
Evidence-based Dental Pain Care: **A New Opioid Prescribing Guideline** **from Washington State**

Addressing the Opioid Crisis: A National Perspective on Dental Care

**A.Omar Abubaker, D.M.D., Ph. D Professor and Chair,
Department of Oral and Maxillofacial Surgery
Virginia Commonwealth University**

<http://fox8.com/2014/02/10/heroin-hits-home-robby-story/>

Disclosure

(who am I and who I am not...)

- I serve a “speaker” in educational events sponsored by PACIRA Pharmaceutical, Inc. (a manufacturer of long acting local anesthetics)...
- I am not an expert on the subject matter but the subject matter is **PERSONAL**

The Narratives

- While there are many factors that may have led to this opioid epidemic, dentists and physicians played an important role through “overprescribing”. We must owe our past, and move forward to be part of the solution. We owe it to our patients, to our profession and to our country. It can be done and ought to be done



Objectives/ Goals

- Why prescribing regulations and guidelines are needed?
- What do these guidelines look like, nationally ?
- Where do we go from here?
 - Better understanding of dental pain
 - New approach to managing dental pain

The Need for A Change
Reason I:
Public Sentiment

Is the Public Ready for a Changed Approach to Pain Management?

“... in this country, public sentiment is everything. With it, nothing can fail; against it, nothing can succeed.

Whoever molds public sentiment goes deeper than he who enacts statutes, or pronounces judicial decisions.”

- President Abraham Lincoln

“

My daughter went to [REDACTED] to have her teeth removed. I received all of the prescriptions at the appointment prior to the surgery. One of the prescriptions was for 40 prescription pain killers. When I took my daughter for the surgery I questioned the nurse about the amount of pain killers prescribed. I told her that I thought it was surprising because of the national health crisis of heroin addiction and overdose. I pointed out that the majority of heroin addicts, start with prescription pain killers. The nurse was very nasty and said that they believe in keeping their patients comfortable and that I was not obligated to fill the prescription.

The reaction of the nurse has bothered me since that day. I wish in hind sight that I had talked to [REDACTED] directly but surely [REDACTED] must know how many pain pills [REDACTED] prescribes for wisdom teeth removal surgery. It is my hope in writing to you that you could talk with [REDACTED] and educate [REDACTED] on the very real dangers of overprescribing prescription pain pills.

”

Ask your oral surgeon to stop prescribing oxycodone for teen wisdom teeth removal



And parents please stop asking for it.

Seven percent of patients prescribed narcotic or opioid analgesics will become addicted.* Some statistics put it as high as 10%. Still others will abuse it or sell it. Do you want that to be your kid?

If you've never had an opiate, percocet, oxycodone or vicodin, you shouldn't risk it either.

One pill can trigger an addiction

Opiate Addiction is up
3,203 %
from 2002-2014
Ask oral surgeons to stop prescribing
oxycodone & other opiates for
wisdom teeth removal
annemoss.com

ACQUIN

HOW WISDOM TEETH ARE FUELING THE OPIOID EPIDEMIC

By Melissa Pandika



2K
SHARED



WHY YOU SHOULD CARE

Keeping your teeth healthy needn't feed an opiate habit in the process.

The opioid epidemic continues to devastate the United States. In 2015, opioids killed a record 33,000 people, according to the Centers for Disease Control and Prevention. About half of those deaths involved a prescription opioid. Now, a new study drills down to one source of these drugs: wisdom-tooth extractions.

More than half of the opioid painkillers prescribed to patients after wisdom tooth removal surgery in a recent *Drug and Alcohol Dependence* study went unused. If those numbers were to play out for all practicing oral surgeons, that would translate to a startling annual figure:

100 MILLION OPIOID PILLS, PRESCRIBED FOR WISDOM-TOOTH EXTRACTIONS, GO UNUSED.

RECOMMENDED

SPONSORED

1 The Cocaine Addict Who Invented Radio Surgery

2 Treating Brain Disorders

3 The Worst Decision You

The Future of Postsurgical Pain Management



Opioid
Reducing

Opioid
Free

Will Opioid-Free Surgery Become the New Standard of Care?



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Opioid-Free Oral Surgery



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Surgeon General

We took the pledge

What are opioids?

Bronson Testimonial Video

▶ Play Video



The Need for A Change

Reason II: The Casualties

Casualties of Drug Overdose in the US in Perspectives

Every day: 143
casualties



Every three weeks: 3000 casualties



“With approximately 143 Americans dying every day from drug overdose , every three weeks America is enduring a death toll equal to September 11th.” *The President Commission on Combating Drug Addiction and Opioid Epidemic report, July 2017*

In perspective (2016):

- ✘ US deaths the Vietnam War (10 years) 58,220
- ✘ US deaths in Iraq War (12 years): 4,486
- ✘ US deaths in Afghanistan: War 2,345

America Are Than Ever

NE 5, 2017

health agencies reveals the extent of

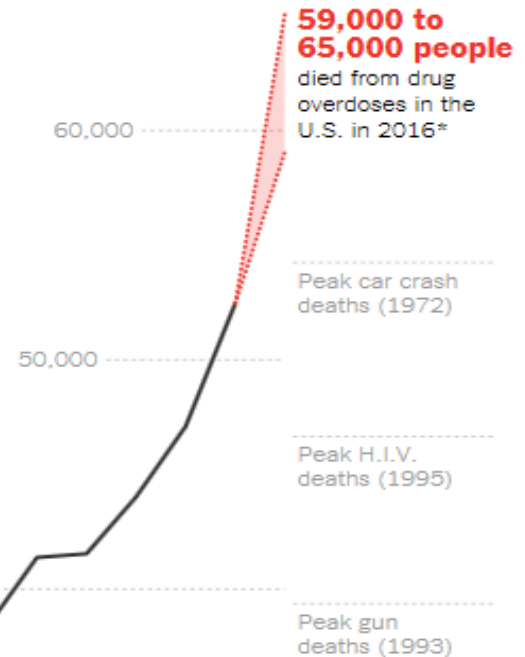
f [nationwide drug deaths](#) shows overdoses in 2016.

in 2016 most likely exceeded recorded in the United States, l by The New York Times.

ce of an addiction, now ly manufactured oses are now the ns under 50.

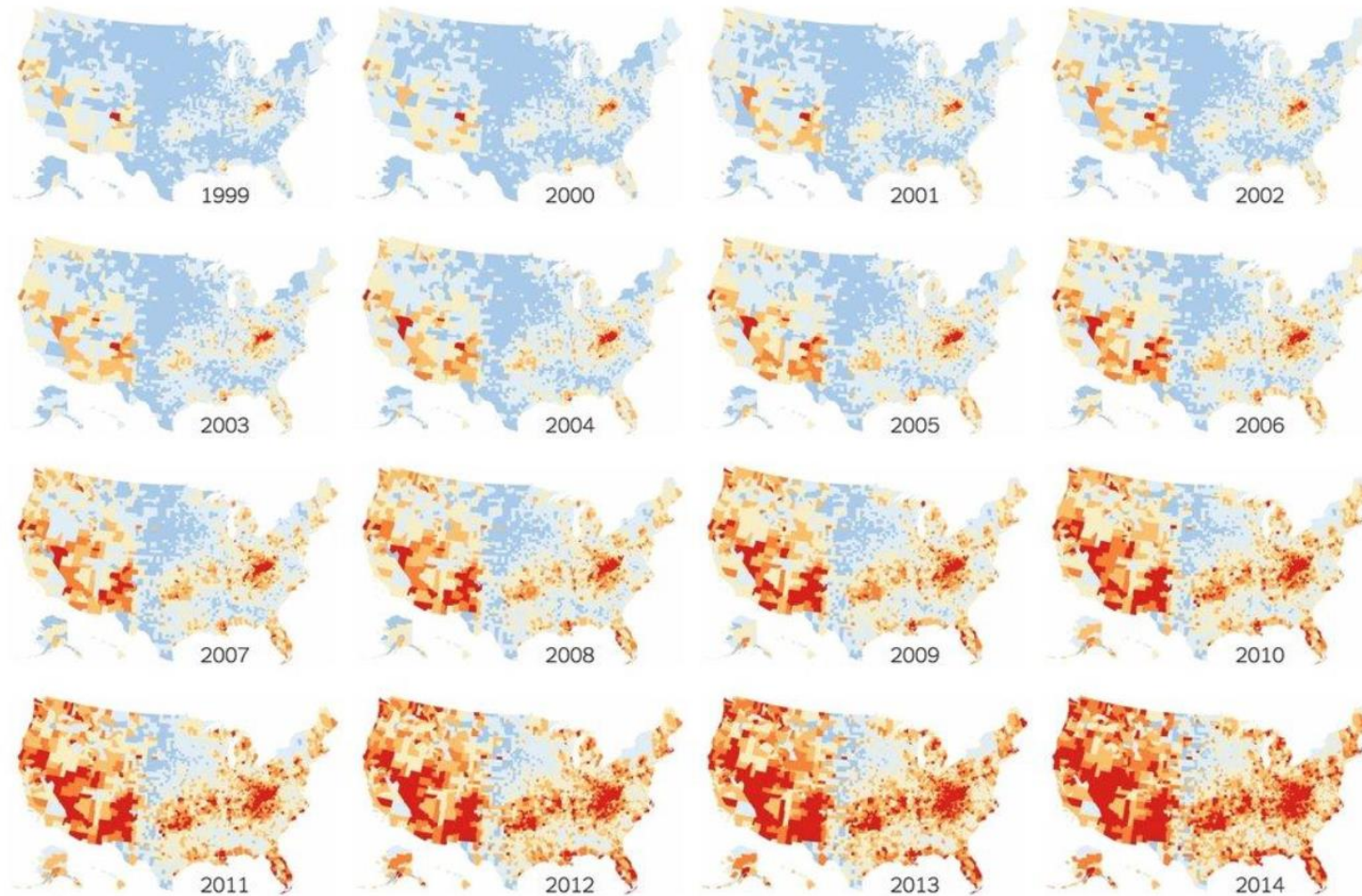
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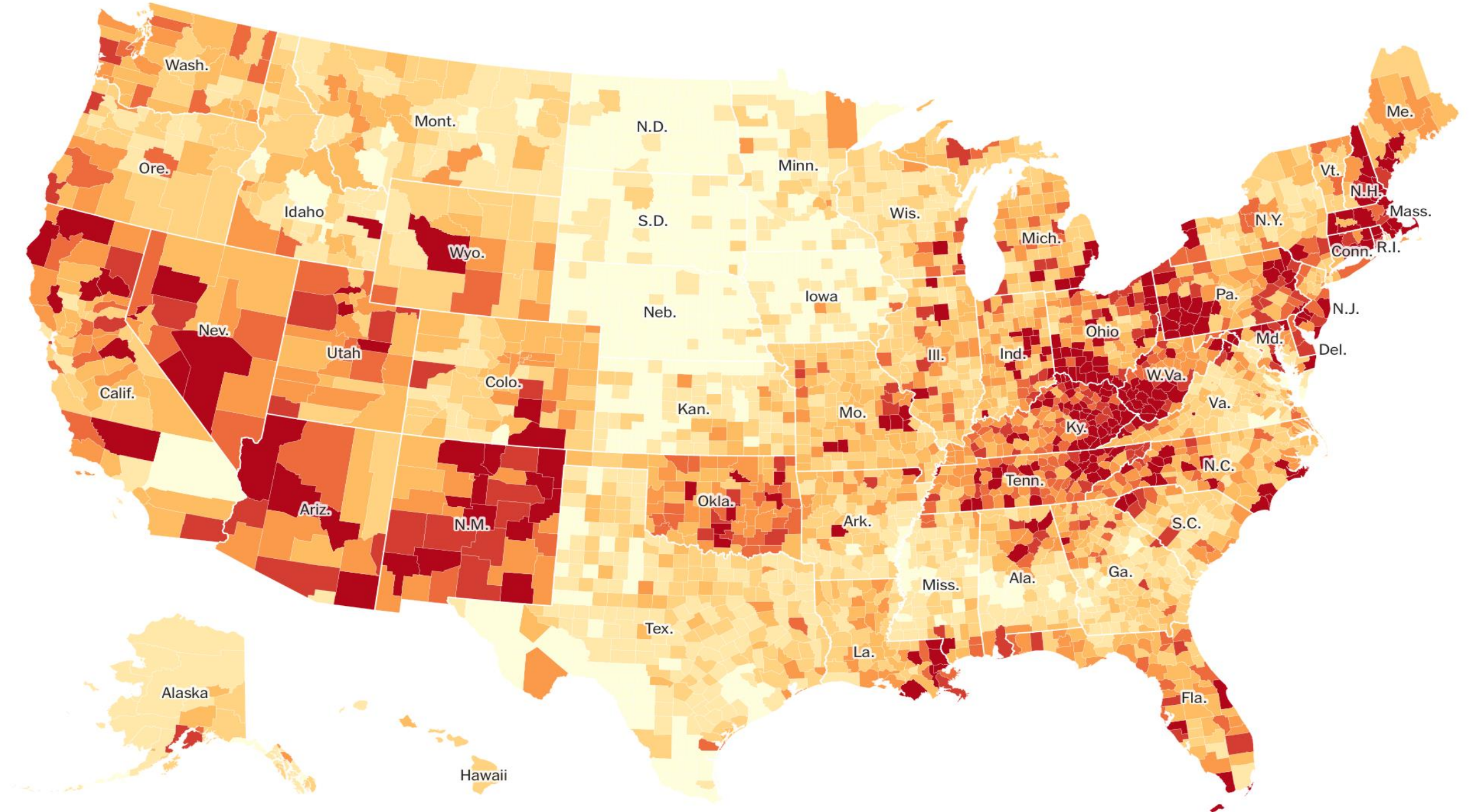
The Numbers

Our reporters have been deciphering and providing context to masses of data about the many and varied ways opioids are affecting Americans.



How overdose deaths rippled across the United States.

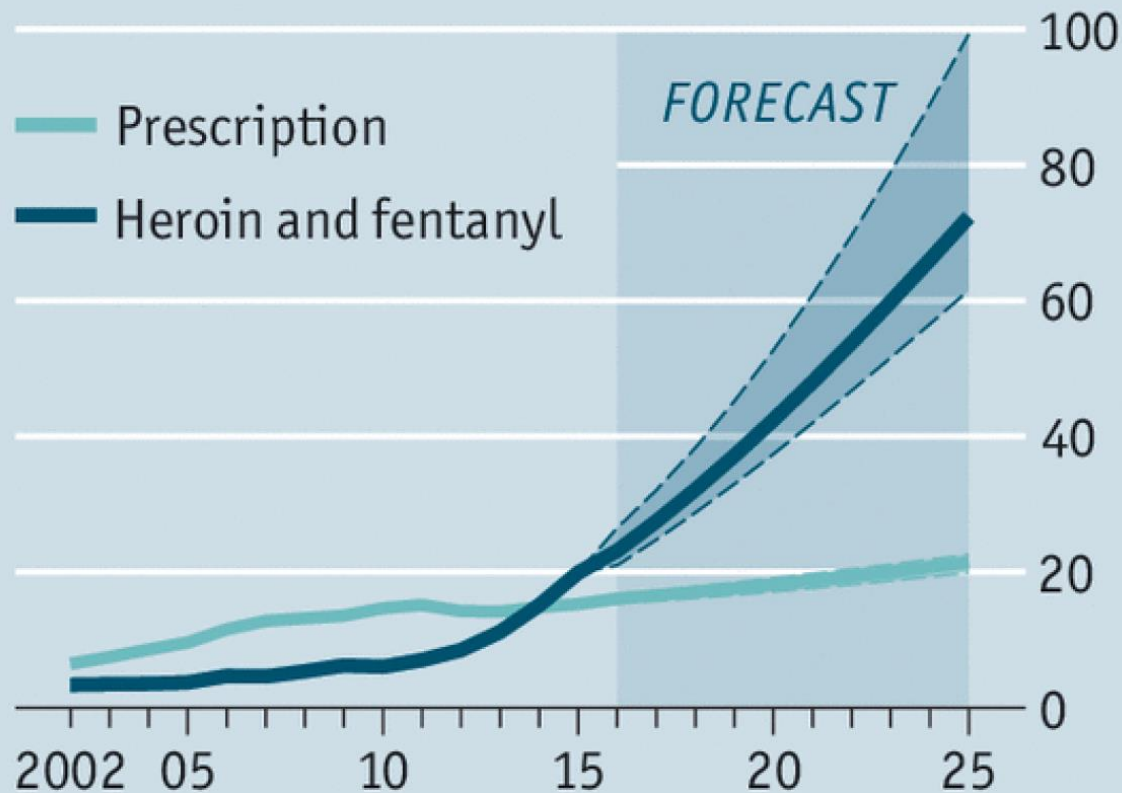
5. Where is the worst of the problem?



... and the damage done

2

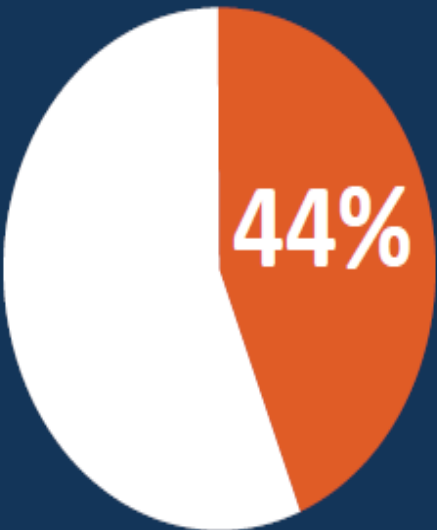
United States, opioid-overdose deaths
By drug type, '000



Source: "A Dynamic Transmission Disease Model of the Opioid Epidemic", by D. Sinclair, H. Jalal, M. Roberts & D. Burke, University of Pittsburgh, 2017 October 28, 2017

Opioids: A Public Health Crisis

All institutions,
public and private,
need to respond



of Americans say they know someone who's been **addicted to Rx painkillers**

26% say it's an **acquaintance**

21% say it's a **close friend**

19% say it's a **family member**

3% say it's **themselves**

SOURCE: Kaiser Family Foundation Health Tracking Poll (conducted November 8-13, 2017)



of Americans say they know someone who has **died from a Rx painkiller overdose**

13% say it's an **acquaintance**

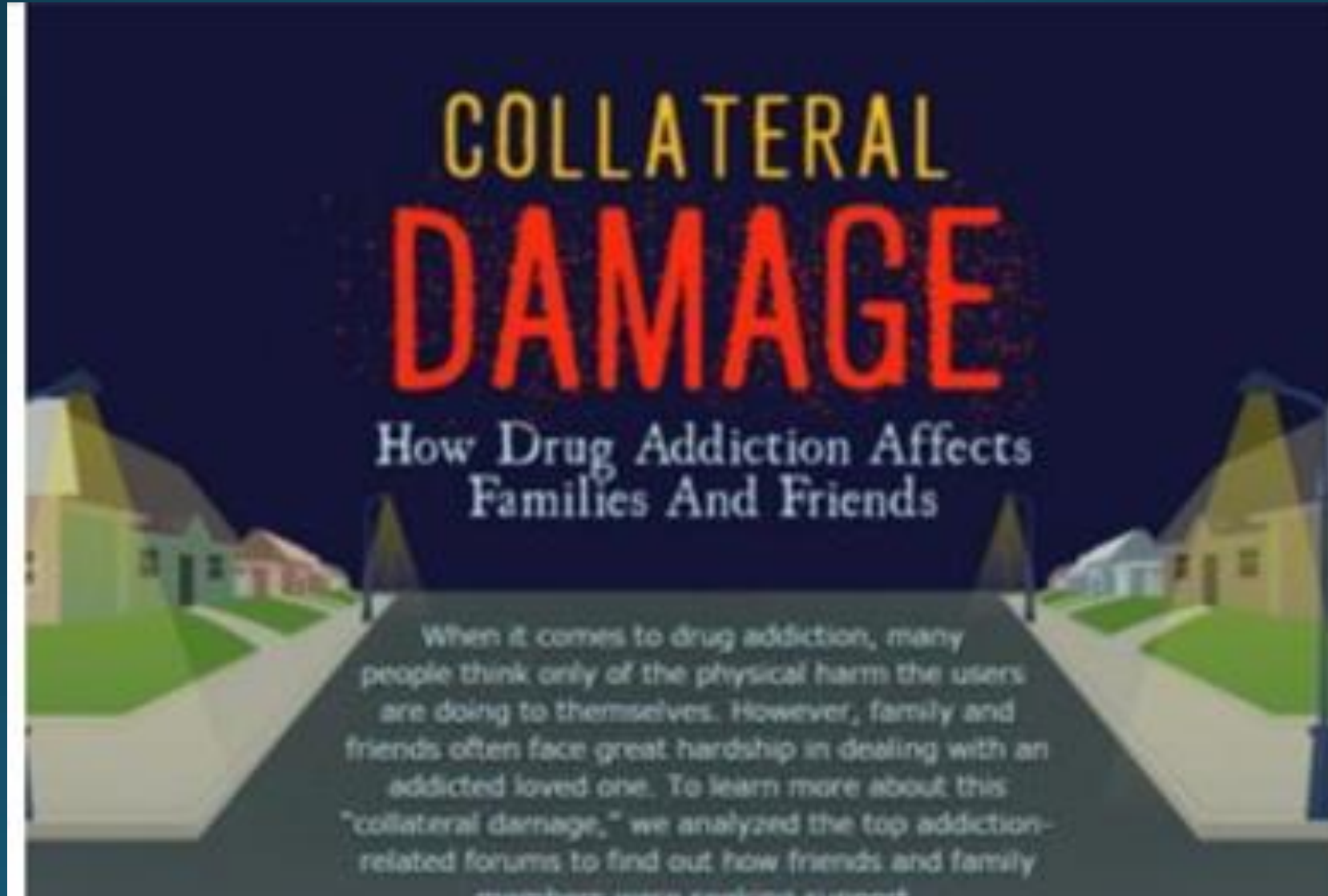
8% say it's a **close friend**

6% say it's a **family member**

SOURCE: Kaiser Family Foundation Health Tracking Poll (conducted November 8-13, 2017)

The Need for A Change
Reason III:
The Proxy Casualties, the families

The Families....





Family Loses Third Son To The Heroic Epidemic

If this story is not proof that our country is in the midst of an epidemic, what more will it take?

11/06/2016 06:51 pm ET | Updated Nov 07, 2016



**The Need for A Change
Reason IV:
The Scientific Evidence**



"The prescription overdose epidemic is doctor-driven. It can be reversed in part by doctor's actions. **Prescription opioid overdose deaths can be prevented by improving prescribing practices.** We can protect people from becoming addicted to opioids and clinicians are key to helping to reverse the epidemic."

Thomas R. Frieden, MD, MPH
Director of the CDC (Centers for
Disease Control and Prevention)

Opioid Prescribing Patterns

- Family physicians are the #1 prescribers of immediate release
- More than half of the estimated 100 million pain pills annually in the US are unused
- 20% of adults shared prescribed opioid medication with another person
- 82 % of parents were not told what to do with leftover medication

Opioid Prescribing Patterns

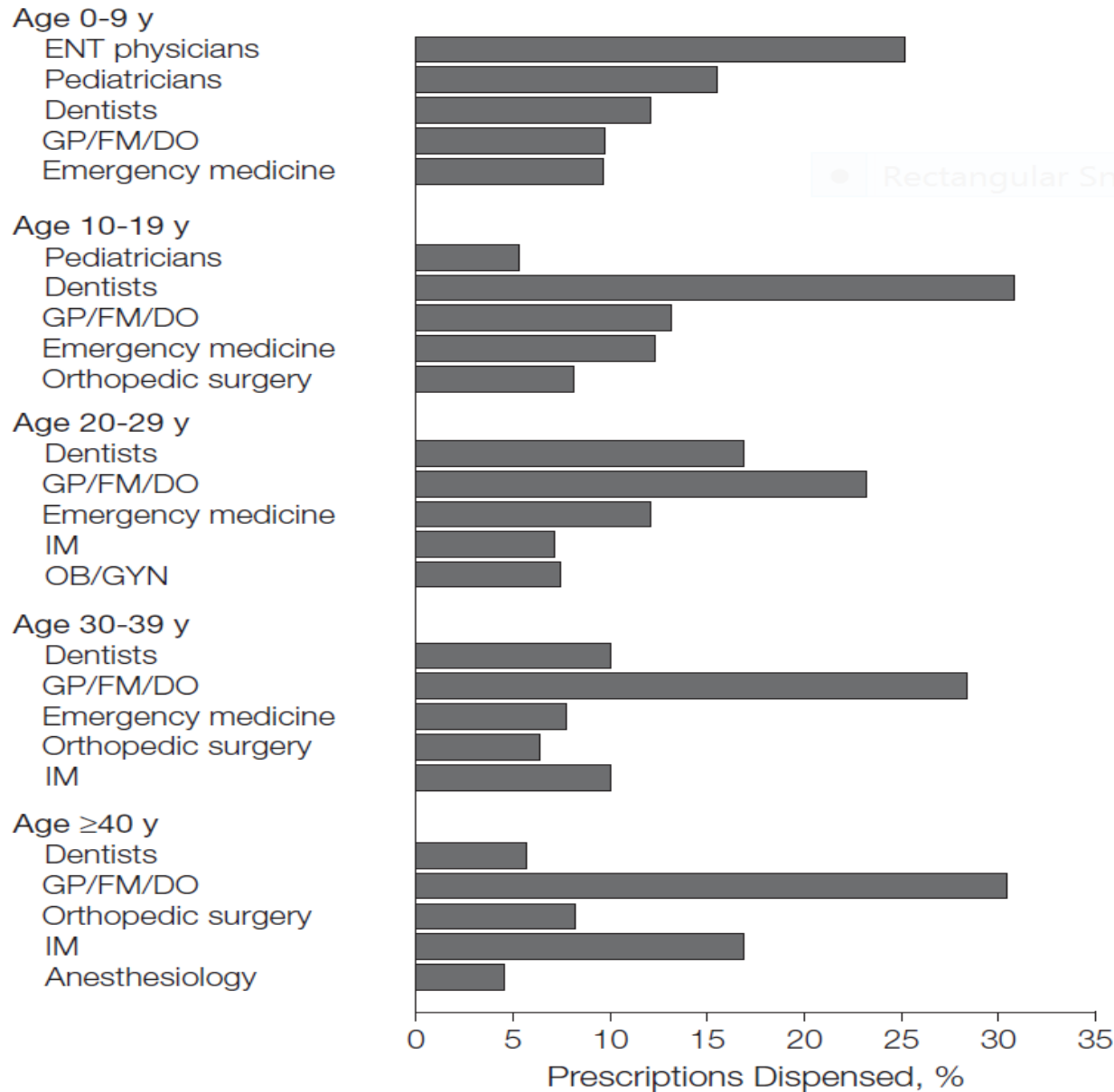
- 2% to 8% of all opioids prescribed by dentists
- Most oral surgeons prescribe an average of 20 opioid pills after tooth extraction
- Dental surgery is the first time that many young adults are exposed to opioid containing drugs
- 90% of SUD started using drugs and alcohol before the age of 18

Narcotic Prescribing Habits and Other Methods of Pain Control by Oral and Maxillofacial Surgeons After Impacted Third Molar Removal

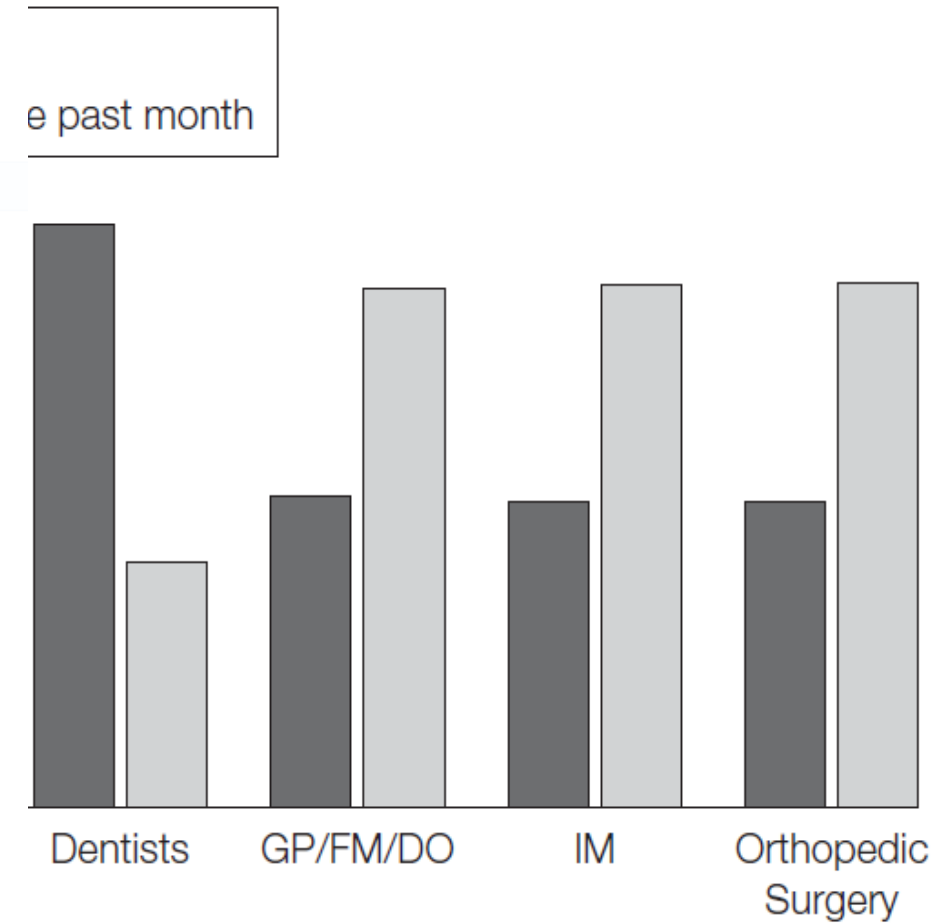
*Ibrahim Mutlu, DDS, PhD, *A. Omar Abubaker, DMD, PhD, †
and Daniel M. Laskin, DDS, MS‡*

- Only 2 OMFS of the 384 respondents did not prescribe a narcotic
- The most common was 20 tablets
- 22% of the respondents prescribed more than 20 tablets and 11% prescribed 30 tablets
- Hydrocodone (5 mg) was the most frequently prescribed narcotic

Figure 1. Percentage of Prescriptions Dispensed for Opioid Analgesics From Outpatient US Retail Pharmacies by Age and Physician Specialty, 2009



Percentage of Prescriptions Dispensed for Opioid Analgesics From Outpatient US Retail Pharmacies as a Function of Specialty, 2009



... Prior prescriptions (dispensed within the past month) a different prescriber or specialty. GP/FM/DO indi- family medicine/osteopathic physicians; IM, internal

Original Contributions

Cover Story

Opioid prescribing practices from 2010 through 2015 among dentists in the United States

What do claims data tell us?

Niodita Gupta, MD, MPH, PhD; Marko Vujcic, PhD; Andrew Blatz, MS

- Opioid prescription increased from approximately 130.58 per 1,000 in 2010 to 147.44 per 1,000 in 2015
- 68.41 % of opioid prescribed are after surgery and 31.10% restorative
- The largest increase was among 11-year through 18-year olds

100 Million Prescription Opioids go Unused Each Year Following Third-molar Extraction

100
million

- **Abundance of prescription opioids in homes, in medicine cabinets and communities for potential misuse, diversion and abuse**



Reducing Opioids

What Are the Regulations:

I. Basis

Centers for Disease Control and Prevention (CDC) Warning for Use of Opioids for Acute Pain

- The likelihood of long-term use increases based on the length of the initial prescription
- The likelihood of long-term use increases sharply after the **third and fifth** days of taking a prescription, and spikes again after the 31st day
- Long-term use also increases with a second prescription or refill, a 700 morphine milligram equivalents (MME) cumulative dose, and an initial 10- or 30-day supply

The CDC "Guideline for Prescribing Opioids for Acute Pain (March 2016)

- The guideline recommends a quantity no greater than what is needed for the expected duration of pain severe enough to require opioids, specifying that three days or less will often be sufficient and more than seven days will rarely be needed

What Are the Regulations: National Trends

State Legislation To Confront Opioid Overdose Epidemic

- Legislation limiting opioid prescriptions debuted early in 2016, with **Massachusetts** passing the first law in the nation
- By the **end of 2016, seven states** had passed legislation limiting opioid prescriptions, and the trend continued in 2017
- More than **30 states considered** at least 130 bills related to opioid prescribing in 2016 and 2017
- By early **April 2018, at least 28 states** had enacted legislation with some type of limit, guidance or requirement related to opioid prescribing

State Legislation To Confront Opioid Epidemic

- Some states, such as Rhode Island and Utah, have prescribing limits in statute, and allow other entities to adopt prescribing policies
- Other state laws (New Hampshire, Ohio, Oregon, Vermont, Virginia, Washington and Wisconsin) rather than setting in statute, direct or authorize other entities (department of health/state health official, or provider regulatory boards such as the board of medicine, nursing and/or dentistry) to do so

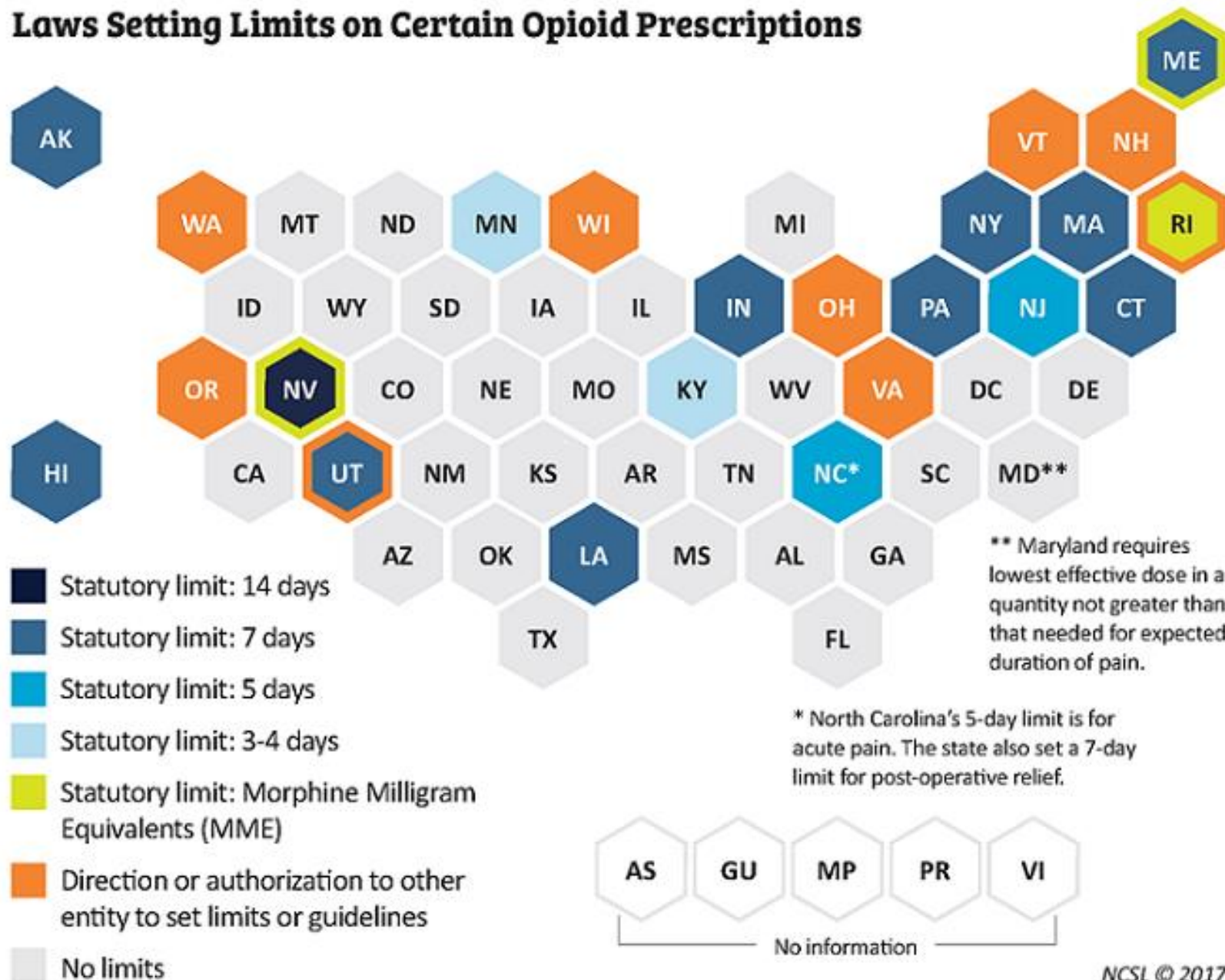
Key Elements of All Prescribing Regulations /Guidelines

1. Most are directed towards acute pain
2. Most set limits for prescribing for acute pain and some set different guidelines and exemptions for chronic pain.
3. Required detailed documentation for patients receiving opioids analgesics
4. Prescribing Naloxone in certain instances
5. Require specific CE Requirement for opioid prescribers
6. Requiring Use of MME and PMP

Nationwide Prescribing Guidelines/ Legislations

- Most of State legislation limit first-time opioid prescriptions to a certain number of days' supply, (seven days is most common , some three , five or 14 days).
- Few states also set dosage limits (morphine milligram equivalents, or MMEs).
- All legislations left options to clinicians to prescribe for longer duration but with documented justifications for these exceptions

Laws Setting Limits on Certain Opioid Prescriptions



State Legislation To Confront Opioid Epidemic

- The majority of states focus on general opioid prescribing
- In addition, Alaska, Connecticut, Indiana, Louisiana, Massachusetts, Nebraska, Pennsylvania and West Virginia also set limits specifically for minors.
 - Laws set limits for any opioid prescription for adults and specify other requirements, such as discussing opioid risks with the minor and parent or guardian.

Extra State Legislation To Confront Opioid Epidemic

- State laws in Maryland and Utah provide additional guidance related to opioid prescribing:
 - **Maryland:** prescribe the lowest effective dose of an opioid for a quantity that is not greater than that needed for the expected duration of pain
 - **Utah:** in addition to 7-day limit, authorized commercial insurers, the state Medicaid program, workers' compensation insurers and public employee insurers to implement evidence-based guidelines policies for prescribing certain controlled substances

State Legislation To Confront Opioid Overdose Epidemic: Exemptions

- Nearly half the states with limits specify that these limitations apply only to treating acute pain
- Most laws also exempt treatment for cancer and palliative care and chronic pain, from prescription limits
- Many states also allow exceptions for the treatment of substance use disorder or medication-assisted treatment (MAT), or for the professional judgment of the provider prescribing the opioid
- Many laws stipulate that any exceptions must be documented in the patient's medical record

The prescription monitoring program data

What it can tell you

[David A. Keith](#), BDS, FDSRCS, DMD  [Thomas A. Shannon](#), [Ronald Kulich](#), PhD



Conclusions

- Early data suggest that PMP data can be helpful in reducing the number and frequency of opioid prescriptions
- Mandatory use of the PMP database caused prescription rates to drop over the 3-month study period and 78% fewer opioid pills were prescribed

Virginia Emergency Regulations

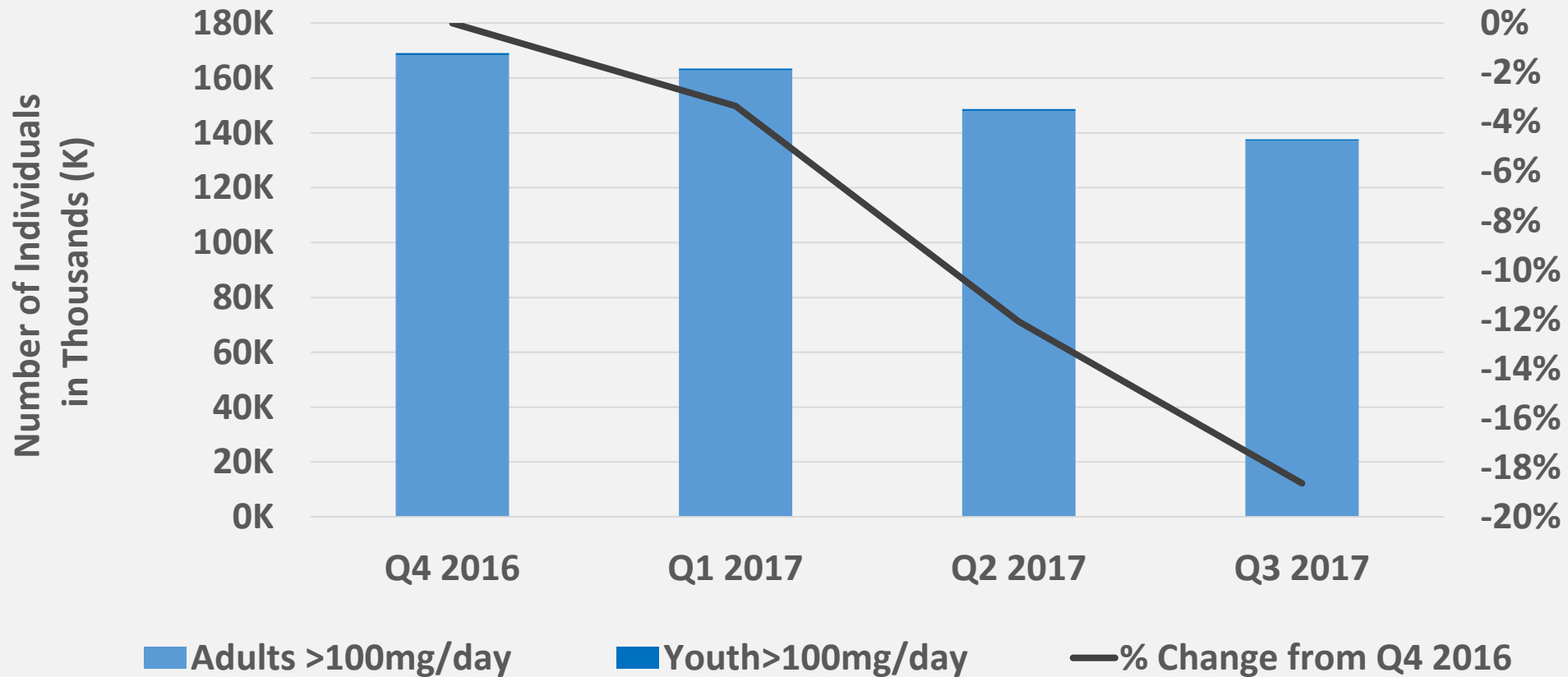
April 24, 2017

Key Elements of the Virginia New Regulations

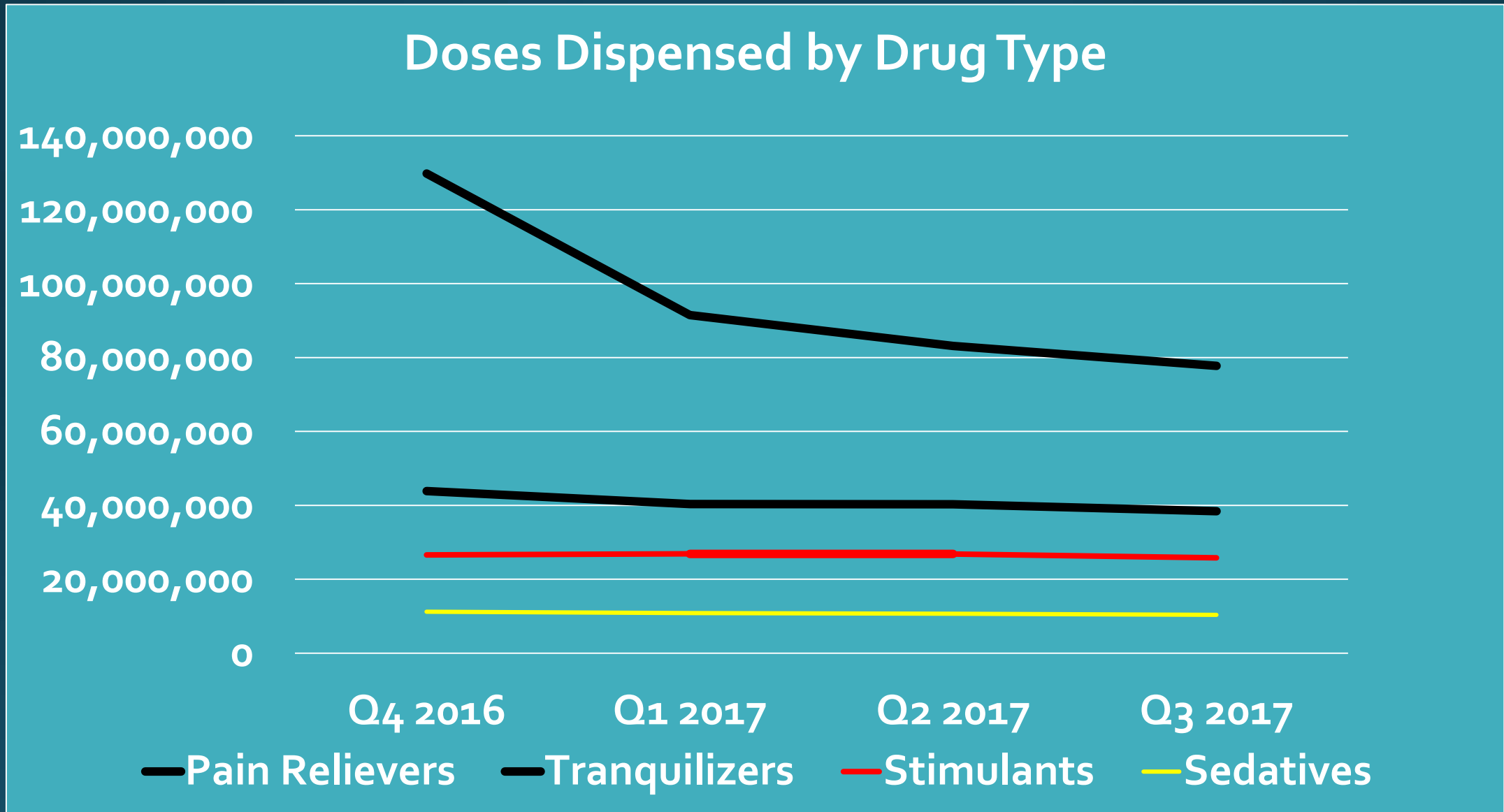
1. Defining acute Vs. Chronic pain
2. Required documentation for patients receiving opioid treatment
3. Guidelines for prescribing for acute pain (7 days, 50 MME)
4. Guidelines for prescribing for chronic pain
5. Indications for prescribing Naloxone
6. CE Requirement for opioid prescribers (2)
7. Requiring Use of MME and PMP

IMPACT of Regulation in VA: MME

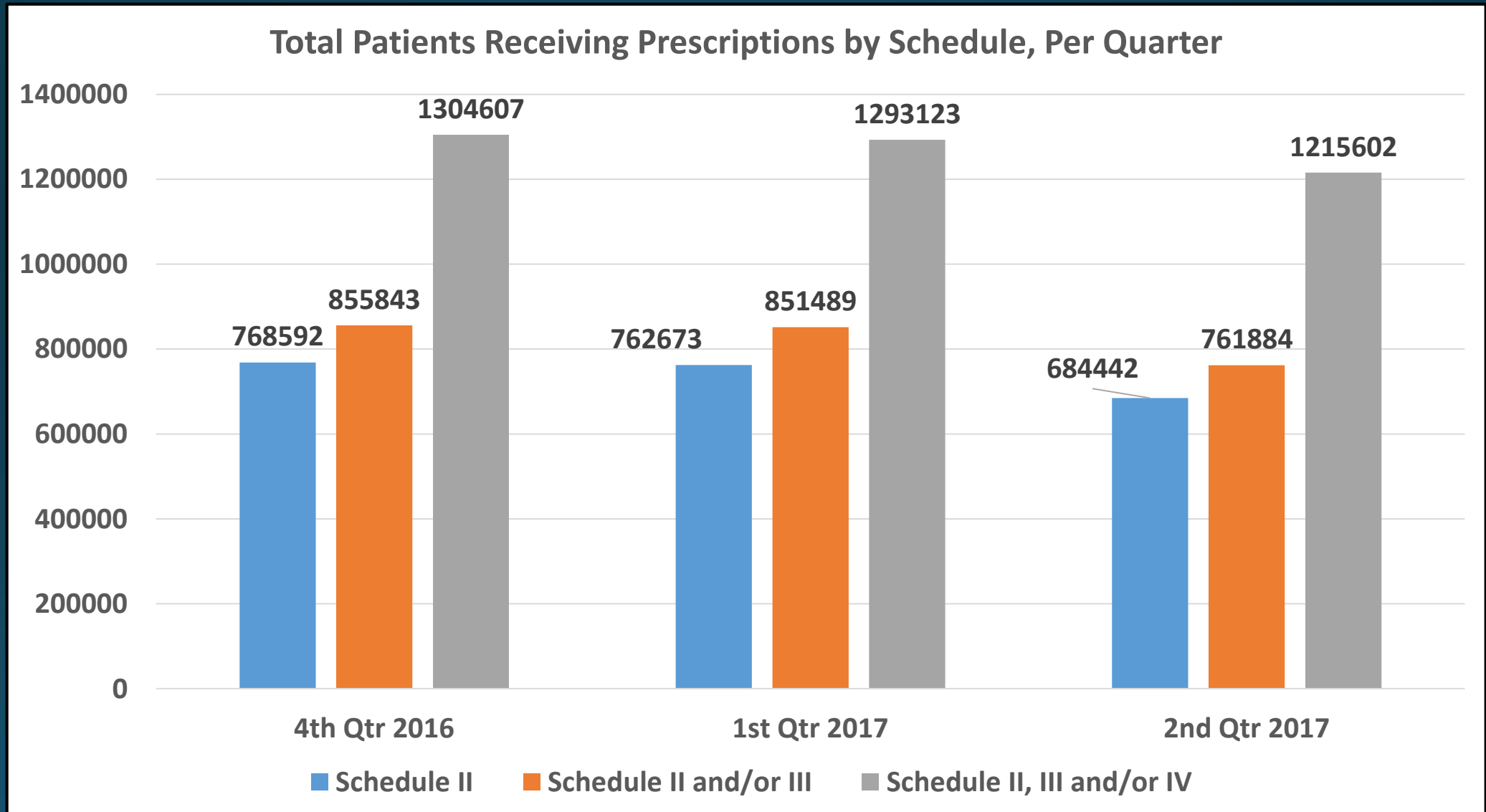
Individuals Receiving Greater than 100 Morphine Milligram Equivalents per day



IMPACT of Regulation in VA: DOSES DISPENSED



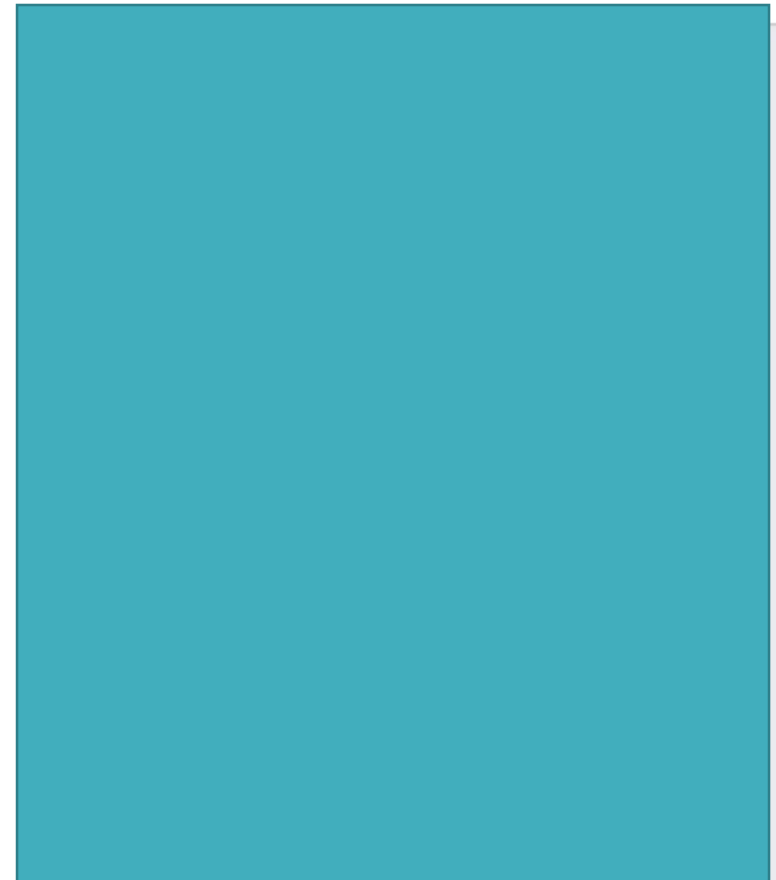
IMPACT of Regulation in VA Patients Receiving Prescriptions



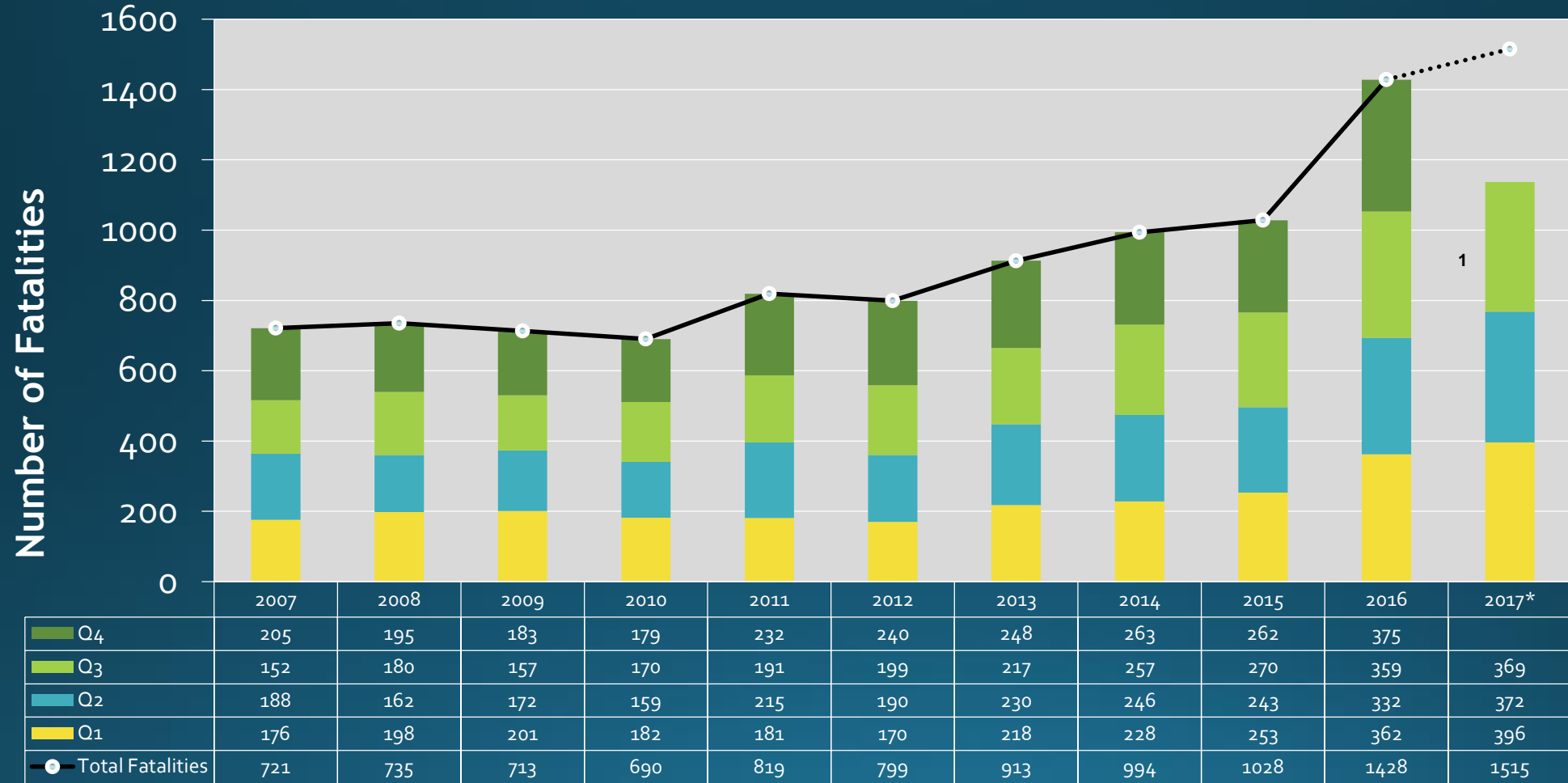
Report: Opioid overdose deaths continue to rise in Virginia in 2017



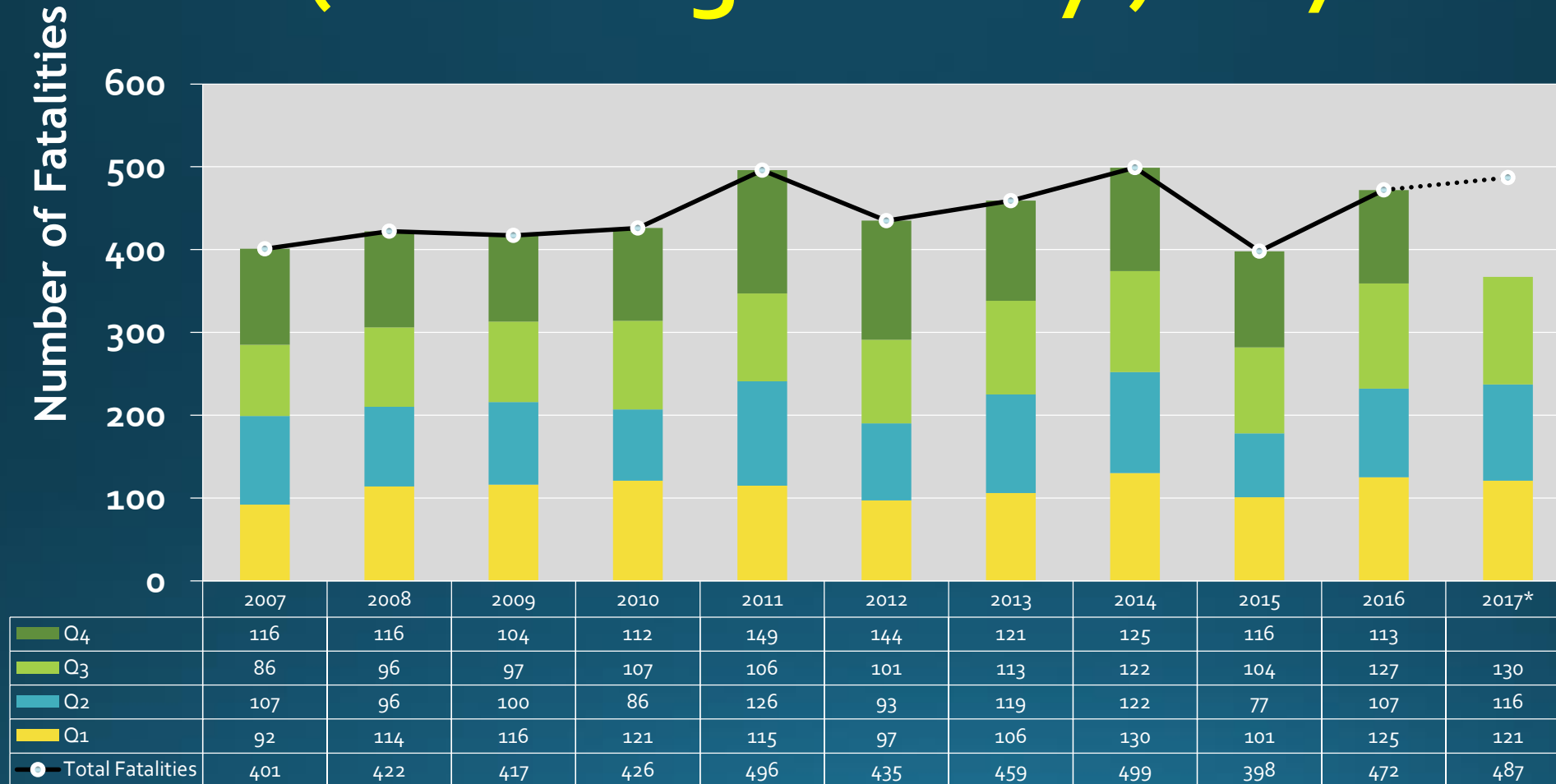
(Judith Lowery)



Fatalities of All drugs-2017



Virginia Fatalities of Prescription opioids (Excluding Fentanyl) 2017

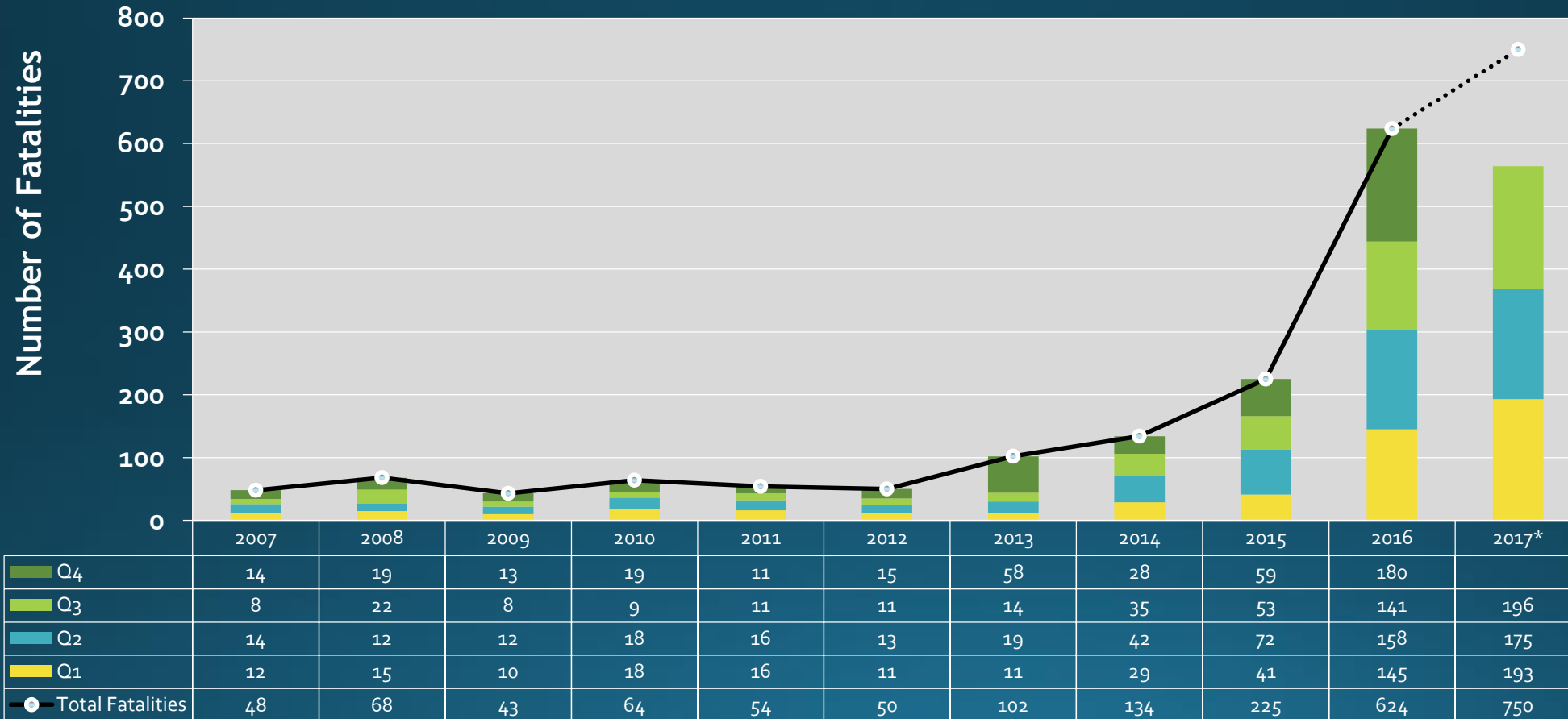


¹ 'Prescription Opioids (excluding fentanyl)' calculates all deaths in which one or more prescription opioids caused or contributed to death, but excludes fentanyl from the **required list** of prescription opioid drugs used to calculate the numbers. However, given that some of these deaths have multiple drugs on board, some deaths may have fentanyl in addition to other prescriptions opioids, and are therefore counted in the total number. Analysis must be done this way because by excluding all deaths in which fentanyl caused or contributed to death, the calculation would also exclude other prescription opioid deaths (oxycodone, methadone, etc.) from the analysis and would thereby undercount the actual number of fatalities due to these true prescription opioids.

Virginia Fatalities of Fentanyl

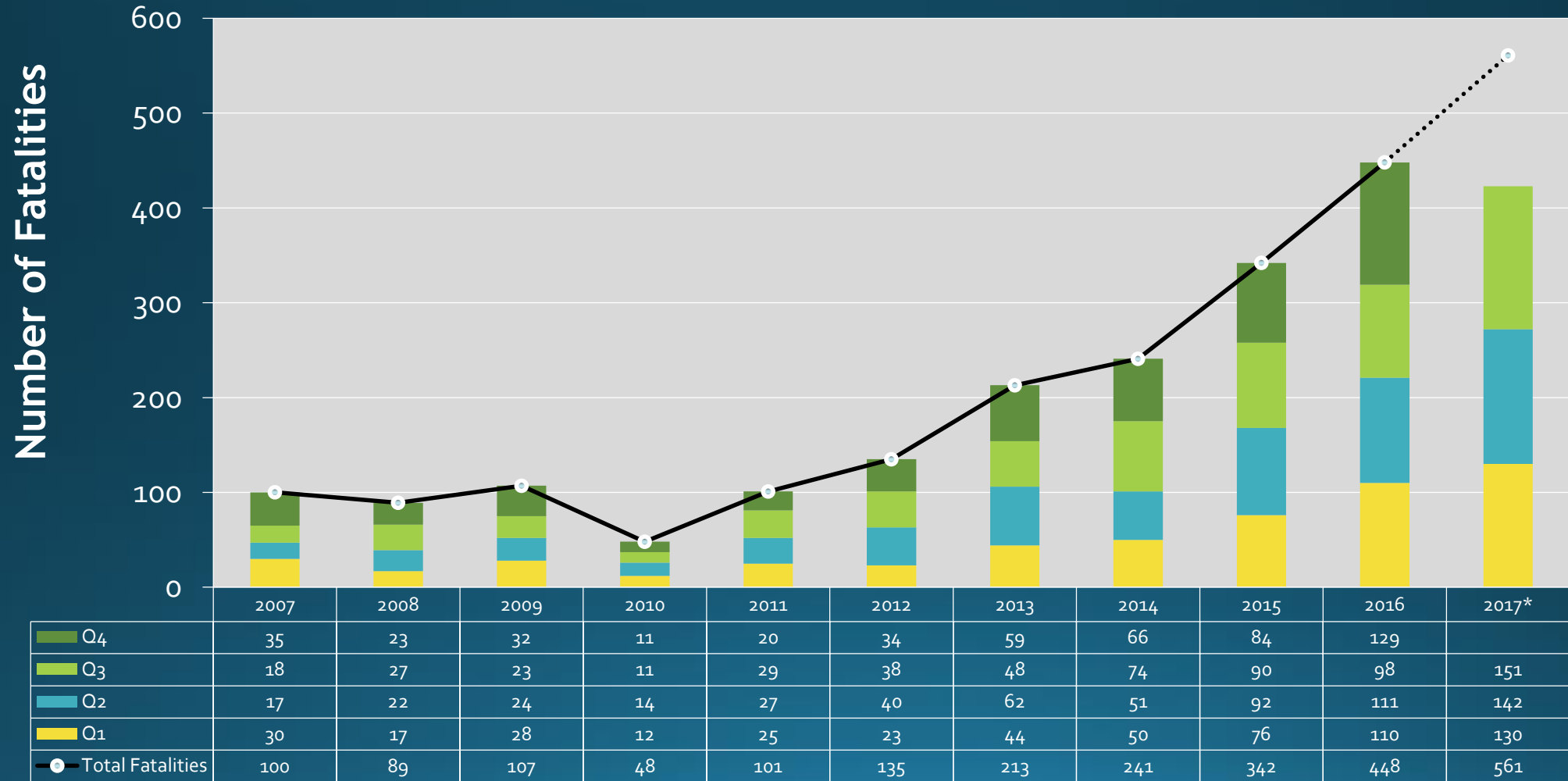
2017

Total Number of Fatal Fentanyl Overdoses by Quarter and Year of Death, 2007-2017
 ('Total Fatalities' for 2017 is a Predicted Total for the Entire Year)



Virginia Fatalities of Heroin

2017



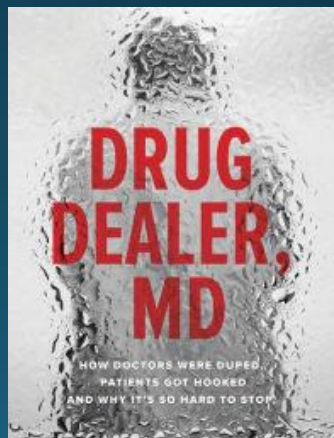
**Where Do We Go From here?
New Strategies in Management
of Acute Dental Pain**

Cornerstones of Management of Acute Dental Pain

- Better understanding of addiction and acute dental pain
- Adequate discussion of the postoperative pain
- Evidence-based pharmacological management of pain
- Adjunct modalities of pain control

Better Understanding Of Addiction and Acute Dental Pain

- “Medicine must once and for all embrace addiction as a disease, not because science argues for it, but because it is practical to do so.”
- “As long as the system continues to ostracize patients with addiction, especially while openly embracing and aggressively treating disorders such as chronic pain, chronic fatigue, fibromyalgia, depression, attention deficit disorder, and so on, the prescription drug epidemic will continue, as will the suffering of millions of people with untreated addiction.”
- Anna Lembke, MD



ADDICTION IS A DISEASE

- The American Medical Association
- The American Society of Addiction Medicine
- American Dental Association

HEALTHY LIVING 11/17/2016 02:48 pm ET | Updated Dec 09, 2016

Surgeon General Vivek Murthy: Addiction Is A Chronic Brain Disease, Not A Moral Failing

The way forward includes needle exchanges and calling addiction what it is: a medical condition.



By Erin Schumaker



**SUBSCRIBE TO &
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Better Understanding Of Dental Pain

Nature of Odontogenic Pain

Pain Experience After Simple Tooth Extraction

Taiseer Hussain Al-Khateeb, BDS, MScD, FDSRCSE, FFDRCSI,
and Amir Alnabar, BDS, MSc†*

© 2008 American Association of Oral and Maxillofacial Surgeons
J Oral Maxillofac Surg 66:911-917, 2008

- The peak pain occurs at 8-12 hours after extraction
- Extraction pain rarely persists longer than 2 days after surgery
- 53% of patients reported low pain score (0-3 out of 10) the first day after dental surgery
- 80 % of patients reported minimal pain five days after surgery
- Highly variable and depends on patient's, the pre-extraction status and the procedure

Adequate Discussion of The Postoperative Pain

Discussion Of The Postoperative Dental Pain

- Pre- and Postoperative discussion of pain
 - Goals of pain control and prescriber-patient pain control goal
 - Modalities of pain control
 - The risks and possible side effects of prescribed medications, including risks of addiction and overdose
 - Guidance towards disposal of the unused opioids medications

Pharmacologic Management of Postop Dental Pain

- Potent analgesics are not required in most extraction situations
- NSAID analgesics, should be the primary agents for managing postoperative dental pain.
- The first dose of analgesic medication should be taken before the effect of the local anesthetic subsides
- Opioids combination analgesics should be reserved for severe pain and when the highest dose of combination non-opioid analgesic is not effective

Pharmacological Management of Postoperative Dental Pain

- *Monotherapy (single drug analgesic):*
 - *Non-opioids:*
 - *Acetaminophen (APAP), Nonsteroidal anti-inflammatory drugs (NSAID's)*
 - *Opioids:*
 - *Codeine, Oxycodone, Hydrocodone, etc...*
- *Multimodal Analgesia (formulations containing two analgesics)*
 - *APAP combined with opioids*
 - *NSAID's combined with opioids*
 - *Combinations of APAP-and NSAID's*

Combining ibuprofen and acetaminophen for acute pain management after third-molar extractions

Translating clinical research to dental practice

Paul A. Moore, DMD, PhD, MPH; Elliot V. Hersh, DMD, MS, PhD

898 JADA 144(8) <http://jada.ada.org> August 2013

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- A critical analysis of 59 reviews categorized as “pharmacological treatments for anesthesia and pain control”;

NSAID-ACETAMINOPHEN COMBINATIONS

- NSAID-APAP combination appeared to provide analgesia after third-molar extractions greater than either of the drugs alone and often equivalent to those of commonly prescribed opioid combination formulations.
- Establish optimal dosages of nonopioids around the clock followed by the addition of incremental doses of opioids as needed for rescue.

-

Benefits and harms associated with analgesic medications used in the management of acute dental pain

An overview of systematic reviews

[Paul A. Moore](#), DMD, PhD, MPH  , [Kathleen M. Ziegler](#), PharmD, [Ruth D. Lipman](#), PhD, [Anita Aminoshariae](#), DDS, MS, [Alonso Carrasco-Labra](#), DDS, MSc, [Angelo Mariotti](#), DDS, PhD



Practical Implications

The best available data suggested that the use of nonsteroidal medications, with or without acetaminophen, offered the most favorable balance between benefits and harms, optimizing efficacy while minimizing acute adverse events.

Adjunct Strategies for Management of Pain in Dentistry

- **Long acting local anesthetics**
 - Marcaine blocks
 - Long acting local anesthetics (Exparel)
- **Preemptive Analgesics:**
 - 600mg Ibuprofen 1 hour surgery
- **Corticosteroids**

New Concepts in Management of Postop Dental Pain: Exparel*

EXPAREL® (bupivacaine liposome injectable suspension)

- EXPAREL is indicated for administration into the surgical site to produce postsurgical analgesia
- EXPAREL is not indicated for nerve block

EXPAREL is a long-lasting,
non-opioid option for
postsurgical pain control

- EXPAREL is the only postsurgical analgesic to use DepoFoam® to extend the therapeutic effect of bupivacaine



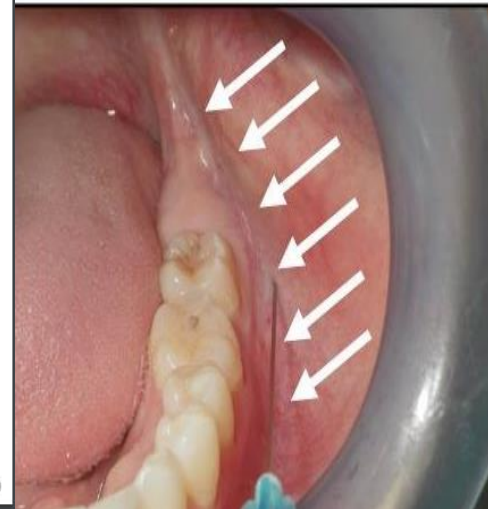
EXPAREL®
(bupivacaine liposome injectable suspension)
PATIENT-FOCUSED PAIN CONTROL



Maxilla

4 mL of liposomal bupivacaine:

- On the buccal side
- 2 mL right
- 2 mL left



Mandible

6 mL of liposomal bupivacaine:

- 3 mL right
- 3 mL left

Role of Opioids in Management of Postoperative Pain in Dentistry

How Many Opioid Pills Do Patients Require Following Third Molar Extraction with Intravenous Sedation?

E.T. Lahey III, Y.D. Ji

Harvard School of Dental Medicine

K. Charest, D.A. Keith, M. Troulis

DOI: <http://dx.doi.org/10.1016/j.joms.2017.07.060> |  CrossMark



How Many Opioid Pills Do Patients Required Following Third Molars Extraction? Results

- Average number of tablets used:
 - **7.36 for oxycodone**
 - **5.17 oxycodone/acetaminophen**
 - **6 tables for hydrocodone/acetaminophen**
- Only one patient required additional opioids
- Females consumed **1.18** fewer opioid units compared to males
- Patients who were prescribed Ibuprofen used **1.32** units less than the average than who did not

Evidence-Based Recommendations Postoperative Pain After Third Molars Surgery

- Six to seven tablets of oxycodone (5mg), or oxycodone/acetaminophen (5/325mg) or hydrocodone/acetaminophen (5mg/325 mg) may be sufficient to manage pain after third molar extractions



**THE PRESIDENT'S COMMISSION
ON COMBATING DRUG
ADDICTION AND THE OPIOID
CRISIS**

Roster of Commissioners

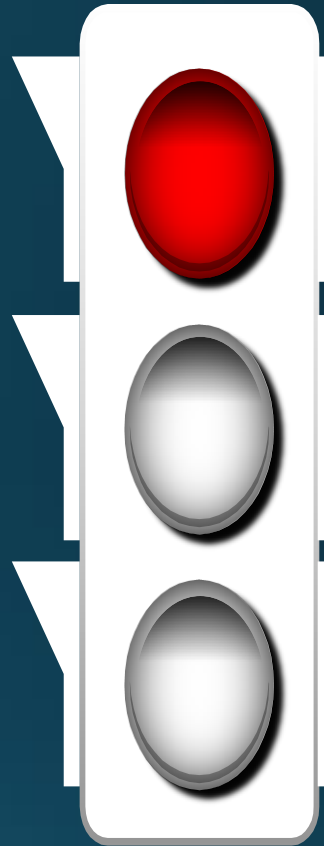
- Governor Chris Christie, Chairman
- Governor Charlie Baker
- Governor Roy Cooper
- Congressman Patrick J. Kennedy
- Professor Bertha Madras, Ph.D.
- Florida Attorney General Pam Bondi



A WARNING!!

“Every American should be awakened to this simple fact: if this scourge has not found you or your family yet, without bold action by everyone, it soon will.”*

**The President Commission on combating Drug Addiction and Opioid Epidemic*



Parents, Educators, Clinicians And Citizens Responsibilities

- This issue is an American issue.....and to fix it it is an American duty, dentists, parents and citizens alike
- After September 11th, our President and our nation banded together to use every tool at our disposal to prevent any further American deaths.
- We must act boldly to stop this epidemic: We need to take bold steps and we can not afford to wait ...

“A mother’s story”

- “Dr. Abubaker: My name is Susan Cunningham and I just read your article in the Boston Globe about educating dentists and dental students on the use of opioids after dental procedures...
- My husband and I are living with the same excruciating pain having lost our 27 year old son a year ago to a fatal overdose (heroin and fentanyl). **Liam’s first experience with opioids was after having 2 wisdom teeth extracted in 2005. Both he and my daughter (who had all 4 extracted) were given 30 Percocet tablets. He took several over just a few days, and felt great. “**

“A mother’s story”

- “..... This was the beginning of the downward spiral of addiction. Since that time, I have tried to warn friends about the dangers of opioid use (for adolescents especially) after routine wisdom tooth extractions....

“A mother’s story”

- “My daughter used icepacks and Tylenol and was absolutely fine. If it would be helpful, add my son’s story to your lectures. It would help me, knowing that perhaps other parents’ children will not be introduced to opioids in this way. Thank you so much for the work you are doing. Sincerely;” Susan Cunningham

Prescribing Opioids Using a Health-Oriented, Risk-Benefit Framework

NOT...

- ▶ Is the patient good or bad?
- ▶ Does the patient deserve opioids?
- ▶ Should this patient be punished or rewarded?
- ▶ Should I trust the patient?



RATHER...

- ▶ Are opioids indicated and safe for this patient?
(In this case there was no further indication.)

**Judge the opioid treatment,
NOT the patient**

Always Stay in Your Clinician Role



NOT



Thank you