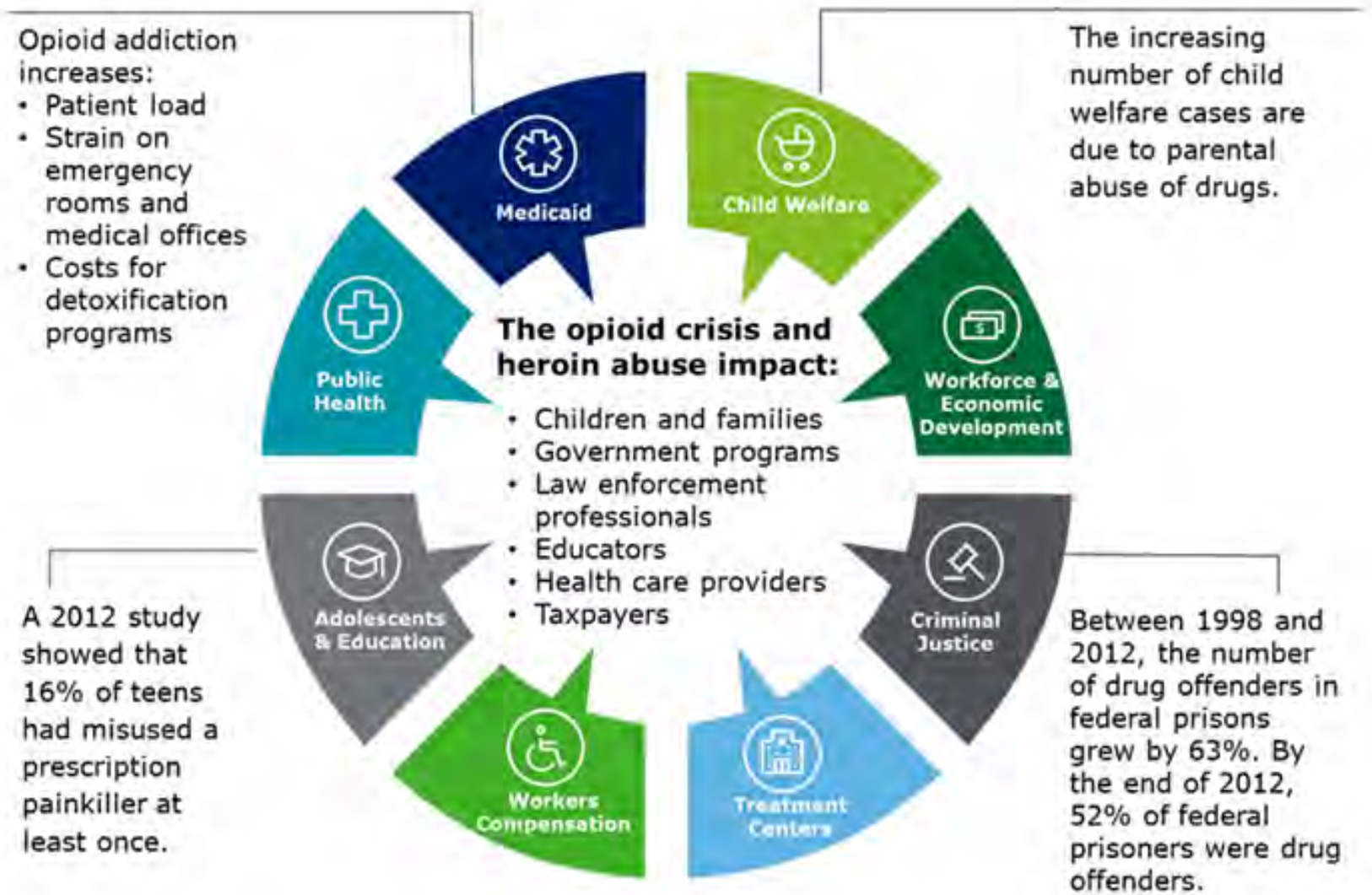


PAIN?



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

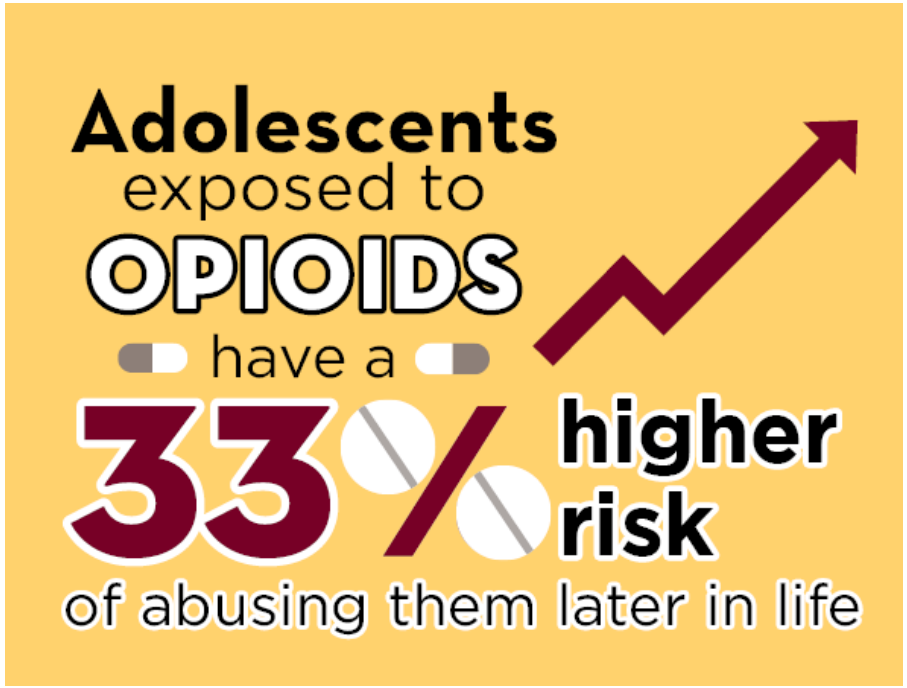
SOCIETAL IMPACT



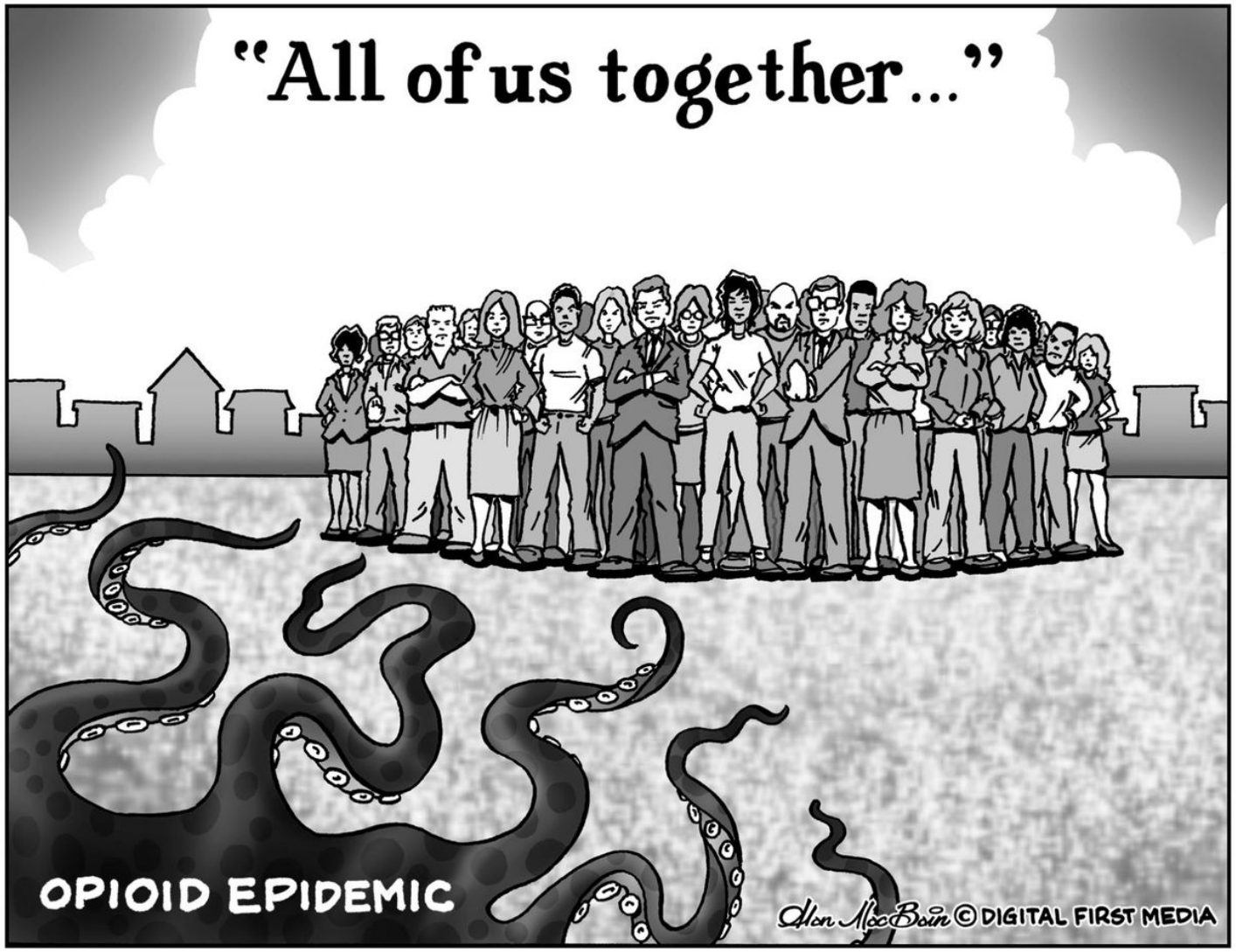
TALK ABOUT OPIOID RISKS

Educate in schools on the dangers of opioids

- **Estimate 50% exposed to opioids by 8th grade**
- Targeting children at or before 5th grade



WHO'S RESPONSIBLE?



OPIOID STEWARDSHIP

WHERE WE STARTED…

- Developed the "team"
- Mission
- Structure
- Administrative support
- Survey
- Educational endeavors
- Institutional changes

THE TEAM?

OVERARCHING GOAL OF THE OPIOID STEWARDSHIP COMMITTEE

To develop holistic patient-centered strategies that mitigate pain, optimize recovery and promote well-being for the communities we serve

CHARTER…

Opioid Stewardship Committee Charter

Mission Statement

To develop holistic patient-centered strategies that mitigate pain, optimize recovery and promote well-being for the communities we serve.

Purpose

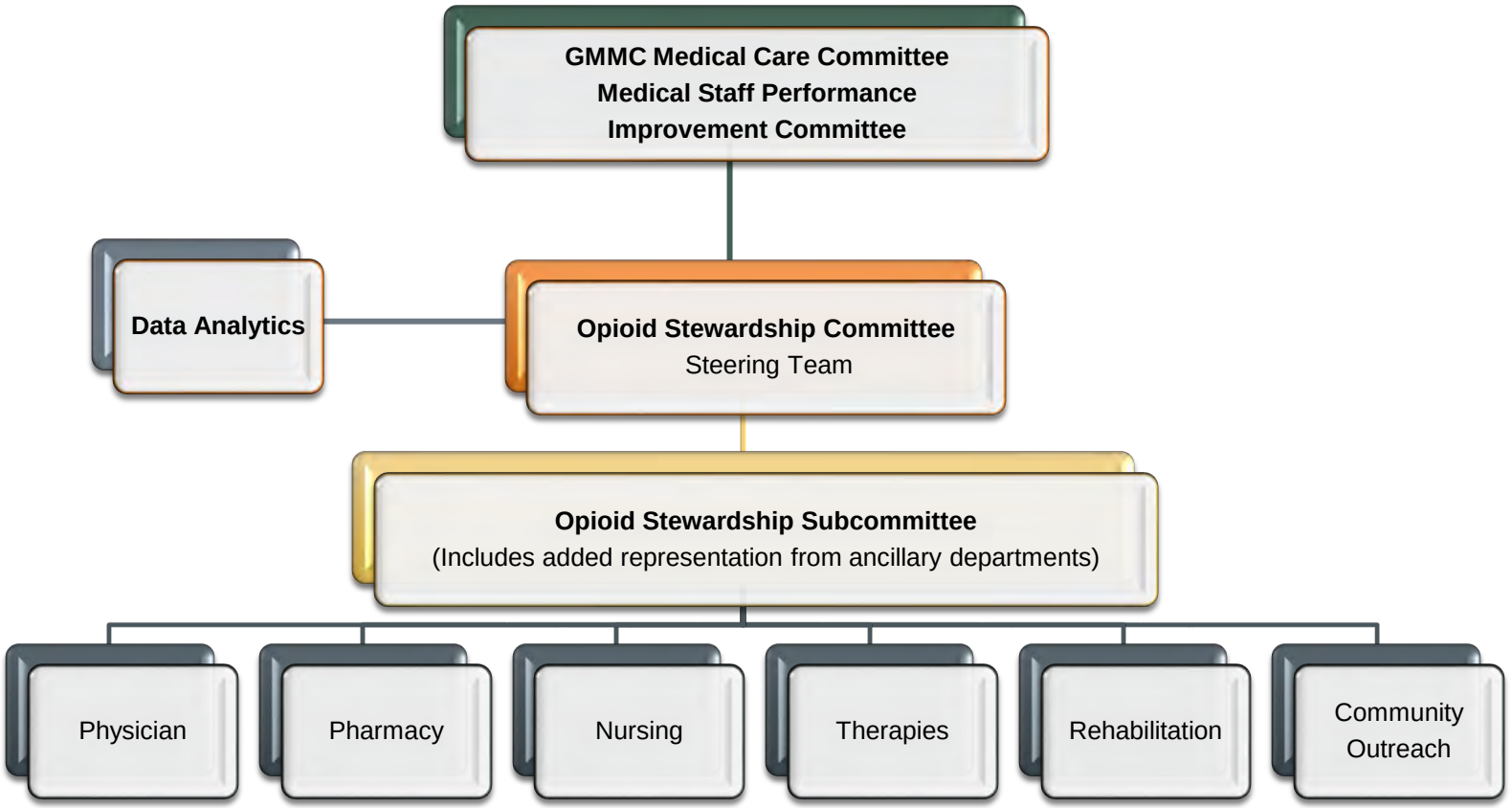
To provide advisement on proposed evidence-based best practices, assist with mitigating barriers, and set the tone and behaviors for system-level coordination.

The Committee serves as an oversight and decision-empowering team for all seven hospital campuses which evaluate, vet, and recommend strategies (including methods, approaches, and processes) and tools (including technologies) for successful opioid prescribing.

The Committee has the authority to research, collaborate, vet, and recommend best practices in an effort to contribute to the goals of improving quality of care, clinical outcomes, and enhancing the patient experience.

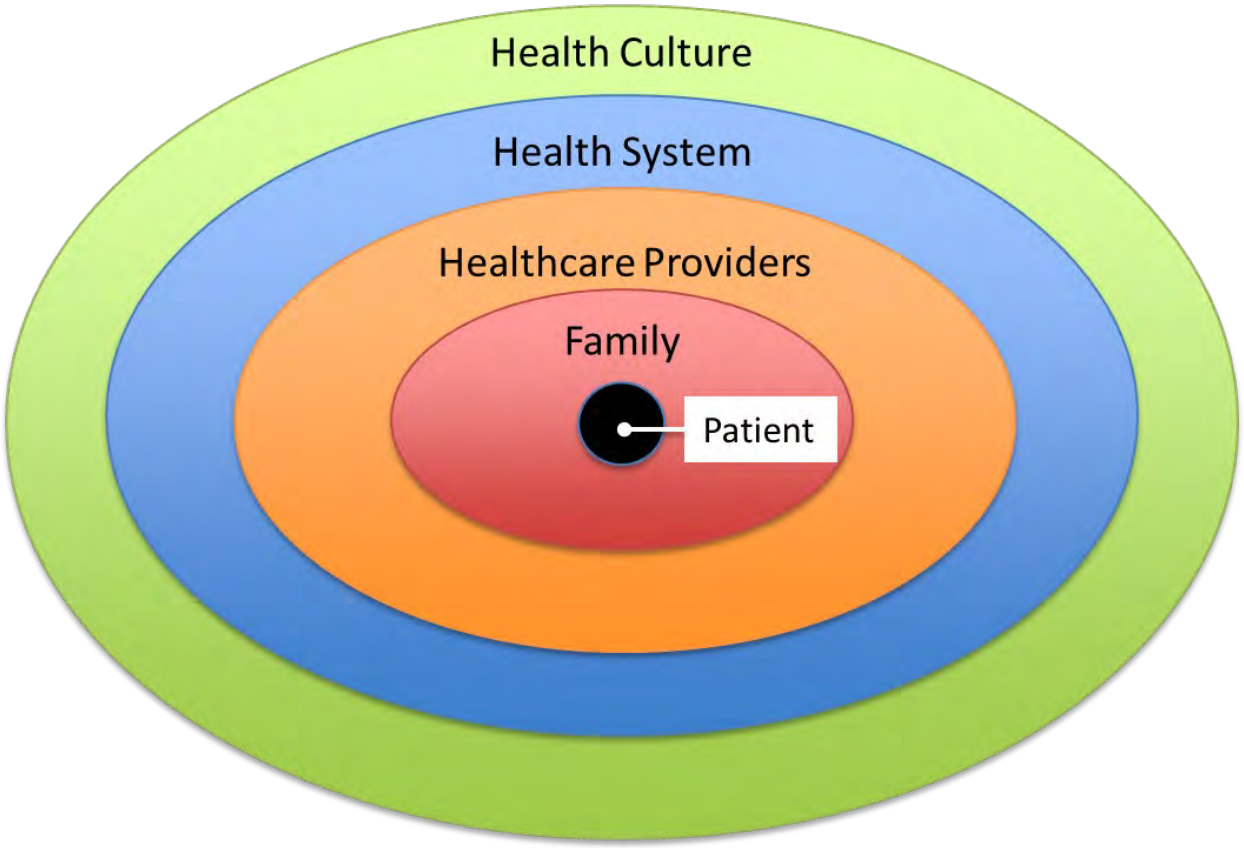
Membership

ORGANIZATIONAL STRUCTURE



Workgroup Streams – Charged with Rolling out Initiatives

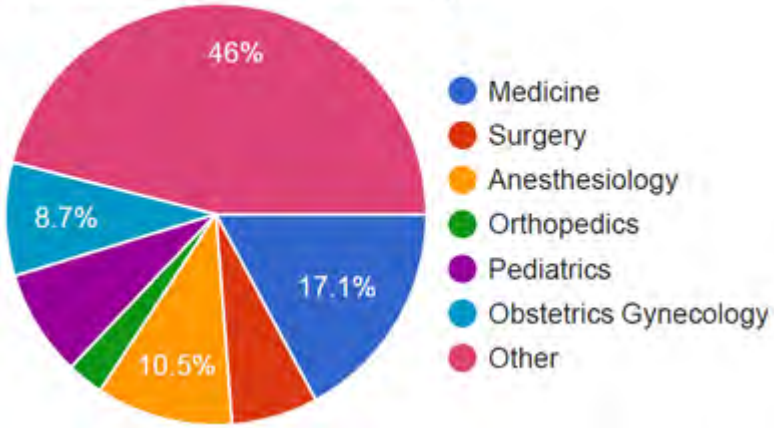
HOW DO WE IMPROVE OPIOID SAFETY ?



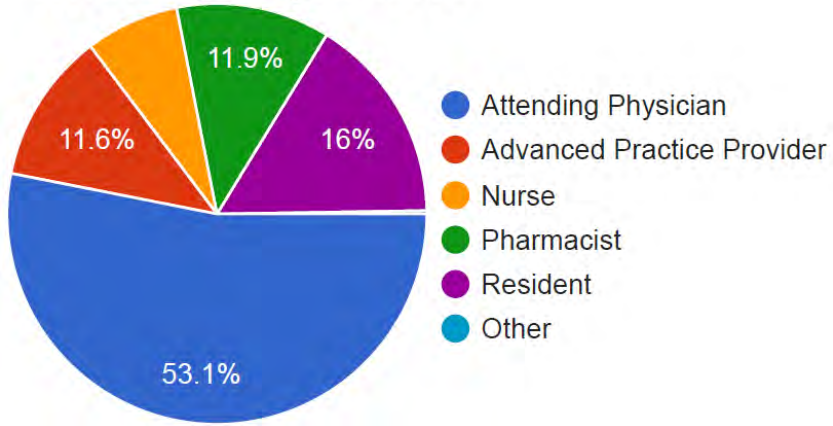
- Redefine patient pain expectations
- Engage patient and families about the harms of opioid therapy
- Increase prescriber awareness
- Implement a data-driven process for improving safe prescribing
- Work with rehabilitation programs and community outreach programs
- Change the health culture of safe and appropriate prescribing

PRACTITIONER PULSE CHECK ON OPIOIDS

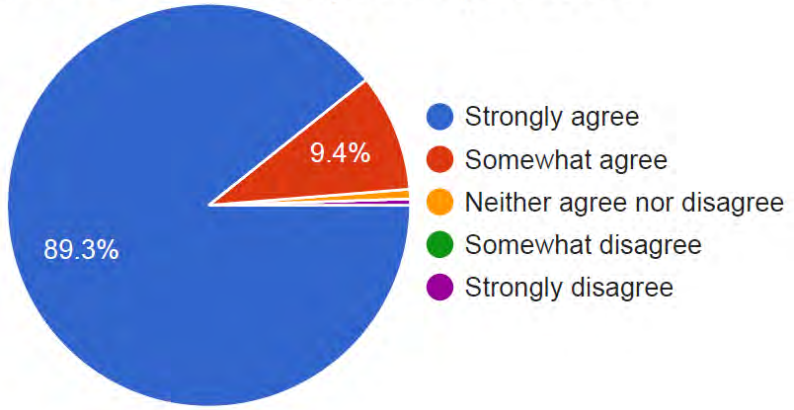
What is your specialty?



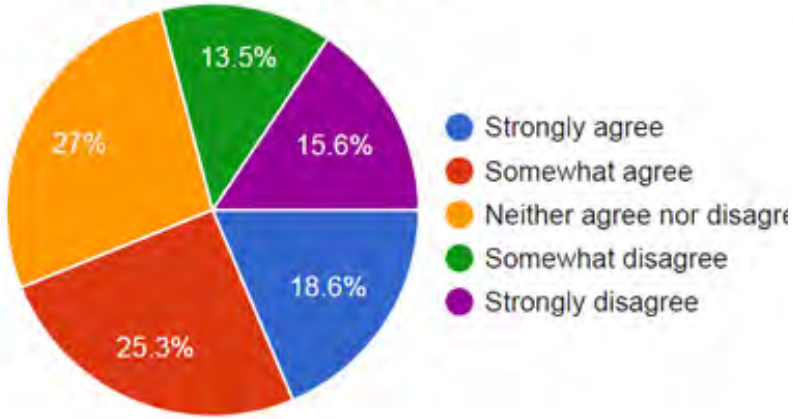
What is your job title?



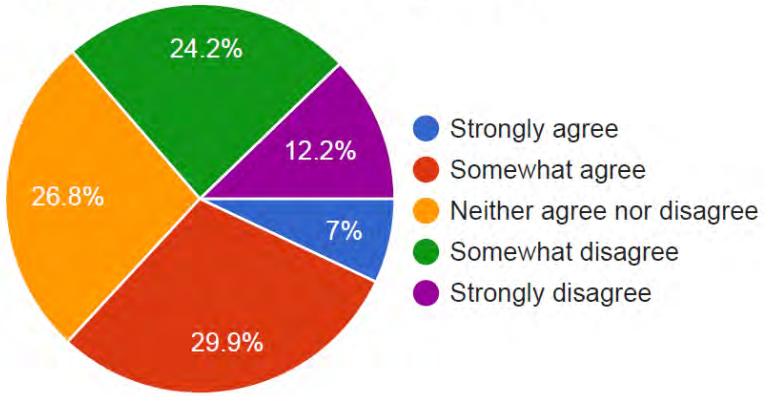
There is a national opioid epidemic.



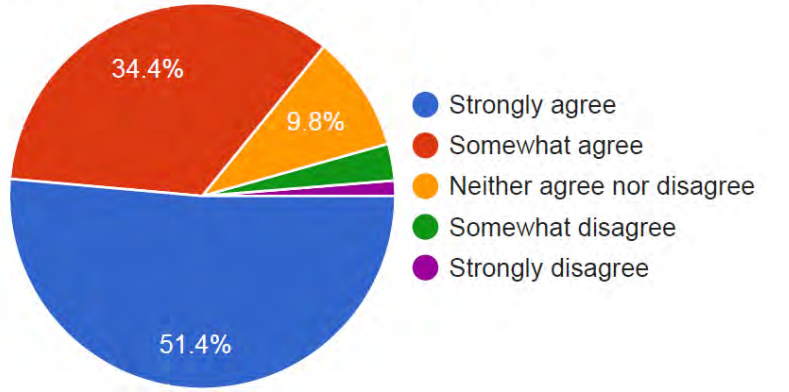
I feel pressured to prescribe opioids.



Most patients would be receptive to using non-opioids.

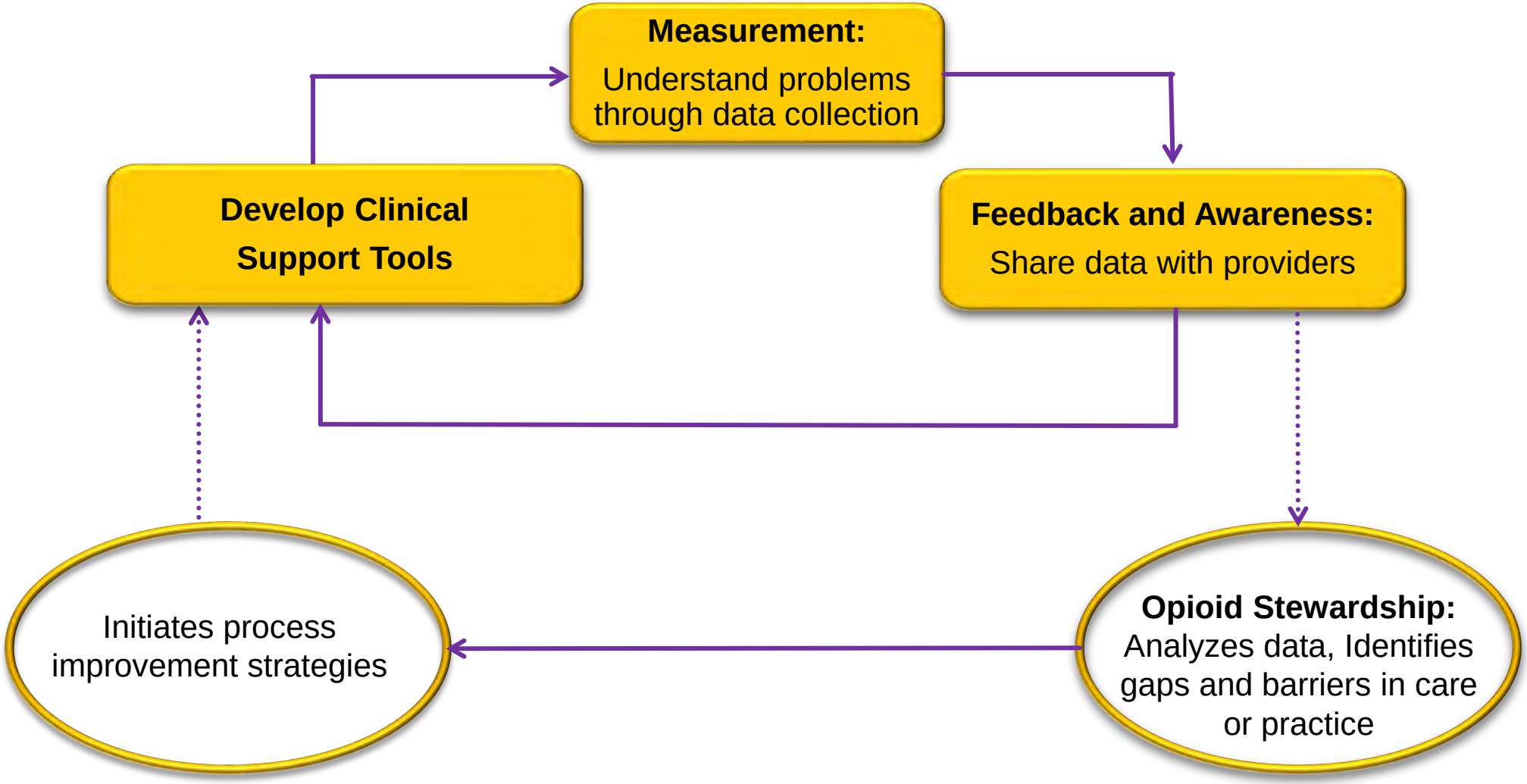


Patients have unrealistic expectations about pain control.

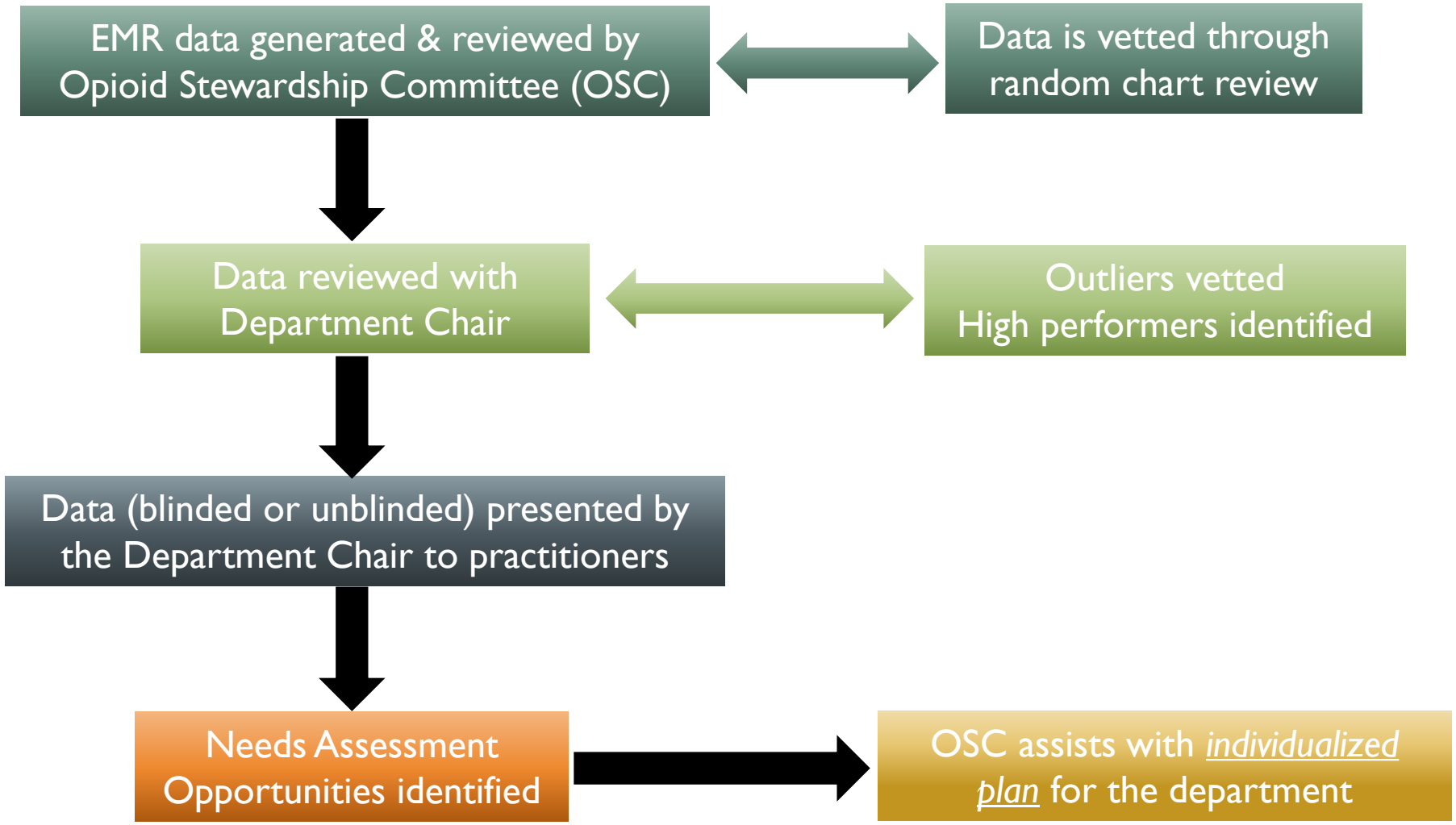


OPIOID STEWARDSHIP

PHILOSOPHY FOR PROCESS IMPROVEMENT

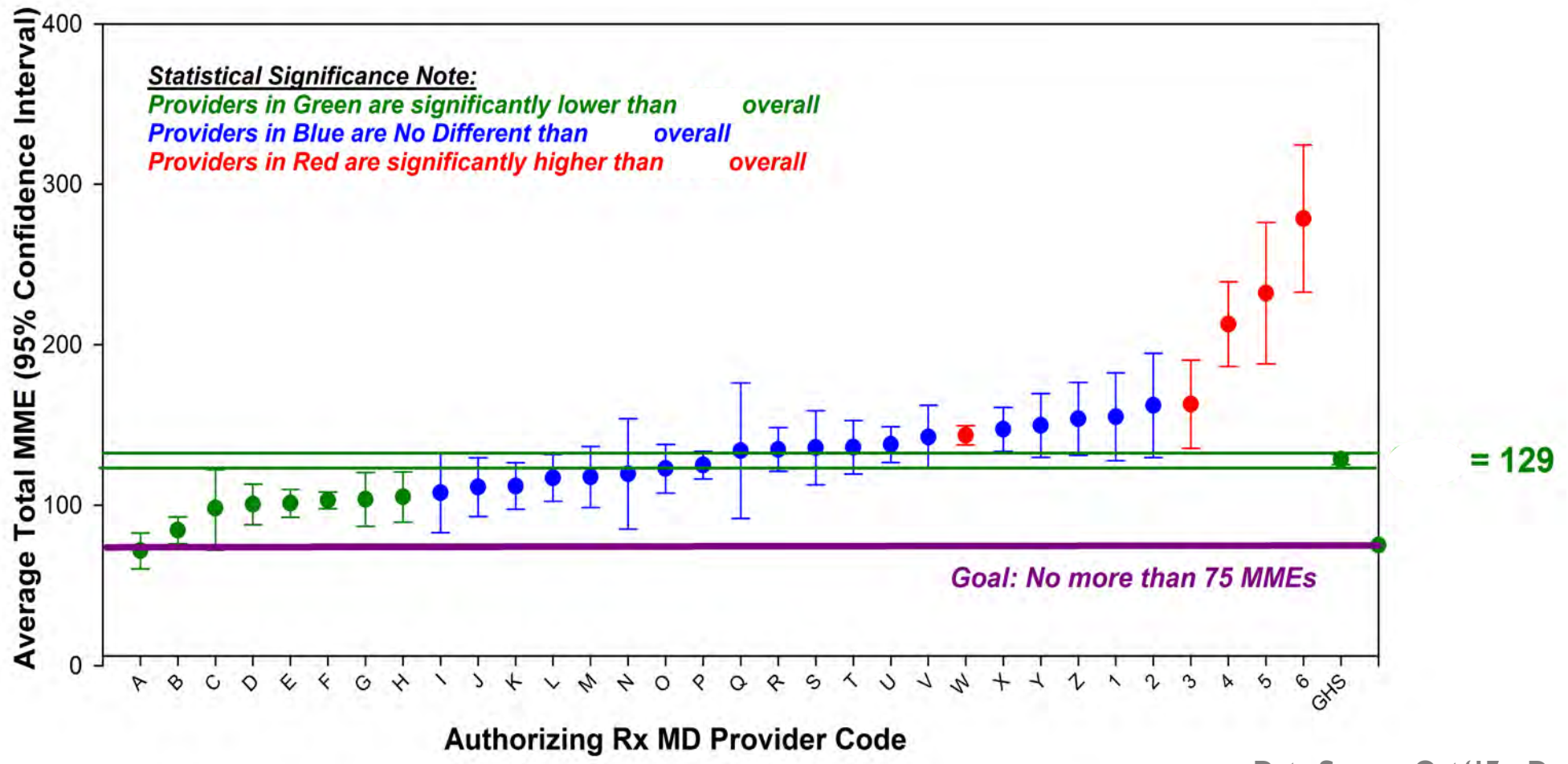


DATA-DRIVEN APPROACH TO CHANGE



Vaginal Deliveries:

Average Total Discharge MME by Provider (95% Confidence Interval)

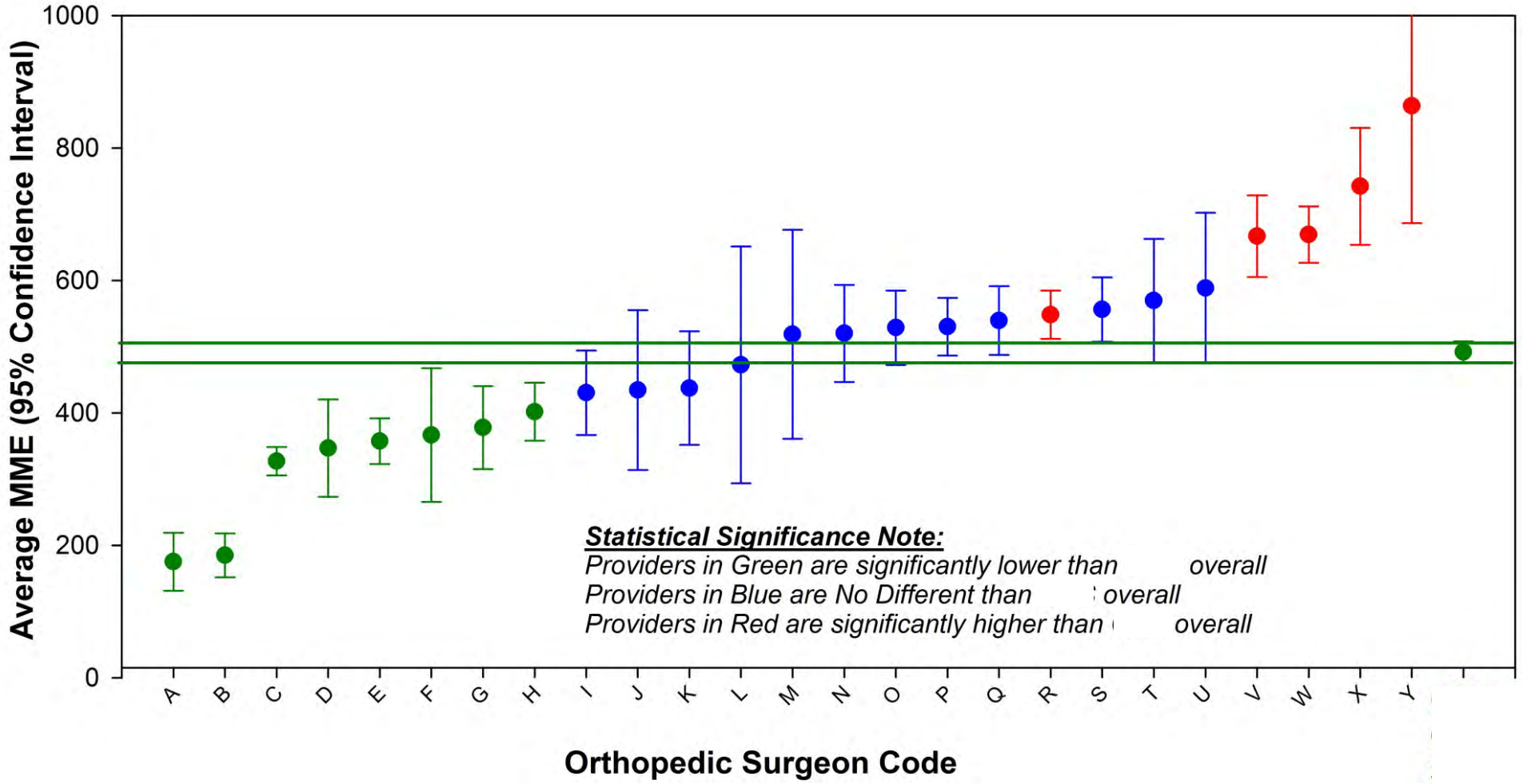


Data Source: Oct '17 – Dec '18

Note: Graph excludes MDs with < 20 Vaginal Delivery encounters with an opioid prescription at discharge

Ordering MD: Orthopedics

Average Total Discharge MME (95% Confidence Interval)

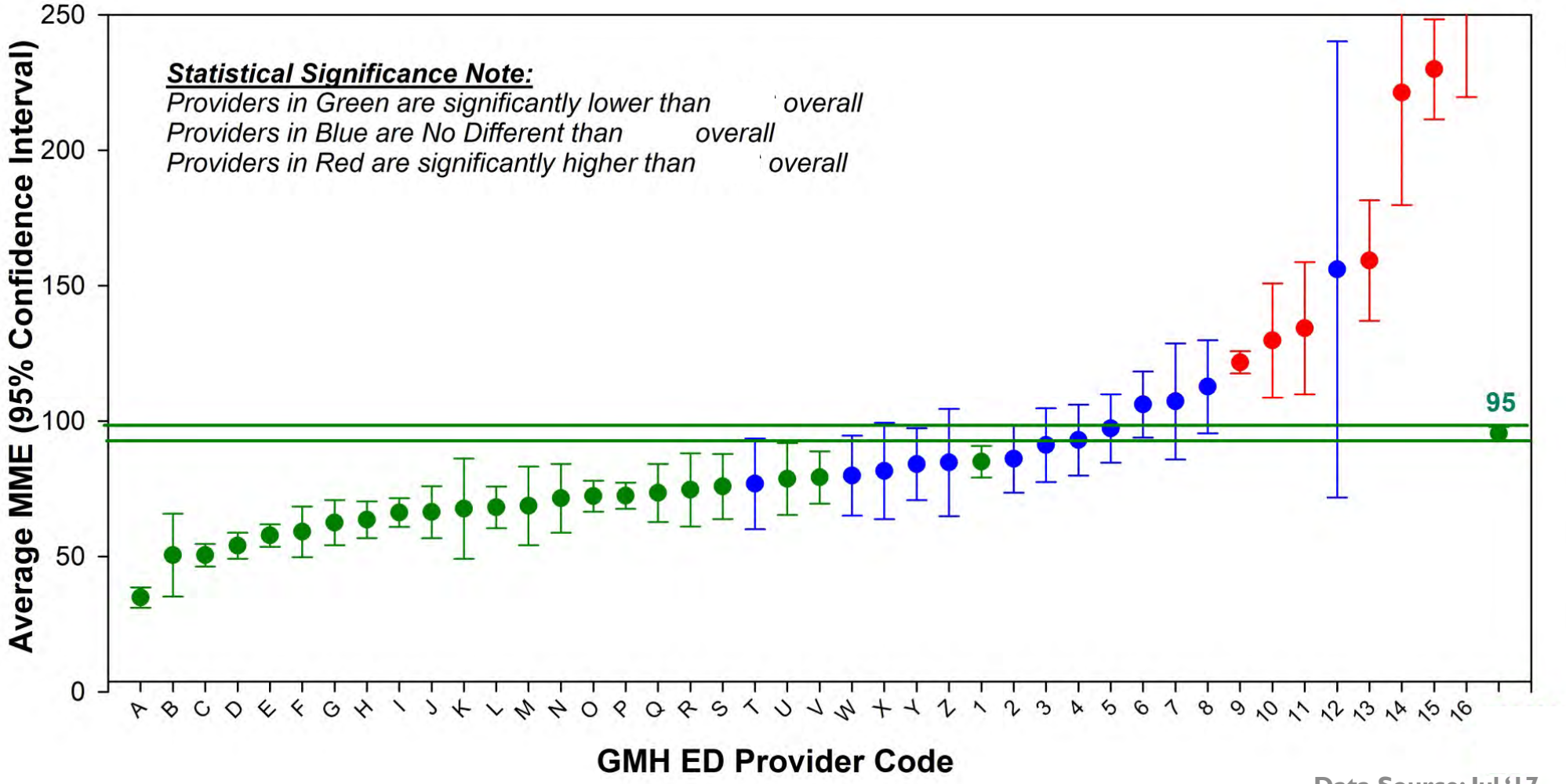


Data Source: Jan '17 – Jul '18

Note: Graph excludes surgeons with < 30 discharges with an opioid prescription

Emergency Departments:

Average Discharge MME (95% Confidence Interval)



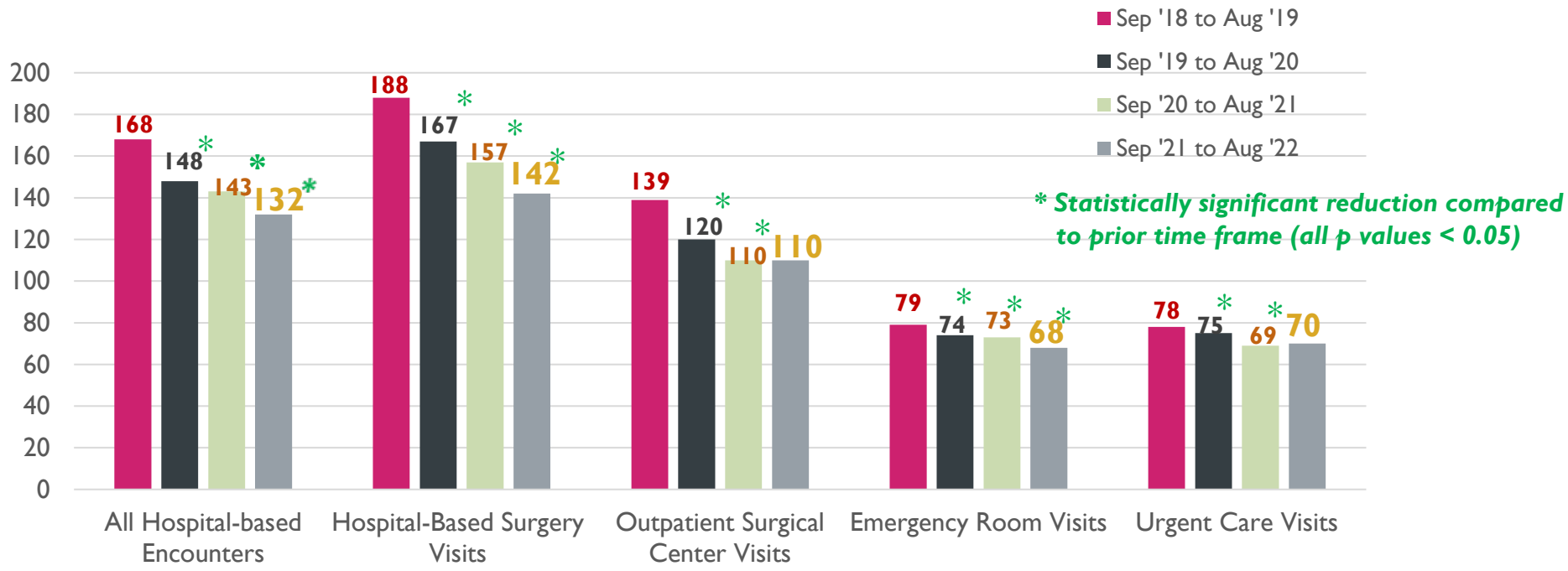
Data Source: Jul '17 – Jun '18

Note: Graph excludes MDs with < 50 ED discharges with an opioid prescription

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

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

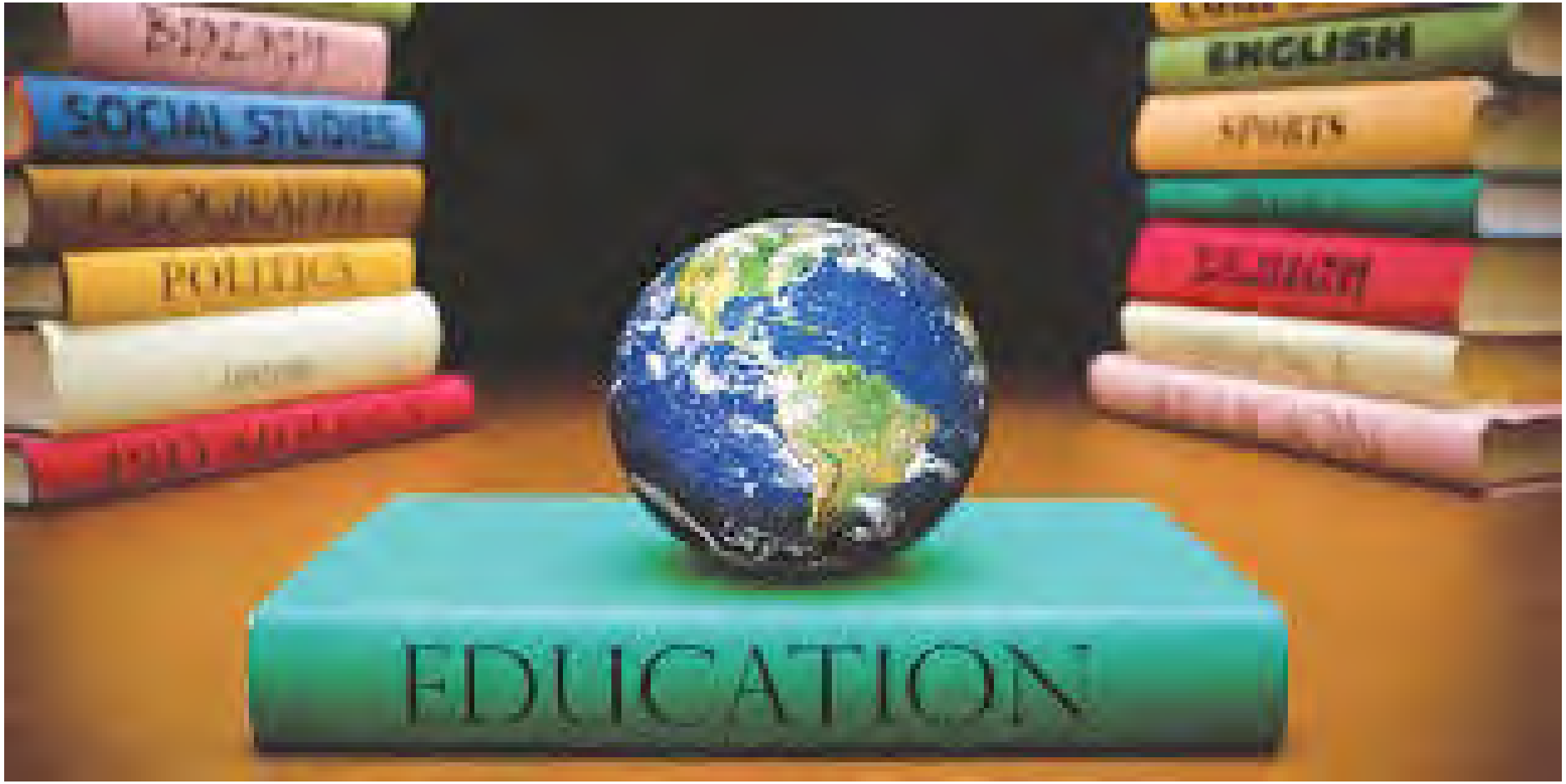
Average Total Discharge MME



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

STRATEGIES…

STRATEGY #1: EDUCATION... EDUCATION...



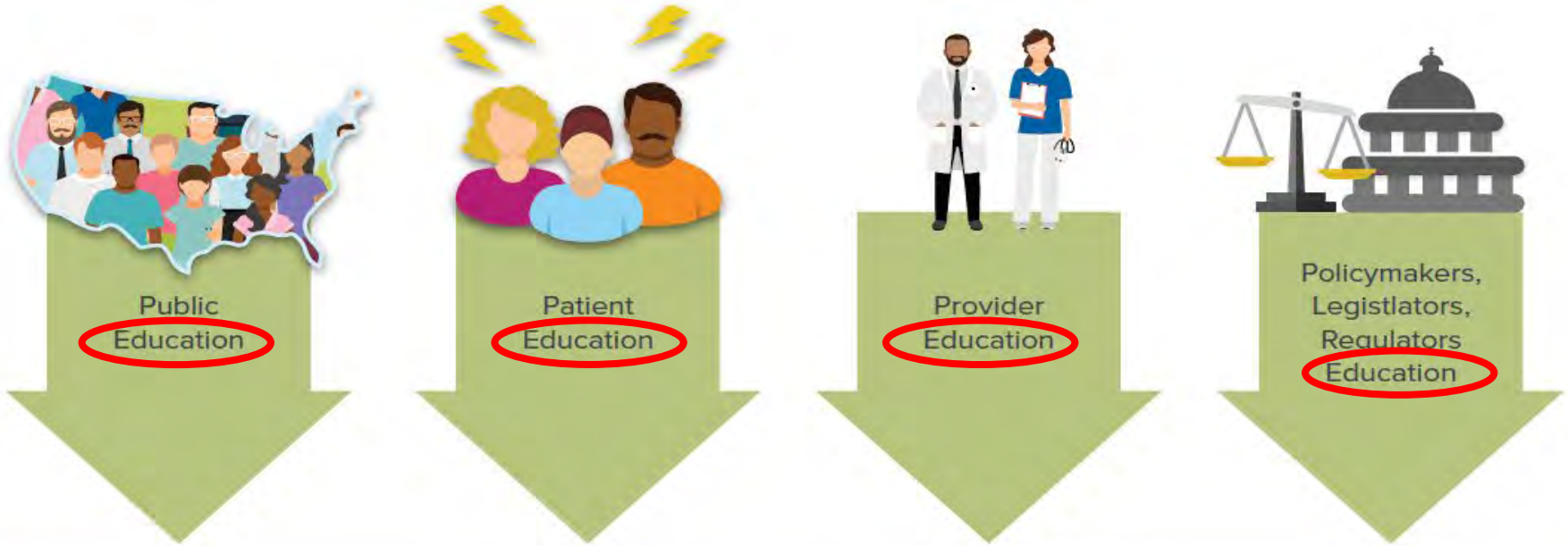


Figure 19: Education Is Critical to the Delivery of Effective, Patient-Centered Pain Care and Reducing the Risk Associated With Prescription Opioids

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

PATIENT EDUCATION

Prescription Opioids: What You Need to Know

You have been prescribed an opioid pain medicine, also called a narcotic. What follows is important safety information and common questions people have about opioids.

What are opioids?
Examples are hydrocodone, oxycodone and tramadol. Opioids come in different forms, but have the same effects and can harm you.

What are side effects?
With opioids, a fine line exists between pain control and dangerous side effects.

Common side effects may include the following:
- Constipation
- Confusion
- Dry mouth
- Depression
- Upset stomach
- Dizziness

Note: Opioids can reduce your ability to learn new things. It also can hinder your ability to drive or operate machines.

Serious side effects of opioid use are addiction, overdose and even death.

How can I avoid serious side effects?
- Use the lowest dose of opioids for the shortest time.
- Use opioids as prescribed.
- Avoid alcohol when taking opioids.
- Do not take nerve pills, muscle relaxers or sleeping pills. Using these with opioids can cause you to stop breathing.
- NEVER take opioids that are not yours. Pills may look the same but contain a different type of opioid and in a higher amount.

What are signs of an overdose?
Stop taking the drug, seek medical help at once or call 911 if you have ANY of the following:
- Garbled speech
- Heavy or unusual snoring
- Extreme tiredness
- Hallucinations (seeing things that are not there)
- Severe dizziness
- Slow heart rate
- Purple-colored lips or fingers

What are options to taking opioids?
Ask your provider about other ways to manage your pain. These options may work better—and carry fewer risks.

Here are some options:
- Other pain relievers approved by your doctor
- Exercise
- Physical therapy
- Counseling to help avoid triggers that cause pain and stress

How can I keep my family safe?
- Keep opioids locked up and out of children's reach.
- Do not leave loose pills out.
- Keep opioids in their original bottle. Monitor pill numbers.
- NEVER share or give away opioids.

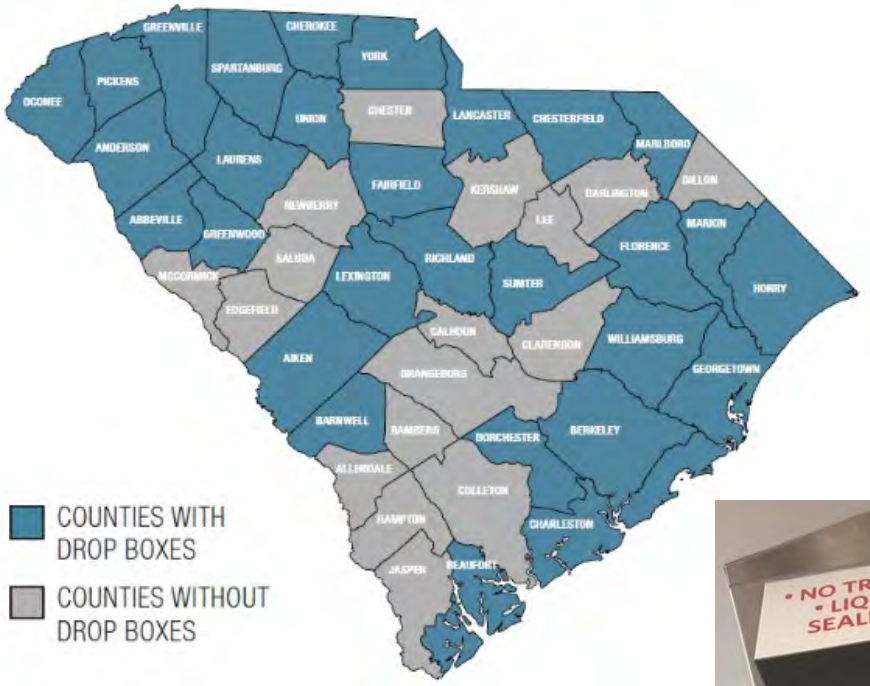
How can I safely get rid of expired or unused medicine?
The best way to dispose of medicine is in a secure drop box. You can find medicine drop boxes at these locations:

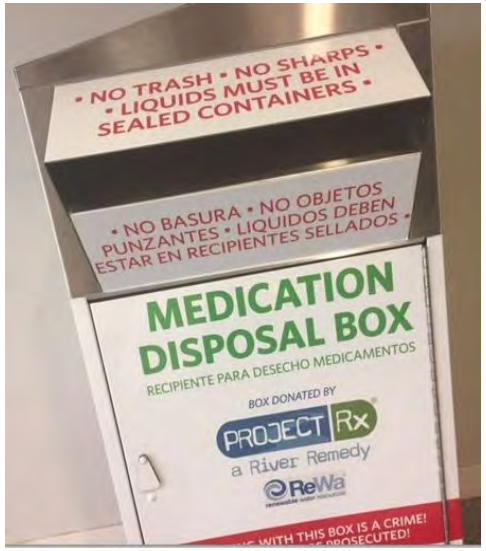
Greenville County
- Greenville County Sheriff's Office, *4 McGee St., Greenville*
- Greenville Memorial Hospital, *701 Grove Road, Greenville*
- Greer Memorial Hospital, *830 S. Buncombe Road, Greer*
- Greer Police Department, *102 S. Main St., Greer*
- Hillcrest Memorial Hospital, *729 SE Main St., Simpsonville*
- Travelers Rest Police Department, *6711 State Park Road, Travelers Rest*

Laurens County
Laurens County Memorial Hospital, *22725 Highway 76 East, Clinton*

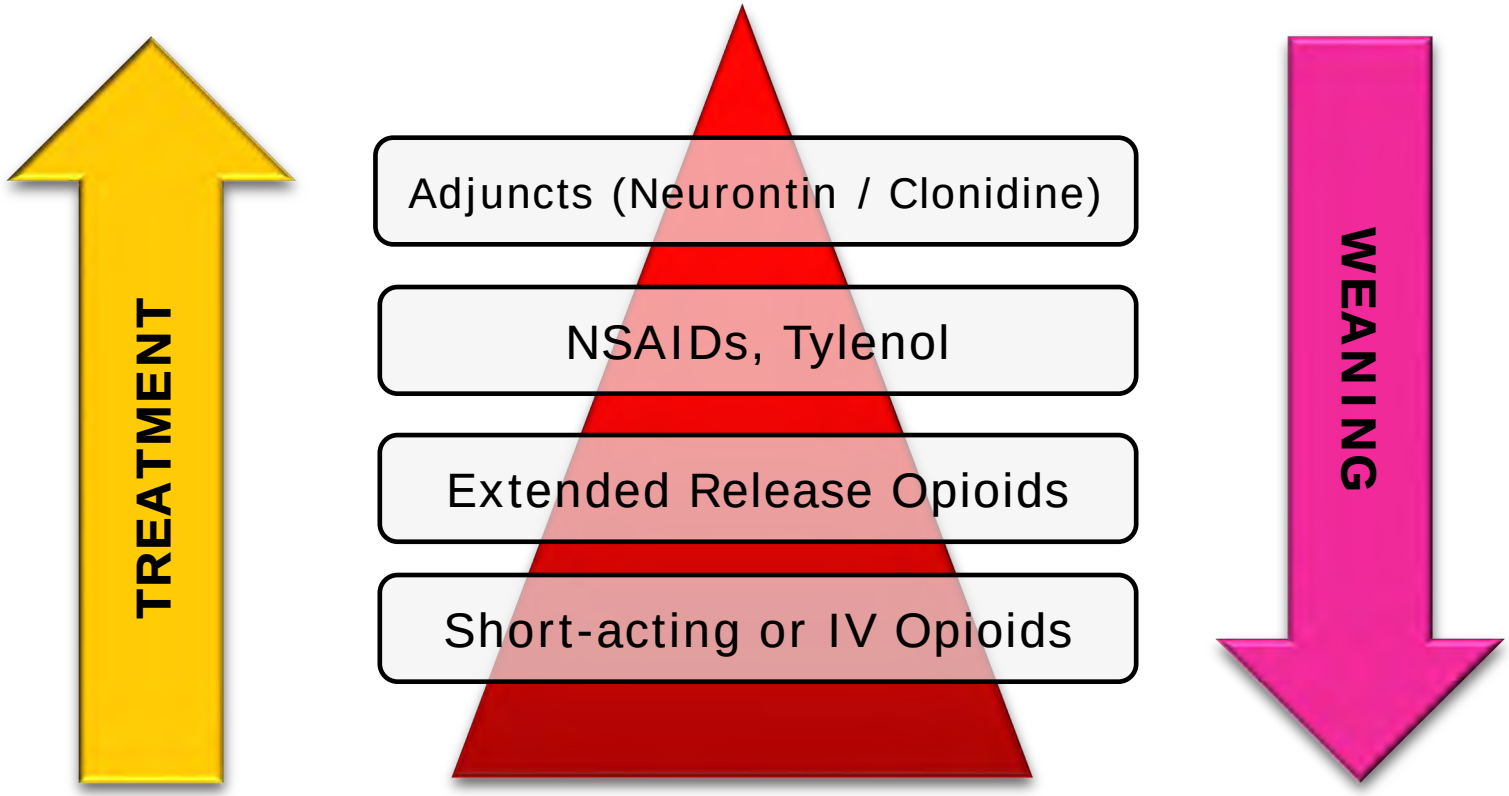
Oconee County
Oconee Memorial Hospital, *298 Memorial Drive, Seneca*

What are additional resources I can consult?
- Contact your doctor or pharmacist with opioid-related questions
- Visit www.cdc.gov/drugoverdose to learn the risks of opioid abuse and overdose
- Visit FAVOR of Greenville for information on its unique recovery and rehabilitation programs: https://favorgreenville.org
- Visit the Phoenix Center to learn about programs that treat substance abuse disorders: http://www.phoenixcenter.org

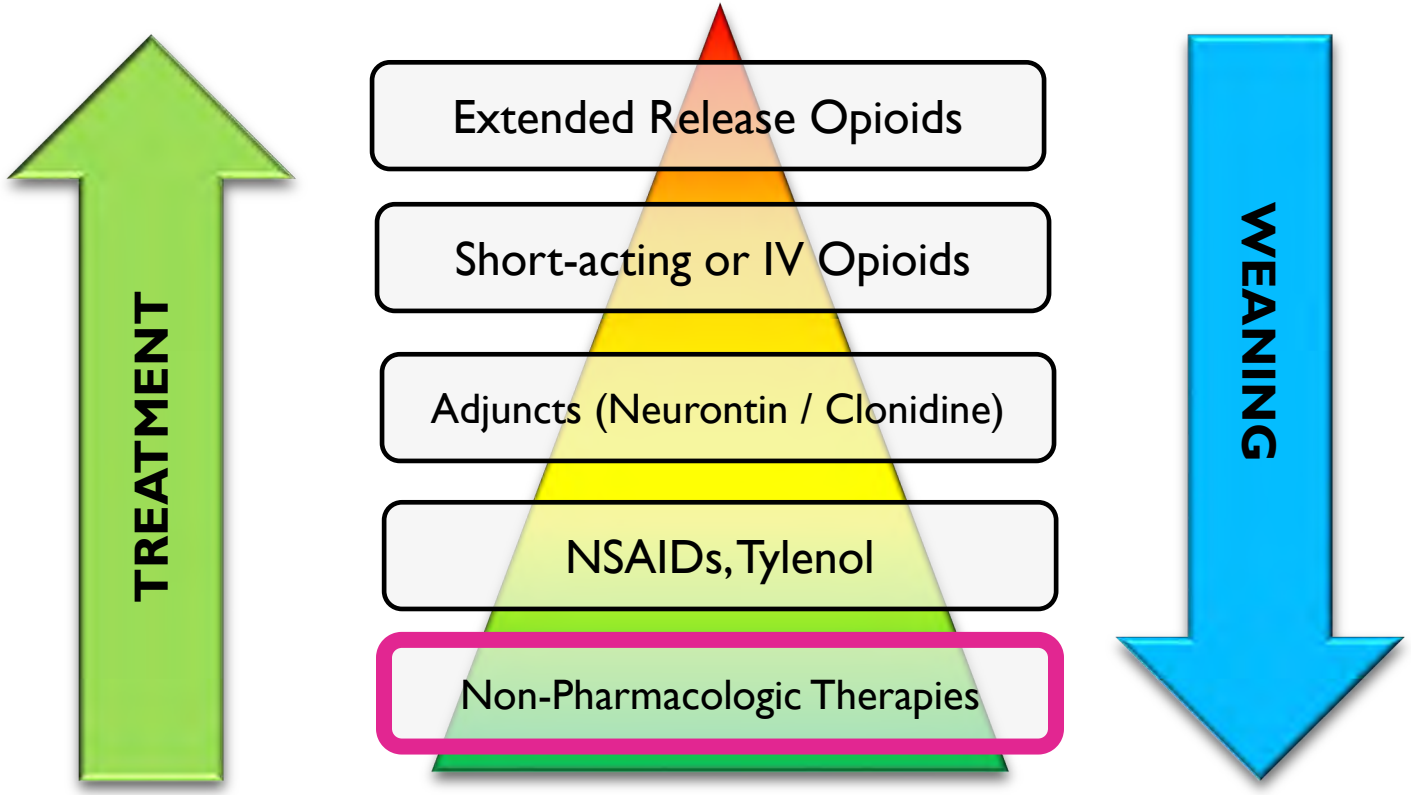




CULTURE CHANGE – OLD PRACTICE

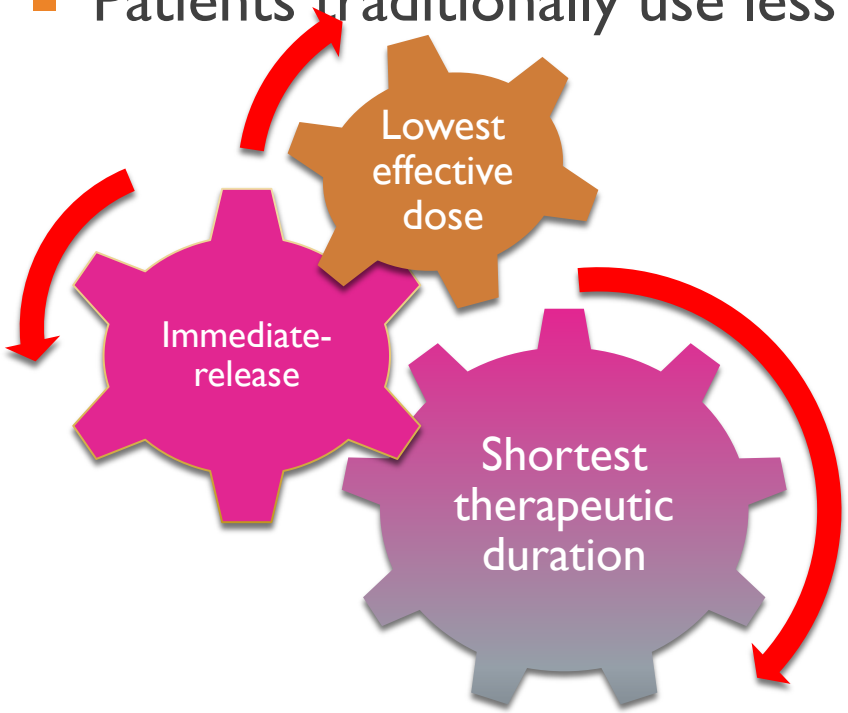


CULTURE CHANGE – CURRENT PRACTICE



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…
>7 days rarely needed

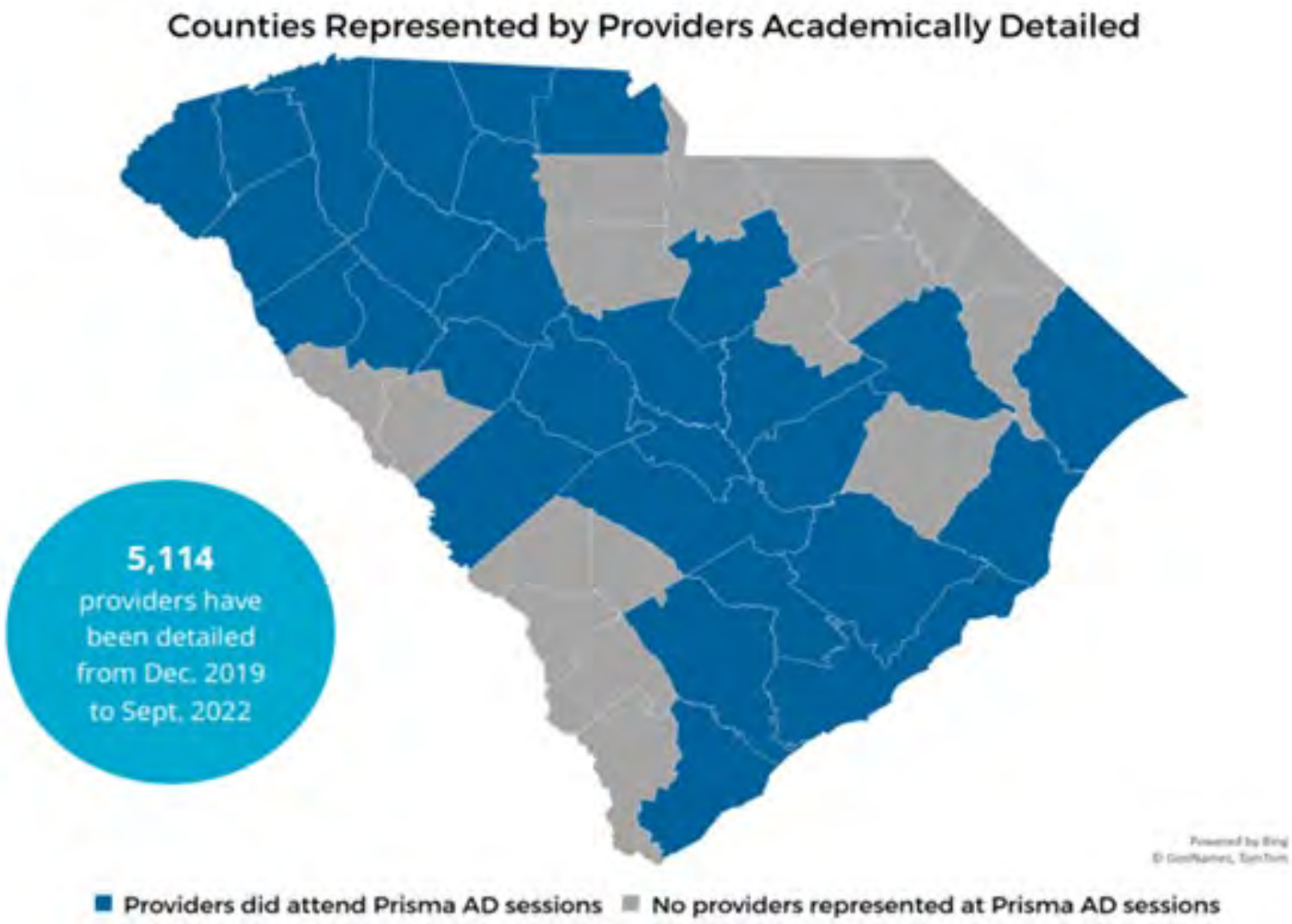
Practice Changes:

Re-evaluation of patient

Re-engagement in pain management plan

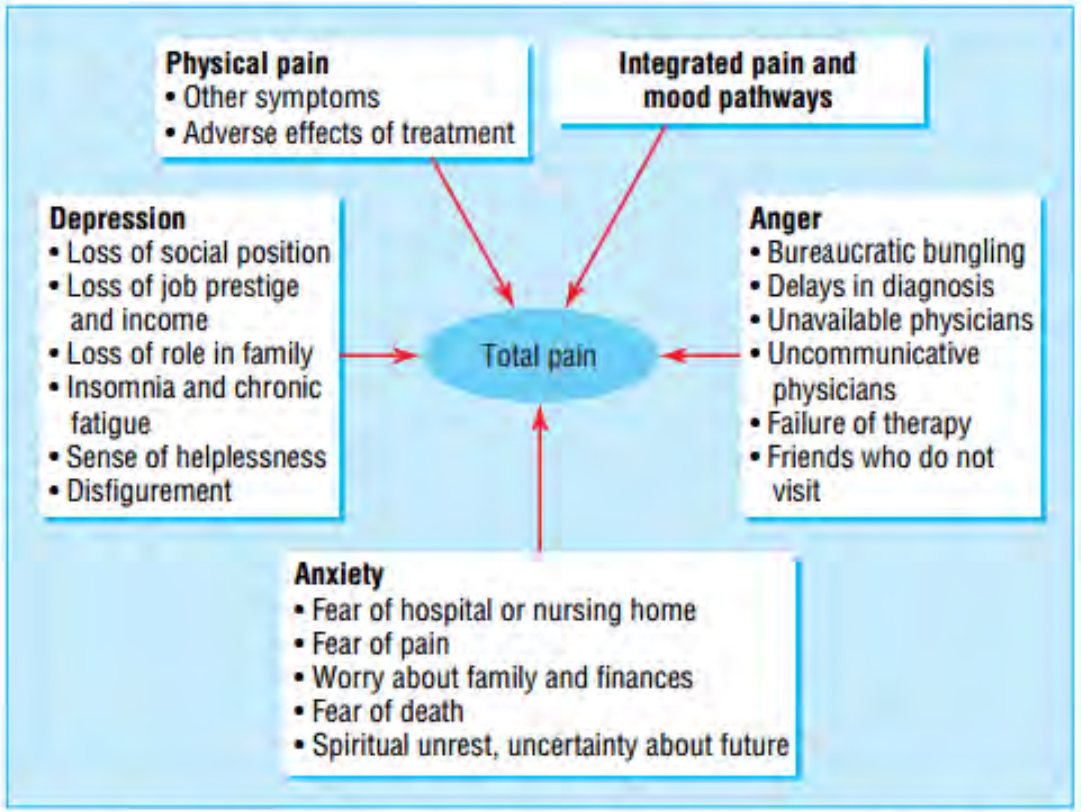
N Engl J Med 2016; 374:1501-1504
CDC Guideline for Prescribing Opioids for Chronic Pain; 2016.
http://turnthetiderx.org/treatment/

ACADEMIC DETAILING

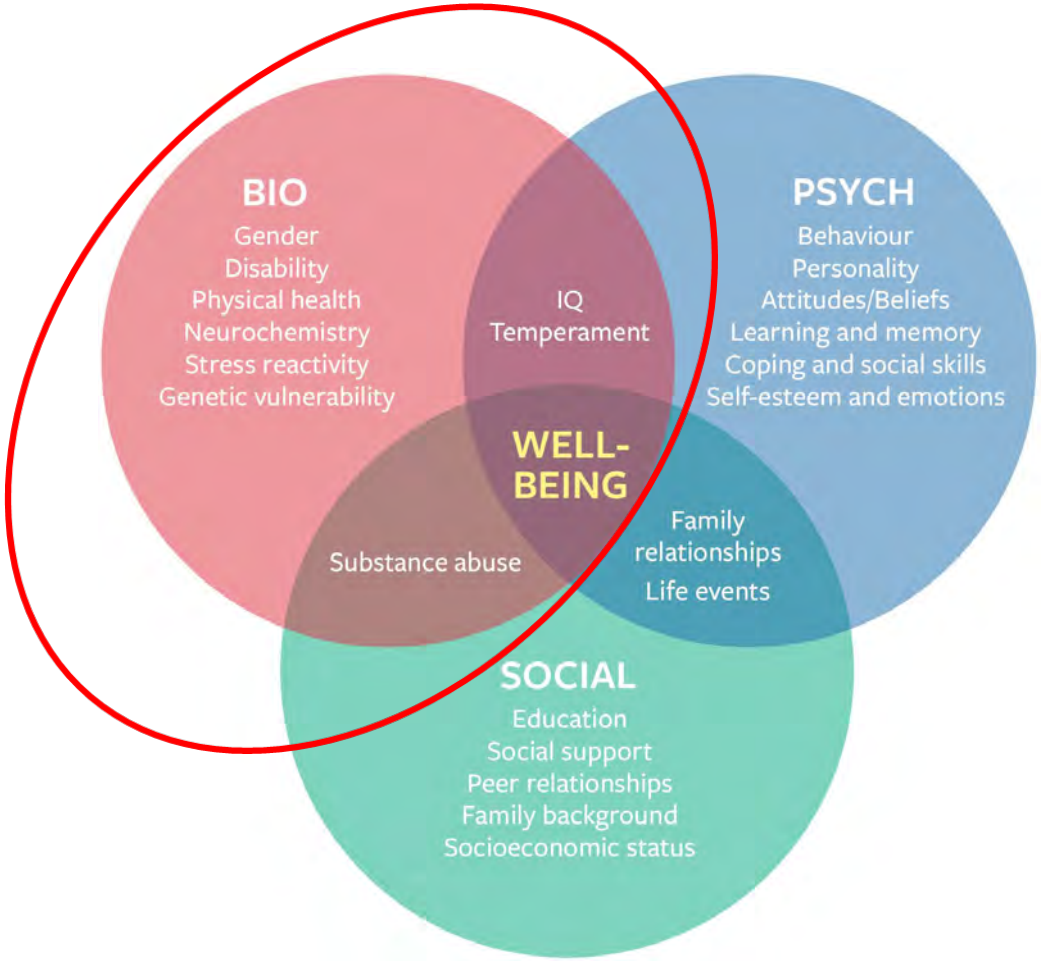


STRATEGY #2: UNDERSTAND KEY CONCEPTS

"Total Pain"



Factors affecting patient's perceptions of pain (adapted from Twycross RG, Lack SA, *Therapeutics in terminal disease*, London: Pitman, 1984)



"Burst the biomedical bubble!"

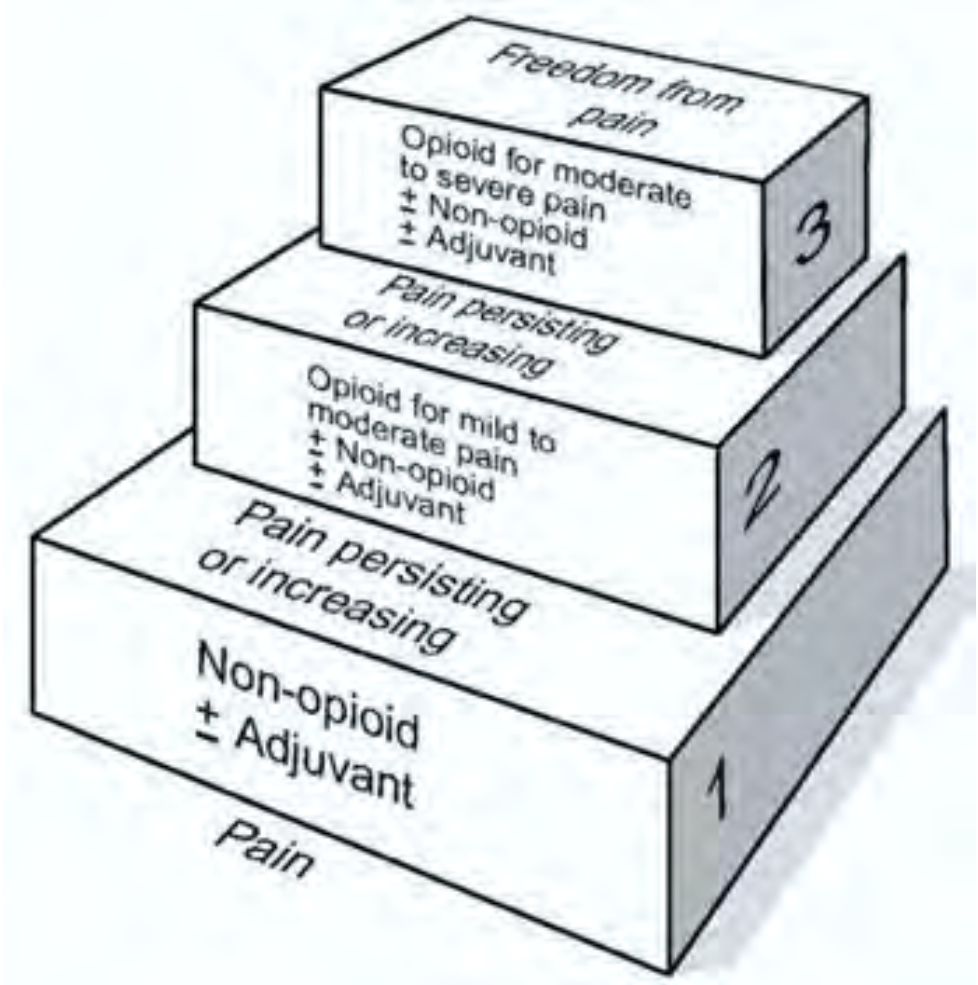
Karran, Emma L.; Grant, Ashley R.; Moseley, G. Lorimer. PAIN 161(11):p 2476-2493, November 2020.*

FOCUS ON THE POINT !

- Appropriate assessment of marginalization
- "Equity-Oriented Care"
- Harm reduction
- Understanding neurobiology (starting to)
- Financial Support
- Individual bias
- Ask the "hard" question!

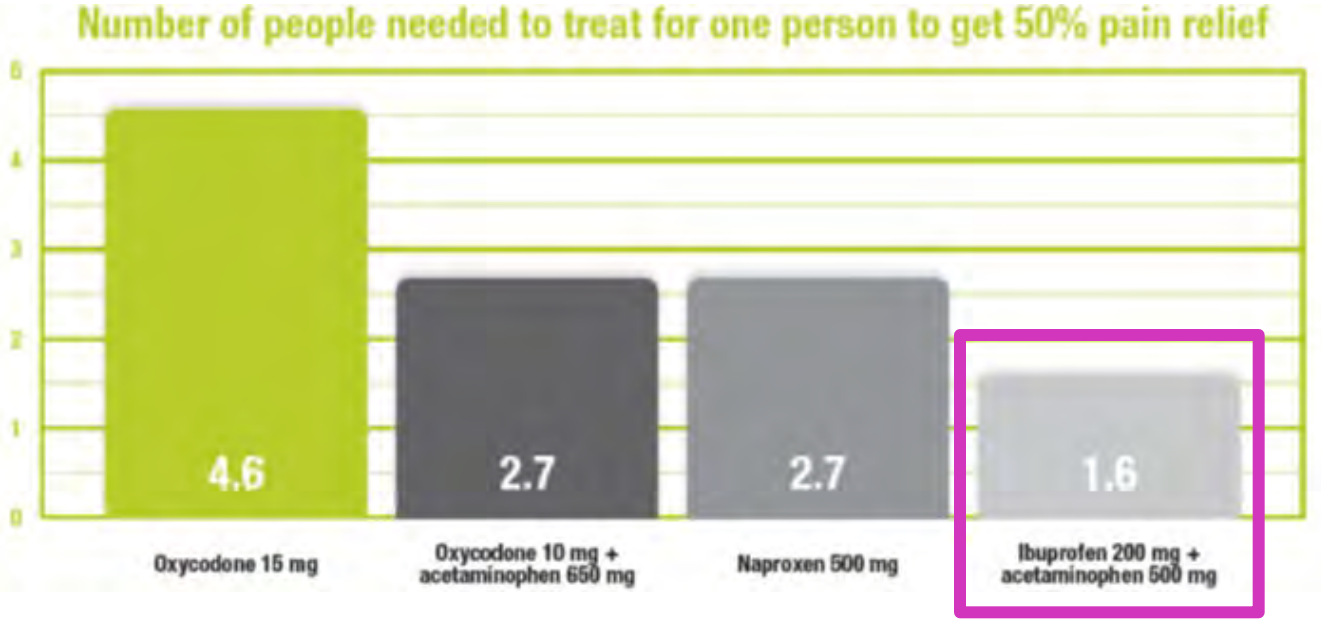
CRAIG KD, HOLMES C, HUDSPITH M, MOOR G, MOOSA-MITHA M, VARCOE C, WALLACE B. PAIN. 2020 FEB;161(2):261-265.

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



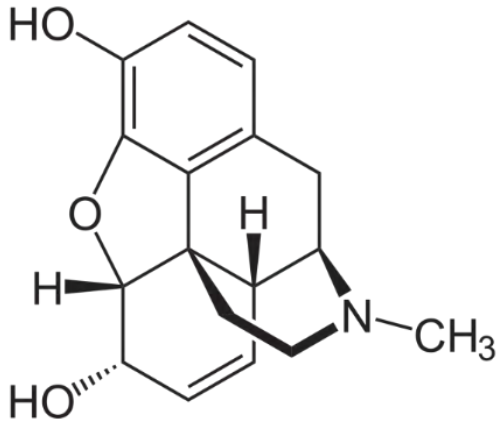
COCHRAN.ORG, 2014
BANDOLIER, 2007

MAGIC IN A BOTTLE !!

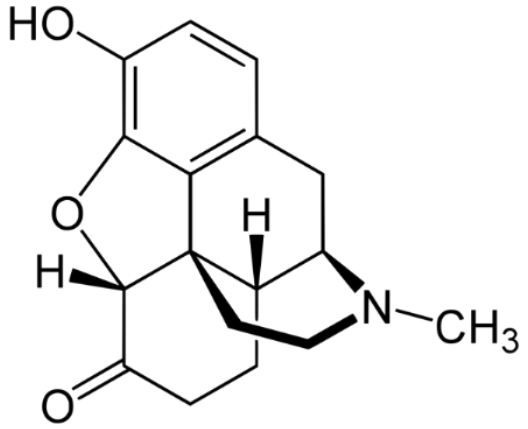
AND

VS

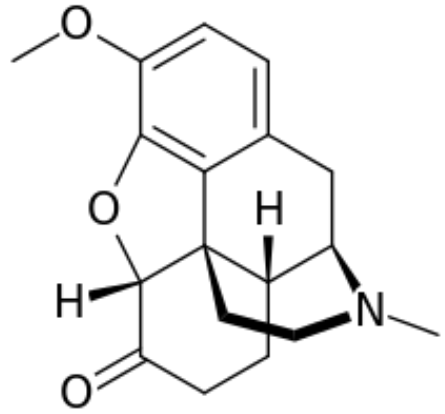
THE WHY BEHIND THE REALITY



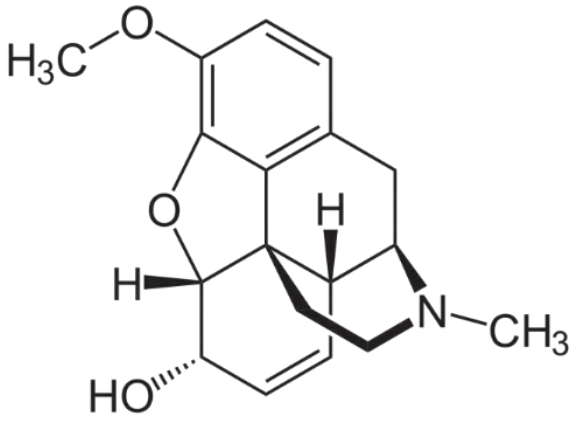
morphine



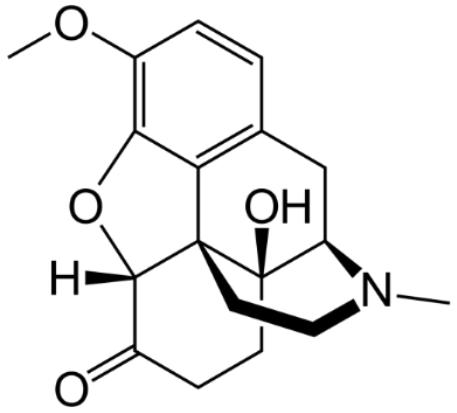
hydrocodone



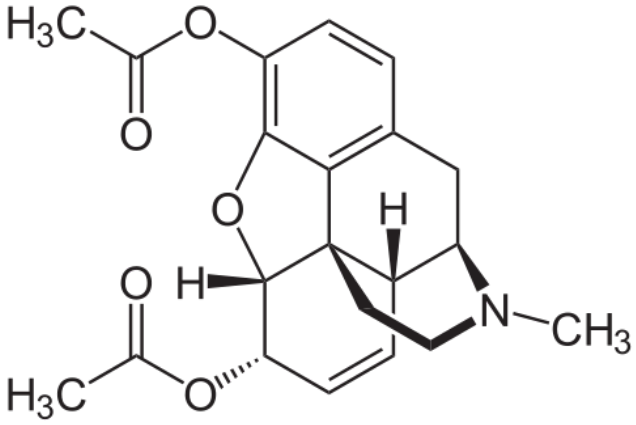
hydromorphone



codeine

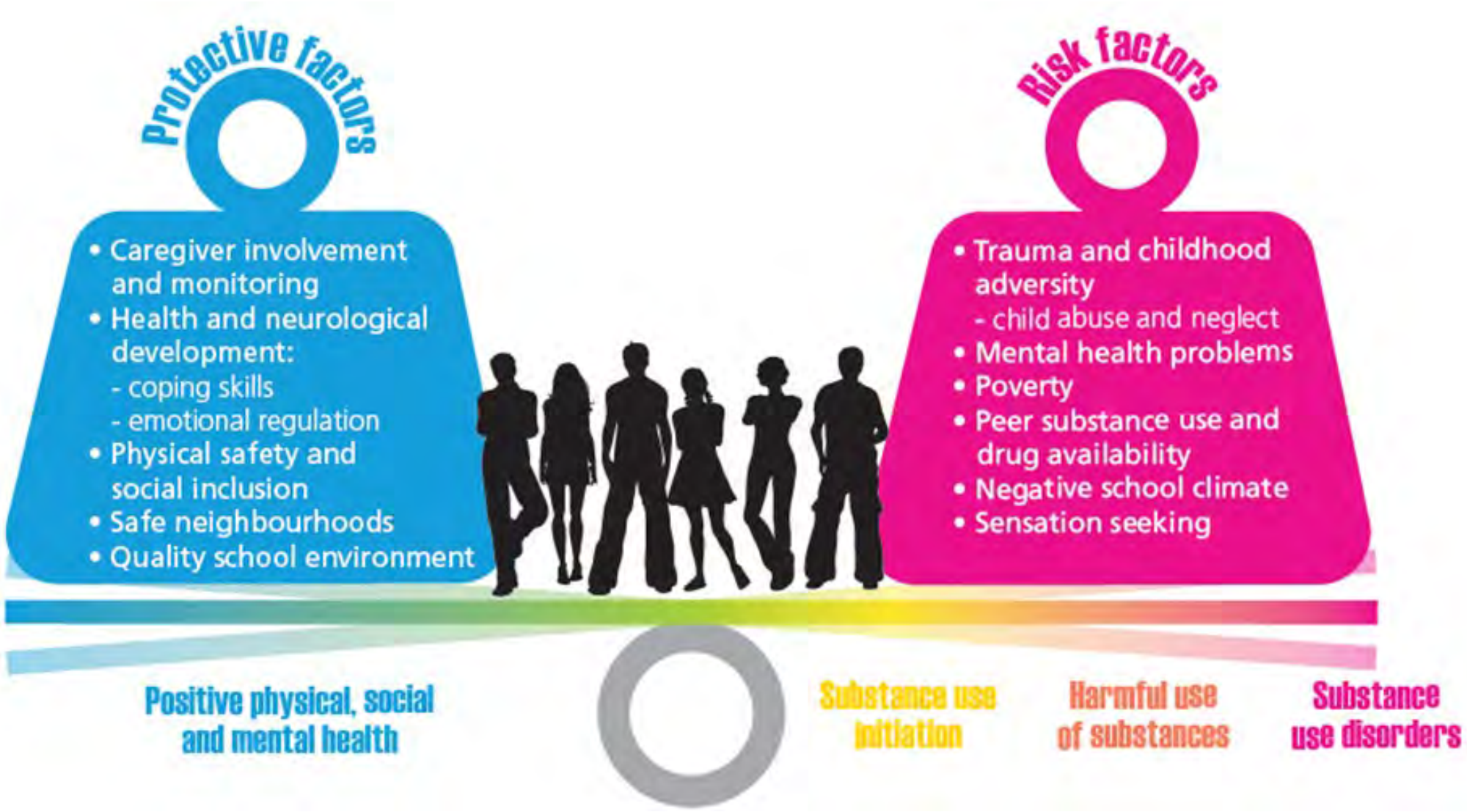


oxycodone

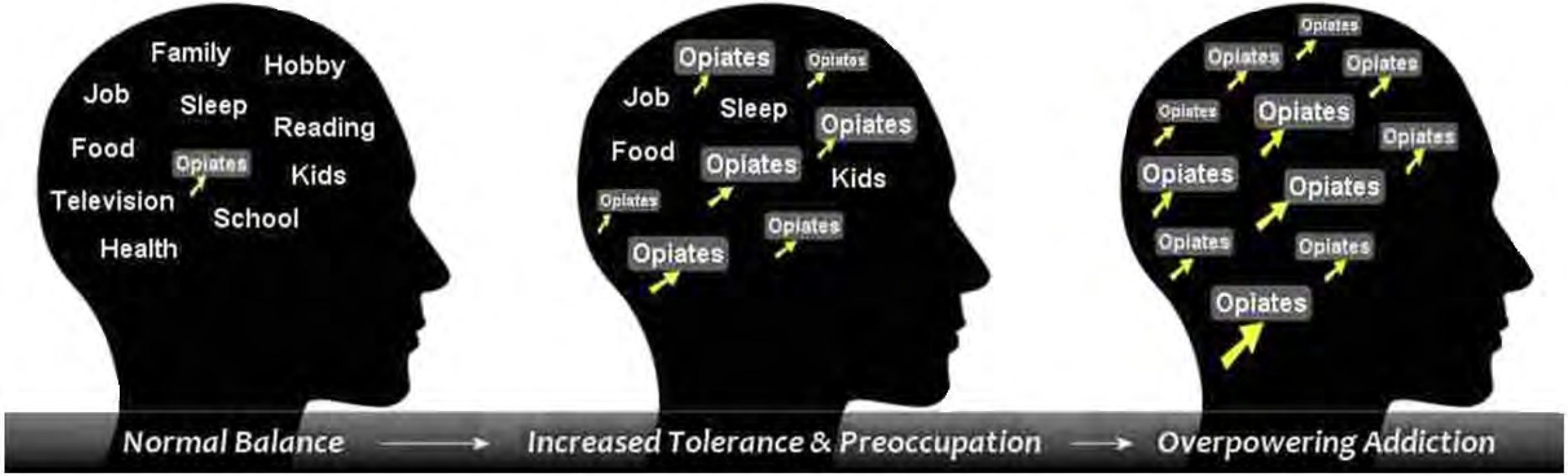


heroin

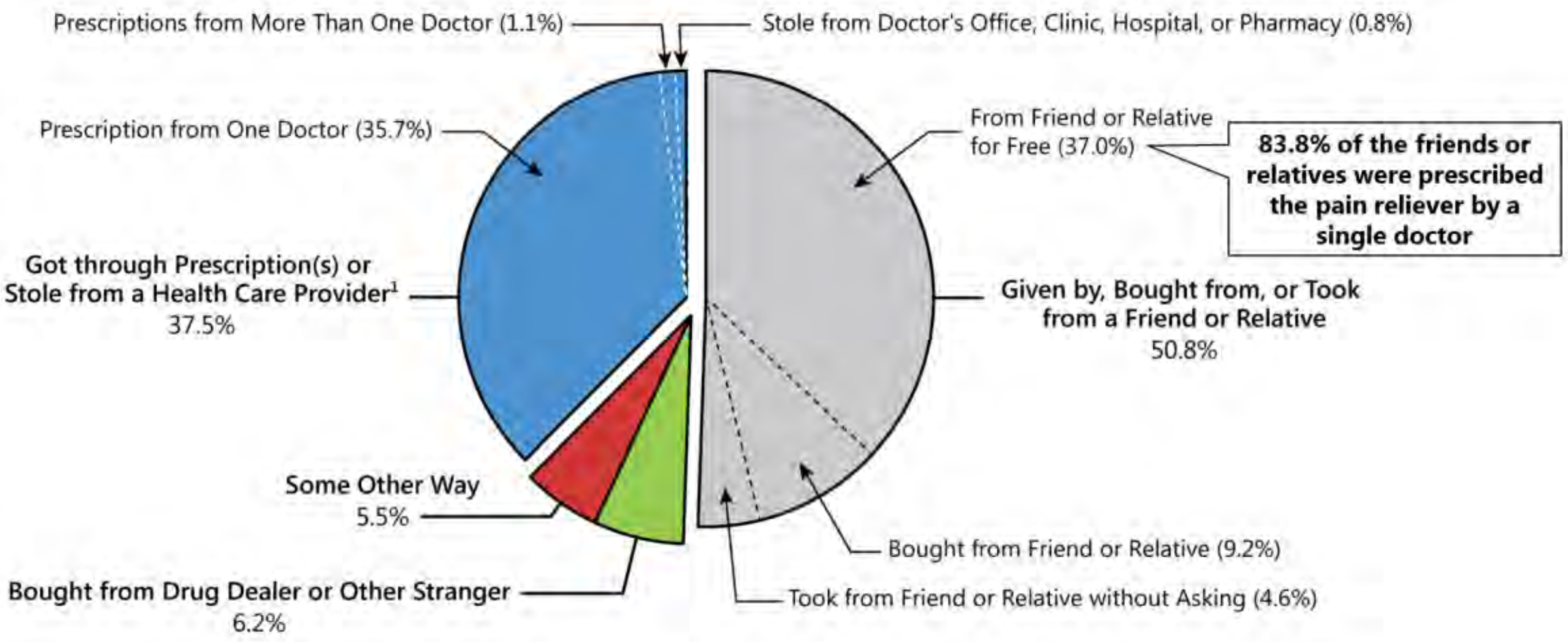
PROTECTIVE RISK FACTORS FOR DRUG ABUSE



PROGRESSION TO ADDICTION



SOURCE OF OPIOID MISUSE



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

WHERE TO START?

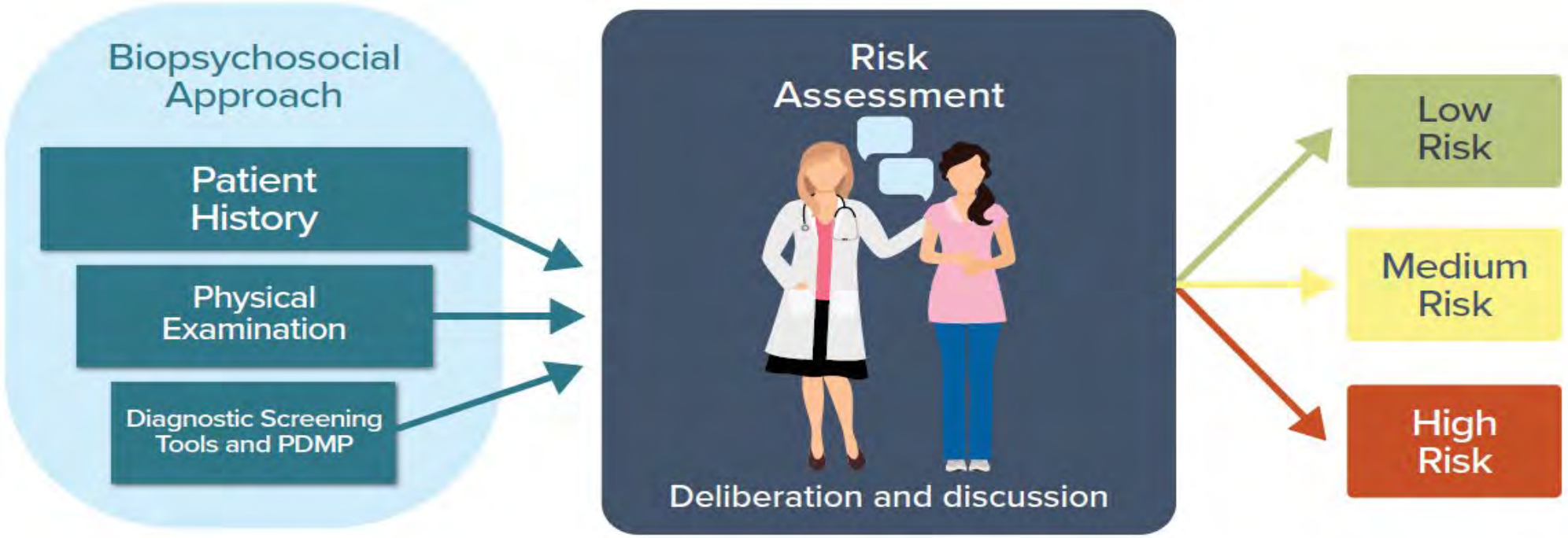


Figure 17: A Risk Assessment Is Critical to Providing the Best Possible Patient-Centered Outcome While Mitigating Unnecessary Opioid Exposure

Pain Medicine, Volume 21, Issue 1, January 2020

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.

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

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

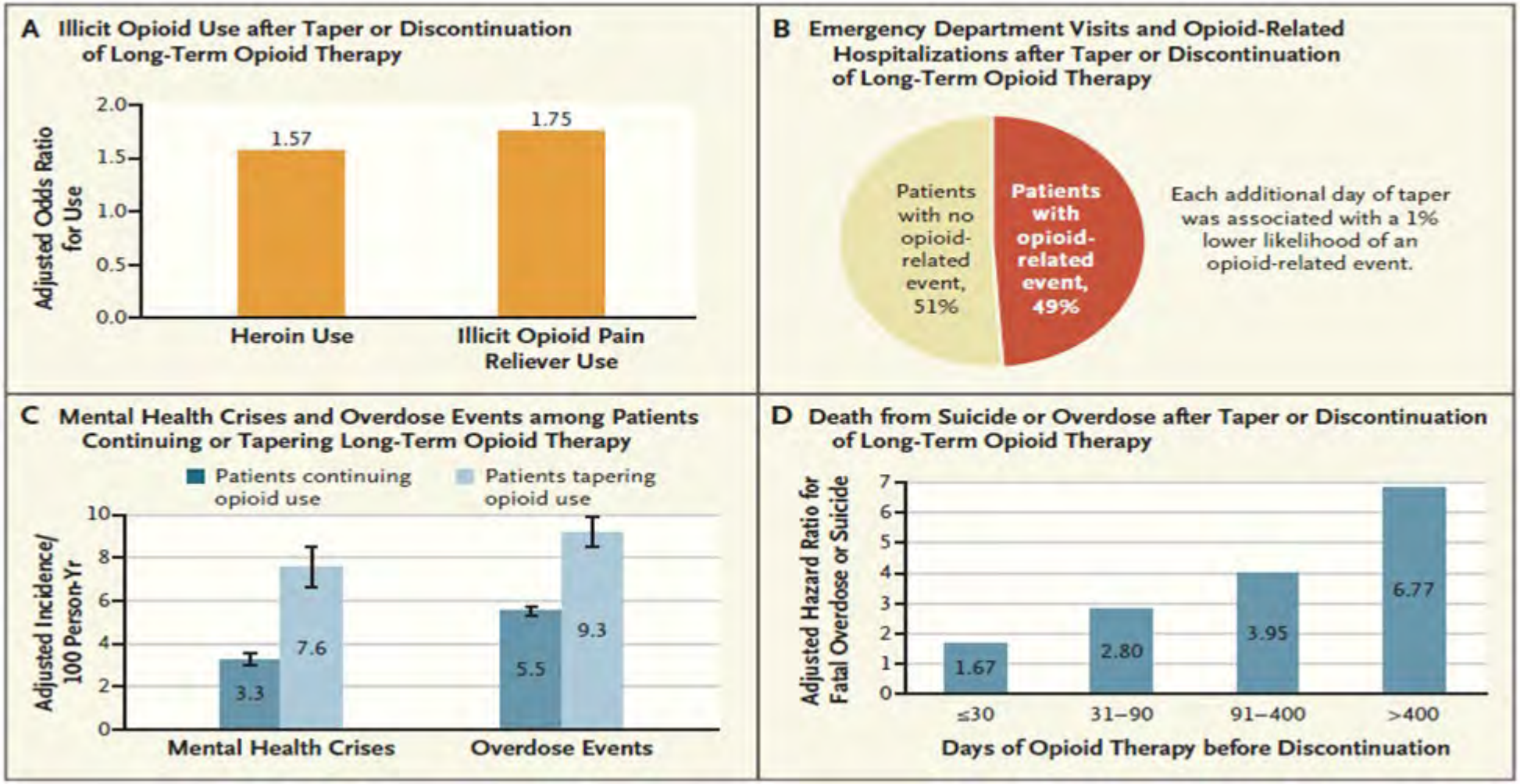
HOW TO MANAGE?...LEGACY PTS

- 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

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

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

NEED FOR OPIOIDS

“Opiophobia”

“No pain left behind”

Responsible Opioid Pharmacotherapy

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 expectation
- Consider alternative therapies prior to prescribing opioid
- 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

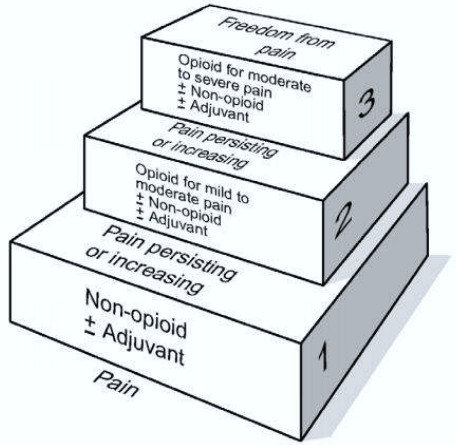
HOW IT ALL STARTED…

HIGH USE AREAS - PRODUCT AVAILABILITY

- Anesthesia narcotic packs

2016	2017	2018	2019
Ketamine 50mg	Ketamine 50mg	Ketamine 30mg	Ketamine 30mg
Hydromorphone 4mg	Hydromorphone 2mg	Hydromorphone 1mg	Hydromorphone 0.5mg syringe
Fentanyl (2) X 250mcg vials	Fentanyl (2) X 100mcg vials	Fentanyl 100mcg vial	Fentanyl 100mcg vial
Fentanyl (2) X 100mcg vials	Midazolam 5mg vial	Midazolam 2mg syringe	Midazolam 2mg syringe
Midazolam (2) X 5mg vials			

- Emergency Room standardization
  - Reinforce WHO recommendations on pain
  - Standardize to lowest dosage forms available



LOCAL, STATE, AND FEDERAL OUTREACH

- E.C.H.O. Empowering Communities for Health Outcomes
- Speaking Opportunities
  - Prisma Health Grand Rounds
  - SC Birth Outcomes Initiative
  - SC Medical Association
  - American Dental Association
  - Governor's Opioid Summit
- Aligning with state political partners
  - Reports sent to Senator Graham and Governor McMaster outlining our ongoing opioid stewardship efforts
  - Research grants establishing best practices for SC through DAODAS
- National efforts:
  - Prisma Health Upstate efforts incorporated into the US Senate Congressional Testimony on Combating the US Opioid crisis

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.

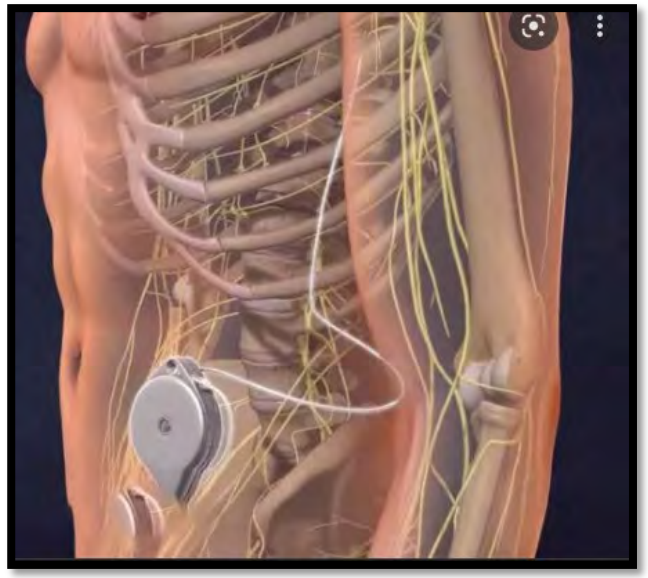
Formulated: April 12, 2019

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



LOCAL, STATE, AND FEDERAL INVOLVEMENT

ECHO gReenville

Empowering Communities for Healthy Outcomes

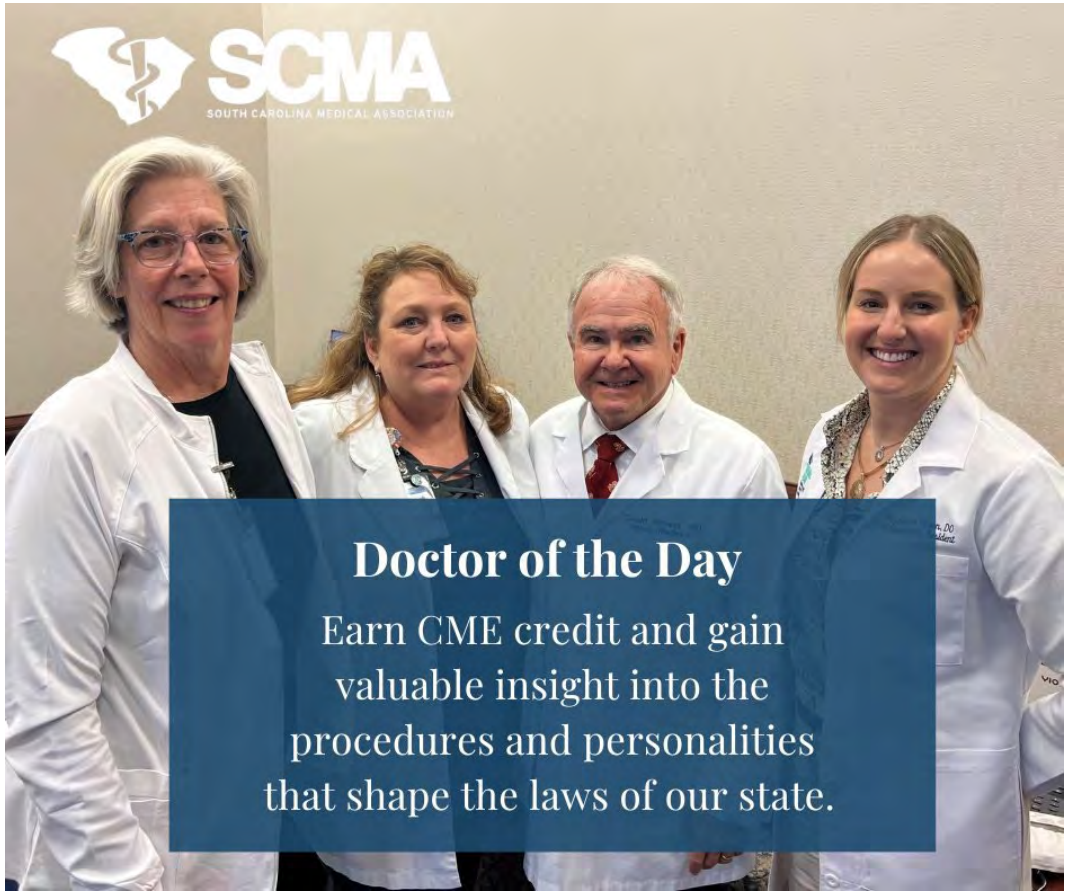
SOUTH CAROLINA OPIOID EMERGENCY RESPONSE TEAM

CaroNova

FUTURE NEEDS?

SUPPORT THE SCMA THEY SUPPORT YOU…

SCMA
SOUTH CAROLINA MEDICAL ASSOCIATION



NOW WE ARE HERE TO SHARE…

Thank You

Email Contacts:

- Kevin Walker, MD FASA *Kevin.Walker@PrismaHealth.org*