“Ask your doctor if taking a pill to solve all your problems is right for you.”
Statewide Workgroup on Reducing Overuse:

Opioid Overuse

Neal Kohatsu, MD

Kelly Pfeifer, MD

October 29, 2015
Annual spend in billions

- US Education
- US International Affairs
- US Science
- CA Corrections
- CA Education
- Opioid national Spend

Series1
SALES OF OPIOIDS

2001  $3.97 billion

2012  $8.34 billion
Up 110%
California rural north: highest prescribing rates

SF has the average prescribing rate as CA, but twice the death rate
What do we know now (and we didn’t know then)

- Long-term opioids change the brain, often permanently
- Addiction is much more common than we thought
- Opioids work well for acute pain – for chronic pain, not so much
- Long-term opioids can worsen pain and increase disability
- Slow tapers to lower doses can decrease pain, improve function and decrease mortality
Basic neurochemistry 3-minute detour

Best day ever

In despair and feeling hopeless…

Dopamine units
Best day ever

First dose of heroin ....

100

1000-1100
Over time with daily use...

Same dose of opioids....

60 – The normal “average day”
Happiest Possible Day

Opioid-naive

After long-term opioid exposure (without replacement)
Worst Possible Day

After long-term opioid exposure (without replacement)

Opioid-naive

We need to break up

EVICION NOTICE

40

10
What is it like to live on a dopamine range of 10-20?
Old way of thinking….

“No one ever dies of opioid withdrawal.”

New way of thinking:

Severe dopamine depletion is a chronic brain disease.
Caused by long-term licit or illicit opioid use.
Can be temporary or permanent.
Can lead to poor judgment, and is often fatal:
   overdose, HIV, hepatitis, suicide
Opioid replacement stabilizes the brain
Whose fault? Bad patients?

“Doctor shoppers”

Only 0.7% of persons
Receive only 1.9% of prescriptions

Most patients who die of overdose are taking opioids from their personal doctor.

Tennessee Enacts Law To Incarcerate Pregnant Women Who Use Drugs

Posted: 04/30/2014 3:21 pm EDT   |   Updated: 05/01/2014 12:59 pm EDT
The problem of the opioid refugee

What do we do about the patients who are already dependent?
Whose fault – bad doctors?

713 total

- **Primary Care**
  - Cardiology
  - Endocrinology
  - Family Practice (17%)
  - General Practice
  - Gastroenterology
  - GYN
  - Infection Disease
  - Internal Medicine (22%)
  - Nephrology
  - Neurology
  - Nurse Practitioner (2.6%)
  - Oncology
  - Physician Assistant (6.3%)
  - PM&R
  - Rheumatology

- **Pain**
  - Anesthesia
  - Pain

- **Surgery**
  - ENT
  - General
  - Neurosurgery
  - Ophthalmology
  - Orthopedics
  - Plastics
  - Podiatry
  - Radiology
  - Urology
  - Vascular

Credit: Roneet Lev, MD, San Diego
You broke it – you fix it.
Building a Comprehensive Approach

- Safe Prescribing
- Access to Addiction Treatment
- Naloxone Distribution
How to fix it?

Avoid NEW STARTS

Taper down to LOWEST POSSIBLE DOSE

IDENTIFY PROBLEM USE – ensure access to buprenorphine

SAFE PRESCRIBING

MED-ASSISTED TX

Harm continuum

NALOXONE– prevent deaths
How to fix it?

- Avoid NEW STARTS
- Taper down to LOWEST POSSIBLE DOSE
- IDENTIFY PROBLEM USE – ensure access to buprenorphine

Harm continuum
For 100 patients starting on opioid therapy
25 will be come long-term opioid users
For 100 long-term users, how many misuse?

72 (INNER CITY CLINIC)
For 100 long-term users, how many misuse?

Up to 56%

Over a lifetime
Don’t create opioid refugees

Avoid NEW STARTS

Taper down to LOWEST POSSIBLE DOSE

IDENTIFY PROBLEM USE – ensure access to buprenorphine

MED-ASSISTED TX

Harm continuum
What is the difference?

**Cause:** Genes, environment and behavior

**Preventable:** Recognizing risky habits, early intervention

**Result:** Requirement for long-term replacement for a chemical deficit
The Buprenorphine Effect

- Full Agonist (Methadone)
- Partial Agonist (Buprenorphine)
- Antagonist (Naloxone)

Death
California counties with no narcotic treatment program: Corresponds to counties with high death rates
Currently there are 632 Zip Codes in the US, with the following characteristics:
1) Rural (less than 1,000 people per sq mile.)
2) 40% or more people identify themselves as Hispanic.
3) The average household income is less than $44,100.

5,373,209 people reside in these zip codes, with 756,578 of those living in NM. There are 145 licensed providers residing within these zip codes, 72 within New Mexico. This graph shows when each provider became licensed.
How to fix it?

Avoid NEW STARTS

Taper down to LOWEST POSSIBLE DOSE

IDENTIFY PROBLEM USE—ensure access to buprenorphine

SAFE PRESCRIBING

MED-ASSISTED TX

Harm continuum

NALOXONE
How do we know we can succeed?
Focus on **law enforcement** and crack-down on pill-mills:

**18% drop in death rates in 2 years**
(after 59% rise over last 6 years)

**Public health initiative**, public service announcements, academic detailing

**Dropped deaths by 29% in 2 years**
(Staten Island)

**Spread of monitoring data base**
(similar to CURES)

**Decreased patients receiving meds from multiple prescribers by 50%**
County clinic system guideline and physician coaching
Dropped number of patients on opioids by 40% with 80% retention rate

Partnership Health Plan through ECHO, auth policies and local coalition dropped total number of opioid prescriptions written by 70% in Humboldt, and high-dose opioids by 33%.
Partnership – Total Opioid Prescriptions

43% Decrease
In 15 months
SAFE PAIN MEDICINE PRESCRIBING

We care about you. Our goal is to treat your medical conditions, including pain, effectively, safely and in the right way.

Pain relief treatment can be complicated. Mistakes or abuse of pain medicine can cause serious health problems and death.

Our emergency department will only provide pain relief options that are safe and correct.

For your SAFETY, we routinely follow these rules when helping you with your pain.

1. We look for and treat emergencies. We use our best judgment when treating pain. These recommendations follow legal and ethical advice.
2. You should have only ONE provider and ONE pharmacy helping you with pain. We do not usually prescribe pain medication if you already receive pain medicine from another health care provider.
3. If pain prescriptions are needed for pain, we will only give you a limited amount.
4. We do not refill stolen prescriptions. We do not refill lost prescriptions. If your prescription is stolen, please contact the police.
5. We do not prescribe long acting pain medicines such as: OxyContin, MSContin, Fentanyl (Duragesic), Methadone, Opana ER, Exalgo, and others.
6. We do not provide missed doses of Subutex, Suboxone, or Methadone.
7. We do not usually give shots for flare-ups of chronic pain. Medicines taken by mouth may be offered instead.
8. Health care laws, including HIPAA, allow us to ask for all of your medical records. These laws allow us to share information with other health providers who are treating you.
9. We may ask you to show a photo ID when you receive a prescription for pain medicines.
10. We use the California Prescription Drug Monitoring Program called CURES. This statewide computer system tracks opioid pain medications and other controlled substance prescriptions.

If you need help with substance abuse or addiction, please call 211 for confidential referral and treatment.

For every ED in LA and SD
Collective impact – state workgroup
3 Coordinated Grant efforts

- California Department of Public Health
- Centers for Disease Control and Prevention
- CURES 2.0
- Bureau of Justice Assistance
- California Healthcare Foundation

$3.7 million
4 years

$750,000
3 years

12 coalitions
17 counties
18 months
Summary

• Unlike any other epidemic, this one is caused by the medical system
• Medical culture is difficult to change, but change is possible
• Avoid bad doctor/bad patient trap
• Focus on the continuum of harm:
  – **Safe prescribing** (avoiding new starts, tapering chronic users to safer doses, where possible)
  – **Medication-Assisted Treatment** (avoid opioid refugees)
  – **Naloxone** (to save lives while the other two strategies are spread)
Possible next steps

- **Vision and Call to Action: 20/20/2000 campaign**
  - Drop prescriptions and deaths by 20%
  - Save 2000 lives by 2020

- **Communication campaign**
  - Stories of success
  - Disseminate resources
  - Partner and convene

- **Produce or endorse “Action Guides”**
  - Policy/purchaser
  - Health Plan
  - Provider/group
  - Consumer/patient/family
Appendix
Why are we here?

CDC: Parallel increases in opioid sales, deaths and substance abuse

Rates of prescription painkiller sales, deaths and substance abuse treatment admissions (1999-2010)

US opioid sales quadrupled 2000-2010

Since 2008, 15,000 deaths per year. This exceeds MVA deaths in 30 states.

“Some clinicians have inaccurate and exaggerated concerns about [addiction, tolerance, and risk of death].

This attitude prevails despite the fact that there is no evidence that addiction is a significant issue when persons are given opioids for pain control.”
“Look, you’ve got to stop thinking that one little pill is going to solve all your problems... You need to take at least four, twice a day.”
# MAT: retention in Treatment

## Table ES1. Summary measures of effectiveness of medications for opioid dependence treatment over 3-12 months of follow-up.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Methadone</th>
<th>Buprenorphine/Suboxone</th>
<th>Naltrexone/Vivitrol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality (%)</td>
<td>&lt; 1% (range: 0-6%)</td>
<td>&lt;1% (range: 0-2%)</td>
<td>No deaths reported</td>
</tr>
<tr>
<td>Use of Illicit opioids</td>
<td>12 (range: 3-25)</td>
<td>12 (range: 3-25)</td>
<td>Not reported</td>
</tr>
<tr>
<td>(mean # positive urine tests)</td>
<td></td>
<td></td>
<td>(% of patients not achieving abstinence: 40-60%)</td>
</tr>
<tr>
<td>Retention in treatment (%)</td>
<td>63% (range: 54-71%)</td>
<td>52% (range: 40-65%)</td>
<td>28% (range: 16-30%)</td>
</tr>
</tbody>
</table>
## MAT: comparative death rate

<table>
<thead>
<tr>
<th></th>
<th>Deaths per person years</th>
<th>admissions for inpatient detox</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>During tx</td>
<td>After leaving tx</td>
</tr>
<tr>
<td>Methadone or bupe</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Naltrexone</td>
<td>7</td>
<td>39</td>
</tr>
</tbody>
</table>
In California, counties with naloxone programs had an overall slower rate in the growth in opioid overdose death compared to counties without naloxone programs.13
<table>
<thead>
<tr>
<th>Drug</th>
<th>Number Needed to Treat</th>
<th>To Avoid this condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naloxone</td>
<td>64</td>
<td>Overdose death</td>
</tr>
<tr>
<td>Statins in heart disease</td>
<td>70-250</td>
<td>1 heart attack or stroke</td>
</tr>
<tr>
<td>Statins with high cholesterol</td>
<td>500+</td>
<td>Death or serious condition</td>
</tr>
<tr>
<td>Avandia</td>
<td>1000+</td>
<td>Heart attacks or other</td>
</tr>
</tbody>
</table>
Partnership Health Plan

% Opioid Users on Unsafe Doses (120mg MED or higher)

All Opiate Fills P100MPM
Region: All, County: All, User Type: Null, High, Low doses

43% decrease January 2014-July 2015
3 major grant-funded efforts

• CDC (CDPH)
  – Supporting local coalitions through data and technical assistance
  – Working with health plans and health systems
  – Academic detailing

• DOJ (CURES)
  – Leveraging CURES 2.0 to better support prescribers – dashboards, alerts and ensuring easy use
  – Evaluation of impact with eye on spread

• Regional Coalitions (CHCF)
  – Supporting county and regional collective impact efforts
  – Coaching, mentoring, communications support
ECHO mechanism to change clinician behavior by leveraging scarce specialist resources at scale: case reviews, teaching, and mentoring

Dr. Sanjeev Arora
University of New Mexico
<table>
<thead>
<tr>
<th>County</th>
<th>January 2014 (per 100 MPM)</th>
<th>March 2015 (per 100 MPM)</th>
<th>Percent Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Del Norte</td>
<td>3.15</td>
<td>1.85</td>
<td>50%</td>
</tr>
<tr>
<td>Humboldt</td>
<td>4.06</td>
<td>1.42</td>
<td>70%</td>
</tr>
<tr>
<td>Lassen</td>
<td>4.92</td>
<td>3.18</td>
<td>36%</td>
</tr>
<tr>
<td>Modoc</td>
<td>1.39 *April 2014</td>
<td>1.85</td>
<td>+33%</td>
</tr>
<tr>
<td>Shasta</td>
<td>3.09</td>
<td>1.53</td>
<td>50%</td>
</tr>
<tr>
<td>Siskiyou</td>
<td>4.29</td>
<td>2.19</td>
<td>49%</td>
</tr>
<tr>
<td>Trinity</td>
<td>7.42 *February 2014</td>
<td>2.36 *April 2015</td>
<td>68%</td>
</tr>
<tr>
<td>Lake</td>
<td>6.09 *February 2014</td>
<td>2.97</td>
<td>51%</td>
</tr>
<tr>
<td>Marin</td>
<td>5.10</td>
<td>1.88</td>
<td>63%</td>
</tr>
<tr>
<td>Mendocino</td>
<td>3.96</td>
<td>2.02</td>
<td>49%</td>
</tr>
<tr>
<td>Napa</td>
<td>3.21</td>
<td>1.09</td>
<td>66%</td>
</tr>
<tr>
<td>Solano</td>
<td>2.27</td>
<td>1.03</td>
<td>55%</td>
</tr>
<tr>
<td>Sonoma</td>
<td>5.38</td>
<td>2.28</td>
<td>58%</td>
</tr>
<tr>
<td>Yolo</td>
<td>1.62</td>
<td>0.78</td>
<td>52%</td>
</tr>
</tbody>
</table>