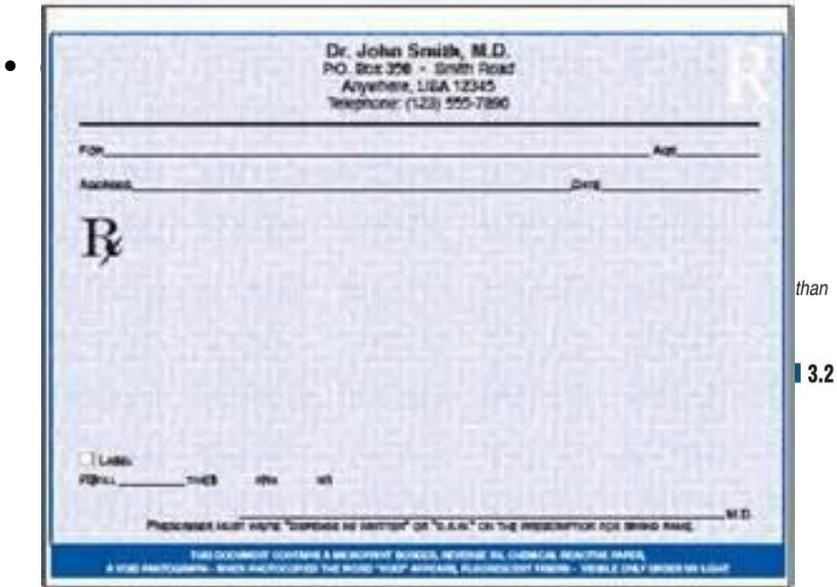


Opioid Prescription

Harm Reduction
Or
Just Plain Harm

Today's Epidemic

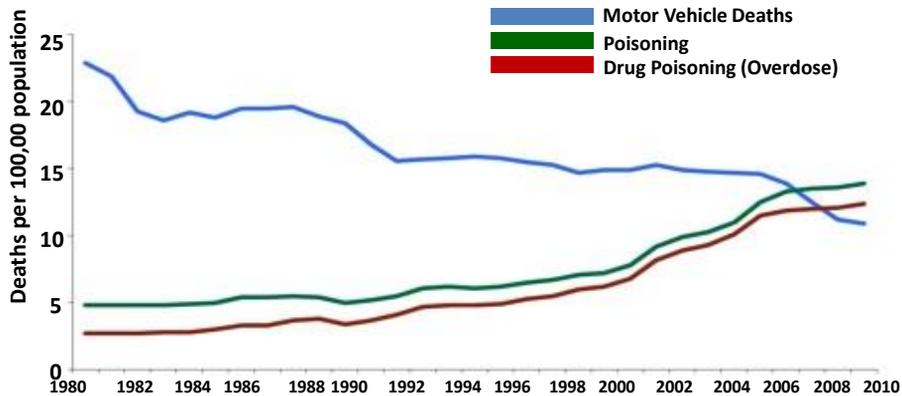


than

3.2

Increased Deaths due to prescription Opioid Overdose

- U.S. Drug Overdose deaths surpass Motor Vehicle deaths



Source: Warner et al. (2011) updated with 2009 and 2010 mortality data by Jones (2012).

Our Challenge

The death rate from opioid overdose has quadrupled in the U.S. in the last decade



- **15,000**

Nearly 15,000 people die every year of overdoses involving prescription painkillers.



- **1 in 20**

In 2010, 1 in 20 people in the US (age 12 or older) reported using prescription painkillers for nonmedical reasons in the past year.

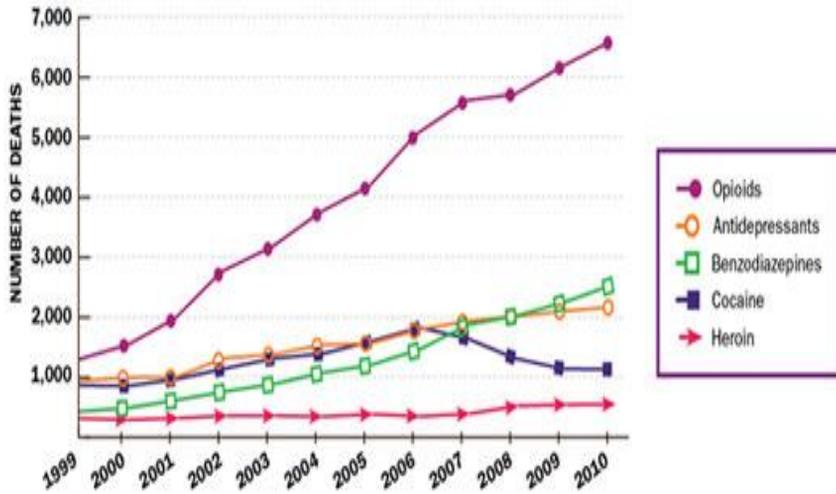


- **1 Month**

Enough prescription painkillers were prescribed in 2010 to medicate every American adult around-the-clock for a month.

Chart taken from the CDC <http://www.cdc.gov/vitalsigns/PainkillerOverdoses/index.html>

Deaths due to prescription Opioid Overdose



CDC Statistics (2008)

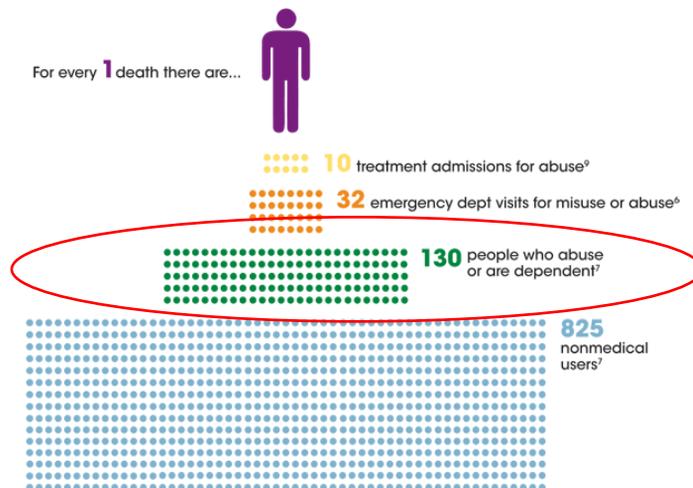


Chart taken from CDC <http://www.cdc.gov/homeandrecreationalafety/rxbrief/>

Prescriptions

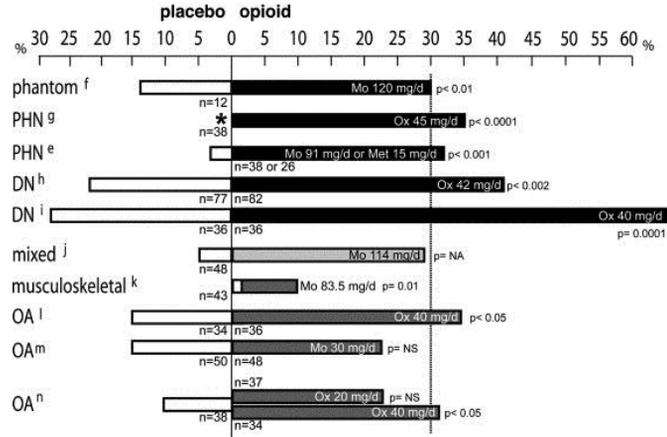


- Almost all prescription drugs involved in overdoses originate from prescriptions
 - Roughly 20% of prescribers prescribe 80% of all prescription painkillers

CDC Website <http://www.cdc.gov/homeandrecreationalafety/rxbrief/>

How Well Do Opioids Work for Chronic Pain?

Randomized Control Trial Data



Kalso et al. Pain 2004

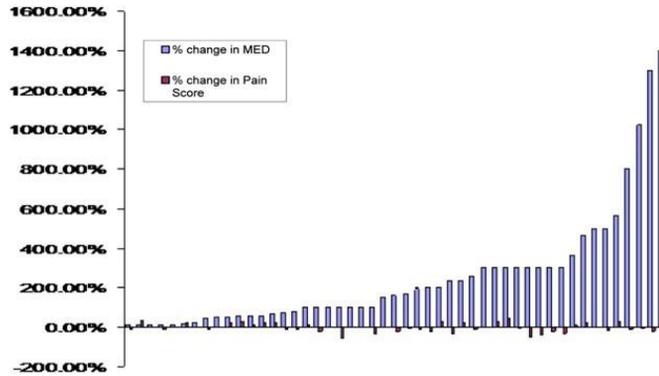
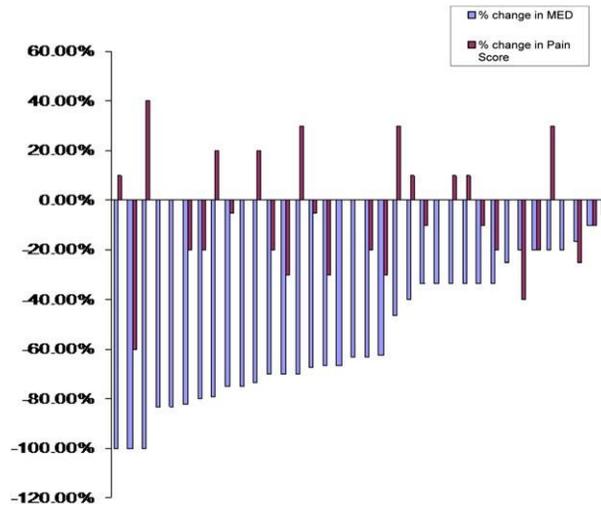


Illustration of each individual subject with opioid dose increase and the corresponding clinical pain score point change. MED, daily morphine equivalent dose.

Chen L, et al.
<http://dx.doi.org/10.1016/j.pain.2012.12.012>



Chen L, et al. Illustration of each individual subject with opioid dose decrease and the corresponding point change in clinical pain score.
<http://dx.doi.org/10.1016/j.pain.2012.12.012>

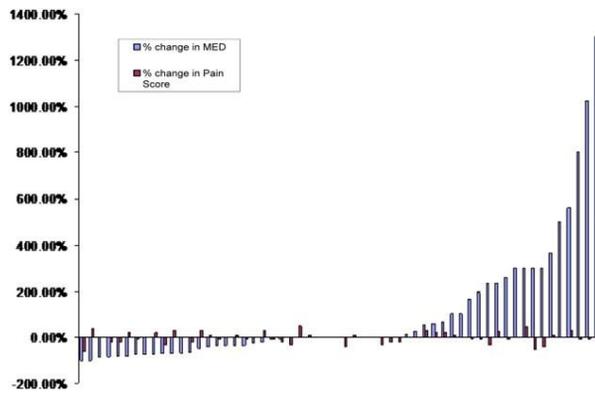
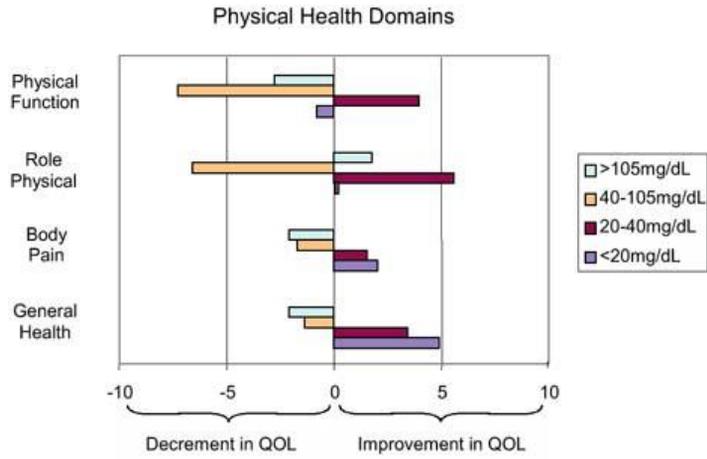


Illustration of all subjects with neuropathic pain, showing the relationship between changes in opioid dose and point change in clinical pain score.

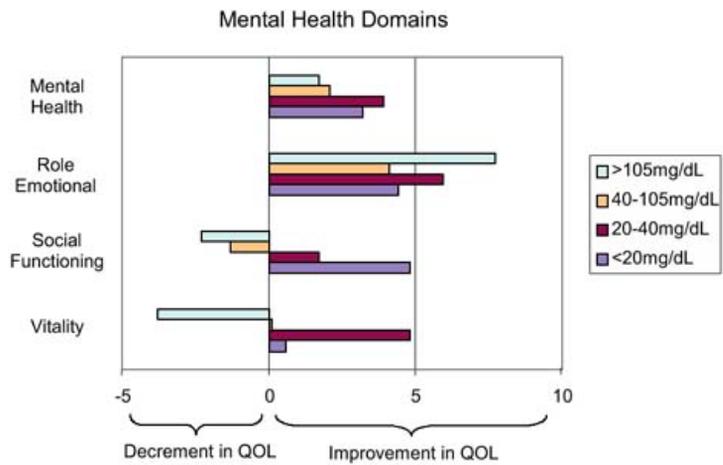
Chen L, et al.
<http://dx.doi.org/10.1016/j.pain.2012.12.012>

Physical Health Domains



Dillie et al Journal of the American Board of Family Medicine 21(2) 2008

Mental Health Domains



HIV Epidemic

- Described 1981
- 15,527 cases of AIDS and 12,529 deaths later government recognition and resources
- Political movement, gay political power, fear – leads to new public health approaches
- Biomedical breakthroughs
- Advocacy – “nothing for us without us.”
- Global response

Wakeman S et al. AJM June 2014

Today's Epidemic

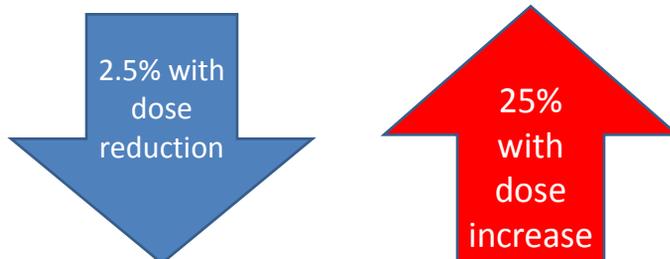
- Prescription opioid epidemic
 - 15.9% of population affected by addiction
 - Most commonly opioids
 - More than heart disease, diabetes, cancer
 - Fastest growing
- Promoted
 - Potent pain killers, ease of prescription
 - Promoted in the market
 - “fifth vital sign” “moral imperative”
 - Regulatory pressure
 - Patient satisfaction – demand
 - No maximum dose

Historic Clinical Setting

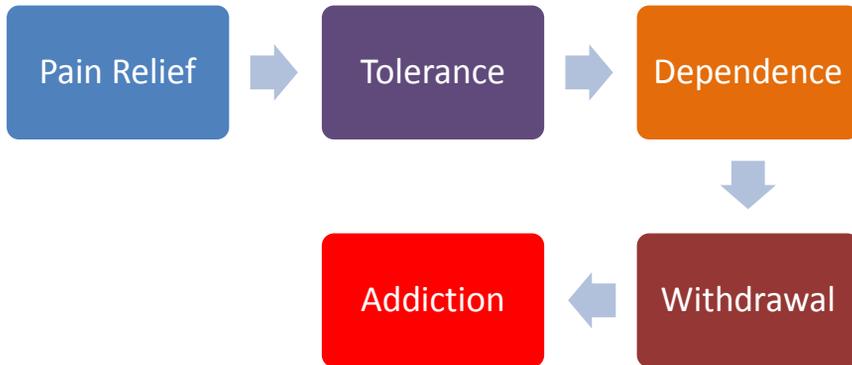
- More chronic pain with aging population
- Was easy to satisfy patients with pain
- Becomes easy to satisfy patients with demands
 - Prescribe
 - Prescribe more
- Unable to refuse – alternative, dealing with withdrawal
- Time pressures
- Generation of a large cohort
- Cohort is inherited and enlarged

“Not my fault, they came to me this way”

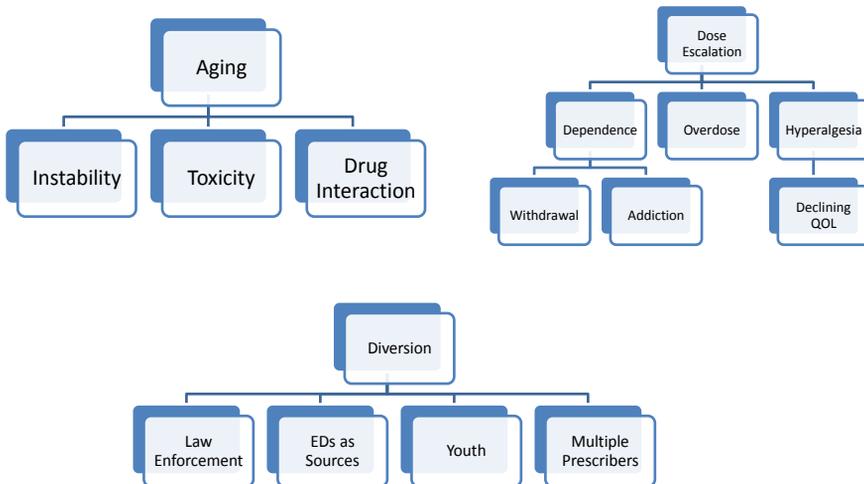
- Partnership HealthPlan survey
- > 120 MEDs / day
- 6 months in 2013



From
 “Easing pain to feel good”
 to
 “Needing to feel normal”



Cohort



Unintended Consequences

- Increasing percentage of primary care time diverted to prescribing opioids
 - Consequences for other primary care needs
- Reduced satisfaction in primary care
- Squeezing out other patients

HIV and Opioids

- Rise of epidemics together
 - Approval of Vidocin
- A population at risk
 - IDU
 - Mental health
- Prior to HAART
 - Eventual death of most
 - Palliative care
 - Hospice
 - Suicide
- Commonness of painful conditions
 - Peripheral neuropathy
 - Herpes zoster
 - Cancer , KS
 - Malignant herpes zoster
 - Pressure ulcers
- Malaise
 - Uncontrolled HIV, CMV, HSV
 - Wasting
 - Chronic diarrhea
 - Fatigue
- In light of the atmosphere at the time regarding treatment of pain
 - Little concerns about opioid prescribing / dependence

Pain in HIV

- Unrelated to HIV
- Caused by HIV or its complications
- Caused by medications for HIV

After HAART

- Cohort survival
 - Treated as palliative but now with long survival
- Large amounts of opioid prescription
- Cohort associated with
 - Aging
 - More medication needs
 - Drug interactions

Lastly

As a tool for adherence and staying in care

CONSORT Study of HIV and Opioid Use KPNC and GHC

KPNC

- Opioid uses more likely
 - Women
 - Older
 - White
 - African American
 - More yrs HIV
 - Prior IDU
 - Prior depression
 - Co-morbidities
- Less often
 - Hispanic, other races/ethnicities
 - MSM
- Prevalent users
 - Lower CD4
 - Higher VL
 - AIDS
 - ARV experience

Silverberg, et al – Clin J Pain 2012

Changes in long-term opioid use

- KPNC – from 1997 to 2005
 - 7% to 8%
 - Adjusted increase of 4%
- Non-HIV
 - 2.1% to 3.9%
 - Adjusted increase of 8.4%
- GHC – 1997-20005
 - 8.4% to 8.5%
- Non-HIV
 - 2.3-4.7%

Prescription Profiles

- Higher average prescribed and daily doses
- Higher percentages of high dose
 - Mainly Schedule II (prior to change), LA Schedule II, and 180+ of sedative hypnotics

Manhattan Brain Bank

- Prospective cohort for post-mortem donation of tissue samples
- N= 173 HIV carriers prescribed opioids other than methadone
- 62% had problematic use
 - Documented by urine toxicology
 - Structure psychiatric interview -
- Problematic use associated with
 - Current psychiatric disorder (but not baseline)
 - History of substance abuse or dependence
 - Poor adherence with ARVs
- However did not predict future problematic use if not currently using.
- Small cohort

Robinson-Papp et al
JAIDS - 2012

Primary Care Providers' Judgement of Opioid Misuse

- N=105 PCP – UCSF Pain Study (Tenderloin based) dyads prescribed opioids by the PCP in the past year responding to the study

Vijayaraghavan, Maya JGIM 2010

PCP estimates of prescription Opioid Misuse

- Prevalence of opioid drug misuse
 - 20% used to get high, sell or alter
- PCPs estimated
 - that half would do so
 - Did not identify 8/21 who did
 - Misidentified 39/84 that did not report

Vijayaraghavan, Maya JGIM 2010

PCP estimate of illicit drug use

- 1/3 of patients reported
 - Cocaine, meth, heroin
 - 37.8% AA, 44.4% white (NS)
- PCP estimated
 - 49.5% had used illicit drugs in past year
 - Over estimated in 33.3%, underestimated in 28.9%

Vijayaraghavan, Maya JGIM 2010

PCP estimation

- Estimated higher illicit use among
 - Younger (NS)
 - African American (NS)
 - Past illicit drug use (OR=3.01)

Vijayaraghavan, Maya JGIM 2010