OVERVIEW

Agreements
Brief overview of pain and addiction
Contextualize the opioid crisis
Why rural location makes it worse
Introduction to Opioid Use Disorder (OUD)
Review indications for medication assisted therapy (MAT)
Discuss models for MAT in outpatient, lower-resourced settings
Case study- One Community Health
We helped create this problem. ‘Legacy’ patients were created by a system influenced by a myriad of forces, including:

- JACHO (pain as a vital sign)
- Pharma influence on prescribers and patients
- Patient satisfaction scores
- The FFS model, avoiding hard/difficult conversations, promoting turnover
- Economic influences (the more patients we see and the shorter visits have a financial benefit)

This is a uniquely American problem. We are 4% of the world’s population, and use 80% of its opiates

This is still an issue—60 Minutes/Washington Post article on influence of the drug industry on DEA/DOJ
TIME OUT

Patients with chronic pain experience stigma in a variety of care settings
- This can be difficult for providers and staff, but can also be an opportunity

Fire hydrant = chronic pain patient
Cars = medical establishment

Reminder: this a patient population that we all created.
PAIN PRIMER: THE SPECTRUM

Peripheral

Acute pain  Osteoarthritis  SC disease  Fibromyalgia
  RA  Ehler’s Danlos  Tension HA  Low back pain  TMJD  IBS

Centralized

Managing Chronic Pain: If Opiods, Then What? Clauw, DJ. 2017
# Pain Primer: Origins

<table>
<thead>
<tr>
<th></th>
<th>Nociceptive</th>
<th>Neuropathic</th>
<th>Centralized</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cause</strong></td>
<td>Inflammation or damage</td>
<td>Nerve damage or entrapment</td>
<td>CNS or systemic problem</td>
</tr>
<tr>
<td><strong>Clinical features</strong></td>
<td>Pain is well localized, consistent effect of activity on pain</td>
<td>Follows distribution of peripheral nerves (i.e. dermatome or stocking/glove), episodic, lancinating, numbness, tingling</td>
<td>Pain is widespread and accompanied by fatigue, sleep, memory and/or mood difficulties as well as history of previous pain elsewhere in body</td>
</tr>
<tr>
<td><strong>Screening tools</strong></td>
<td>Ask the patient</td>
<td>PainDETECT</td>
<td>Body map or FM Survey</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td>NSAIDs, injections, surgery, ? opioids</td>
<td>Local treatments aimed at nerve (surgery, injections, topical) or CNS-acting drugs</td>
<td>CNS-acting drugs, non-pharmacological therapies. <strong>NOT opiates.</strong></td>
</tr>
<tr>
<td><strong>Classic examples</strong></td>
<td>Osteoarthritis Autoimmune disorders Cancer pain Acute injury</td>
<td>Diabetic painful neuropathy Post-herpetic neuralgia Sciatica, carpal tunnel syndrome</td>
<td>Fibromyalgia Functional GI disorders Temporomandibular disorder Tension headache Interstitial cystitis, bladder pain syndrome</td>
</tr>
</tbody>
</table>
## Effectiveness of Chronic Pain Treatments

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opioids:</strong></td>
<td><em>No Quality Evidence</em></td>
</tr>
<tr>
<td></td>
<td>“No study of opioid therapy vs. placebo, no opioid therapy, nor nonopioid therapy evaluated long-term (&gt;1 year) outcomes related to pain, function, or quality of life.”</td>
</tr>
<tr>
<td><strong>Adjuvants (Tricyclics/SNRIs/Anticonvulsants):</strong></td>
<td>30%</td>
</tr>
<tr>
<td><strong>Cannabis:</strong></td>
<td>10-30%</td>
</tr>
<tr>
<td><strong>Acupuncture:</strong></td>
<td>10+%</td>
</tr>
<tr>
<td><strong>Patient education:</strong></td>
<td>15%</td>
</tr>
<tr>
<td><strong>CBT/Mindfulness:</strong></td>
<td>30-50%</td>
</tr>
<tr>
<td><strong>Physical fitness:</strong></td>
<td>“moderate”</td>
</tr>
<tr>
<td><strong>Sleep restoration:</strong></td>
<td>40-50%</td>
</tr>
</tbody>
</table>

Yet, we (still) use opiates for chronic pain?

This is why we are here.

Our change of practice in chronic pain management has created a massive challenge to our system.

Many patients have become addicted to opiates for perceived functionality. This creates stigma, frustration, and harmful behaviors.

While many patients will be able to discontinue opiates, some will not. This requires our comfort, understanding, and expanded management of addiction.
COMPARISON: DIABETES VERSUS ADDICTION

Why do we define success as binary for addictions?

PreDM
- DM, diet controlled
- DM, oral meds
- DM, insulin

Mild Addiction
- Moderate Addiction
- Severe Addiction
SUBSTANCE USE DISORDERS:
CHRONIC ILLNESS VERSUS MORAL FAILING

Asthma, Diabetes, HTN, HIV, etc.

Substance Use Disorder

Time

O'Connor, JAMA 1998; Lucas, JAIDS 2005
Solotaroff, Neurobiology of Pain and Addiction, 2017
INTRODUCTION TO OUR PATIENT

58 y/o female, wheelchair bound d/t weakness/deconditioning
Inherited on ~200 MED, MS contin w/ IR morphine
Significant trauma history (ACE score >>4)
H/o depression, anxiety, COPD (2L oxygen)
History of some early fills and highly resistant to taper
Son takes Suboxone for MAT (IVDU history)
TIDES ARE TURNING

Statewide Drug Prescribing and Overdose Measures

OHP Expansion, Tramadol inclusion
Factors causing increased pain burden:
- Societal norms: opiates are the ‘only thing’ that works for my pain. This is now generational.
- Social isolation
- Increase in poverty and unemployment in rural areas
- Stigma around addiction
- Poor access to addiction treatment or comprehensive pain centers
MORE ON RURAL IMPACT

It has been proposed that rural (vs. urban) non-medical prescription opiate use is fueled by:

1. Increased sales of opioid analgesics in rural areas leading to greater availability for nonmedical use through diversion.

2. Out-migration of upwardly mobile young adults from rural areas, increasing economic deprivation and creating an aggregation of young adults at high risk for drug use.

3. Tight kinship and social networks allowing faster diffusion of nonmedical prescription opioids among those at risk.

4. Increasing economic deprivation and unemployment creating a stressful environment and placing individuals at risk.

OPIOID USE DISORDER (OUD)

Opioids taken in larger amounts for longer than intended
Persistent desire or unsuccessful desire to cut down to control use
Spending a lot of time getting, using, or recovering from opioids
Craving opioids
Recurrent opiate use causing failure to fulfill obligations at home, work, or school
Continuing to use opiates, even when it effects relationships
Opiate use causing disengagement from social, occupational, or recreational activities
Continued use, even when causing adverse events
Using even when aware of a physical or psychological problem worsened by opiates
Tolerance: either increasing dose to get same effect, or a diminished effect at the same dose
Developing withdrawal symptoms which are relieved by taking more opiates or similar substances

Mild (2-3)  Moderate (4-5)  Severe (6+)
THE TIP OF THE ICEBURG?

25 Million Americans have a substance use disorder (not just opiates and same # as diabetes), 90 % will not get treatment.
CHANGES IN PRACTICE WILL CAUSE MAJOR STRESS TO THE SYSTEM

We do not know how many patients will need substance use treatment when opiates are discontinued

Goal #1: Reduce new patients starting chronic opiate therapy

Goal #2: Minimize the impact of practice changes on ‘legacy’ patients

Goal #3: Minimize patients moving to heroin/focus on harm reduction
## Medication Efficacy, OUD

<table>
<thead>
<tr>
<th></th>
<th>Treatment Program Retention</th>
<th>Opioid Misuse</th>
<th>Criminal Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone</td>
<td>(\uparrow) ((n=3)^a)</td>
<td>(\downarrow) ((n=6)^a)</td>
<td>No Effect ((n=3)^a)</td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>(\uparrow) ((n=4)^b)</td>
<td>(\downarrow) ((n=2)^b)</td>
<td>No data</td>
</tr>
<tr>
<td>PO NTX</td>
<td>No effect ((n=2)^c)</td>
<td>(\downarrow) ((n=4)^c)</td>
<td>(\downarrow) ((n=2)^c)</td>
</tr>
<tr>
<td>XR NTX</td>
<td>(\uparrow) ((n=2)^d)</td>
<td>(\downarrow) ((n=2)^d)</td>
<td>No data</td>
</tr>
</tbody>
</table>

\(NTX = \text{Naltrexone}\)

Note: Suboxone = buprenorphine/naltrexone. Subutex = buprenorphine

Solotaroff, Neurobiology of Pain and Addiction, 2017
Low dose Buprenorphine (2-6mg) was less effective than methadone in retaining people in treatment.

Buprenorphine (>7 mg/day) was not different from methadone (≥40 mg/day) in retaining people in treatment or in suppression of illicit opioid use.

***note that both Buprenorphine and methadone are used in treating chronic pain***
**BUPRENORPHINE**

A *partial* \(\mu\)-opioid receptor agonist

**Decreased:**
- Respiratory suppression
- Toxicity compared to other opiates
- Pain scores in patients with chronic pain
- Craving

**Often Paired With:**
- Naloxone, a full opioid antagonist (Suboxone)
THREE MODELS OF MAT DELIVERY IN PRIMARY CARE

1. ‘Hub and Spoke’ model
   - Primary care identifies patient with an OUD (mild-severe) and patient willing to address disorder.
   - Addictions center (AC) does intake, determines optimal treatment (detox, MAT, etc) based on history.
   - If patient is identified as an MAT (Buprenorphine in this case) candidate, AC performs induction, stabilization, and core addictions work.
   - After time (> 4mos typically) patient ‘graduates’ back to medical home and AC ‘signs off.’
     - NOTE: AC will offer continuing behavioral health work, patient usually not required to attend.
     - PCP assumes MAT ongoing.

Infrastructure required:
   - Willing partners
   - Monthly care calls to "run the list"

Issues:
   - Insurance coverage (straight Medicare or self-pay is not covered)
   - Patient acceptance/showing up to AC
MAT MODELS CONTINUED

2. Housed within the patient’s medical home
   - PCP does induction and management- protocols required
   - Integrated or close behavioral health relationships essential
   - Dr. Whetstone to describe an example

3. If no BH resources but need exists
   - PCP does induction and management- protocols required
   - If no existing BH resources, being creative is essential
   - Requires being firm on severity of OUD provider agrees to manage – KNOW YOUR LIMIT
   - Best for patients with mild-moderate OUD
Returning to our patient

Enrolled in mental health w/ CCBH. Closely co-managed with therapist (who was a CADC).

Tapered down to 90 MED

Came into the office in withdrawal (d/c’d oral opiates 24 hrs prior)

Suboxone initiated that day. BHC called the next day, assessed for withdrawal

BHC and I discussed dosing, and with the patient eventually found 8mg 2x daily was optimal

Pt sees me every other month but therapist 2 x month. Pt reports adequate pain control and increased mental clarity
BUPRENORPHINE TREATMENT AT A SEMI-RURAL MIGRANT HEALTH CENTER IN THE DALLES

Heather Whetstone, MD
ONE COMMUNITY HEALTH

FQHC, migrant health center in The Dalles and Hood River
Large medicaid and uninsured populations
In 2011, The Dalles location was only clinic offering buprenorphine MAT in the Gorge community
THE NEED

Nearest methadone clinic in Portland
One waivered physician
THE NEED

Nearest methadone clinic in Portland
One waiver physician
THE NEED
STARTING UP...

Workflows for new patient consultations, inductions, monitoring/maintenance
Forms, policies, procedures
Supplies (e.g. POC UDS)
Case management (CMA, RN)
  • Prior Authorizations
  • Patient assistance programs
  • Tracking patients
  • Monitoring engagement in counseling services
  • DEA site visit
Identifying capacity/finding the balance
Advertising?
COUNSELING RESOURCES

Providence Gorge Counseling Services
Private therapists
Mid-Columbia Center for Living
  • Monthly joint meetings
  • Family dependency court
  • CPS / DHS
  • Peer mentors
A CASE STUDY

22 yo G1 at 23 weeks in mild-moderate heroin withdrawal presents to clinic on a Friday to get started on Suboxone®
Standard workflow: MAT consultation -> MH intake -> Induction
A CASE STUDY

22 yo G1 at 23 weeks in mild-moderate heroin withdrawal presents to clinic on a Friday to get started on Suboxone®

Standard workflow: MAT consultation $\rightarrow$ MH intake $\rightarrow$ Induction
A CASE STUDY

22 yo G1 at 23 weeks in mild-moderate heroin withdrawal presents to clinic on a Friday to get started on Suboxone®

Standard workflow: MAT consultation → MH intake → Induction

Enact Plan B: immediate induction!
- Setting? Inpatient vs Outpatient
- Weekend Logistics
- MAT first, MH second

Treatment partners (OB, MH, inpatient care of mom and baby, CPS)

Complications
**SUCCESSES**

Over 100 individual patients  
Recruiting additional buprenorphine prescribing physicians  
Prenatal MAT and partnership with local obstetric providers  
HRSA Service Expansion Grant 2016
CHALLENGES

Misconceptions about buprenorphine
Maintaining a focus on harm reduction
Flexibility (working outside of the box)
Meeting (the expanded) community needs
Determining panel capacity
Lack of resources (e.g. NICU to manage NAS)
December 2016, congress passes 21\textsuperscript{st} Century Cures Act

- $1 billion in grants over two years
- Flows in priority to those states effected most, in the form of:
  - Expanded access to addiction treatment
  - Increased prescription drug monitoring
  - Training to prevent opioid abuse and overdose
  - Various public health initiatives related to drug use

Opiate prescriptions are decreasing and the culture is starting to change

This was 30 years in the making, and we’ve made significant changes in the past five years

http://docs.house.gov/billsthisweek/20161128/CPRT-114-HPRT-RU00-SAHR34.pdf
RESOURCES

OHSU Project ECHO for addiction medicine/MAT

- Weekly interactive learning sessions, each cohort done on a quarterly basis
- CME provided, goal is to upscale all providers regardless of setting
ONE SWITCHBACK AT A TIME...