# Overtreatment of Outpatient Infections

MarkAlain Déry, DO, MPH, FACOI
Chief Innovation Officer
Medical Director of HIV and Hepatitis Services
Access Health Louisiana; FQHC
Medical Director AIDS Educational Training Center (AETC)
Medical Director Center for Health Equities

Executive Director;
102.3 WHIV-LP FM
Human Rights and Social Justice Radio

madery@whivfm.org

ACOI '19 ARIZONA
AMERICAN COLLEGE OF OSTEOPATHIC INTERNISTS
ANNUAL CONVENTION AND SCIENTIFIC SESSIONS
OCT 30 - NOV 3

# Disclosures

# Objectives

At the conclusion of this section, participants will be able to;

- Recall that the overuse of antibiotics is common and associated with significant negative impact on patient safety and quality of care.
- Paraphrase that there is an over-diagnosis of penicillin allergy, and that de-labeling people mistakenly thought to be allergic to penicillin is safe and cost-saving.
- Recognize that conditions that are difficult to 'precisely diagnose', such as respiratory tract symptoms and skin erythema can lead to over-diagnosis, then over-treatment of conditions that can be misinterpreted as having an infectious etiology.

# OVERTREATMENT

*Defined*

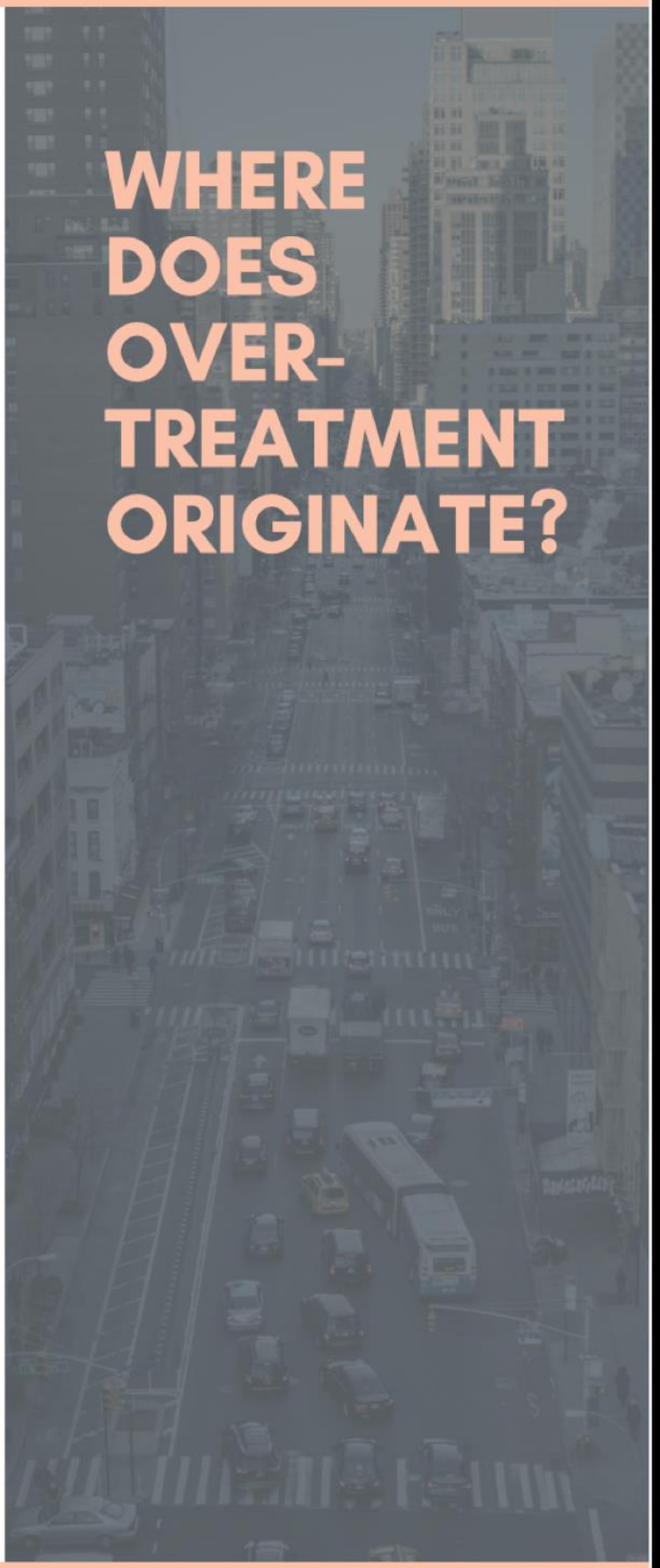
**OVERTREATMENT**

**Overdiagnosis**

Overdetection

Overdefinition

Overselling



# Overdiagnosis

Editorial

## Overdiagnosis: what it is and what it isn't

John Brodersen,[1,2] Lisa M Schwartz,[3] Carl Heneghan,[4]
Jack William O'Sullivan,[4] Jeffrey K Aronson,[4]
Steven Woloshin[3]

Overdiagnosis is making people patients unnecessarily, by identifying problems that were never going to cause harm, or by medicalising ordinary life experiences through expanded definitions of diseases.

# Overdetection

Overdetection refers to the identification of abnormalities that were never going to cause harm, abnormalities that do not progress, that progress too slowly to cause symptoms or harm during a person's remaining lifetime, or that resolve.

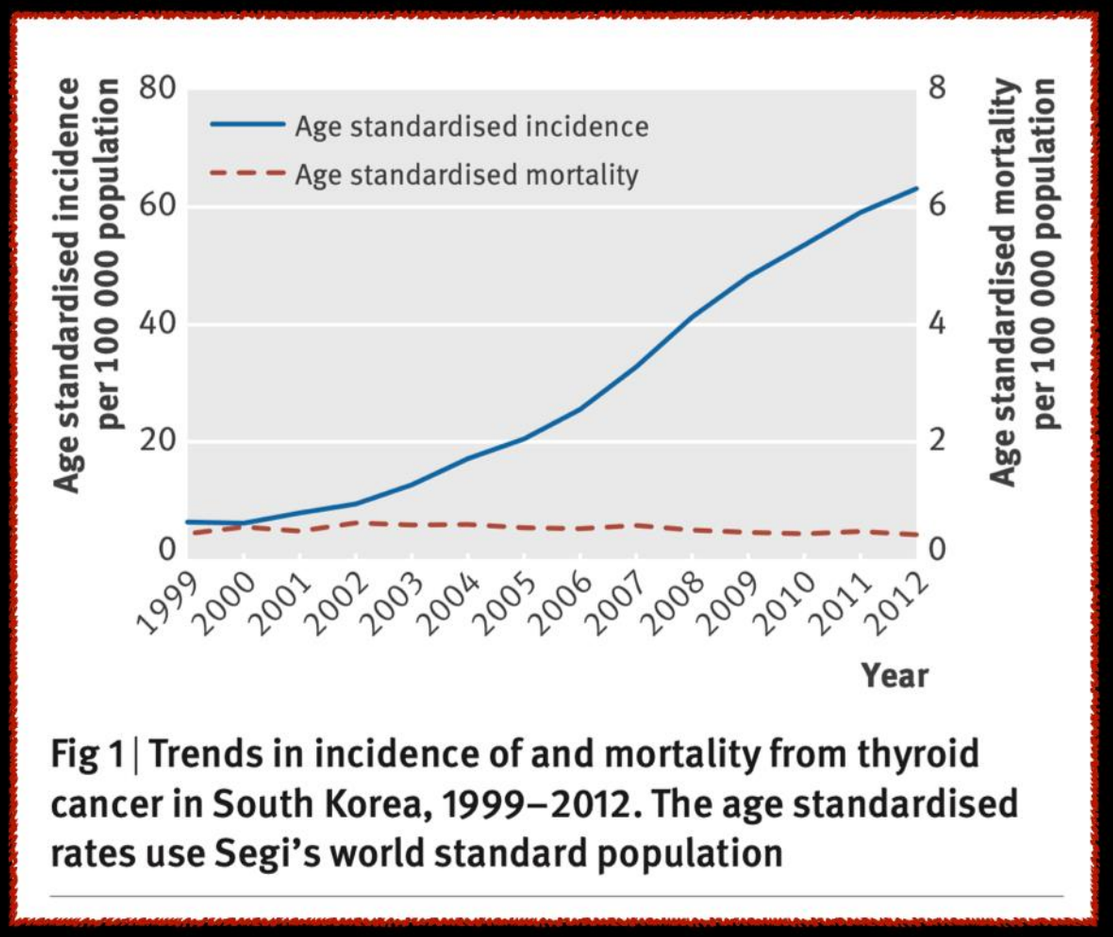



**Fig 1 | Trends in incidence of and mortality from thyroid cancer in South Korea, 1999–2012. The age standardised rates use Segi's world standard population**

"The current "epidemic" of thyroid cancer in South Korea is due to an increase in the *detection* of small tumours, most likely as a result of overdetection."

# Overdefinition

Overdefinition occurs by two mechanisms:

1. Lowering the threshold for a risk factor without evidence that doing so helps people and by expanding disease definitions to include patients with ambiguous or very mild symptom.

**New Blood Pressure (BP) Categories in Adults**

| Category | Systolic BP | | Diastolic BP |
|---|---|---|---|
| Normal | <120 mm Hg | AND | <80 mm Hg |
| Elevated | 120–129 mm Hg | AND | <80 mm Hg |
| Hypertension | | | |
| Stage 1 | 130–139 mm Hg | OR | 80–89 mm Hg |
| Stage 2 | ≥140 mm Hg | OR | ≥90 mm Hg |

Source: *J Am Coll Cardiol.*

An example of lowering the threshold would be changing high blood pressure from a systolic blood pressure of >150 to >130 for all adults.

# Overdefinition; Prediabetes


**Summary box**

*Clinical context*—Attempts to tackle the increasing prevalence of diabetes have focused on identifying and treating people at risk of developing the disease

*Diagnostic change*—The definition of people at risk has expanded from impaired glucose tolerance to include people with raised fasting glucose or glycated haemoglobin ($HbA_{1c}$) concentrations and cut-off points have been lowered

*Rationale for change*—People in all the above categories have a raised diabetes risk, although prediction is poorer for fasting glucose and $HbA_{1c}$ than for impaired glucose tolerance

*Leap of faith*—Treatment of people in newly defined categories will improve mortality and morbidity

*Impact on prevalence*—The expanded categories increase the prevalence of pre-diabetes by twofold to threefold

*Evidence of overdiagnosis*—New definitions result in over 50% of Chinese adults having pre-diabetes

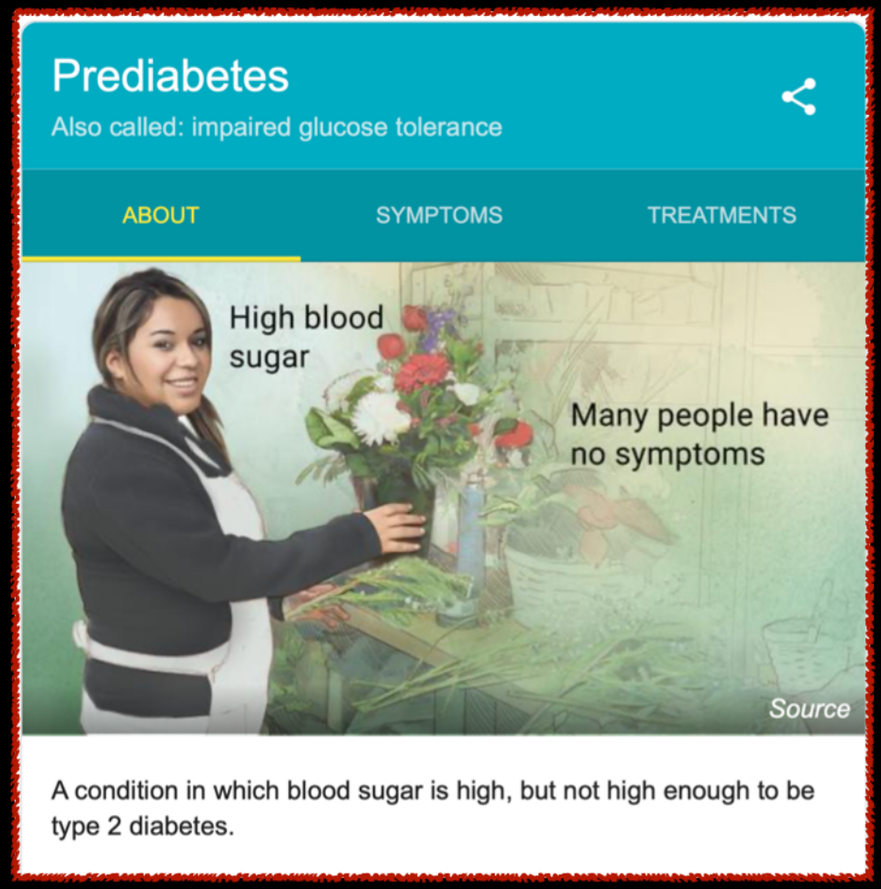
*Harms from overdiagnosis*—A label of pre-diabetes bring problems with self image, insurance, and employment as well as the burdens and costs of healthcare and drug side effects

*Limitations of evidence*—No studies have examined the effect of lifestyle or drug interventions in newly added subcategories

*Conclusion*—Diabetes prevention requires changes to societies and therefore a concerted global public health approach. Diagnoses and thresholds for clinical application may unrealistically burden societies in exchange for limited value

# Overdefinition; Prediabetes

2. <u>Treating</u> risk factors as diseases and lowering the thresholds for ‘risk factor-based’ diagnoses has dramatically increased the prevalence of many diseases such as the ‘epidemic’ of prediabetes.

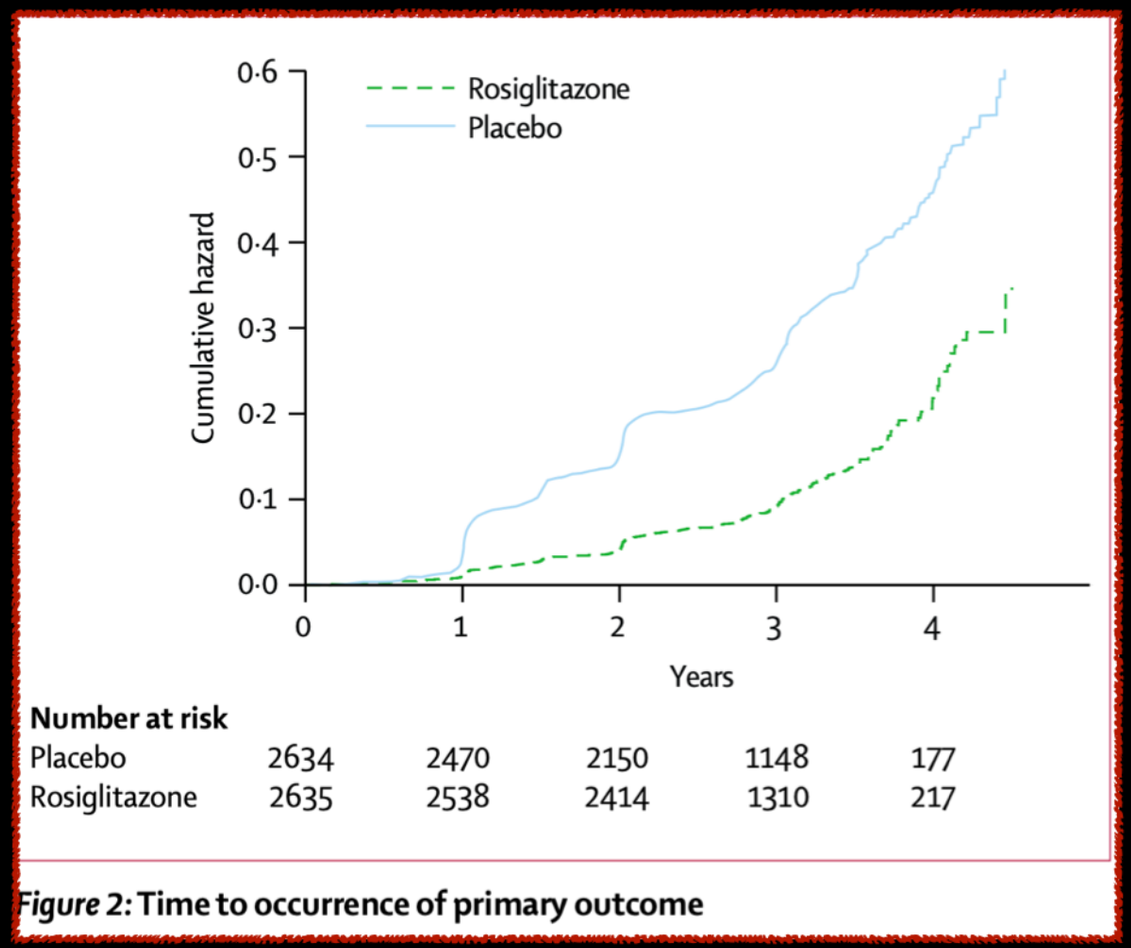



Pre-diabetes could be defined as a risk factor for developing a risk factor. With this label comes much of the same trappings as for diabetes, without evidence of long term benefit.

*BMJ Evidence-Based Medicine* February 2018 | volume 23 | number 1 |

# Overdefinition; Prediabetes

- The DREAM study reported that 14 in 100 people were prevented (or postponed) from developing diabetes by taking rosiglitazone for 3 years.
- This means that 86 in 100 healthy people who weren't going to develop diabetes in three years were put on a drug that causes heart failure and fractures and has been under suspicion of increasing cardiovascular risk.




**Number at risk**

| | | | | | |
|---|---|---|---|---|---|
| Placebo | 2634 | 2470 | 2150 | 1148 | 177 |
| Rosiglitazone | 2635 | 2538 | 2414 | 1310 | 217 |

***Figure 2:*** **Time to occurrence of primary outcome**

The long-term benefits and cost effectiveness of early pharmacologic treatment vs withholding treatment until diabetes develops are <u>unproven</u>.



www.thelancet.com Vol368 September23,2006

# Overselling;
# Disease Mongering

OVERSELLING

## INSIDIOUS TACTIC FOR PROMOTING OVERDIAGNOSIS.

What characterises overselling is that the supposed 'diseases' are unpleasant experiences most people have from time to time.

For example, most people have experienced trouble sleeping, sadness, or difficulty focusing.

Over- selling means moving the line separating normal from abnormal, so that people with milder and milder symptoms get diagnosed.

## Disease Mongering

Disease mongering is a pejorative term for the practice of widening the diagnostic boundaries of illnesses, and promoting public awareness of such, in order to expand the markets for those who sell and deliver treatments, which may include pharmaceutical companies, physicians, and other professional or consumer organizations

Disease mongering has been a central strategy in prominent marketing campaigns for conditions such as low testosterone of ageing ('low t'), restless legs syndrome, binge eating disorder, adult ADHD, chronic dry eye disease, and too short eyelashes.

*BMJ Evidence-Based Medicine* February 2018 | volume 23 | number 1 |

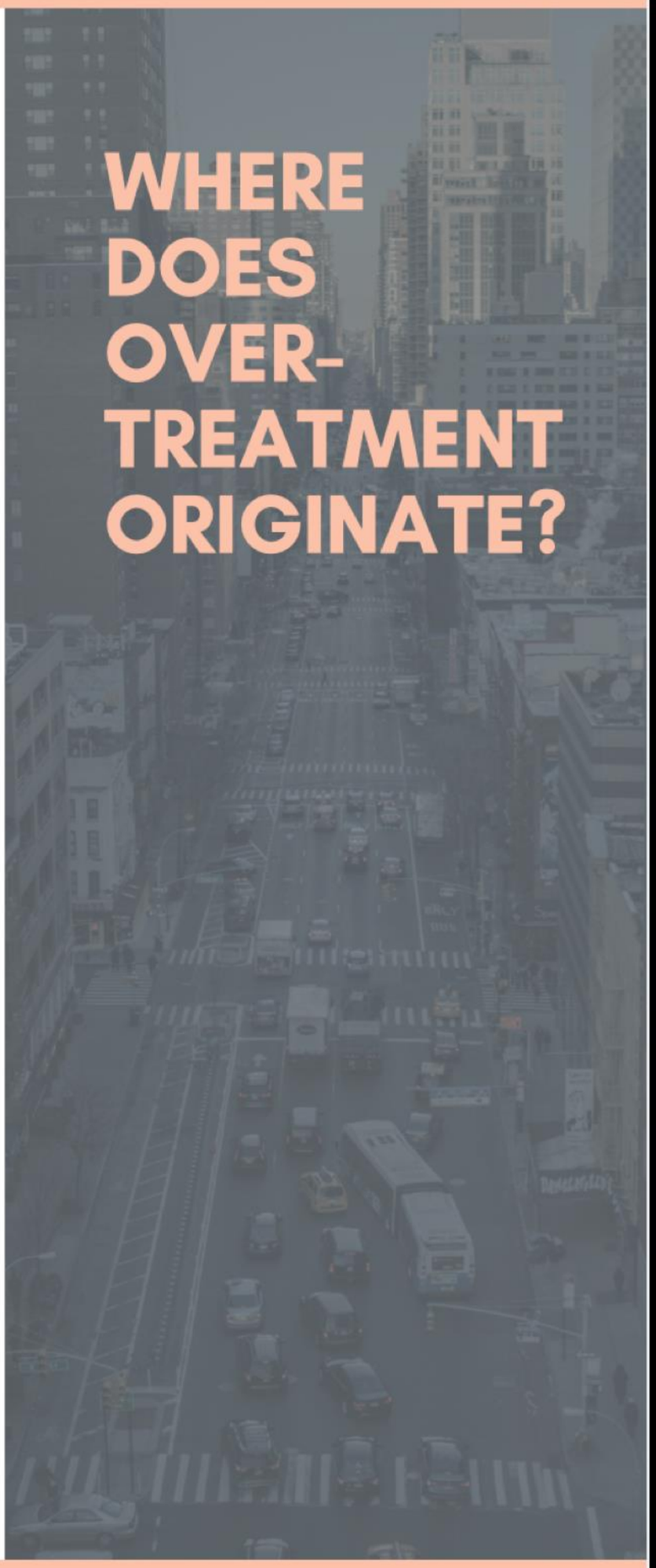
# Overselling

**There's a lot of money to be made from telling healthy people they're sick. Some forms of medicalising ordinary life may now be better described as disease mongering: widening the boundaries of treatable illness in order to expand markets for those who sell and deliver treatments.Pharmaceutical companies are actively involved in sponsoring the definition of diseases and promoting them to both prescribers and consumers. The social construction of illness is being replaced by the corporate construction of disease.**

23andMe

BMJ. 2002 Apr 13; 324(7342): 886–891

# WHERE DOES OVER-TREATMENT ORIGINATE?



**OVERTREATMENT**

**Overdiagnosis**

Overdetection

Overdefinition

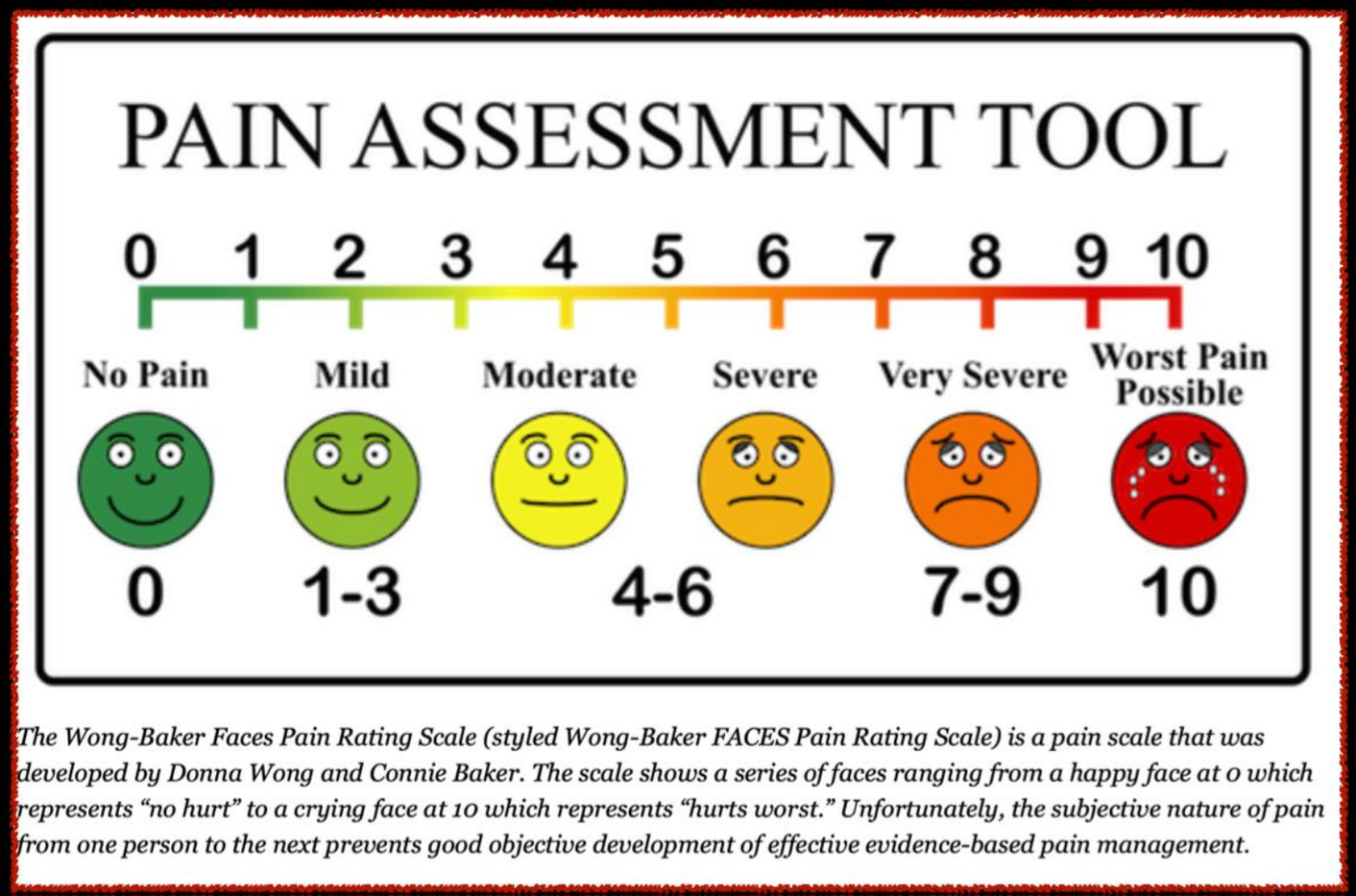
Overselling

# Overtreatment; Opioids


1. https://www.hhs.gov/opioids/ 2019

# Overdiagnosis; Pain


# Overdetection; Pain


*The Wong-Baker Faces Pain Rating Scale (styled Wong-Baker FACES Pain Rating Scale) is a pain scale that was developed by Donna Wong and Connie Baker. The scale shows a series of faces ranging from a happy face at 0 which represents "no hurt" to a crying face at 10 which represents "hurts worst." Unfortunately, the subjective nature of pain from one person to the next prevents good objective development of effective evidence-based pain management.*

# Overtreatment; Opioids

CORRESPONDENCE ARCHIVE

## Addiction Rare in Patients Treated with Narcotics



January 10, 1980
N Engl J Med 1980; 302:123
DOI: 10.1056/NEJM198001103020221

TO THE EDITOR

Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients[1] who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients,[2] Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare in medical patients with no history of addiction.

Jane Porter
Hershel Jick, M.D.
Boston Collaborative Drug Surveillance Program Boston University Medical Center, Waltham, MA 02154

N Engl J Med 1980; 302:123

# Overtreatment; Opioids

- 608 citations of the index publication… note, a sizable increase after the introduction of OxyContin.
- The authors of 439 (72.2%) cited it as evidence that addiction was rare in patients treated with opioids.
- Of the 608 articles, the authors of 491 articles (80.8%) did not note that the patients who were described in the letter were hospitalized at the time they received the prescription.

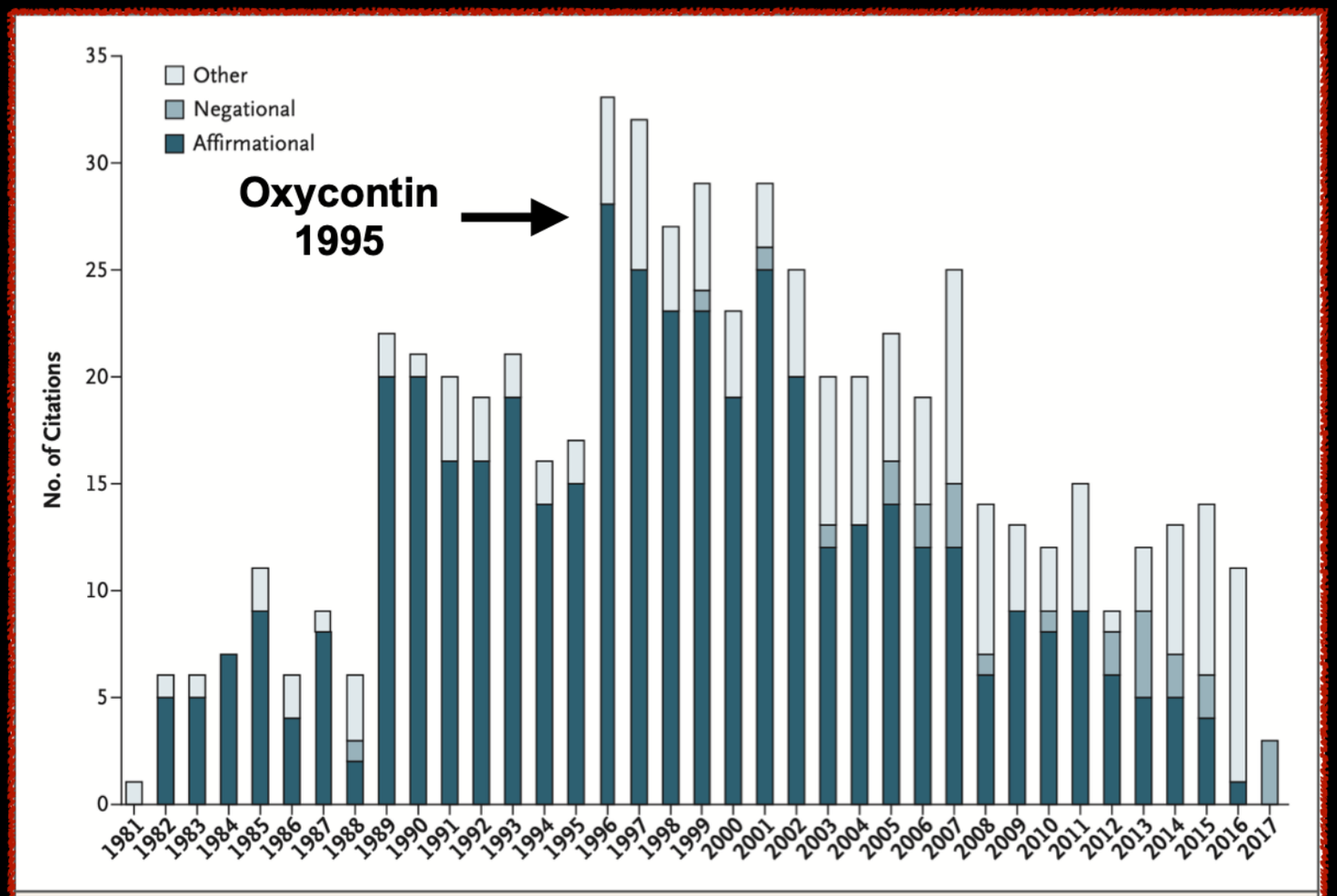



**Figure 1. Number and Type of Citations of the 1980 Letter, According to Year.**

Shown are number of citations of a 1980 letter to the *Journal* in which the correspondents claimed that opioid therapy rarely resulted in addiction. The citations are categorized according to whether the authors of the articles affirmed or negated the correspondents' conclusion about opioids. Details about "other" citation categories are provided in Section 2 in the Supplementary Appendix.

NEJM 376;22, 2017

# Overtreatment; Opioids

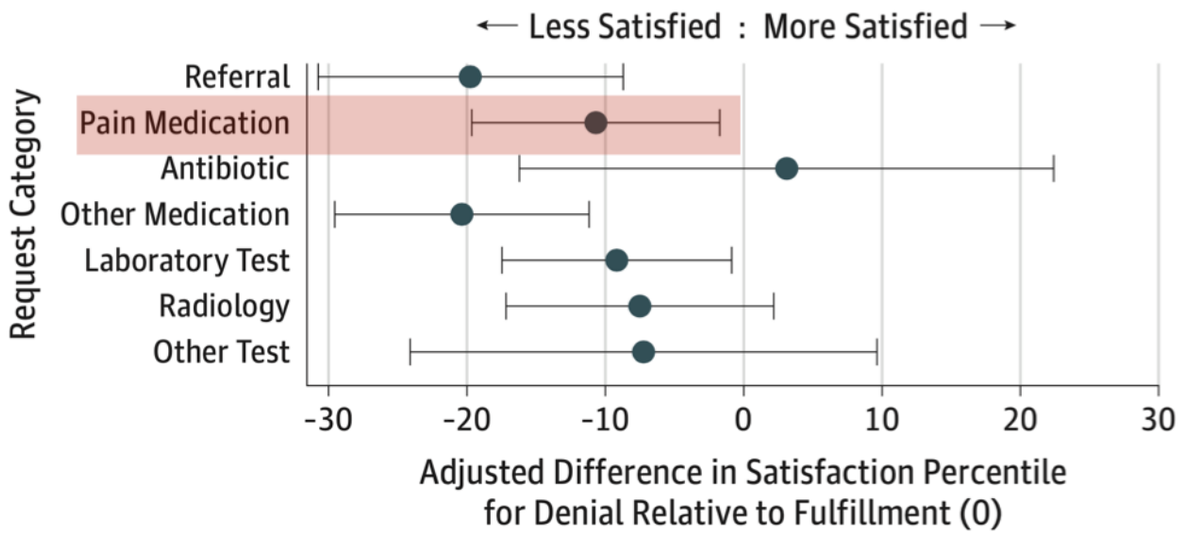
- In 2001 the IOM called for processes to monitor and track 6 aims (safety, effectiveness, patient centeredness, timeliness, efficiency, and equitableness).
- "Patient satisfaction" became a proxy for success… and this created the *Hospital Consumer of Healthcare Providers and Systems* survey (HCAHPS).
  - This survey had three questions concerning pain control.


Mayo Clin Proc. 2018;93(3):344-350

# Overtreatment; Opioids

- In 2005, reimbursements were tied to patient satisfaction, this led to many conscientious physicians received poor patient satisfaction scores for not providing opioids and other controlled substances when requested.
- Although the Joint Commission, IOM, and CMS had good intentions of involving patients in their care, ramifications were that patients received more opioids and other controlled substances when requested.

**Figure. Adjusted Mean Differences in Patient Satisfaction Percentile Associated With Clinician Denial of Requests**

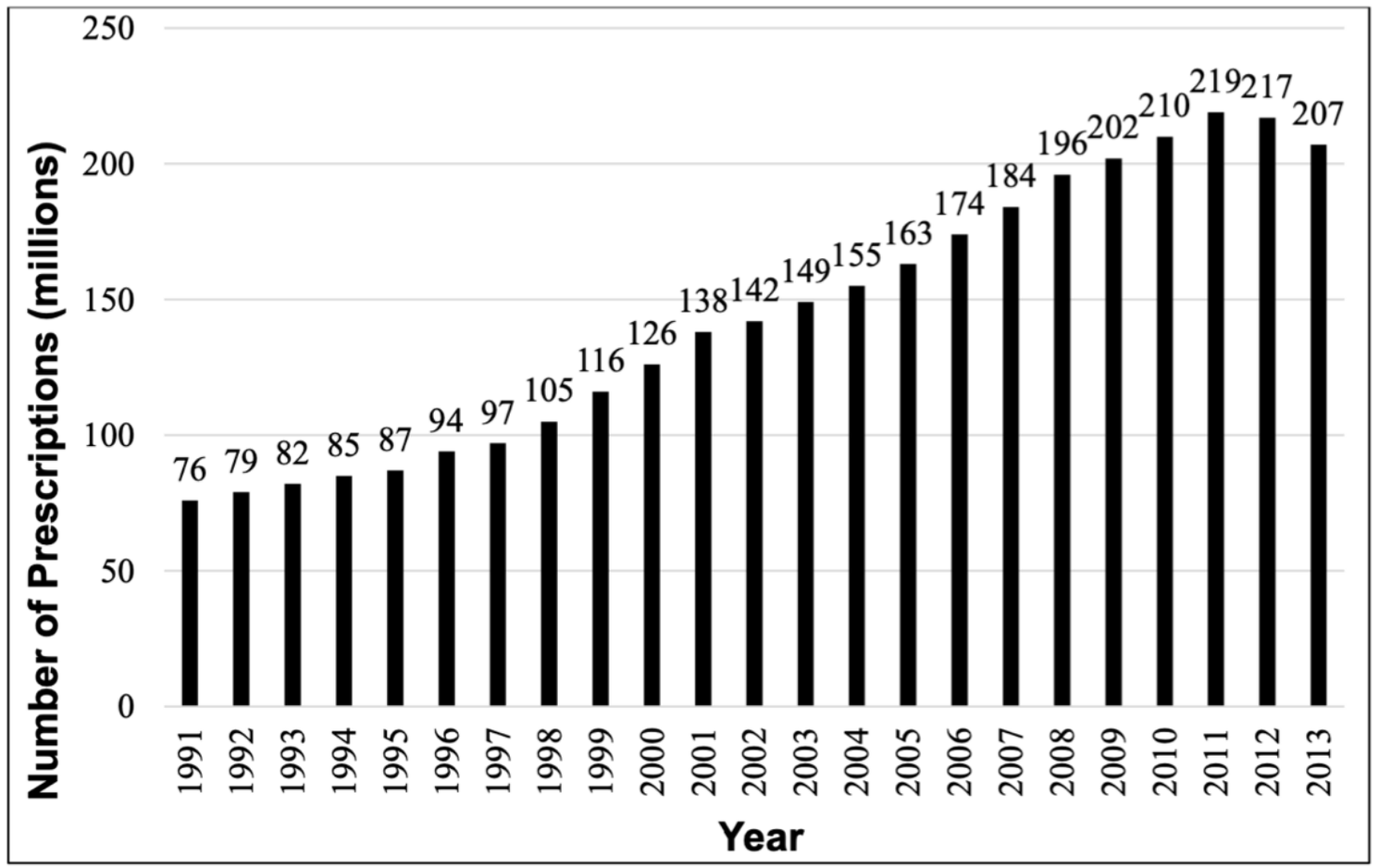



Clinician denial of pain medications was associated with worse patient satisfaction.

*JAMA Intern Med.* 2018;178(1):85-91

# Opioid Prescriptions; 1991-2013

**Figure 1. Opioid Prescriptions Dispensed by U.S. Retail Pharmacies, 1991-2013.**

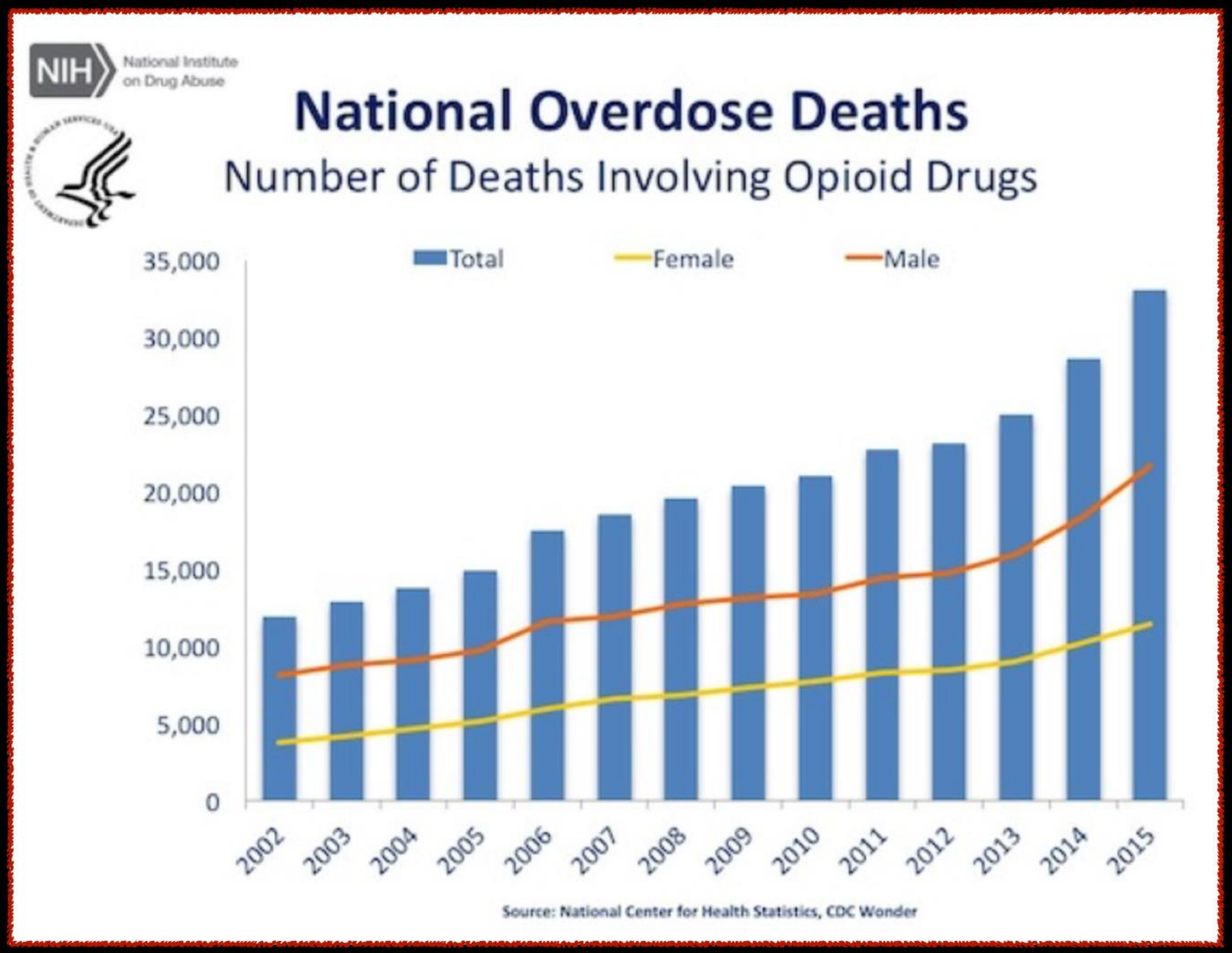



***Changes to the Standards and Examples of Implementation***

In response to safety concerns and the misinterpretation of the Examples of Implementation, The Joint Commission made multiple changes to the standards and Examples of

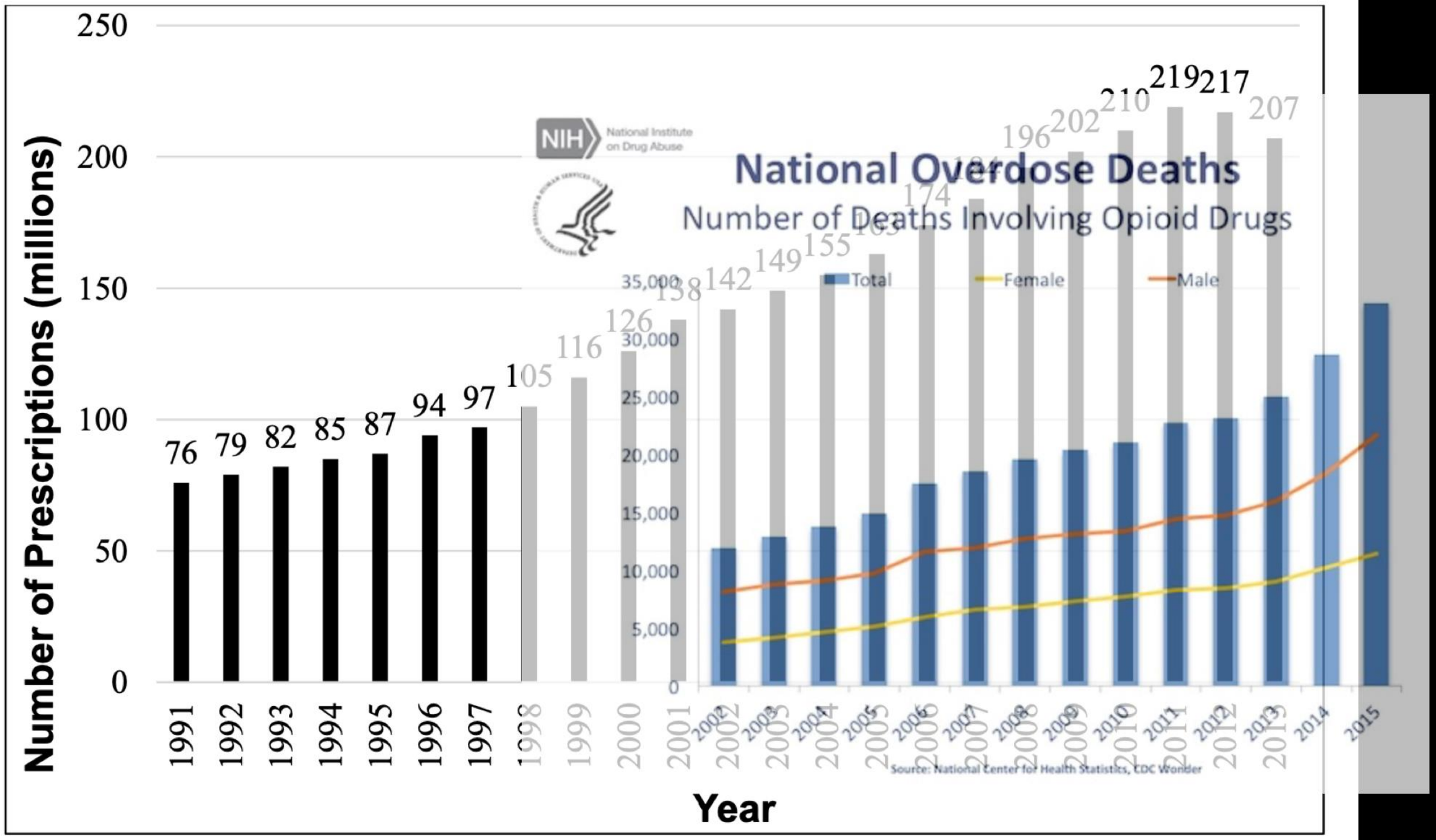
Joint Commission Pain Standards 2017

# Overdose Deaths; 2002-2015




National Center for Health Statistics; CDC

**Figure 1. Opioid Prescriptions Dispensed by U.S. Retail Pharmacies, 1991-2013.**




***Changes to the Standards and Examples of Implementation***

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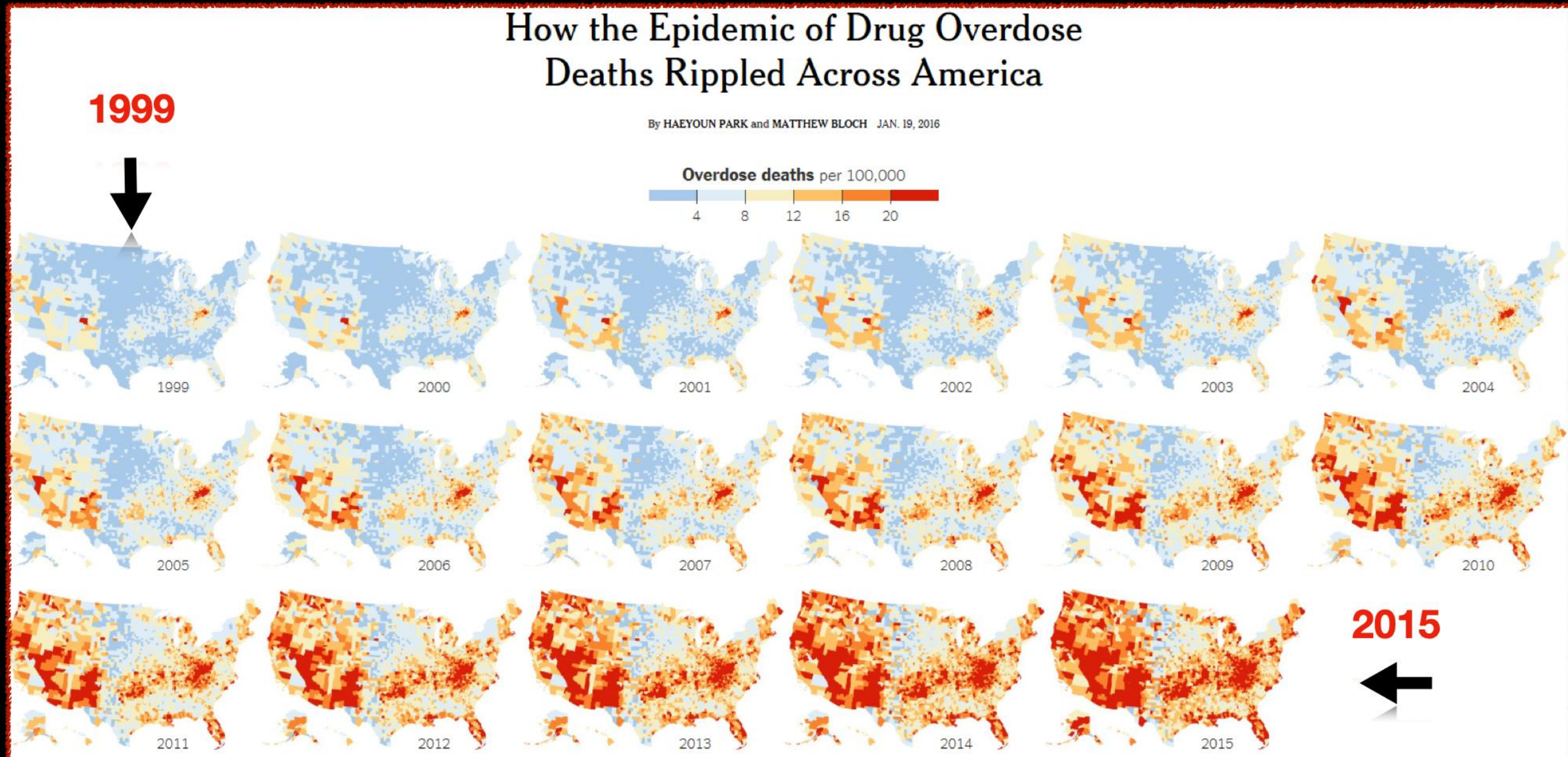
Joint Commission Pain Standards 2017 National Center for Health Statistics; CDC

# Evidence Based Harm Reduction Strategies;
# US Opioid Epidemic

## How the Epidemic of Drug Overdose Deaths Rippled Across America

By HAEYOUN PARK and MATTHEW BLOCH JAN. 19, 2016




The New York Times

# Opioid Epidemic Impact

## Impact of the Opioid Epidemic on the U.S. Healthcare System

**$11.3B**

**Total annual expenses**
of overdose-related costs to the U.S. healthcare system

**$1.94B**

**Total annual hospital costs**
across 647 healthcare facilities nationwide

**24%**

**Percentage of opioid overdose patients**
who were readmitted for additional emergency care within 30 days of discharge – higher than the 17.5 percent national average for 30-day readmissions for Medicare patients

https://www.premierinc.com/newsroom/blog/how-healthcare-providers-are-fighting-the-opioid-epidemic-on-the-front-lines Feb 2019

# Overselling

## Purdue Pharma filed for bankruptcy. What does it mean for lawsuits against the opioid manufacturer?

*By* ANDREW JOSEPH @DrewQJoseph / SEPTEMBER 16, 2019

Purdue Pharma on Sunday filed for Chapter 11 bankruptcy, part of a deal to settle thousands of lawsuits alleging the company misled doctors and the public as it promoted its opioid painkillers, including its blockbuster OxyContin, and helped ignite the opioid epidemic.

## West Virginia cities sue Joint Commission over pain management recommendations

Brian Zimmerman - Friday, November 3rd, 2017 Print I Email

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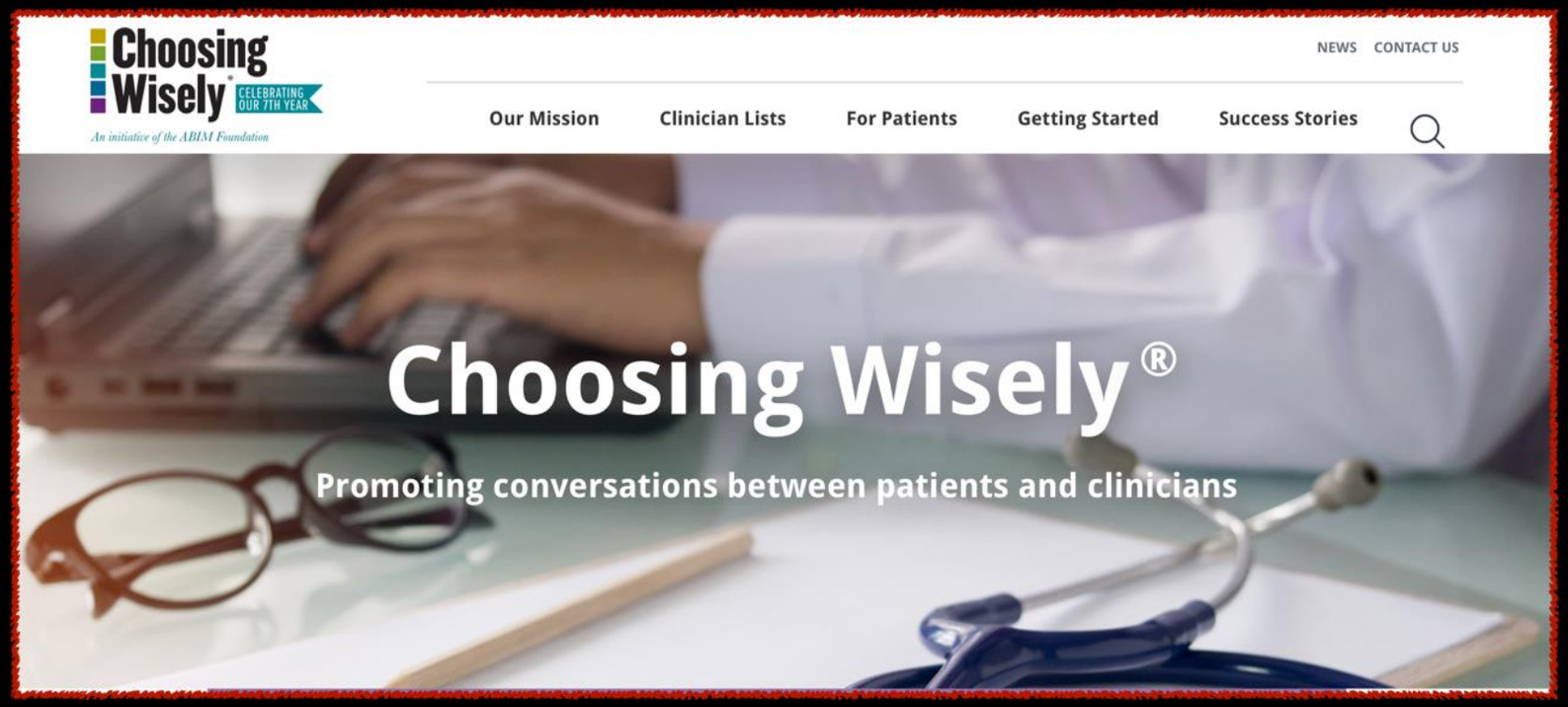
Four West Virginia cities — Ceredo, Charleston, Huntington and Kenova — filed a class-action lawsuit Thursday against The Joint Commission, alleging the healthcare accrediting body issued pain management standards in 2001 that downplayed the deadly and addictive properties of opioids, according to a report from the *Charleston Gazette-Mail*.

he New York Times

## *Purdue Pharma Tentatively Settles Thousands of Opioid Cases*

The company and its owners, members of the Sackler family, have tentatively reached the first comprehensive settlement in thousands of cases nationwide.

# Choose Wisely; ABIM



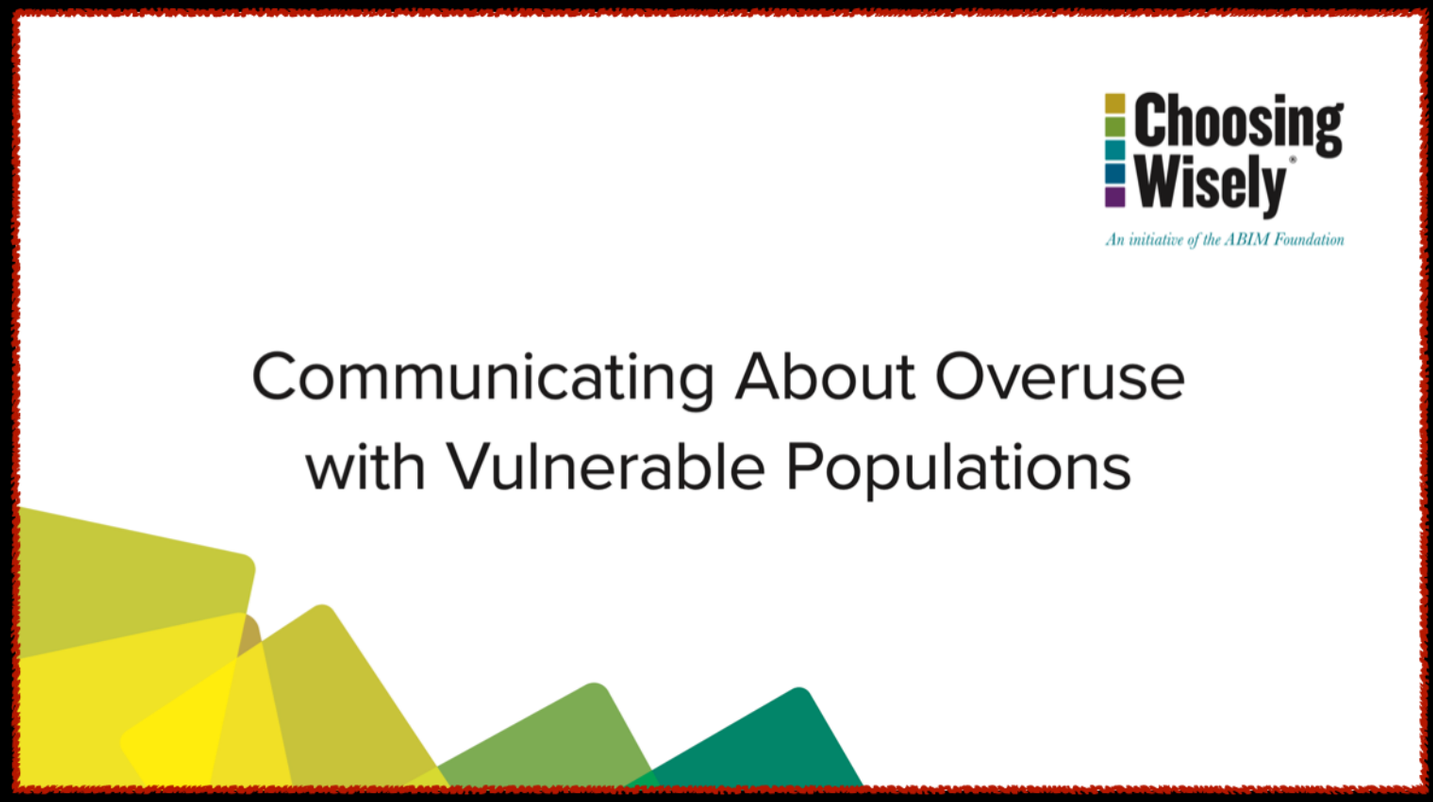

The mission of *Choosing Wisely* is to promote conversations between clinicians and patients by helping patients choose care that is:

- Supported by evidence
- Not duplicative of other tests or procedures already received
- Free from harm
- Truly necessary

https://www.choosingwisely.org/our-mission/

# Choose Wisely; ABIM

- Participants are comfortable challenging their doctors about care decisions.
- Focus group participants expressed relatively low levels of trust in their providers.
- Participants said they conducted fairly extensive research about treatment options and trusted their own judgment about what's best for them.




http://www.choosingwisely.org/wp-content/uploads/2019/10/Communicating-About-Overuse-to-Vulnerable-Population_Final2.pdf

# Choose Wisely; ABIM
# PCN Allergy Requires Appropriate Evaluation


JAMA November 13, 2018 Volume 320, Number 18

# Choose Wisely; ABIM PCN Allergy Requires Appropriate Evaluation

## American Academy of Allergy, Asthma & Immunology

View all recommendations from this society

Released March 3, 2014

**Don't overuse non-beta lactam antibiotics in patients with a history of penicillin allergy, without an appropriate evaluation.**

While about 10 percent of the population reports a history of penicillin allergy, studies show that 90 percent on more of these patients are not allergic to penicillins and are able to take these antibiotics safely. The main reason for this observation is that penicillin allergy is often misdiagnosed and when present wanes over time in most (but not all) individuals. Patients labeled penicillin-allergic are more likely to be treated with alternative antibiotics (such as vancomycin and quinolones), have higher medical costs, experience longer hospital stays, and are more likely to develop complications such as infections with vancomycin-resistant enterococcus (VRE) and Clostridium difficile.

https://www.choosingwisely.org/clinician-lists/american-academy-allergy-asthma-immunlogy-non-beta-lactam-antibiotics-penicillin-allergy/

# Choose Wisely; ABIM
# PCN Allergy Requires Appropriate Evaluation

## Evaluation and Diagnosis of Penicillin Allergy for Healthcare Professionals

Is it Really a Penicillin Allergy?

### Did You Know?

5 Facts About Penicillin Allergy (Type 1, Immunoglobulin E (IgE)-mediated)

1. Approximately 10% of all U.S. patients report having an allergic reaction to a penicillin class antibiotic in their past.
2. However, many patients who report penicillin allergies do not have true IgE-mediated reactions. When evaluated, fewer than 1% of the population are truly allergic to penicillins.1
3. Approximately 80% of patients with IgE-mediated penicillin allergy lose their sensitivity after 10 years.1
4. Broad-spectrum antibiotics are often used as an alternative to penicillins. The use of broad-spectrum antibiotics in patients labeled “penicillin-allergic” is associated with higher healthcare costs, increased risk for antibiotic resistance, and suboptimal
antibiotic therapy.1
5. Correctly identifying those who are not truly penicillin-allergic can decrease unnecessary use of broad-spectrum antibiotics.1

https://www.cdc.gov/antibiotic-use/community/for-hcp/Penicillin-Allergy.html

# Choose Wisely; ABIM
# PCN Allergy Requires Appropriate Evaluation

10% of the population reports a penicillin allergy but <1% of the whole population is truly allergic.

Before prescribing broad-spectrum antibiotics to a patient thought to be penicillin-allergic, evaluate the patient for true penicillin allergy (IgE-mediated) by conducting a history and physical, and, when appropriate, a skin test and challenge dose.

Broad-spectrum antibiotics are often used as an alternative to narrow-spectrum penicillins.

- Using broad-spectrum antibiotics can increase healthcare costs and antibiotic resistance, and may mean your patient receives less than the best care.
- Correctly identifying if your patient is actually penicillin-allergic can decrease these risks by reducing unnecessary use of broad-spectrum antibiotics.

https://www.cdc.gov/antibiotic-use/community/for-hcp/Penicillin-Allergy.html

# Choose Wisely; ABIM Procalcitonin

## American Society for Clinical Pathology

View all recommendations from this society

September 25, 2018

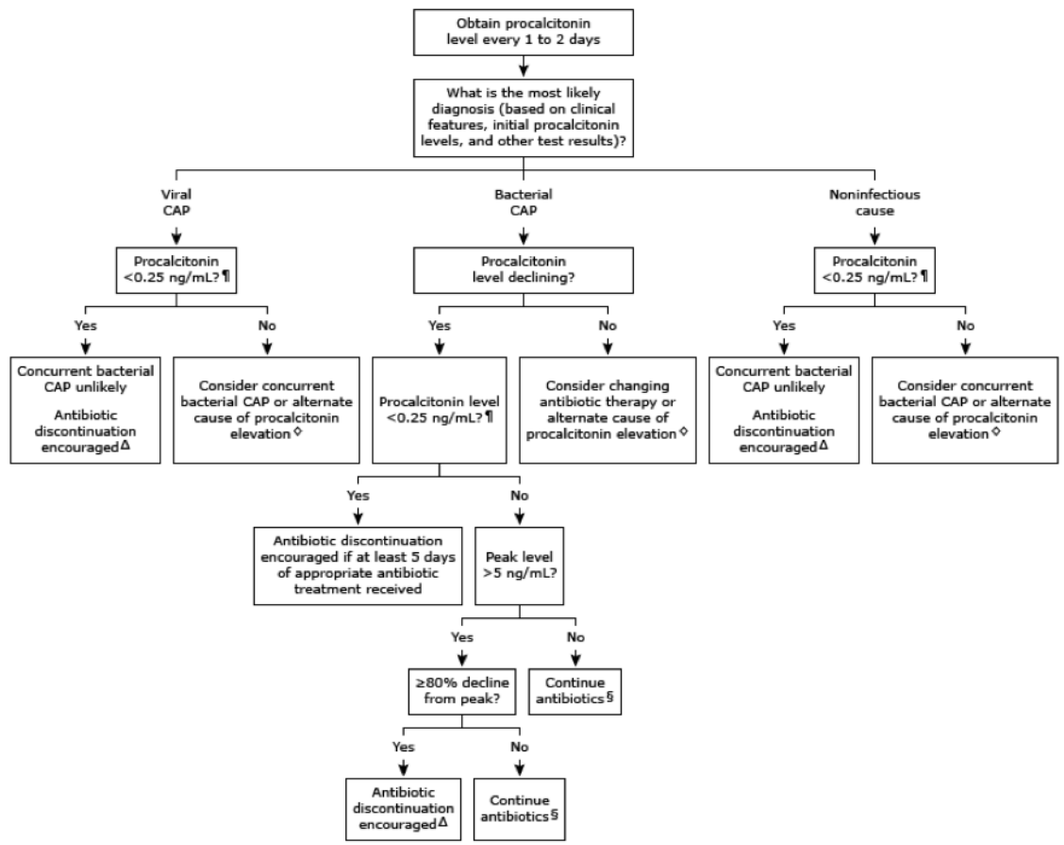
**Don’t perform Procalcitonin testing without an established, evidence-based protocol.**

Unfortunately, procalcitonin is often either misused (i.e. not used in the appropriate setting) or established algorithms are not followed. When the latter occurs, the procalcitonin result becomes simply another piece of laboratory data that adds costs, but does not benefit the patient. These scenarios often occur because there is not an evidence-based utilization plan established at an institution. Laboratory and intensive care unit leadership are encouraged to identify the major users of procalcitonin, to establish guidelines that are most appropriate for the local setting and to monitor use.

https://www.choosingwisely.org/clinician-lists/ascp-procalcitonin-testing/

# Choose Wisely; ABIM Procalcitonin

**Algorithm for procalcitonin-guided antibiotic discontinuation in clinically stable adult patients with known or suspected community-acquired pneumonia (CAP)***




* Procalcitonin has not been well studied in immunocompromised patients, trauma or surgery patients, pregnant women, patients with cystic fibrosis, and patients with chronic kidney disease. The algorithm may not be applicable to these populations or other patients with complex comorbidities.

¶ Optimal thresholds have not been precisely determined. Some experts use a lower threshold, typically 0.1 ng/mL when deciding to discontinue antibiotics.

△ Decisions to stop antibiotics should be made in combination with clinical judgment and presume that the patient is stable and that a bacterial infection that requires a longer course of therapy, such as CAP complicated by bacteremia, was not identified.

◇ Systemic inflammation due to other causes, such as burns, trauma, surgery, pancreatitis, malaria, or invasive candidiasis can also lead to elevated procalcitonin levels.

§ Reaching a procalcitonin level of <0.25 ng/mL is not a requirement for antibiotic discontinuation. For patients with clinically resolved pneumonia and levels >0.25 ng/mL, clinical judgment alone is adequate.

UpToDate®

https://www.uptodate.com/contents/image?imageKey=ID%2F117052&topicKey=ID%2F114753&search=procalcitonin&rank=1~67&source=see_link

# Choose Wisely; ABIM Procalcitonin

- Assessed the efficacy and safety of procalcitonin-guided antibiotic treatment in patients in ICUs in a health-care system in the Netherlands.
- Prospective, multicentre, randomised, controlled, open-label intervention trial in 15 hospitals.

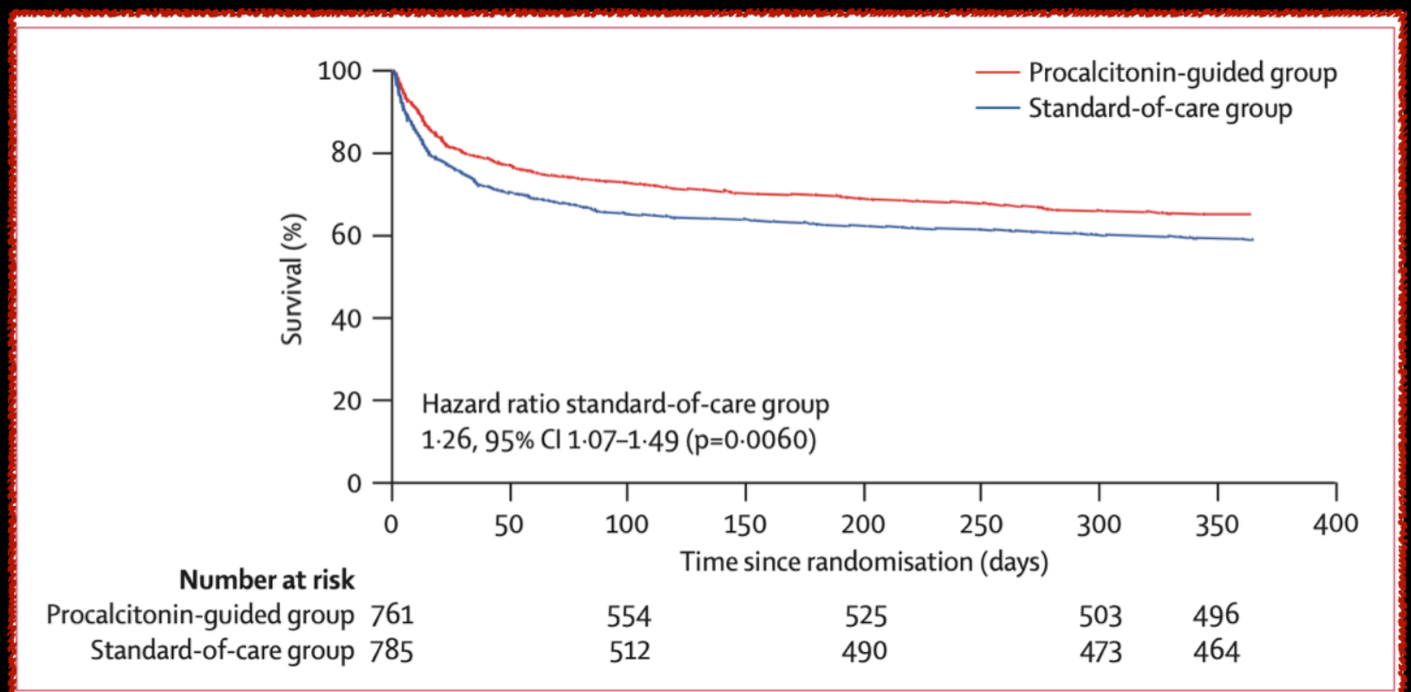



*Figure 2:* **Kaplan-Meier plot for probability of survival from random assignment to day 365, in the modified intention-to-treat population**

Procalcitonin guidance stimulates reduction of duration of treatment and daily defined doses in critically ill patients that was associated with a significant decrease in mortality.

www.thelancet.com/infection Vol 16 July 2016

# Choose Wisely; ABIM Avoid Antibiotics for URI's

## Infectious Diseases Society of America

View all recommendations from this society

Released February 23, 2015

**Avoid prescribing antibiotics for upper respiratory infections.**

The majority of acute upper respiratory infections (URIs) are viral in etiology and the use of antibiotic treatment is ineffective, inappropriate and potentially harmful. However, proven infection by Group A Streptococcal disease (Strep throat) and pertussis (whooping cough) should be treated with antibiotic therapy. Symptomatic treatment for URIs should be directed to maximize relief of the most prominent symptom(s). It is important that health care providers have a dialogue with their patients and provide education about the consequences of misusing antibiotics in viral infections, which may lead to increased costs, antimicrobial resistance and adverse effects.

https://www.choosingwisely.org/clinician-lists/infectious-diseases-society-antbiotics-for-upper-respiratory-infections/

# Choose Wisely; ABIM Avoid Antibiotics for URI's

| Condition | Epidemiology | Diagnosis | Management |
|---|---|---|---|
| Acute rhinosinusitis[1,2] | • About 1 out of 8 adults (12%) in 2012 reported receiving a diagnosis of rhinosinusitis in the previous 12 months, resulting in more than 30 million diagnoses<br>• Ninety–98% of rhinosinusitis cases are viral, and antibiotics are not guaranteed to help even if the causative agent is bacterial. | • Diagnose acute bacterial rhinosinusitis based on symptoms that are:<br>◦ **Severe (>3-4 days),** such as a fever ≥39°C (102°F) and purulent nasal discharge or facial pain;<br>◦ **Persistent (>10 days) without improvement**, such as nasal discharge or daytime cough; or<br>◦ **Worsening (3-4 days)** such as worsening or new onset fever, daytime cough, or nasal discharge after initial improvement of a viral upper respiratory infections (URI) lasting 5-6 days.<br>• Sinus radiographs are not routinely recommended. | If a bacterial infection is established:<br>• Watchful waiting is encouraged for uncomplicated cases for which reliable follow-up is available.<br>• Amoxicillin or amoxicillin/clavulanate is the recommended first-line therapy.<br>• Macrolides such as azithromycin are not recommended due to high levels of *Streptococcus pneumoniae* antibiotic resistance (~40%).<br>• For penicillin-allergic patients, doxycycline or a respiratory fluoroquinolone (levofloxacin or moxifloxacin) are recommended as alternative agents. |

https://www.cdc.gov/antibiotic-use/community/for-hcp/outpatient-hcp/adult-treatment-rec.html

# Choose Wisely; ABIM Avoid Antibiotics for URI's

| Condition | Epidemiology | Diagnosis | Management |
|---|---|---|---|
| Acute uncomplicated bronchitis[3-5] | • Cough is the most common symptom for which adult patients visit their primary care provider, and acute bronchitis is the most common diagnosis in these patients. | • Evaluation should focus on ruling out pneumonia, which is rare among otherwise healthy adults in the absence of abnormal vital signs (heart rate ≥ 100 beats/min, respiratory rate ≥ 24 breaths/min, or oral temperature≥ 38 °C) and abnormal lung examination findings (focal consolidation, egophony, fremitus).<br>• Colored sputum does not indicate bacterial infection.<br>• For most cases, chest radiography is not indicated. | Routine treatment of uncomplicated acute bronchitis with antibiotics is not recommended, regardless of cough duration.<br>Options for symptomatic therapy include:<br>• Cough suppressants (codeine, dextromethorphan);<br>• First-generation antihistamines (diphenhydramine);<br>• Decongestants (phenylephrine).<br>Evidence supporting specific symptomatic therapies is limited. |

https://www.cdc.gov/antibiotic-use/community/for-hcp/outpatient-hcp/adult-treatment-rec.html

# Choose Wisely; ABIM Avoid Antibiotics for URI's

| Condition | Epidemiology | Diagnosis | Management |
|---|---|---|---|
| Common cold or non-specific upper respiratory tract infection (URI)[6,7] | • The common cold is the third most frequent diagnosis in office visits, and most adults experience two to four colds annually.<br>• At least 200 viruses can cause the common cold. | • Prominent cold symptoms include fever, cough, rhinorrhea, nasal congestion, postnasal drip, sore throat, headache, and myalgias. | • Decongestants (pseudoephedrine and phenylephrine) combined with a first-generation antihistamine may provide short-term symptom relief of nasal symptoms and cough.<br>• Non-steroidal anti-inflammatory drugs can be given to relieve symptoms.<br>• Evidence is lacking to support antihistamines (as monotherapy), opioids, intranasal corticosteroids, and nasal saline irrigation as effective treatments for cold symptom relief.<br><br>Providers and patients must weigh the benefits and harms of symptomatic therapy. |

https://www.cdc.gov/antibiotic-use/community/for-hcp/outpatient-hcp/adult-treatment-rec.html

# Choose Wisely; ABIM Avoid Antibiotics for URI's

| Condition | Epidemiology | Diagnosis | Management |
|---|---|---|---|
| Pharyngitis[8,9] | • Group A beta-hemolytic streptococcal (GAS) infection is the only common indication for antibiotic therapy for sore throat cases.<br>• Only 5–10% of adult sore throat cases are caused by GAS. | • Clinical features alone do not distinguish between GAS and viral pharyngitis; a rapid antigen detection test (RADT) is necessary to establish a GAS pharyngitis diagnosis<br>• Those who meet two or more Centor criteria (e.g., fever, tonsillar exudates, tender cervical lymphadenopathy, absence of cough) should receive a RADT. Throat cultures are not routinely recommended for adults. | • Antibiotic treatment is NOT recommended for patients with negative RADT results.<br>• Amoxicillin and penicillin V remain first-line therapy due to their reliable antibiotic activity against GAS.<br>• For penicillin-allergic patients, cephalexin, cefadroxil, clindamycin, or macrolides are recommended.<br>• GAS antibiotic resistance to azithromycin and clindamycin are increasingly common.<br>• Recommended treatment course for all oral beta lactams is 10 days. |

https://www.cdc.gov/antibiotic-use/community/for-hcp/outpatient-hcp/adult-treatment-rec.html

# Choose Wisely; ABIM
# Avoid FLQs for Uncomplicated UTI

## American Urogynecologic Society

View all recommendations from this society

Released May 5, 2015

**Avoid using a fluoroquinolone antibiotic for the first-line treatment of uncomplicated urinary tract infections (UTIs) in women.**

Clinical uncertainty surrounding asymptomatic bacteriuria (ASB) and/or pyuria is the major driver for overtreatment of Urinary Tract Infections (UTI) in PALTC, (Nace). Colonization (a positive bacterial culture without signs or symptoms of a localized UTI) is a common problem in PALTC facilities that contributes to the over-use of antibiotic therapy in this setting, leading to an increased risk of diarrhea or other adverse drug events, resistant organisms, and infection due to Clostridioides difficile. An additional concern is that the finding of asymptomatic bacteriuria may lead to an erroneous assumption that a UTI is the cause of an acute change of status, hence failing to detect or delaying the timely detection of 5 signs and symptoms likely indicative of uncomplicated cystitis. These include dysuria, and one or more of the following: frequency, urgency, supra-pubic pain or gross hematuria. In the presence of dysuria and one or more sign/symptom, collection of a urine culture is indicated.

https://www.choosingwisely.org/clinician-lists/infectious-diseases-society-antbiotics-for-upper-respiratory-infections/

# Choose Wisely; ABIM
# Avoid FLQs for Uncomplicated UTI

| Condition | Epidemiology | Diagnosis | Management |
|---|---|---|---|
| Acute uncomplicated cystitis[10,11] | • Cystitis is among the most common infections in women and is usually caused by *E. coli*. | • Classic symptoms include dysuria, frequent voiding of small volumes, and urinary urgency. Hematuria and suprapubic discomfort are less common.<br>• Nitrites and leukocyte esterase are the most accurate indicators of acute uncomplicated cystitis | For acute uncomplicated cystitis in healthy adult non-pregnant, premenopausal women:<br>• Nitrofurantoin, trimethoprim/sulfamethoxazole (TMP-SMX, where local resistance is <20%), and fosfomycin are appropriate first-line agents.<br>• Fluoroquinolones (e.g. ciprofloxacin) should be reserved for situations in which other agents are not appropriate. |

https://www.cdc.gov/antibiotic-use/community/for-hcp/outpatient-hcp/adult-treatment-rec.html

# Questions?

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