

## Solving the Prescription Opioid Crisis: An Anesthesiology Chair's Perspective



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## Conflict of Interest

None

SAAA - Chicago, IL - November 12, 2016

## Objectives

- Explain the evolution of increased use of opioids for the treatment of chronic pain
- Outline recent trends in the pharmacological management of pain, including the evolving role for opioid analgesics
- Describe the (potential) impact of this epidemic on academic anesthesiology departments

SAAA - Chicago, IL - November 12, 2016

An Unmet Need

## THE BURDEN OF PAIN

2011: Relieving Pain in America

REPORT BRIEF | JUNE 2011

INSTITUTE OF MEDICINE  
OF NATIONAL ACADEMIES  
Advancing the nation - Improving health

For more information visit [www.iom.edu/relievingpain](http://www.iom.edu/relievingpain)

### Relieving Pain in America

A Blueprint for Transforming Prevention, Care, Education, and Research

Pain represents a national challenge. A cultural transformation is necessary to better prevent, assess, treat, and understand pain of all types.

Chronic pain affects an estimated 100 million American adults—more than the total affected by heart disease, cancer, and diabetes combined. Pain also costs the nation up to \$635 billion each year in medical treatment and lost productivity.

The Universal Antidote

## THE OPIATES & OPIOIDS

10,000 B.C. – 2016

## Acute Pain and Opioids

- Opioid analgesics are used to effectively treat acute pain in the postoperative period and following trauma
- Opioid analgesics are an integral part of treating pain and minimizing suffering in those with advanced illness

## Chronic Pain and Opioids

- Until recent years, use of opioids for treating chronic pain was limited
- The potential for adverse effects, including addiction and death due to overdose, has been known for as long as opium has been in use

## Chronic Pain and Addiction

- While the likelihood of patients progressing from taking legitimately prescribed opioids for pain to opioid addiction is low, pain in the context of pre-existing opioid addiction is extremely high
- Individuals with severe pain and opioid addiction have over five times higher relapse rate compared with their counterparts with opioid addiction but no pain

Wachholtz A et al. *Subst Abuse Rehabil* 2011; 2:145–162.

A Newfound Panacea

## OPIOIDS FOR CHRONIC PAIN

1988 - 2001

## Opioids for Chronic Pain



“...these papers represent a phenomenon akin to ‘breaking the sound barrier.’ Our attitudes to narcotics are influenced by unfounded prejudice based on street addicts...”

Melzack R. *The tragedy of needless pain: a call for social action*. IASP President's Address, Vth World Congress on Pain, 1988.

## Opioids for Chronic Pain

### *New Pharmacologic Preparations*

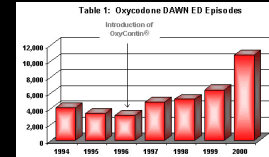
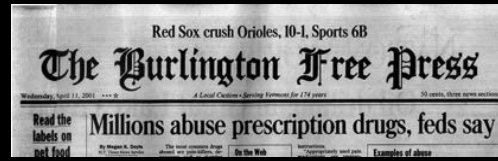
- 1987: Extended-release morphine (MS-Contin®)
- 1990: Transdermal fentanyl (Duragesic®)
- 1996: Extended-release oxycodone (OxyContin®)
- 1998: Oral transmucosal fentanyl (Actiq®)
- 2006: Oral buccal fentanyl (Fentora®)
- 2010: Extended-release hydrocodone (Exalgo®)
- 2013: Extended-release hydrocodone (Zohydro ER®)

Prescription Drug Abuse

## AN EPIDEMIC EMERGES

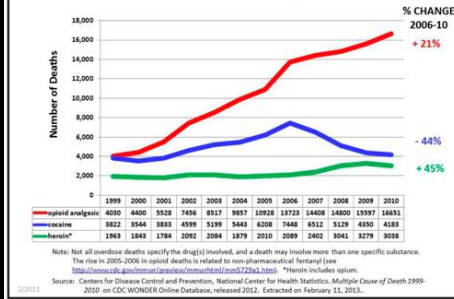
2000 - 2012

## An Epidemic Emerges



## An Epidemic Emerges

Overdose Deaths Involving Opioid Analgesics, Cocaine and Heroin: United States, 1999–2010



Recent Trends

## PHARMACOLOGICAL PAIN MANAGEMENT

The Evolving Role for Opioid Analgesics

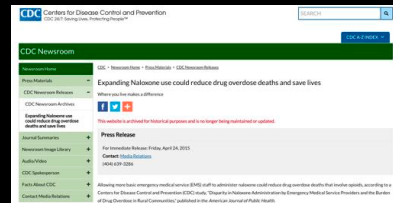
## New Analgesics

- No novel analgesics
  - “Abuse-deterrent” formulations of opioids
  - New extended-release formulations
  - New routes of delivery for some agents (topical, transmucosal)
  - Label extension to new indications
- Little impact on managing those with chronic pain

[Onzetra Xsail \(sumatriptan nasal powder\)](#)  
[Troxyca ER \(oxycodone + naltrexone\)](#)  
[Belbuca \(buprenorphine\)](#)  
[Vivlodex \(meloxicam\)](#)  
[Dyloject \(diclofenac sodium\) Injection](#)  
[Targiniq ER \(oxycodone hydrochloride + naloxone hydrochloride\) extended-release tablets](#)  
[Tivorbex \(indomethacin\)](#)  
[Xartemis XR \(oxycodone hydrochloride and acetaminophen\) extended release](#)  
[Zohydro ER \(hydrocodone bitartrate\) Extended-Release Capsules](#)  
[Zubsolv \(buprenorphine and naloxone\)](#)  
[Lyrica \(pregabalin\)](#)  
[Subsys \(fentanyl\) sublingual spray](#)

## Naloxone

- Narcan (naloxone hydrochloride); Adapt; For emergency treatment of known or suspected opioid overdose; Approved November 2015
- The effectiveness of naloxone in preventing opioid-related overdose deaths and who should receive this drug, particularly among those on chronic opioid therapy for pain, are unknown



## Emphasis on Minimizing use of Opioid Analgesics

### *Trends in the Pharmacological Management of Acute Pain*

- Enhanced Recovery After Surgery (ERAS) protocols that combine multiple analgesics as part of comprehensive protocols have become commonplace
- Education for providers with emphasis on use of the smallest effective doses and shortest duration of analgesics after surgery have become common

Evaluating the Scientific Evidence

## ARE OPIOIDS EFFECTIVE?

Twenty Years of Scientific Inquiry

## Are Opioids Effective?

- A 2015 NIH workshop centered on the prescription drug abuse epidemic
- There is not one study long-term (>1 year) outcomes related to pain, function, quality of life, opioid abuse, or addiction
- Observational studies suggest that opioid therapy for chronic pain is associated with increased risk for overdose, opioid abuse, fractures, myocardial infarction, and markers of sexual dysfunction
- For some of these harms, higher dose was associated with increased risk

Chou R et al. Intern Med 2015;162:276-86.

Addressing the Epidemic

## CHRONIC OPIOIDS TODAY

2016 and Beyond

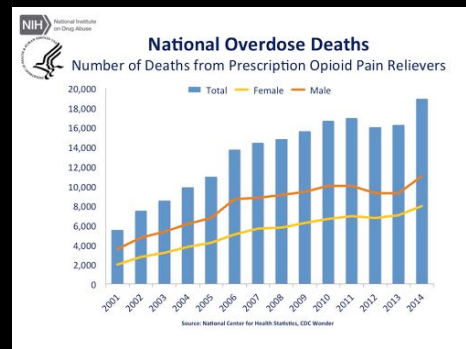
## Chronic Opioids Today



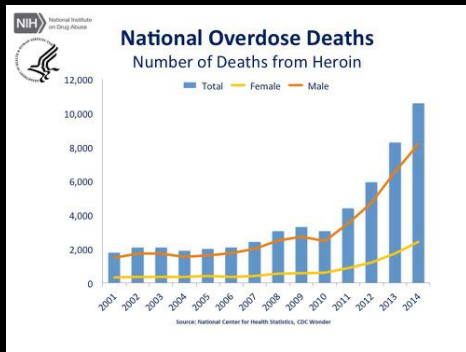
The 2011 White House plan calls for:

- Expanded education of patients and health care practitioners
- An urgent call for new research
- Expansion of existing Prescription Drug Monitoring Programs (PDMPs)
- Better means for disposing of unneeded prescription drugs
- Tougher enforcement of existing laws focused on identifying and prosecuting practitioners

## Chronic Opioids Today



## Chronic Opioids Today



## Chronic Opioids Today

How do we appropriately select and manage patients with chronic non-cancer pain for chronic opioid therapy to treat only those with the greatest chance to benefit while minimizing the risk to the individual who is treated and our society?

## Chronic Opioids Today

- Identify at-risk patients using validated screening tools
- Incorporate frequent monitoring, periodic urine screens, opioid therapy agreements, opioid checklists, and motivational counseling

Jamison RN, Mao J. Opioid analgesics. Mayo Clin Proc 2015; 90:957-968.

## Chronic Opioids Today

How do we identify and best manage those patients receiving chronic opioid therapy who are not benefiting from this course of treatment?

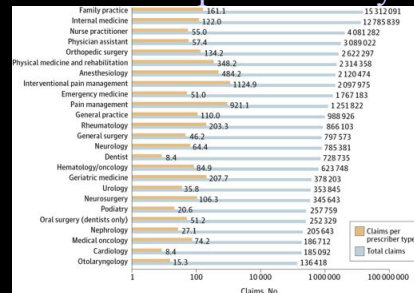
## Chronic Opioids Today

*Discontinuation and/or maintenance of chronic opioid therapy*

- Guides for tapering opioids are non-existent
- Most studies are in those under treatment for substance use disorder
- Psychiatric co-morbidities and fears of medico-legal risk hinder treatment

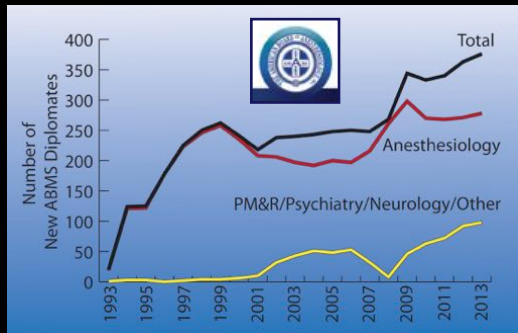
Berna C et al. Mayo Clin Proc 2015;90:828-42.

## Chronic Opioids Today



JAMA Intern Med. 2016;176(2):259-261.

## Physician Training in Pain Medicine



## National Pain Strategy

A Comprehensive Population Health-Level Strategy for Pain

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### Conclusions

#### ACADEMIC ANESTHESIOLOGY MUST LEAD

- RESEARCH: Aimed at developing new analgesics that are more effective and less subject to abuse
- RESEARCH: Aimed at determining who will benefit most from chronic opioid therapy with an emphasis on measurable improvements in function
- RESEARCH: Aimed at identifying patients who are not benefiting from chronic opioid therapy and determining how best to discontinue opioids

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### Conclusions:

#### ACADEMIC ANESTHESIOLOGY MUST LEAD

- EDUCATION: Improving the education of all health care providers in the compassionate and evidence-based management of chronic pain is needed
- INNOVATION: The magnitude of this problem calls for the adoption of new models for collaborative care among primary care and specialty providers for managing patients with chronic pain with an emphasis on measurable improvement in function



Boston Public Library

Boston, Massachusetts, 2012