Safe Prescribing Residency Action Group

Neurobiology of pain and addiction:

How new understanding of physiology changes how we teach residents, and how we support safe prescribing practices

CALIFORNIA HEALTHCARE FOUNDATION

California Improvement Network

Better Ideas for Care Delivery

Faculty

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California Improvement Network Better Ideas for Care Delivery

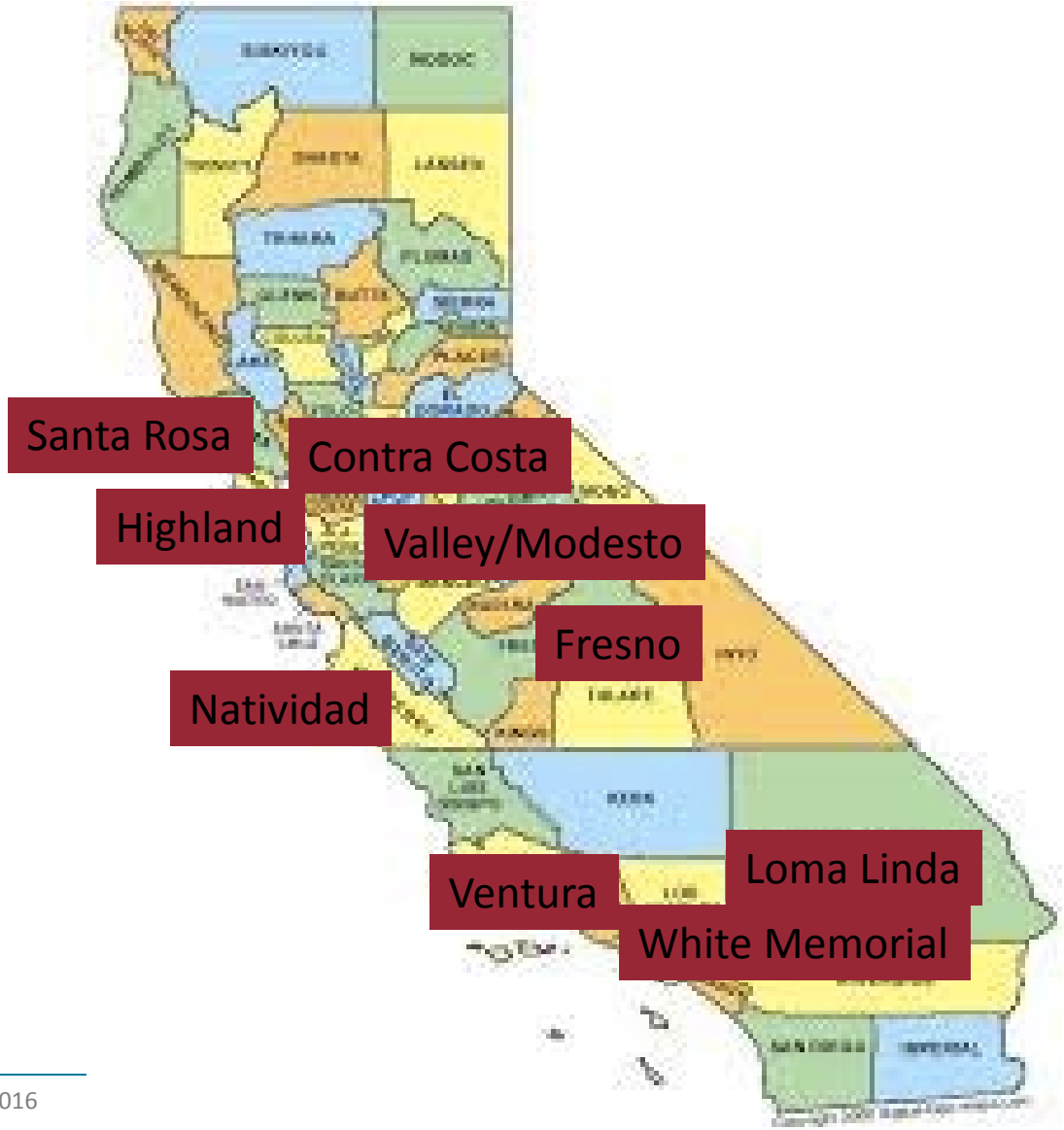
Agenda

- Housekeeping
- Follow-up on SMART goals
- Thinking differently about addiction and pain
- How does understanding neurobiology change how we teach residents?
  - Resources for faculty:
    - Power point slide decks
    - Brief video tools: Corey Waller lectures; SCOPE of pain role plays
    - References and toolkits: MERF and others
  - Role plays, mentoring and coaching
- How does understanding neurobiology change what services we offer in clinic?
  - Core components of universal precautions
  - Buprenorphine – integrating medication-assisted treatment in primary care
- Calendar
- Open for Questions

Housekeeping

- This session will be recorded
- Slides and recording will be posted on action group website (Basecamp) within a week
- To ask a question:
  - Logistical questions: Use CHAT to the Host
  - Questions for Speakers : Use CHAT to ALL
- Webinar Evaluation: please take a moment at the end of the webinar to give feedback

Action Group Teams: review of SMART goals



SMART Goals – next steps

- Two goals – one to improve resident teaching, and one to improve clinic safe prescribing culture
- Set up coaching call with Kristene to review SMART goals:
  - Specific (you can create a specific action plan)
  - Measurable (you can create a metric and know if you made the goal)
  - Actionable (doable in your environment within 9 months)
  - Relevant (if you do it, it will improve teaching or culture)
  - Time-bound (you can accomplish it by February)

Next steps

- Develop measures for your goal
- Develop an action or work plan for your clinic
- Learn from others, with support of faculty and coach

Simple example of excel workplan

Tasks	Assigned to	Metric	Status	Ju	Jul	Au	Se	Oc	No	De	Jar	Fel	Ma	Ap
Implement clinic-wide guidelines, adopted by 90% of attendings, by 2/1/16		% attendings who document by email or signature that they will follow and teach clinic guidelines												
Set up action team meetings on calendar	George													
Review guidelines and tools for best practices	Lin													
Distribute guidelines to providers	Rocio													
Review guidelines in provider meetings or by email	Rocio													
Collect feedback	George													
Draft revised guidelines; send to attendees for email response of commitment	Team													
Document % agreement (if unsufficient; create game plan for outreach and how to bring more attendings on	George													
Meet with health plan medical director-- discuss how health plan could reinforce guidelines	Rocio													
Implement training program of at least 4 hours each for R1s, R2s, and R3s by 3/1/15														
Review curriculum resources and sample curricula from other residencies		at least 2 hours of content embedded into curriculum for each R1, R2 and R3 year; at least 10 residents complete testing on on-line modules by 1/1												
Review current residency block teaching time -- create plan for integrating new concepts														
Identify lead faculty for each curriculum section														
Pilot new teaching modules; collect feedback														
Test RWJ on-line curriculum with R3s; collect feedback														
Revise teaching modules based on feedback														
set up structure for annual review and update														

Thinking differently about addiction and pain

How to teach residents differently from how we were taught

- Videos:
  - Corey Waller; complex.care
  - Scope of Pain
- Role-plays (e.g., based on SCOPE or other videos)
- Shadowing with feedback

Prescription Opiate Misuse

Sample slides from full teaching deck available on BaseCamp

Sharone Abramowitz MD
Director, Behavioral and Addiction Medicine
Primary Care Medicine
Highland Hospital, Alameda Health System
(thanks to Dan Alford MD, for use of some of his slides)

Topics covered in slide deck

1. Scope of Problem
2. Evidence for long-term use of opioids
3. Rational opioid prescribing approach
4. Problem Use Due to Opioid Prescribing
5. Problem Use Due to Substance Abuse
6. Integrating Buprenorphine in Primary Care
7. Prevention

Condition	Prevalence in Patients with Chronic Pain
Major Depression	15% to 56%
Anxiety Disorders	17% to 50%
Somatization Disorder	20% to 31%
Personality Disorders	31% to 81%
PTSD	20% to 34%
Substance Use Disorders	15% to 28%

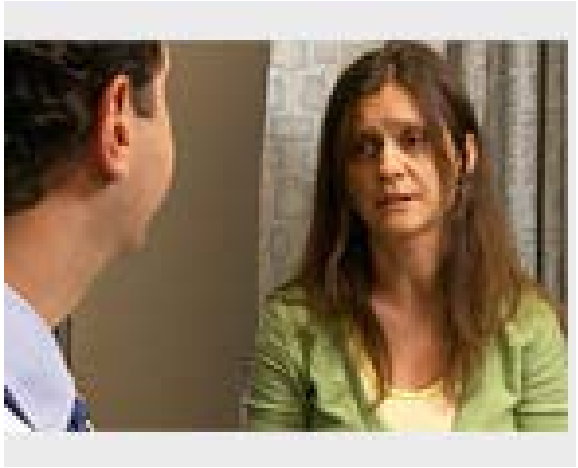
Dersh J et al. Spine 2006
Trescot AM et al. Pain Physician 2008

Chronic Pain is Complicated

Teaching using video role-plays

Lindsey Beecher

- Diabetic neuropathy
- Methadone 60 mg a day and Neurontin
- Using ED when runs out of methadone



Each video comes with summary and discussion tool

Discuss the need for tapering her methadone and treating her pain with nonopioids and nonpharmacotherapy

- Exit Strategies for patient where there is concern for addiction
  - Focus on the patients behaviors that make you concerned for possible addiction
    - Loss of Control (e.g., running out early, obtaining scripts from other providers)
    - Compulsive use (e.g., overly focused on opioids rather than pain control)
    - Continued use despite harm (e.g., request more opioid despite dangerous side effects such as sedation)
  - Discuss these behaviors in a non-judgmental manner
  - If patient is physically dependent taper opioids slowly over 3-4 weeks to minimize opioid withdrawal
  - Offer patient referral to specialty addiction treatment
  - Make it clear that you are not discharging the patient but discontinuing a treatment that has become too risky for the patient
  - Schedule close follow-ups during and after taper

Post-Video Questions for Discussion:

- Is this patient coming back to this provider?
- How do you handle these uncomfortable interactions?
- Do you think the provider and the patient were really hearing each other?
- How might the provider have responded differently? Do you think the outcome would have changed?

Other videos on SCOPE of Pain

1. Initiating opioid therapy
Video | PDF

2. Aberrant opioid taking behavior
Video | PDF

3. Lack of opioid benefit and excessive risk
Video | PDF

4. High dose opioids in an inherited patient Part A & B
Video | PDF

5. Illicit drug use in a patient on chronic opioid therapy
Video | PDF

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35% of primary care pts have chronic non-cancer pain (CNCP)

opioids are the most commonly prescribed treatment

Morasco J Pain 2011 March, Fleming J Pain 2007 July

Yet evidence shows opioids work poorly to control chronic pain, while often worsening function and quality of life

Opioids compared to placebo or other treatments for chronic low-back pain

Cochrane Review 2013

- 15 trials, 5,540 participants
- **Conclusions**:
  - There is some evidence (very low to moderate quality) for **short-term efficacy** (for both pain and function) of opioids to treat CLBP compared to placebo.
  - The trials that compared opioids to NSAIDs or antidepressants **did not show any differences** regarding pain and function.

No change in pain score with large opioid increases

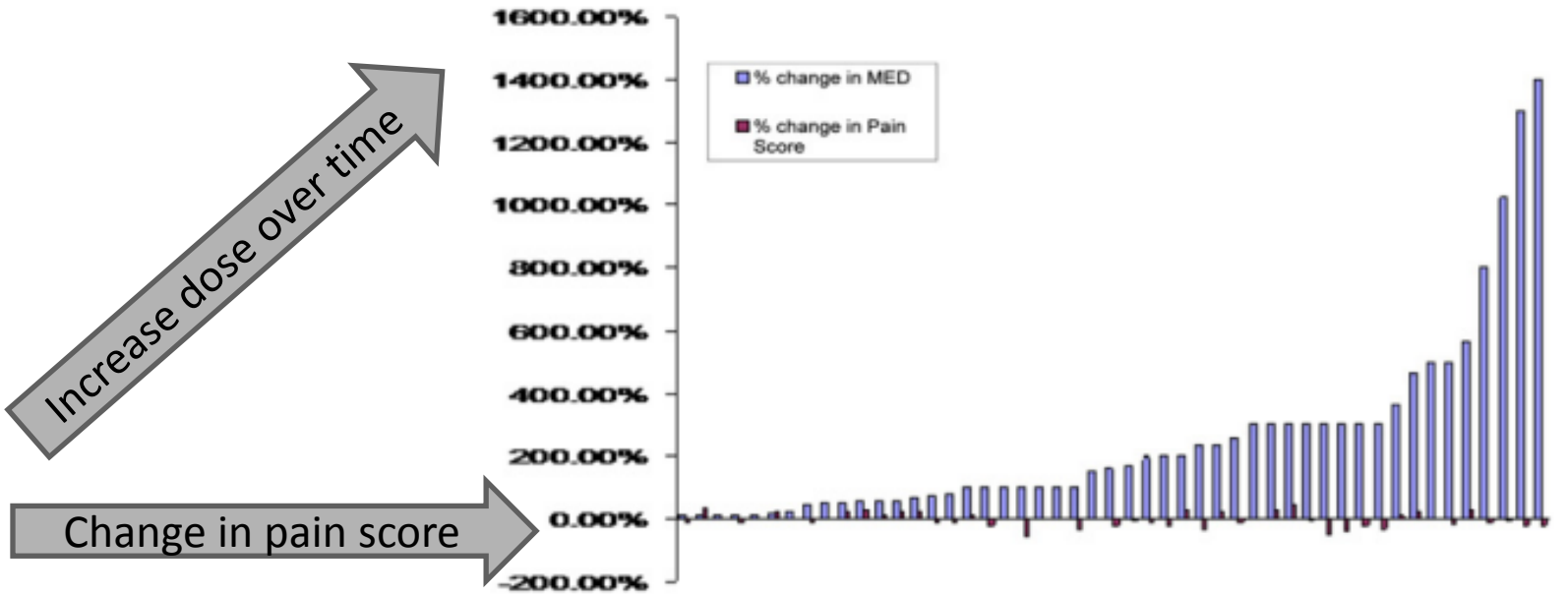

Figure 1. Illustration of each individual subject with opioid dose increase and the corresponding clinical pain score point change. MED, daily morphine equivalent dose.

J. Pain 2013. Vol 14 (4): 384

Discussion and questions

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Table 3. The ten steps of Universal Precautions
1. Make a diagnosis with appropriate differential and a plan for further evaluation and investigation of underlying conditions to try to address the medical condition that is responsible for the pain
2. Psychologic assessment, including risk of addictive disorders
3. Informed consent
4. Treatment agreement
5. Pre-/post-treatment assessment of pain level and function
6. Appropriate trial of opioid therapy +/- adjunctive medication
7. Reassessment of pain score and level of function
8. Regularly assess the "Four As" of pain medicine[a] • **A**nalgesia, **A**ctivity, **A**dverse reactions, and **A**berrant behavior
9. Periodically review management of the underlying condition that is responsible for the pain, the pain diagnosis and comorbid conditions relating to the underlying condition, and the treatment of pain and comorbid disorders
10. Documentation of medical management and of pain management according to state guidelines and requirements for safe prescribing

Gourlay DL, Heit HA, et al. *Pain Med.* 2005;6:107-112.

Gourlay DL, Heit HA. *Pain Med.* 2009;10(suppl 2):S115-S123.

[a]Passik SD, et al. *Clin Ther.* 2004;26:552-561.

Opioid Risk Tool (ORT): method to risk-stratify and deliver appropriate care

		Mark Each Box That Applies	Score if Female	Score if male
1. Family History of Substance Abuse	☐ Alcohol ☐ Illegal Drugs ☐ Prescription Drugs		1 2 4	3 3 4
2. Personal History of Substance Abuse	☐ Alcohol ☐ Illegal Drugs ☐ Prescription Drugs		3 4 5	3 4 5
3. Age (Mark Box if 16-45 years)			1	1
4. History of Preadolescence Sexual Abuse			3	0
5. Psychological Disease	☐ Attention-Deficit/Hyperactivity Disorder; ☐ Obsessive Compulsive Disorder; ☐ Bipolar Disorder; ☐ Schizophrenia		2 1	2 1

Total Score _____Risk Category_____

Low Risk 0-3: 6% chance of developing problematic behaviors
Moderate Risk 4-7: 28% chance …
High Risk >7: >90% chance …

Webster & Webster, Pain Med. 2005.

Approach to monitoring depends on risk level

Low Risk: follow up every 3 months, managed by PCP, routine CURES, urine drug screen, annual review of pain agreement

- **Medium Risk:** Past history of SUD, but not actively addicted; PCP with consultant or review committee support, monthly visits, more frequent monitoring including pill counts

- **High Risk:** Patient actively addicted/abusing; unstable major psychiatric disorder; should be in narcotic treatment program, or managed by PCP with buprenorphine and behavioral health treatment

– Adapted from Gourlay,et al 2005, 2009

Assess Potential Benefit of Opioids

- Assess current **function** (goal is improving function not getting pain score down)
- What can patient be expected to do with opioids that s/he cannot do now?
- Set **S**pecific, **M**easurable, **A**ction-oriented, **R**ealistic, **T**ime-dependant (SMART) goals for next visit
- Think of opioid prescription as a **TEST**

http://www.pcbehavioralhealth.com/ has useful tools for functional assessment, baseline and over time:

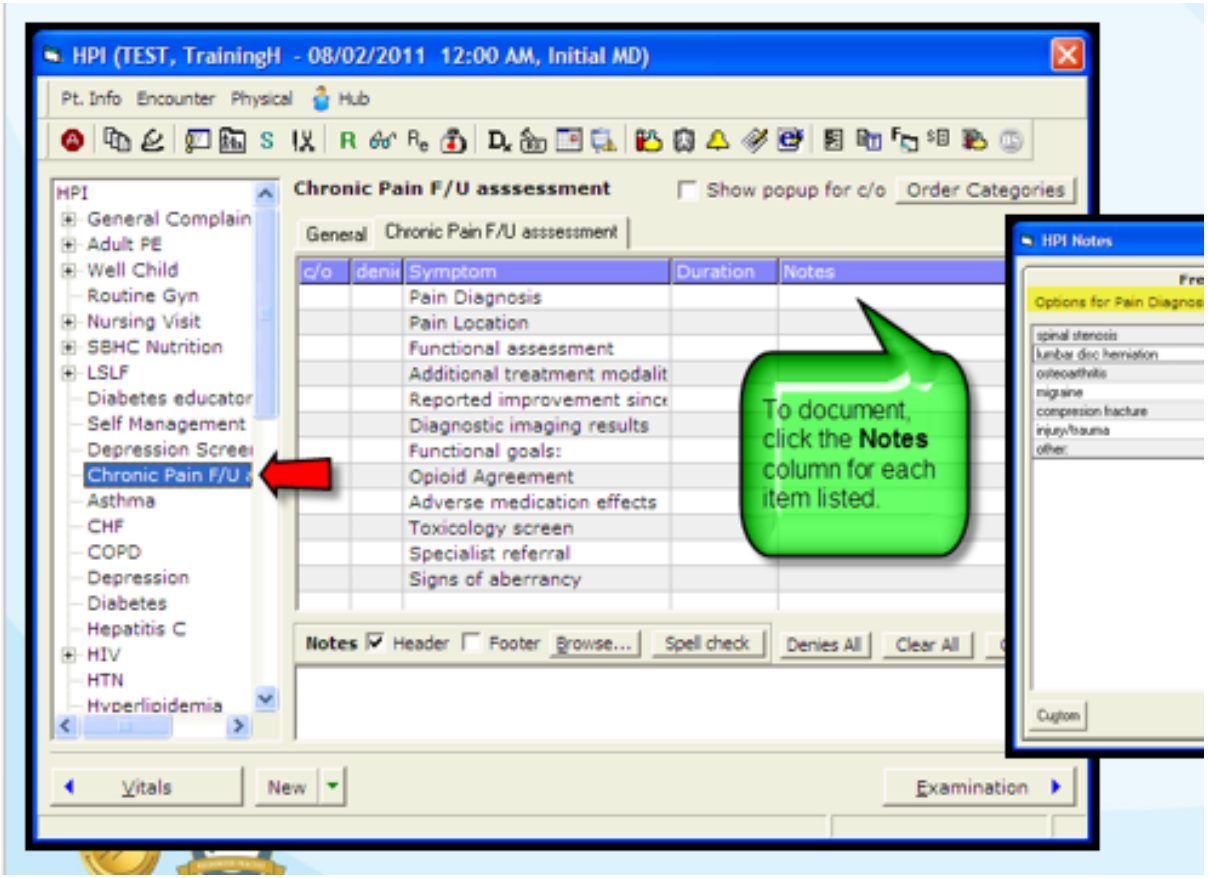
"if function is not improving, meds are not working"

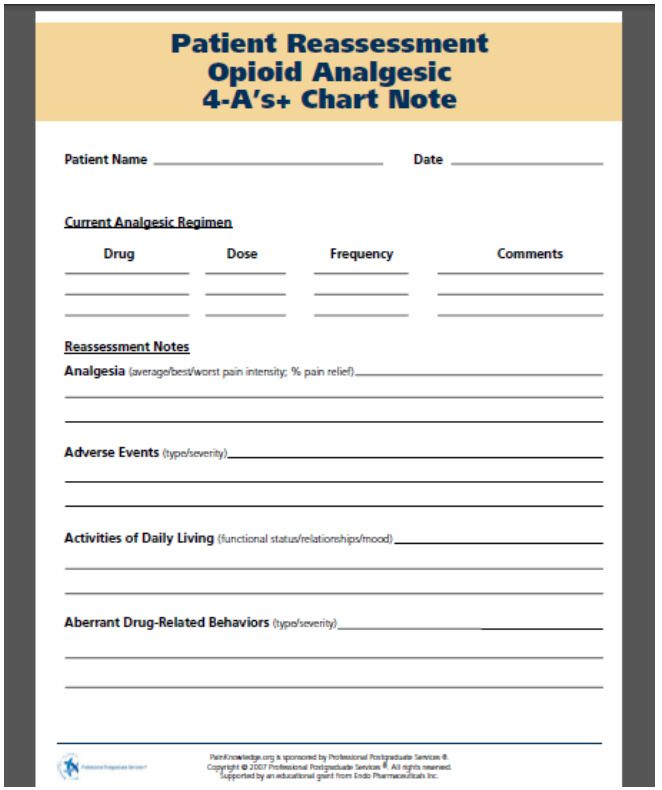
Source: Christina Nicolaidis, MD, MPH, Oregon Health & Science University. SGIM 2008 precourse

Setting Goals for Opioid Treatment
Use 4 A's

- **A**nalgesia: is the pt getting adequate pain relief?
- **A**ctivities of daily living: are these improving?
  - Pain disability index (PDI),
  - "A typical day" (motivational interviewing tool),
  - Pain diary
- avoid **A**dverse events. Top 5 high-risk practices
  - Morphine equivalents over 100 mg daily
  - Methadone over 40 mg daily, or in combo with other opioids
  - Benzos and opioids
  - Combined with street drug/alcohol use, or opioids from multiple prescribers (use CURES to confirm)
  - New patients using over 90 days (half will use opioids life-long)
- avoid **A**berrant medication-related behaviors
  - Review treatment agreement and consequence of risky actions:
    - Mixing with alcohol, street drugs
    - Using more than prescribed
    - Prescribe naloxone, and explain why

Use templates and order sets to ensure protocols are followed





Patient Reassessment
Opioid Analgesic
4-A's+ Chart Note

Patient Name _____ Date _____

Current Analgesic Regimen

Drug	Dose	Frequency	Comments

Reassessment Notes

Analgesia (average/best/worst pain intensity; % pain relief) _____

Adverse Events (type/severity) _____

Activities of Daily Living (functional status/relationships/mood) _____

Aberrant Drug-Related Behaviors (type/severity) _____

Other topics in slide deck; reviewed in detail on October 1

- Pain management agreements
  - Not a contract – mechanism for education, informed consent, and explanation of clinic policies
- Urine drug screens
  - How to use them, how to read them
  - Set up standardized practices
- CURES
  - CURES 2.0 will have more information, much easier to use, should be available by fall
- Best practices on refills
- Pill counts and other monitoring strategies

Questions and discussion

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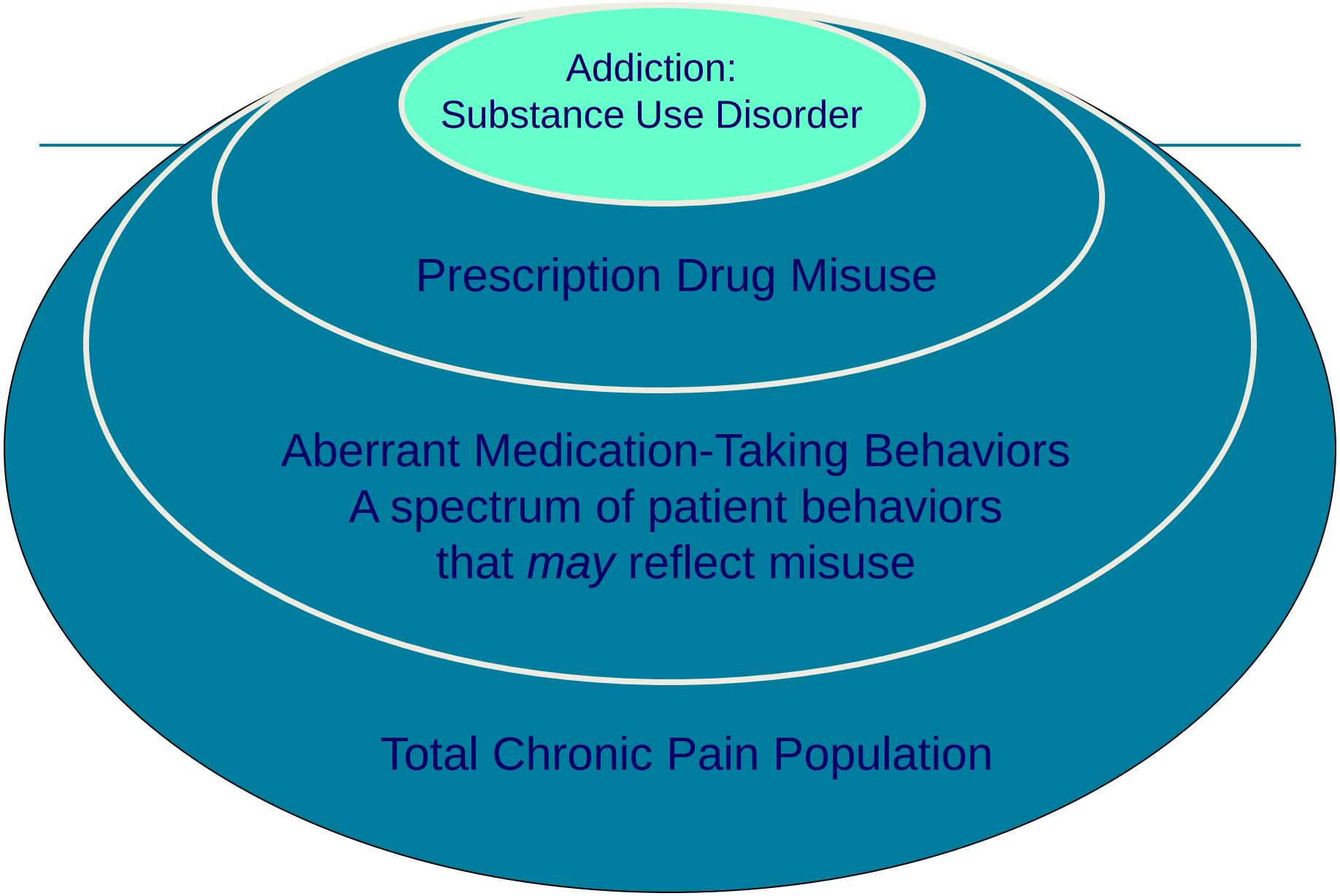

Adapted from Steve Passik. APS Resident Course, 2007

Chronic opioid therapy (COT) may worsen pain experience:

1. Tolerance
2. Intermittent withdrawal
3. Hyperalgesia

Sweating: Over Past 1/2 Hour not Accounted for by Room Temperature or Patient Activity	
0 = no report of chills or flushing 1 = subjective report of chills or flushing 2 = flushed or observable moistness on face • 3 = beads of sweat on brow or face • 4 = sweat streaming off face	
Restlessness Observation During Assessment	
0 = able to sit still 1 = reports difficulty sitting still, but is able to do so • 3 = frequent shifting or extraneous movements of legs/arms • 5 = Unable to sit still for more than a few seconds	
Pupil Size	
0 = pupils pinned or normal size for room light 1 = pupils possibly larger than normal for room light • 2 = pupils moderately dilated • 5 = pupils so dilated that only the rim of the iris is visible	
Bone or Joint Aches if Patient was Having Pain Previously, only the Additional Component Attributed to Opiate Withdrawal is Scored	
0 = not present 1 = mild diffuse discomfort • 2 = patient reports severe diffuse aching of joints/muscles • 4 = patient is rubbing joints or muscles and is unable to sit still because of discomfort	
Runny Nose or Tearing Not Accounted for by Cold Symptoms or Allergies	
0 = not present 1 = nasal stuffiness or unusually moist eyes • 2 = nose running or tearing • 4 = nose constantly running or tears streaming down cheeks	
GI Upset: Over Last 1/2 Hour	
0 = no GI symptoms 1 = stomach cramps • 3 = vomiting or diarrhea • 5 = multiple episodes of diarrhea or vomiting	

COWS Clinical Opioid withdrawal scale

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Epigenetics & SUDs

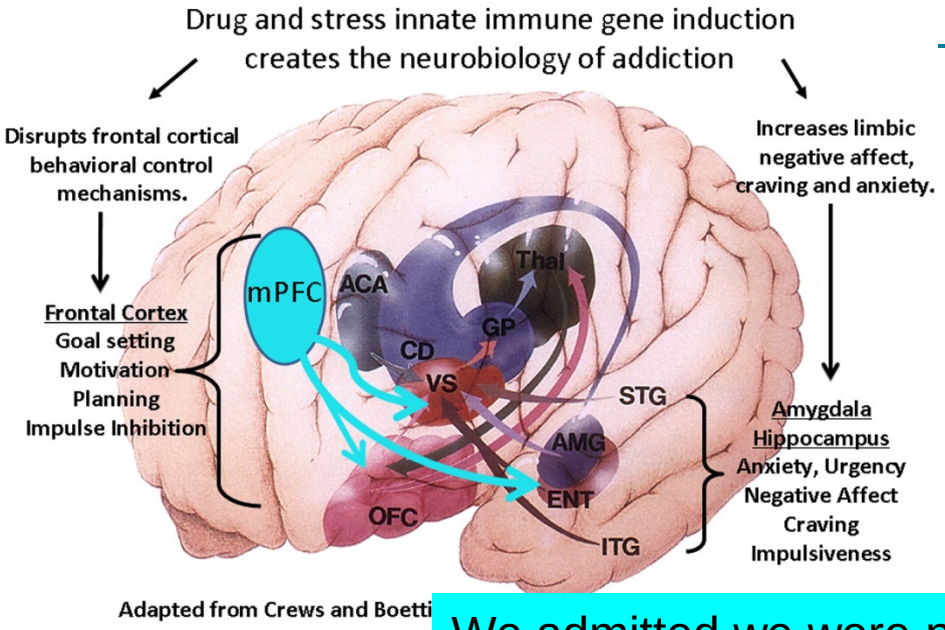
Adverse Childhood Events (ACE)

CDC & Kaiser San Diego Study

Useful to ask all pts:

"Have you ever been harmed physically, sexually, emotionally as a child or an adult?"

http://www.cdc.gov/violenceprevention/acestudy/



We admitted we were powerless over drugs – that our lives had become unmanageable.

Two Item Conjoint Screen: TICS

used in *Screening Brief Intervention & Referral to Treatment* (*SBIRT*)

- In the last year:
  - Have you ever drunk or used drugs, including prescription drugs, more than you meant to?
  - Have you felt you wanted or needed to cut down on your drinking or drug use, including prescription drugs?
  - 1 pos answer: 80% sensitivity/specificity
    - Brown, et al. J Am Board Fam Pract 2001.

Behaviors Highly consistent with SUD

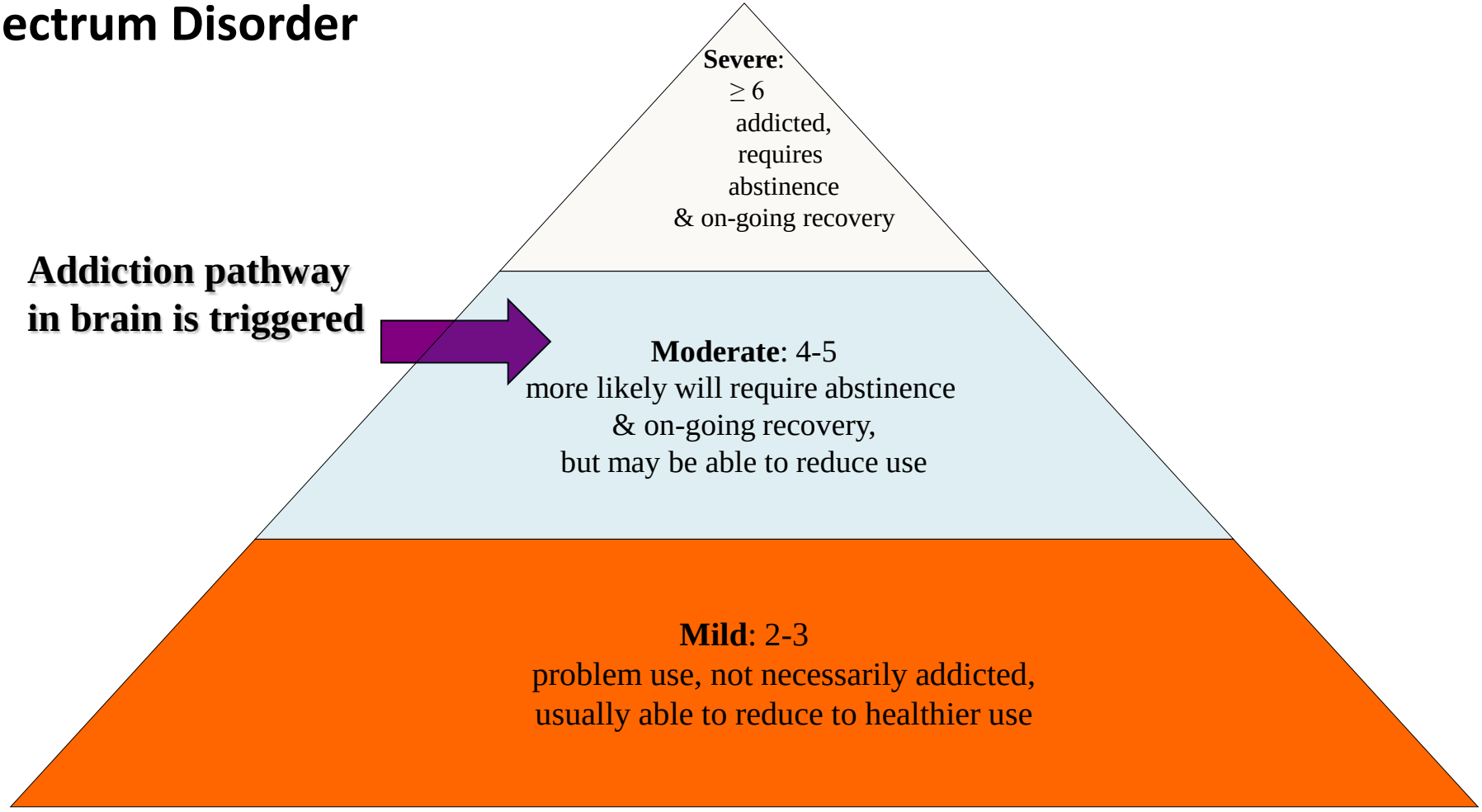
Loss of control of use and much adverse consequences related to use

- Frequent "lost prescriptions"
- Shows no concern about opioid side-effects
- Preoccupation with obtaining prescription opioids for other than analgesia
  - R/o self-tx for untreated dual diagnosis
- Seen multiple providers w/o disclosure
  - Check CURES Physician Drug Monitoring Program (PDMP)
- Injecting oral medication
  - Check for skin signs
- Associated w/ illegal activities
  - Prescription theft and forgery
  - Stole drugs from other
  - Illegal buying
  - Prostitution to get drugs or money to buy drugs
  - Theft to get money to buy drugs

- Fishman, Responsible Opioid Prescribing,Federation of State Medical Boards, Miotto, et al. Psychiatr Clin N Am 35 (2012)

DSM 5: Alcohol/Drug Use Disorder

Spectrum Disorder



What are the 4 C's of Addiction?

- Loss of **C**ontrol
- **C**ompulsive use
- **C**ontinued use despite harm
- **C**raving
- Since physical dependence is a normal neuroadaptation to COT, this can't be depended on for SUD criteria

DSM 5: Opioid Use Disorder Criteria

Within a 12-month period:

- Took more than intended
- Unsuccessful efforts to cut down
- Lots of time spent obtaining, using, or recovering
- Craving
- Failures to fulfill obligations at work, school, home
- Use despite social or interpersonal problems from opioids
- Giving up activities because of opioids
- Use when physically hazardous
- Use despite negative psych or physical impact
- Tolerance (not a criteria for prescribed opioids)
- Withdrawal (not a criteria for prescribed opioids)

- MILD: 2-3
- MODERATE: 4-5
- SEVERE: 6 or more

Two Item Conjoint Screen: TICS

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  - 1 pos answer: 80% sensitivity/specificity
    - Brown, et al. J Am Board Fam Pract 2001.

What are the risk factors for prescription opioid induced SUD?

a. Personal hx of substance abuse
b. Hx of sexual abuse
c. Age less than 45
d. Hx of psychiatric illness
e. All of the above

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Discussing Possibility of Opioid SUD

"I cannot responsibly continue prescribing opioids as I feel it would cause you more harm than good."

- **Inform patient of signs & symptoms**
  - Review why you have made this diagnosis
- **Identify SUD as a treatable medical condition**
  - "Addiction is a disease, not a moral problem – there is treatment that can help"
  - Reassure of your continuity of care
  - Remain compassionate, empathic and nonjudgmental
- **Set limits without engaging in a power struggle**
  - Remain calm and cool even when patient is upset
- **Offer medication-assisted addiction treatment**
  - Strong evidence base: methadone or suboxone maintenance
  - Weak evidence base: detox and naltrexone treatment, higher risk of OD

Buprenorphine 101: agonist/antagonist

- Antagonist qualities:
  - harder to get high,
  - ceiling for respiratory depression,
  - blocks effects of other opioids

- Agonist qualities:
  - normalizes dopamine axis – gets people out of cycle of withdrawal and cravings
  - prevents highs/lows of chronic withdrawal,
  - once-daily dosing makes it harder to divert;
  - Controls pain

Buprenorphine 101: basics

- 8-hour on-line or in-person training:
  - Great training for residents and faculty
    - Understanding opioid pharmacology
    - Understanding neurophysiology of pain and addiction
  - Enables x-license, allowing prescription of buprenorphine for ADDICTION
  - X-License not required to prescribe buprenorphine for pain
- Can be managed in primary care:
  - Induction is easier than it used to be
  - Team approach can be used (PA, NP, Nurse care manager)
- On-line training:
  - http://buprenorphine.samhsa.gov/training_main.html

More Training …

- SCOPE of Pain
  - Safe and Competent Opioid Prescribing Education
  - Free on-line, case-based training, Dan Alford MD
- PCSS-O Training
  - Providers Clinical Support System for Opioid Treatment
    - For PCPs
  - American Academy of Addiction Psychiatry, free on-line
- Pri-Med Online CME: Pain Management Module
  - Compliant w/ ER/LA Opioid Analgesics REMS education requirements issued by the FDA

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4 keys to prevention -

1.Beware of the **90 day cliff**

2/3 of patients on opioids at 90 days become long-term users

2. Avoid going above the **high-risk dose threshold**

> 100 mg morphine equiv

> 40 mg methadone

3. **Don't mix opioids and benzos**

4. **Use CURES** to identify multiple prescribers

Patients started on opioids for injuries are less likely to return to work, and more likely to have poor functional outcomes at three years.

Good review of current evidence on long-term opioids:

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4204477/

Questions?

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  https://www.scopeofpain.com/