

## Managing Pain Safely Forum II

Partnership HealthPlan of California

January 15, 2016

## OBJECTIVES

- To understand the neuroscience of prolonged opioid use
- To understand the similarities and differences with addiction
- To understand approaches to working with patients affected by chronic pain
- To participate in interactive breakout sessions



## LOGISTICS

#### Folders

- Agenda
- Presenter Biographies
- PHC Contact List
- Evaluation
- PHC Website
- NoRxAbuse Flyer
- MPS County Webinar Flyer
- CME Logistics
- Q&A Process





## HOUSEKEEPING

- Restroom Locations
- Electronic Devices
- WIFI Name: Red Lion Guest
- WIFI Code: Harley
- Presentation Materials Online



http://www.partnershiphp.org/Providers/HealthServices/Pages/MPSUpcomingEvents.aspx



## **GROUND RULES**

- Begin and end on time
- Be open-minded respect all ideas and opinions
- Use technology sparingly and place on silent
  - If you must take a call, please step out of the room
- Be engaged participate

## Have fun!!!



## LET'S GET STARTED

# Let's get started ...



## LET'S GET STARTED

# ENJOY THE FORUM!





Managing Pain Safely: Progress on Reducing Opioid Overuse in the PHC Service Area

Robert Moore, MD, MPH Medical Director, Partnership HealthPlan of California

January 15, 2016

## Managing Pain Safely – 2016 Update

## Accomplishments Progress towards goal How we will achieve goal



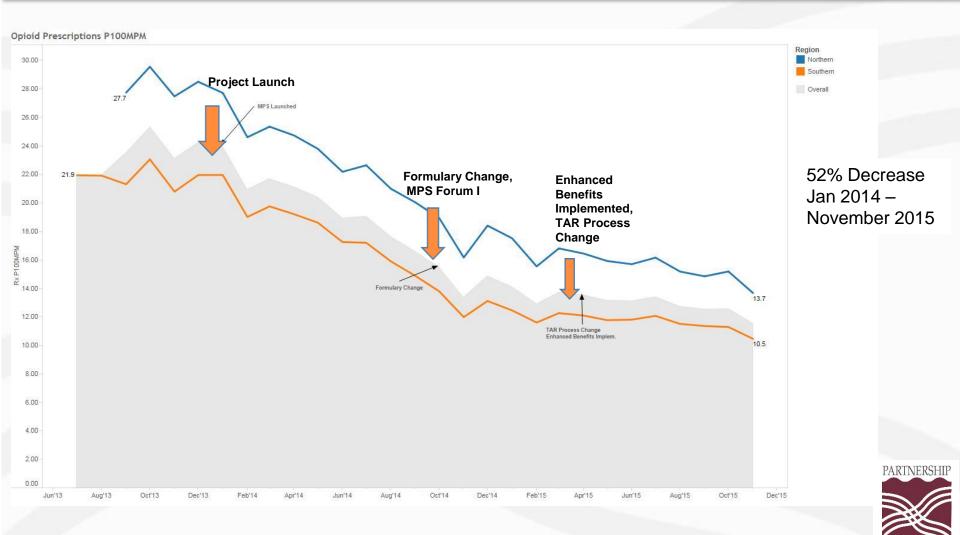




## Accomplishments:

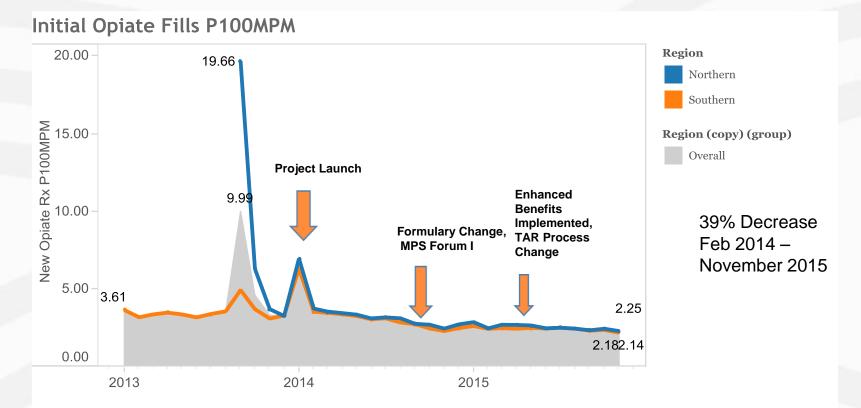
Review of PHC Opioid Prescription Data

## MPS Data – Total Prescriptions



of CALIFORNIA

## MPS Data – Initial Prescriptions



The trends of Initial Rx P100MPM and Initial Rx P100MPM for fill\_dt Month. The marks are labeled by Initial Rx P100MPM. For pane Initial Rx P100MPM: Color shows details about Region (copy) (group). For pane Initial Rx P100MPM (2): Color shows details about Region. The data is filtered on Initial and Date Filter. The Initial filter keeps Y. The Date Filter



## MPS Data – Unsafe Dose

#### **Project Launch** Northern Southern Enhanced <sup>15% –</sup>15.4% Formulary Change, **Benefits MPS Forum I** Implemented, Region (copy) (group) **TAR Process** % of Total Opioid users Overall Change 11.3% 10% 8.3% 7.5% 2% 40% Decrease 5% Jan 2014 -November 2015 0% 2013 2014 2015

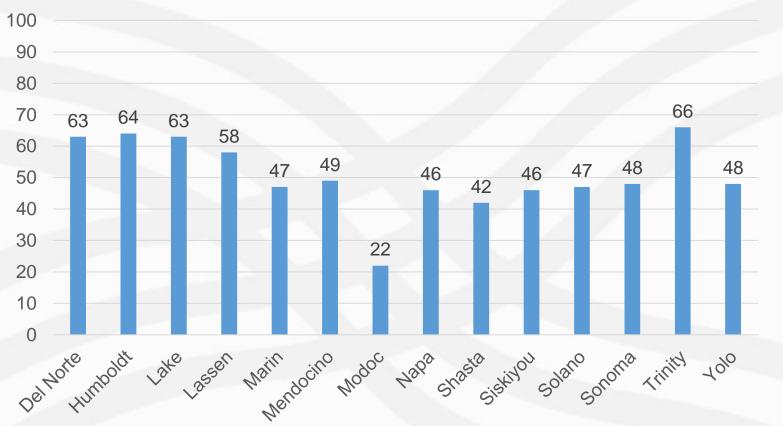
The trends of % of Total Opioid users and % of Total Opioid users for Latest Fill Month broken down by User type. For pane % of Total Opioid users (2): Color shows details about Region. For pane % of Total Opioid users: Color shows details about Region (copy) (group). The data is filtered on Date Filter and Latest Fill. The Date Filter filter keeps True.

% Opioid Users on Unsafe Dose (>120 MED)



## Percent Decrease of Unsafe Dose

#### % Decrease Unsafe Dose December 2013-November 2015



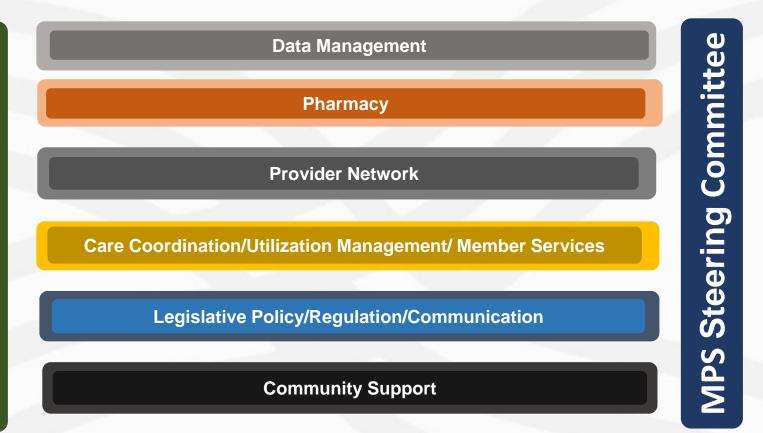




## Accomplishments:

#### **Health Plan Activities**

## MPS Workgroups

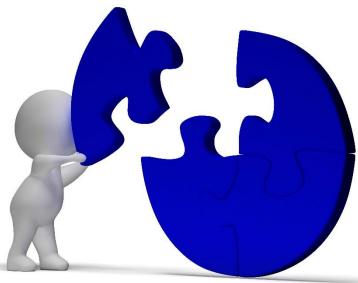


PARTNERSHIP HEALTHPLAN of CALIFORNIA

## Interventions

#### Education

Health plan pharmacy prior authorization changes Additional options for treating pain Community activation Aligned incentives Additional resources



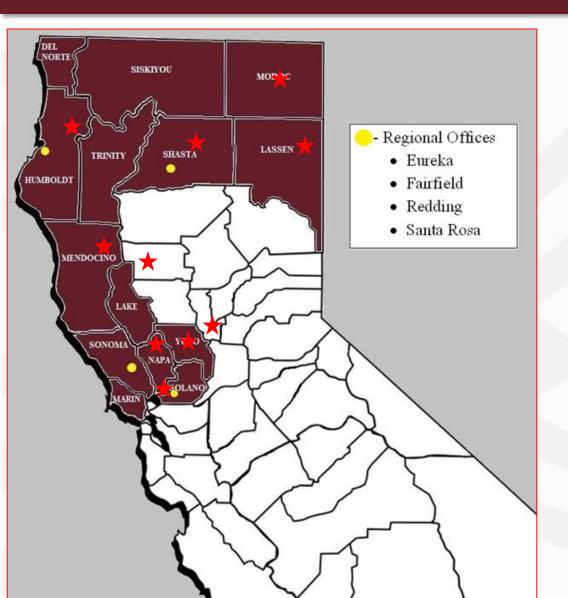




## Accomplishments:

**Community Coalitions** 

#### PHC Counties Participating in CHCF Regional Opioid Safety Coalition Grant Program



10 PHC Counties are participating in CHCF's Regional Opioid Safety Coalition Grant Program

CHCF Opioid Safety Coalition County



## **Community Coalition Status**

PHC COUNTY COALITION STATUS COUNTY NORTE NORTE AND LAKE ASSEN NARIN CINO OC NARA STA STA NOU AND NARINTY YOLO Key Little or No Effort (Yet) 1 Initial Meetings, Beginning of Framework Formation 2 3 Framework Formation, Action Teams Initiating Strong Effort- Framework Implemented, Regular Meetings, Active Action Teams, Working towards Milestones 4 5 Robust Effort- Active Action Teams, Accomplishing Milestones, Measurable Results





## Accomplishments:

#### **Primary Care Providers**

## Interventions

Opioid Oversight Committees Setting up Health Center-wide policies Tapering Integrated Behavioral Health Talking to patients, one by one.







## **Progress Towards Goal**

## Managing Pain Safely – Aim Statement

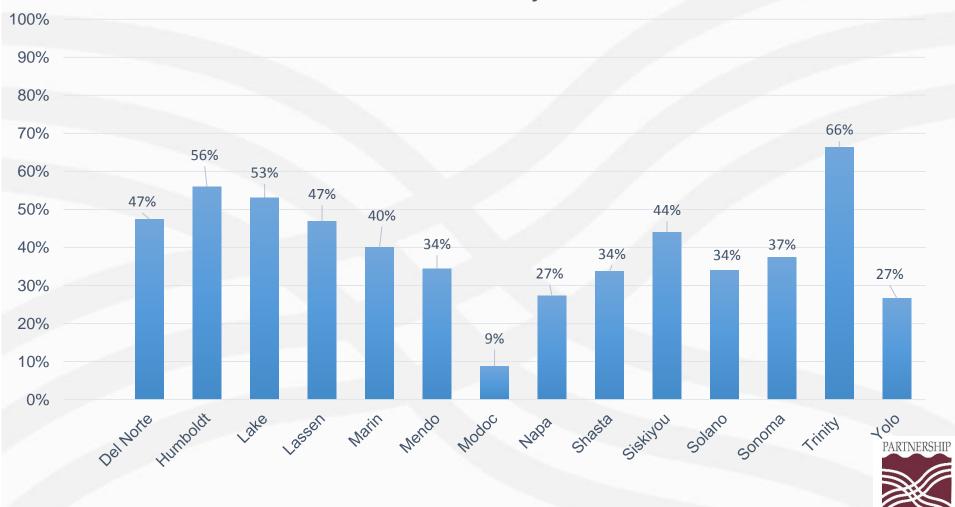
By December 31, 2016, we will improve the health of PHC members by ensuring that prescribed opioids are for appropriate indications, at safe doses, and in conjunction with other treatment modalities as measured by a:

- Decrease in total number of initial prescriptions by 75%
- Decrease in total number of prescription escalations by 90%
- Decrease in total number of patients on high-dose opioids\* by 75%



## Percent Decrease of Unsafe Dose

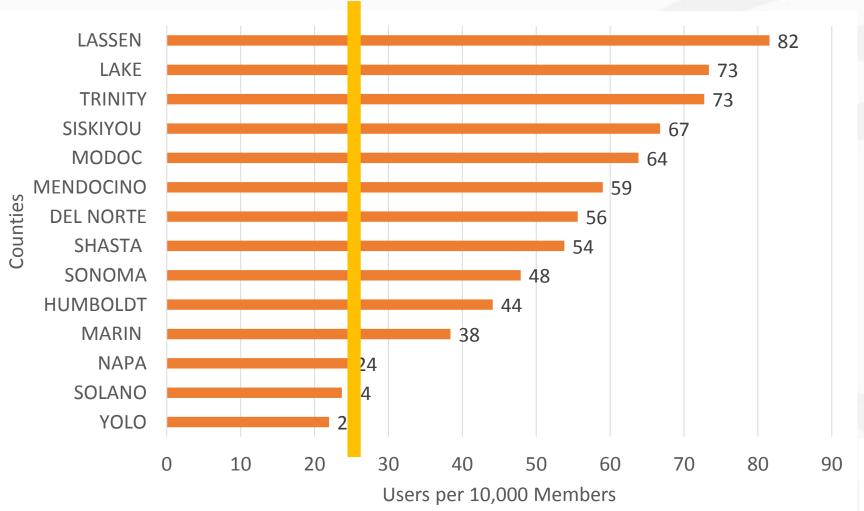
% Decrease Unsafe Dose January 2014-October 2015



of CALIFORNIA

Moore R. CMO Report on Quality. Dec. 2015

## Rate of High Opioid Users: End of 2015



PARTNERSHIP HEALTHPLAN of CALIFORNIA



## Achieving Our Goal: I

Health Plan Activities for 2016

## Looking Ahead in 2016: Health Plan Activities

Provision of tele-consult services for complex patients on high-dose opioids

- Education and coordination around addiction screening and treatment
- Partner with CHCF for continued support in developing and sustaining local efforts targeted at reducing improper use of opioids
- Planning process for creating integrated clinics for high utilizers
- Pharmacy academic detailing
- MPS provider level data sharing
- Tapering guide/ toolkit
- Naloxone Pilot





## Achieving Our Goal: II

#### **State Wide Activities**

- Support for Community Coalitions
- Planning for Integrated Approach to Patients on High Doses of Chronic Opioids
- **CDC** Guidelines
- **CURES 2.0**





## Achieving Our Goal: III

**Prescriber Activities** 

## Looking Ahead in 2016: Prescriber Activities

- Sign up for tele-consult services for complex patients on high-dose opioids
- Make local opioid oversight committees more robust
- Participate in regional coalitions
- Give feedback on draft plan for integrating chronic pain treatment with Medication Assisted Therapy
- Ask your PHC Regional Medical Director to meet with you and/or your clinicians to review their individual PHC opioid data and to review MPS
- Tapering guide/ toolkit
- Distribute Naloxone and educate patients/families on how to use it.



## Thank You!!!

#### Robert Moore, MD, MPH, Medical Director, Partnership HealthPlan of California







Cory Waller, Medical Director Center for Integrated Medicine

Spectrum Health Medical Group

complex

# An Overview Of Substance Use Disorders Partnership Health Plan

#### Sharone Abramowitz M.D.

Psychiatrist & Addiction Medicine Board Certified Behavioral & Addiction Medicine Director, Primary Care Medicine Residency, Highland Hospital, Alameda Health System Executive Council, Calif Society of Addiction Medicine Motivational Interviewing Network of Trainers Integrative Psychiatry Private Practice, Oakland & San Francisco **www.Abramowitz-Psychiatry.com** 

- Epidemiology
- Brain & Addiction
- DSMV
- Opiates
- Marijuana
- Alcohol
- Screening & Counseling

# What we will cover ...

### Pair off

#### **Speakers**

•Think of an impactful interaction you've had with one of your addiction pts (positive or negative)

•Emotional impact, what did you learn?, what you need to learn?

•Speak for 90 seconds

#### Listeners

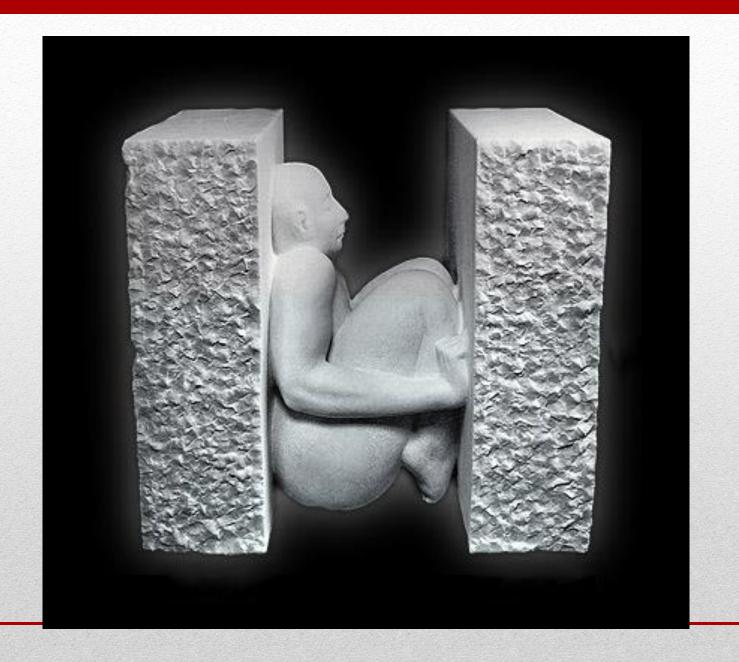
•Listen without speaking

•Your face will show natural responsiveness

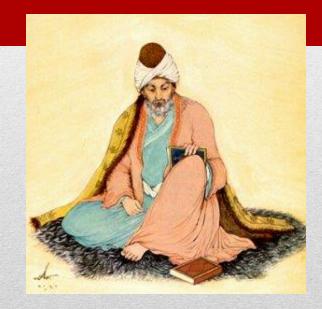
•After time is called, you have 60 seconds to summarize in your own words the story you just heard.

Reverse

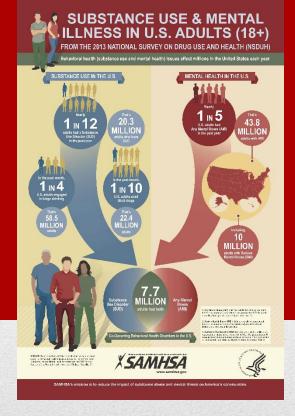
# Summarizing Empathy Exercise



# "The wound is the place where the light enters you."

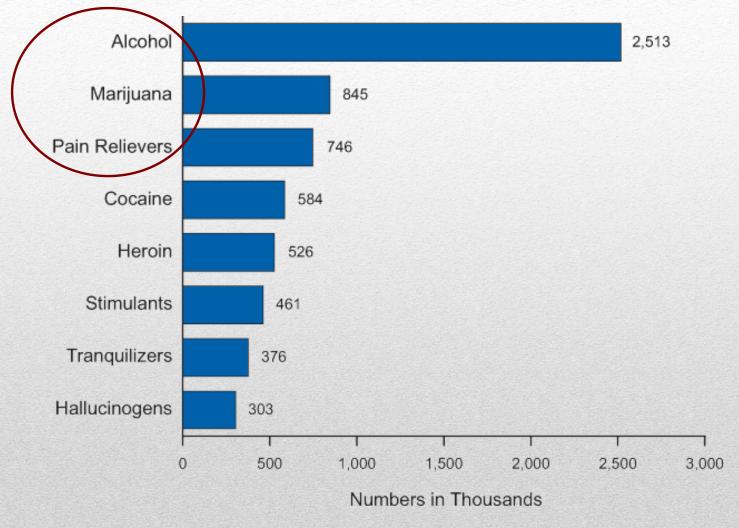


### Rumi

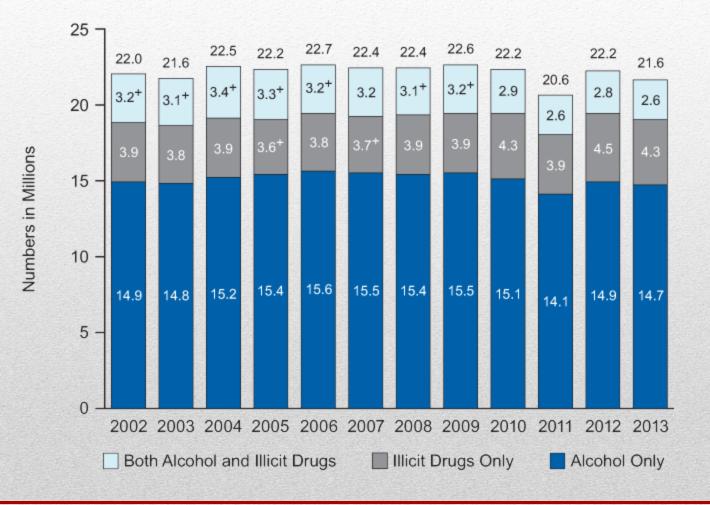


# EPIDEMIOLOGY

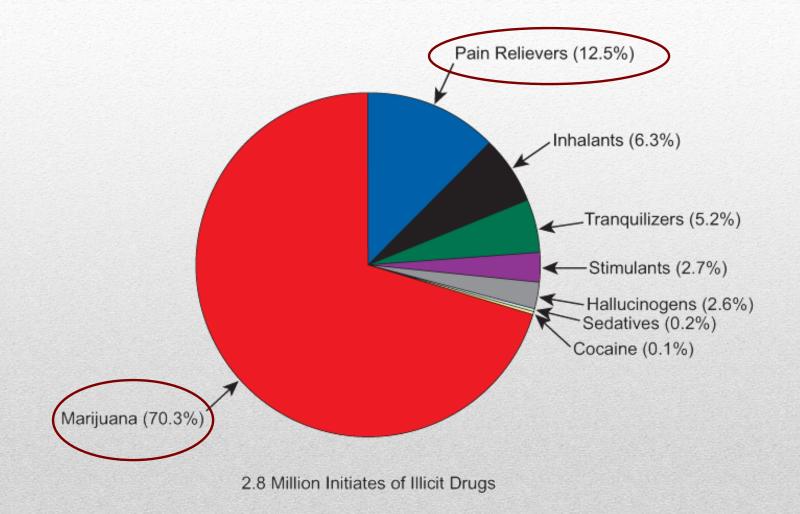
## Substances for Which Most Recent Treatment Was Received in the Past Year among Persons Aged 12 or Older: 2013



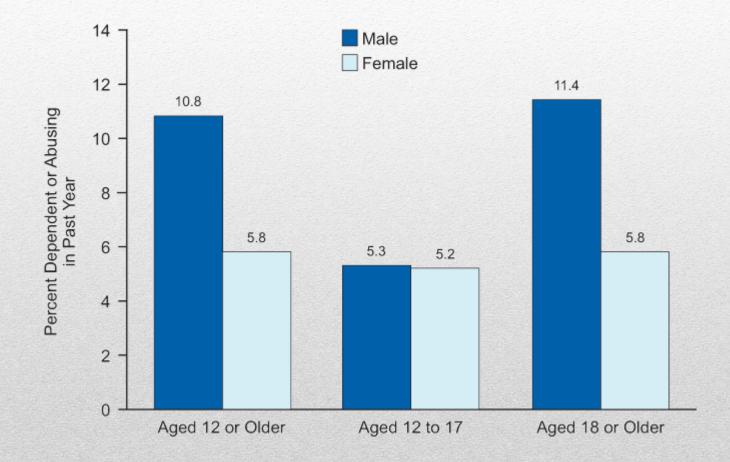
## Substance Dependence or Abuse in the Past Year among Persons Aged 12 or Older: 2002-2013

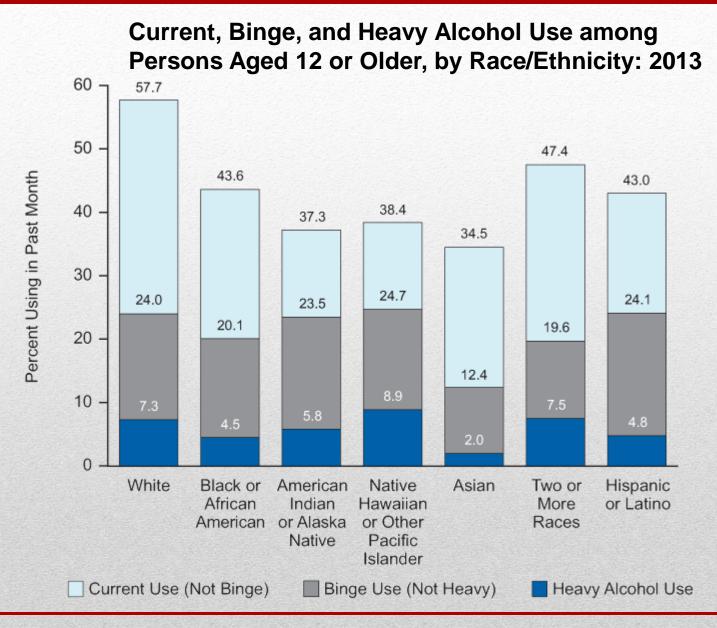


First Specific Drug Associated with Initiation of Illicit Drug Use among Past Year Illicit Drug Initiates Aged 12 or Older: 2013

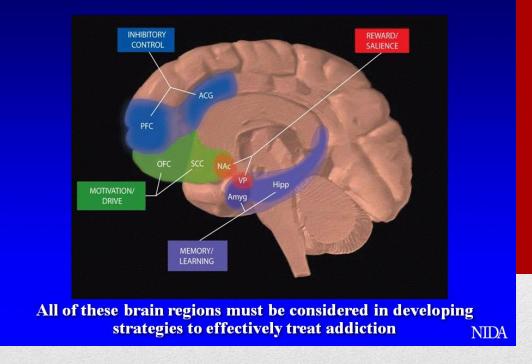


## Substance Dependence or Abuse in the Past Year, by Age and Gender: 2013





#### **Circuits Involved In Drug Abuse and Addiction**



# THE BRAIN & ADDICTION

### SUDs as a Chronic Brain-Based Disease



# **Epigenetics & SUDs**



# Adverse Childhood Events (ACE) CDC & Kaiser San Diego Study

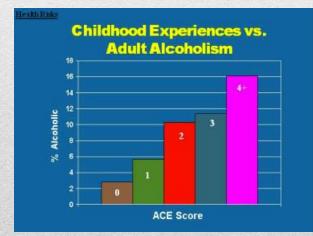
http://www.cdc.gov/violenceprevention/acestudy/

#### 4 or more categories of ACEs, compared to those w/ none:

- 4-12-fold risks for alcoholism, drug abuse, depression, and suicide attempt
- 2- 4-fold increase in smoking, poor self-rated health
- 1.4- 1.6-fold increase in physical inactivity and severe obesity

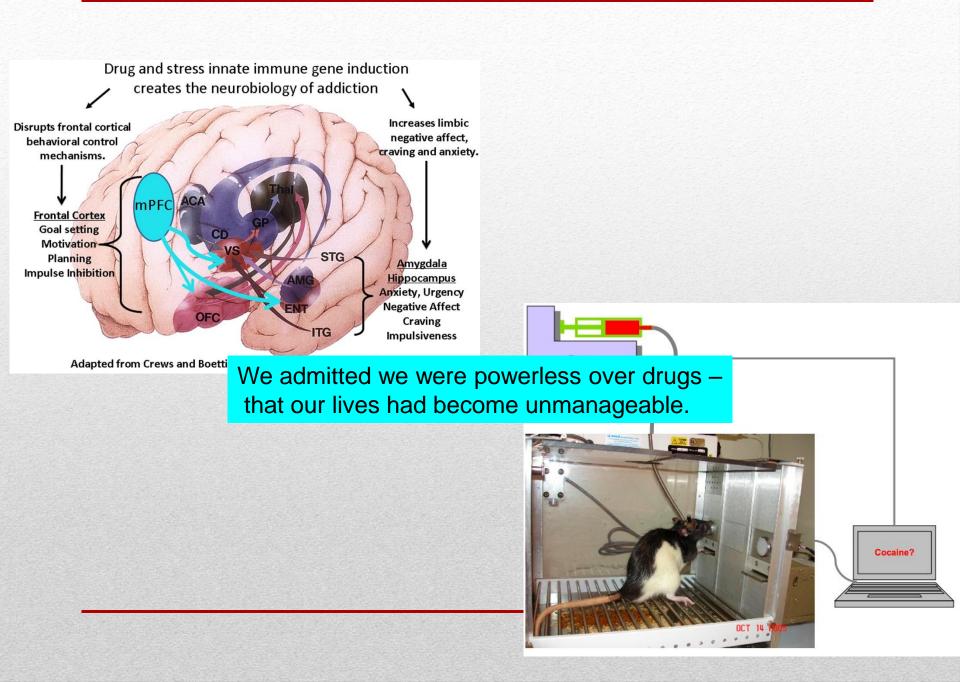
• # of ACEs showed a graded relationship to the presence of adult diseases including: ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease.

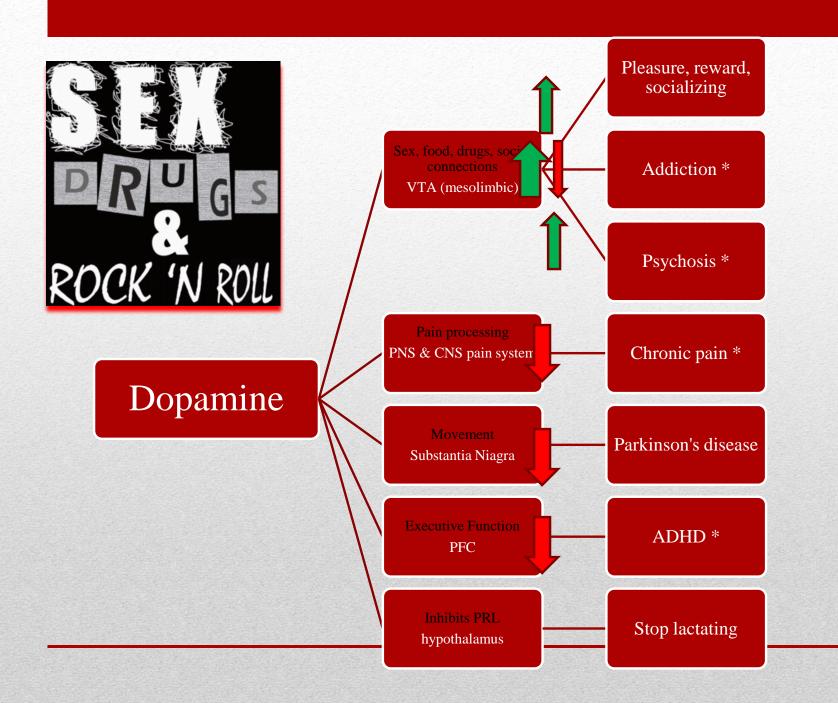
Am J Preventive Med 1998



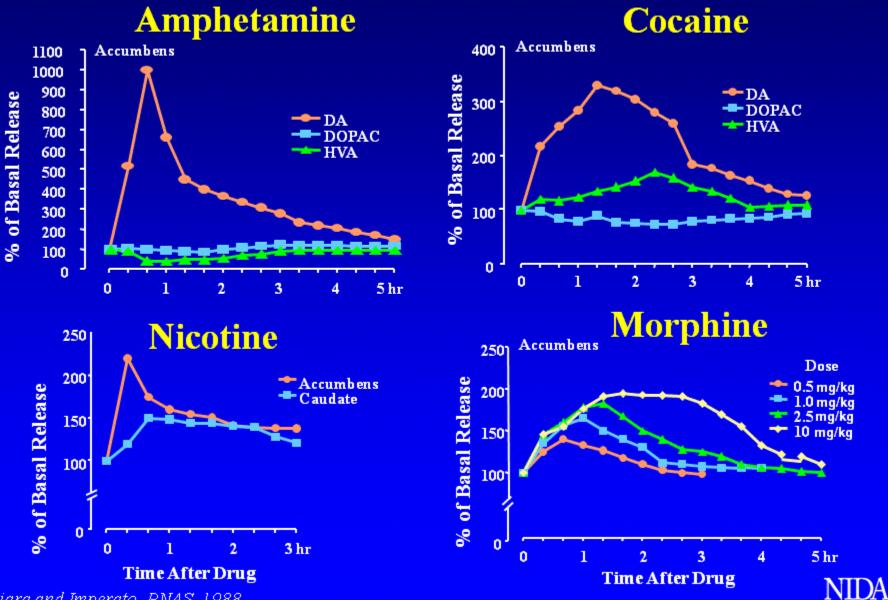
Useful to ask all pts:

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





## Effects of Drugs on Dopamine Release

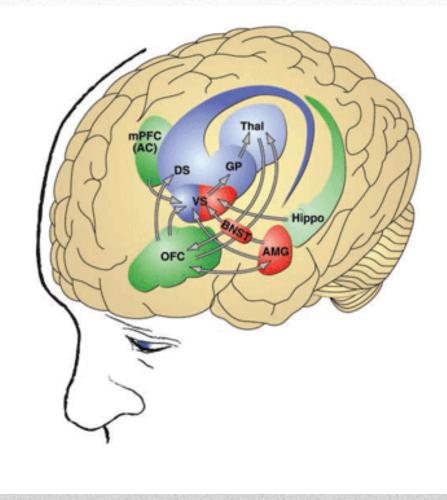


Di Chiara and Imperato, PNAS, 1988

Dr. Nora Volkow on Addiction: A Disease of Free Will, July 2015 www.youtube.com/watch? v=X1AEvkWxbLE



# Dr. Nora Volkow NIDA Director



#### Binge/intoxication

- ventral striatum (VS), including nucleus accumbens euphoria, reward
- dorsal striatum (DS) habits, perseveration
- global pallidus (GP) habits, perseveration
- thalamus (Thal) habits, perseveration

#### Withdrawal/negative affect

- amygdala (AMG), bed nucleus of the stria terminalis (BNST), together also known as the "extended amygdala"
  - malaise, dysphoria, negative emotional states
- ventral striatum (VS) decreased reward

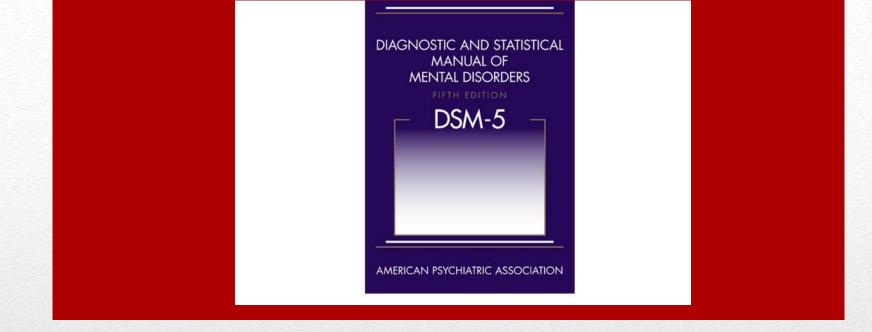
#### Preoccupation/anticipation

- · anterior cingulate (AC)
- prefrontal cortex (mPFC), orbitofrontal cortex (OFC) subjective effects of craving, executive function
- basolateral nucleus of the amygdala conditioned cues
- hippocampus (Hippo) conditioned contextual cues

## **3 Stages of the Addiction Cycle**

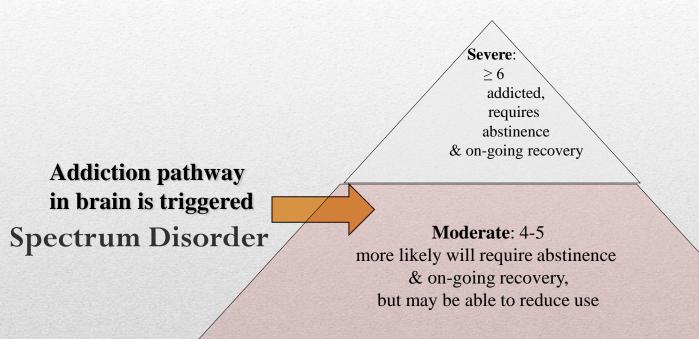
G. Koob, The Potential of Neuroscience to Inform Treatment, NIAAA





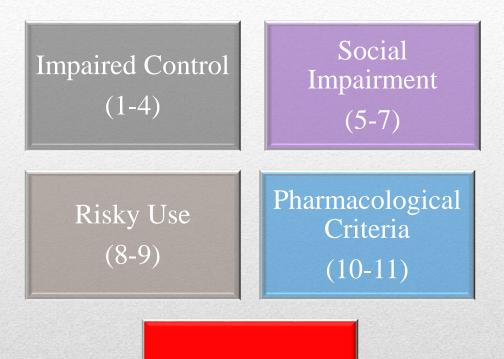
# DSM 5 CRITERIA Alcohol Use Disorder

## DSM 5: Alcohol/Drug Use Disorder



#### **Mild**: 2-3

problem use, not necessarily addicted, usually able to reduce to healthier use



11 dsm 5 criteria

## DSM 5: Alcohol 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
- Giving up activities because of opioids
- •Use when physically hazardous
- •Use despite negative psych or physical impact
- •Tolerance (not a criteria for opioids)
- •Withdrawal (not a criteria for opioids)

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

## What are the 4 C's of Addiction?

- Loss of Control
- Compulsive use
- Continued use despite harm
- Craving

- 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.

**Two Item Conjoint Screen: TICS** used in Screening Brief Intervention & Referral to Treatment (SBIRT)

(National Ins		gle Question hol Abuse and		Variations E	xist)
Question: How many tin men, 4 for women.)	nes in the past	year have you	ı had X or mor	e drinks in a	day? <mark>(</mark> X is 5 for
Score Sensiti			n for alcohol m ficity (95% Cl) (73%–84%)		
		AUDIT-C			
Question	0	1	Points 2	3	4
<ol> <li>How often do you have a drink containing alcohol?</li> </ol>	Never	Monthly or less	2–4 times a month	2–3 times a week	4 or more times a week
<ol> <li>How many drinks containing alcohol do you have on a typical day when you are drinking?</li> </ol>	1 or 2	3 or 4	5 or 6	7–9	10 or more
<ol> <li>How often do you have 6 or more drinks on one occasion?</li> </ol>	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
Scoring: Points from the alcohol misuse is usua increased sensitivity o 0 can be entered for c	lly considered r specificity. If	≥4 for men ar patients answ	nd $\geq$ 3 for wom	ien but may	be adjusted for
<i>Score</i> Men ≥4 Women ≥3	Sensitivity 0.86 0.73	Specificity 0.89 0.91	+ <i>LR (95% Cl</i> 7.8 (5.5–11.1 7.9 (6.2–10)		<i>—LR (95% CI)</i> 0.16 (0.1–0.2) 0.29 (0.2–0.4)

The full AUDIT questions can be found at the World Health Organization. AUDIT, the alcohol use disorders identification test: guidelines for use in primary care. 2nd ed. Geneva, Switzerland: World Health Organization, Department of Mental Health and Substance Dependence; 2001.

### The DAST-10 survey: These questions refer to the past 12 months. One point is awarded for each "Yes" answer.

1. Have you used drugs other than those required for medical reasons?	Yes / No
2. Do you abuse more than one drug at a time?	Yes / No
3. Are you unable to stop using drugs when you want to?	Yes / No
4. Have you ever had blackouts or flashbacks as a result of drug use?	Yes / No
5. Do you ever feel bad or guilty about your drug use?	Yes / No
6. Does your spouse (or parents) ever complain about your involvement with drugs?	Yes / No
7. Have you neglected your family because of your use of drugs?	Yes / No
8. Have you engaged in illegal activities in order to obtain drugs?	Yes / No
9. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?	Yes / No
10. Have you ever had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding)?	Yes / No

#### **Treatment Effectiveness Assessment (TEA)**

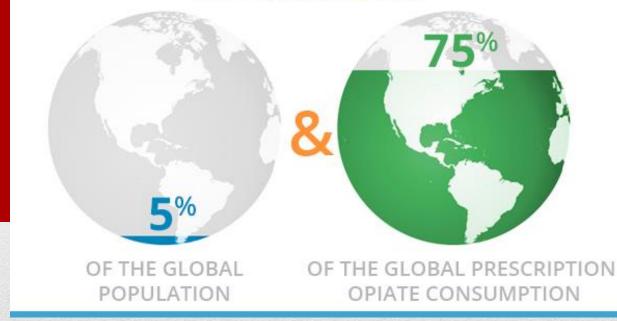
The TEA asks you to express the extent of changes for the better from your involvement in the program to this point (or how things are if it's your first TEA or baseline) in four areas: substance use, health, lifestyle, and community. For each area, think about how things have become better and circle the results on the scale below: the more you have improved, the higher the number – from 1 (not better at all) to 10 (very much better). In each area write down the one or two changes most important to you in the Remarks section. Feel free to use the back of this page to add details, explain remarks, and make comments.

**Substance use**: How much better are you with drug and alcohol use? Consider the frequency and amount of use, money spent on drugs, amount of drug craving, time spent being loaded, being sick, in trouble and in other drug-using activities, etc.

1 Remarks: <b>Health</b> : Has your sleeping properly	•	3 oved? In w	4	5	6	7	8	9	10	
Health: Has your	•									
•	•	oved? In w								
	, exercising,		•			• •	•		•	ting and
N	None or not much			Better			Much better			
1	2	3	4	5	6	7	8	9	10	
Remarks:										
1 Remarks:	2	3	4	5	6	7	8	9	10	
Community: Are society: Do your	,			,		0	beying laws	and meeting	g your respon	sibilities to
N	No or not much			Better			Much better			
1	2	3	4	5	6	7	8	9	10	
Remarks:										

### THE UNITED STATES

#### We account for:



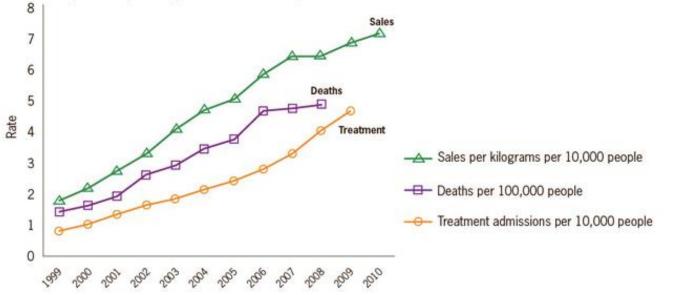
# **PRESCRIPTION OPIATE SUD** #3 most abused substance in the U.S.



## 1 Month

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

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



SOURCES: National Vital Statistics System, 1999-2008; Automation of Reports and Consolidated Orders System (ARCOS) of the Drug Enforcement Administration (DEA), 1999-2010; Treatment Episode Data Set, 1999-2009

Drug overdose was the leading cause of injury & death in 2012 for 25-64 yo. Drug overdose caused more deaths than motor vehicle traffic crashes.

Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. (2014) Available from URL: http://www.cdc.gov/injury/wis gars/fatal.html.

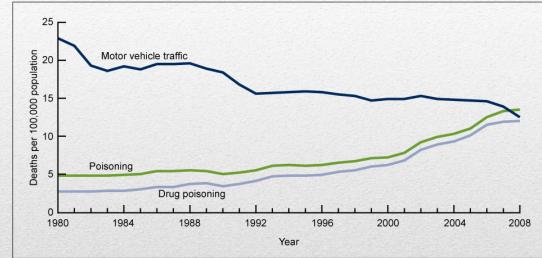
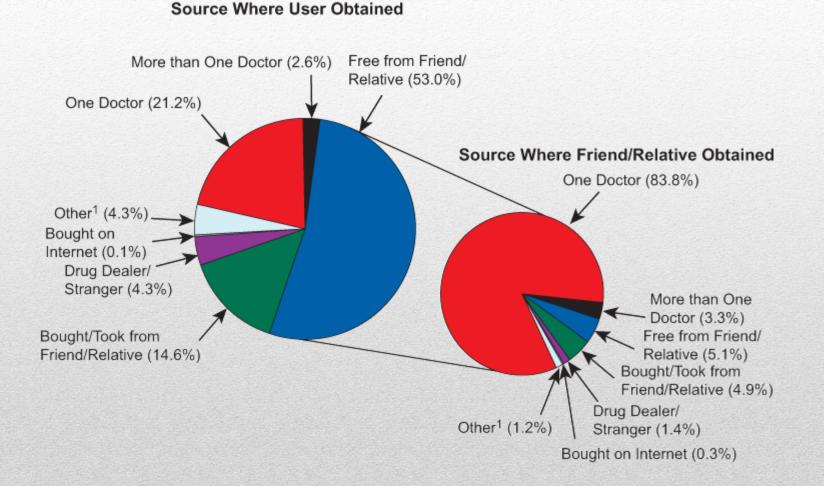


Figure 1. Motor vehicle traffic, poisoning, and drug poisoning death rates: United States, 1980–2008

NOTE: In 1999, the International Classification of Diseases, Tenth Revision (ICD-10) replaced the previous revision of the ICD (ICD-9). This resulted in approximately 5% fewer deaths being classified as motor-vehicle traffic-related deaths and 2% more deaths being classified as poisoning-related deaths. Therefore, death rates for 1998 and earlier are not directly comparable with those computed after 1998. Access data table for Figure 1 at http://www.cdc.gov/nchs/data/databriefs/db81\_tables.pdf#1. SOURCE: CDC/NCHS, National Vital Statistics System.

#### Source Where Pain Relievers Were Obtained for Most Recent Nonmedical Use among Past Year Users Aged 12 or Older: 2012-2013



## Tell pts w/ abusable Tell pts with a busable offescription meds She gets her hair from her mom. Her eyes from her dad. And her drugs to lock them up ! from her grandma's medicine cabinet.

70% of children who abuse prescription drugs get them from family or friends. Prevent your children from abusing your own medication by securing your meds in places your child cannot access.

For more information, go to www.lockyourmeds.org



# 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

Are opioids the optimal treatment for CNCP ?

- Weak evidence that pts w/ CNCP who continued on opioids long-term (> 6 months) experienced significant pain relief
  - But not clear if function or quality of life was improved
- Some evidence short-term efficacy (for both pain and function) of opioids to treat CLBP compared to placebo
- No placb-RCTs supporting the effectiveness and safety of long-term opioid therapy for treatment of CLBP

# NO

### Cochrane Reviews 2010 & 2013

Addiction: Substance Use Disorder

#### Prescription Drug Misuse

Aberrant Medication-Taking Behaviors A spectrum of patient behaviors that *may* reflect misuse

#### **Total Chronic Pain Population**

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 b	y 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	<ul> <li>3 = beads of sweat on brow or face</li> <li>4 = sweat streaming off face</li> </ul>
Restlessness Observation During Assessment	
0 = able to sit still 1 = reports difficulty sitting still, but is able to do s	<ul> <li>3 = frequent shifting or extraneous movements of legs/arm</li> <li>5 = Unable to sit still for more than a few seconds</li> </ul>
Pupil Size	
0 = pupils pinned or normal size for room light 1 = pupils possibly larger than normal for room lig	<ul> <li>2 = pupils moderately dilated</li> <li>5 = pupils so dilated that only the rim of the iris is visible</li> </ul>
Bone or Joint Aches if Patient was Having Pain Pre only the Additional Component Attributed to Opic	
	s severe diffuse aching of joints/muscles ing joints or muscles and is unable to sit still because of discomfor
Runny Nose or Tearing Not Accounted for by Cold	Symptoms or Allergies
0 = not present 1 = nasal stuffiness or unusually moist eyes	<ul> <li>2 = nose running or tearing</li> <li>4 = nose constantly running or tears streaming down cheel</li> </ul>
GI Upset: Over Last 1/2 Hour	
0 = no Gl symptoms 1 = stomach cramps 2 = nausea or loose stool	<ul> <li>3 = vomiting or diarrhea</li> <li>5 = multiple episodes of diarrhea or vomiting</li> </ul>



#### COWS Clinical Opioid withdrawal scale

- Normal for opiates, benzodiazepines, barbituates, others
- Reduction in response to a given dose after repeated administration
- Brain neuroadapts to incoming drugs to maintain homeostasis
- Results in need for increasing doses to maintain equipotent analgesic effects
  - Koob, Le Moal Annu Rev Psychol 2008

## Tolerance and Withdrawal (W/D)

- Tolerance may paradoxically activate a pro-nociceptive mechanism that counteracts opioid analgesia
  - Pain scores reported higher in COT pts than in matched pts without opioid treatment
  - Pain sensitivity is increased in opioid SUDs and with methadone maintenance treatment
    - Mao J, Psych Annals, 2006, Curr Pain Headach Rep. 2006, Am J of Psych, 2006

## Hyperalgesia: Opioids May Worsen Pain

# **Other Opioid Side Effects**

- Acetaminophen toxicity with combo
- Nausea and constipation
- Psychomotor compromise w/ increase risk of falls
- Methadone QT prolongation
- Increased sleep disturbances
- Mood impairment
- Decreased testosterone, estrogen, cortisol, others
- Hyposexuality
- Immuno-compromise due to NK cell impairment, etc.
- Drug interactions: ex. inhibit opioid metabolism
  - Pain Physician 2008

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

		Mark Each Box That Applies	Score if Female	Score i f male
1. Family History of Substance Abuse	<ul> <li>Alcohol</li> <li>Illegal Drugs</li> <li>Prescription Drugs</li> </ul>		1 2 4	3 3 4
2. Personal History of Substance Abuse	<ul> <li>Alcohol</li> <li>Illegal Drugs</li> <li>Prescription Drugs</li> </ul>		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	<ul> <li>Attention-Deficit/Hyperactivity Disorder;</li> <li>Obsessive Compulsive Disorder;</li> <li>Bipolar Disorder;</li> <li>Schizophrenia</li> <li>Depression</li> </ul>		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. 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

# Approach to monitoring depends on risk level

# 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

# Compared to CNCP pts without SUDs, CNCP pts with SUDs are:

#### a. Less likely to be treated with opioids b. More likely to be treated with opioids c. More likely to have restricted early refills d. A & C e. B & C

## 40.3% vs 26.2%

#### Behaviors May or May Not Be consistent with SUD?

R/o opioid misuse due to opioid adaptation or pain under treatment

- Express desperation over current sxs
  - Aggressively asks providers to provide more opiates
  - Repeated requests for early refills
  - Doctor shopping
- Uses more meds than prescribed
  - Hoards meds
  - Taken someone else's meds
- Use MJ, smokes cigs, drinks to help with pain
- Resistant to integrated pain care
- Some adverse consequences related to use (family, work, health)
- Ever used opioids to treat other symptoms: rule out other psychiatric diagnoses

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

- •Frequent "lost prescriptions"
- •Shows no concern about opioid side-effects or interest in integrative care approaches
- •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 with 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)

### Behaviors Highly consistent with SUD

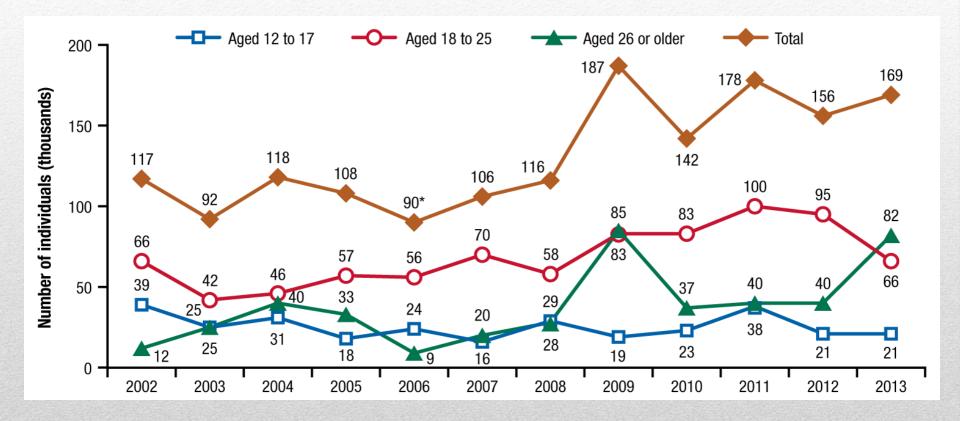
- Opiate Replacement Therapy (ORT)
  - Suboxone
  - Methadone
- Help families and pts to understand this
  - Compare to thyroid replacement therapy
- Why?
  - Likely chronic endogenous opioid deficiency
    - Need chronic opioid receptor occupation (other opiates don't do this)
  - Acute WD can be managed
  - PAWS drives relapse

# Best Evidence-Based Treatment for Opioid SUD

- Anxiety/Depression
- Sleep disturbances
- Fatigue
- Dysphoria/Irritability
- Decreased ability to focus on a task
- Deficits in executive control
- Can mimic:
  - Mood disorder
  - Sleep disorder
  - ADHD

## Post Acute WD Syndrome (PAWS): Opioids

## Past year initiation of heroin among individuals aged 12 or older, by age group: 2002 to 2013



**NSDUH 2013** 



# Naloxone Saves Lives

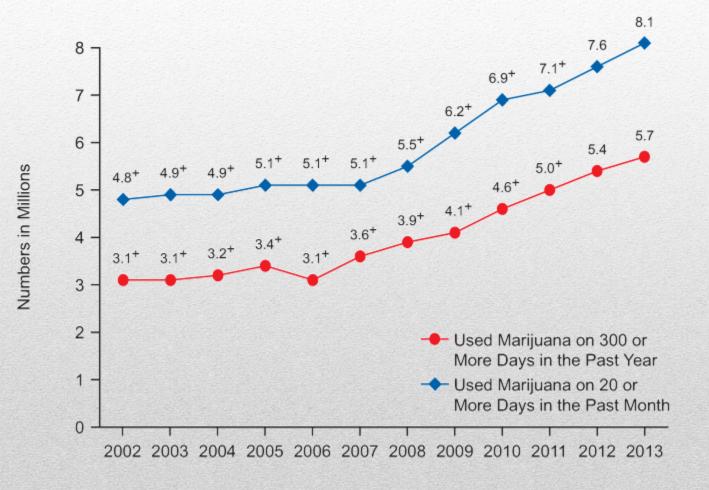
"Emerald Triangle" by O'Dea -Own work. Licensed under CC BY-SA 3.0 via Wikimedia Commons https://commons.wikimedia.org/

wiki/

# MARIJUANA

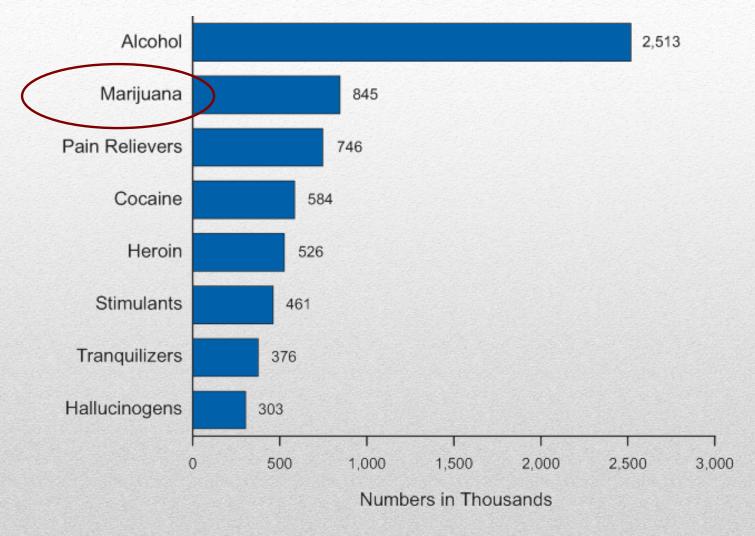
#2 most abused substance in the U.S.

#### Daily or Almost Daily Marijuana Use in the Past Year and Past Month among Persons Aged 12 or Older: 2002-2013



**NSDUH 2013** 

## Substances for Which Most Recent Treatment Was Received in the Past Year among Persons Aged 12 or Older: 2013



**NSDUH 2013** 

#### Endocannabinoids

neuromodulators scattered throughout the brain and spinal cord

**CB1**: in brain & spinal cord **CB2**: in immune system

#### **Intoxication Symptoms:**

Euphoria, psychosis, impaired memory & cognition, reduced locomotor function, increased appetite, antiemetic, antispasticity, sleep-promoting, anti-anxiety, pain-relieving Koppel, et al, Neurology 2014

#### THALAMUS s appetite, NEOCORTE) al lovels and **Responsible for** sehavior cognitive funct the integration sensory inform GANGLIA 1 in motor and g. as woll as HIPPOCAME ation and Important for n tion of action and the learnin facts, sequenc **LAL STRIATUM** places I in the prediction ing of reward DALAible for anxiety, emotion CEREBELLU Centerformoto and coordinatio **ISTEM AND SPINAL CORD** int in the vomiting reflex C Alice Y. Chen, 2004. Adapted from sensation of pain a is smoked, its active ingredient, THC, travels throughout the body, including the brain, to produ aches to sites called cannabinoid receptors on nerve cells in the brain, affecting the way those of

Marijuana's Effects on the Brain

ceptors are abundant in parts of the brain that regulate movement, coordination, learning and m ons such as judgment, and pleasure.

NIDA website

## Why we like 'weed' & not hay?

- MJ contains > 60 pharmacologically active cannabinoids
  - Primary cannabinoids in MJ
    - THC (tetrahydrocannabinol)
      - Euphoria
      - Psychosis
    - Cannabidiol
      - Not psychoactive
      - Possible anti-anxiety & anti-psychotic



- THC:Cannabidiol ratio engineered to achieve desired effects
  - Pertwee, Br J Pharmacology 2006
  - Hill, JAMA 2015



# Weed is Not Oregano

## Neurotoxic Effect of MJ on Youth

- <u>Dunedin prospective study</u>: n=1037. Neuropsych testing done at 13 yo (before cannabis initiation) and again at age 38 yo (after persistent cannabis use, at least 4d/wk).
  - 8 point drop in IQ, even if quit in adulthood
  - Persistent use was associated with neuropsych decline broadly across domains of functioning, even after controlling for years of education
  - Persistent use interfered with everyday cognitive functioning
  - Among adolescent former persistent users, impairment was still evident after cessation of use for 1 y or more
  - Suggest a neurotoxic effect of cannabis on the adolescent brain and highlight the importance of prevention and policy efforts targeting adolescents
    - Meier et al, Proc Natl Acad Sci U S A. 2012

#### •CUDIT-R

- Scores of  $\geq$ 13 identify DSM-5 moderate and severe CUD
- ≥13 demonstrated significantly greater psychological distress and poorer physical and mental health functioning
  - NIDA: Screening for DSM-5 cannabis dependence using the Cannabis Use Identification Test–Revised
  - CUDIT-R: Adamson et al. Drug and Alcohol Dependence 2010

# Cannabis Use Disorder Identification Test

#### Have you used any cannabis over the past six months? YES / NO

If YES, please answer the following questions about your cannabis use. Circle the response that is most correct for you in relation to your cannabis use *over the past six months* 

1.	How often do you use cannabis?								
	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week				
	0	1	2 a month	a week 3	a week 4				
2.	How many hours wara	ou "stoned" on a typical da	y when you had been i	using connobie?					
2.	Less than 1	1 or 2	3 or 4	5 or 6	7 or more				
	0	1	2	3	4				
3.	How often during the past 6 months did you find that you were not able to stop using cannabis once you had started?								
	Never	Less than monthly	Monthly	Weekly	Daily or almost daily				
	0	1	2	3	4				
4.	4. How often during the past 6 months did you fail to do what was normally expected from you because of using cannabia								
	Never	Less than monthly	Monthly	Weekly	Daily or almost daily				
	0	1	2	3	4				
5.	How often in the past 6 months have you devoted a great deal of your time to getting, using, or recovering from cannabis?								
	Never	Less than monthly	Monthly	Weekly	Daily or almost daily				
	0	1	2	3	4				
6.	How often in the past 6 months have you had a problem with your memory or concentration after using cannabis?								
	Never	Less than monthly	Monthly	Weekly	Daily or almost daily				
	0	1	2	3	4				
7.	How often do you use cannabis in situations that could be physically hazardous, such as driving, operating machinery, or caring for children:								
	Never	Less than monthly	Monthly	Weekly	Daily or almost daily				
	0	1	2	3	4				
8.	Have you ever thought about cutting down, or stopping, your use of cannabis?								
	Never Yes, but not in the past 6 months				Yes, during the past 6 months				
	0		2		4				

#### This scale is in the public domain and is free to use with appropriate citation:

#### Mood:

- Irritability
- Anxious or worried
- Depressed
- Restless
- Insomnia and fatigue
- Low appetite or losing weight

## Physical Symptoms:

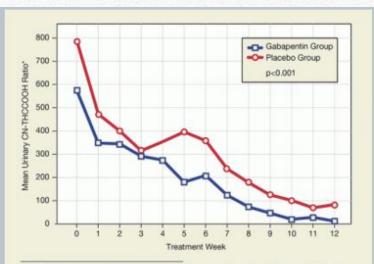
- Stomach pain
- Sweatiness
- Shakiness
- Fever
- Chills
- Headache
  - NIDA

# Marijuana Withdrawal Symptoms

## Gabapentin Treatment for CUD

Treated with gabapentin in a pilot RCT DBP x 12 wks, tapered up to 300/300/600:

- Reduced use more
- Reported fewer symptoms of drug withdrawal
- Showed sig greater improvement in overall performance on tests of executive function
  - Mason et al. Neuropsychopharm 2012



\* The standard measure in urine testing for marijuana use is the ratio of the concentration of creatinine (CN), a product of muscle breakdown that is excreted in urine, to that of THCCOOH (11-nor-9-carboxy-delta-9-tetrahydrocannabinol), which is the main metabolite of marijuana's psychoactive ingredient. The use of the ratio, rather than the metabolite concentration alone, controls for the degree of dilution of the test-taker's urine.

Printed by permission from Macmillan Publishers Ltd: Neuropsychopharmacology 37(7):1689–1698, copyright 2012.

Figure 1. Gabapentin Facilitates Abstinence Patients who received gabapentin used less marijuana during treatment than did a comparison group that received placebo, according to both self-report and urinalysis.

OTC supplement *N*-acetylcysteine works via glutamate modulation in the nucleus accumbens

- RCT DBP x 8 wks CUD adolescents (ages 15-21 years; N=116) received NAC (1200 mg bid)
  - Included contingency rewards & brief counseling
- Participants receiving NAC had more than twice the odds, compared with those receiving placebo, of having negative urine cannabinoid test results during treatment
- NAC was well tolerated, with minimal adverse events

 $H_3($ 

# NAC Treatment for CUD

- References:
  - Hill, JAMA 2015
  - American Academy of Neurology, Neurology 2014
- FDA approved:
  - Dronabinol & nabilone
    - N/V due to cancer chemotherapy
    - Appetite stimulation in wasting illness
  - Best RCT evidence for:
    - MS spasticity
    - Chronic pain
    - Neuropathic pain

# MJ Medical Uses ?



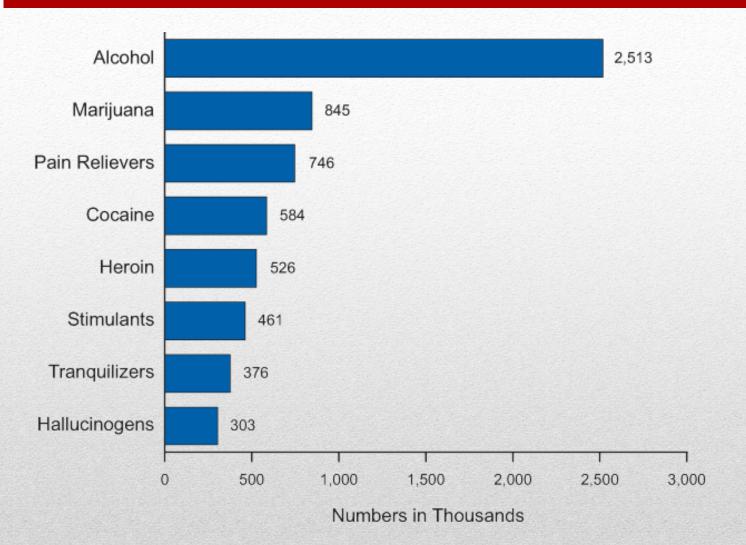


## **BREAK** 15 minutes



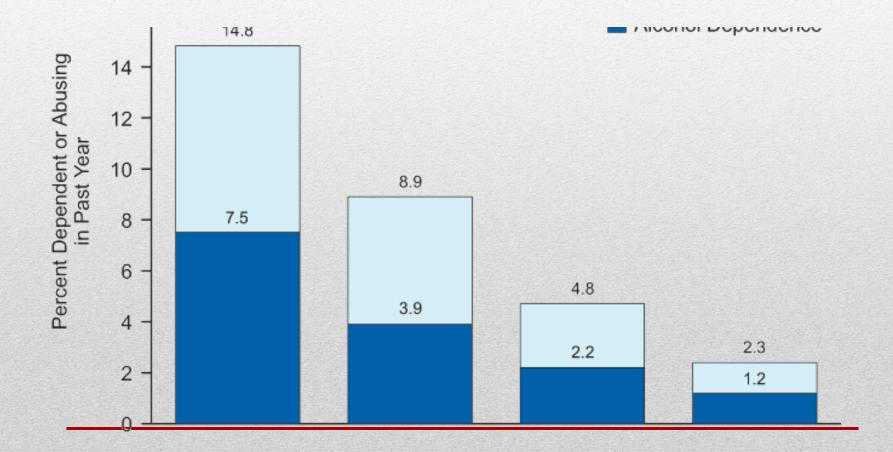
# ALCOHOL

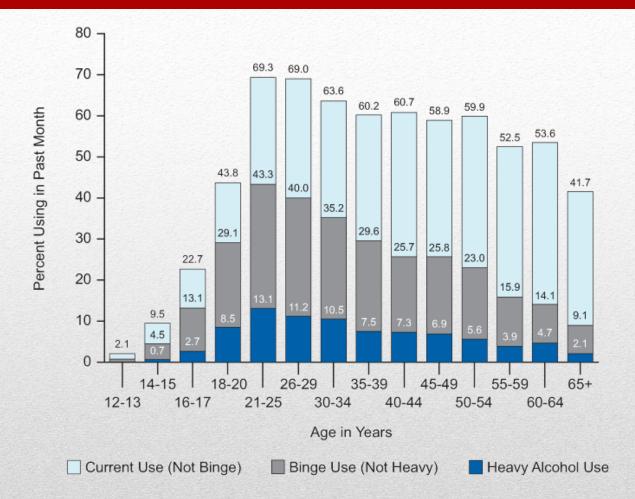
## #1 most abused substance in the U.S.



Substances for Which Most Recent Treatment Was Received in the Past Year: 2013

#### Alcohol Dependence or Abuse in the Past Year among Adults Aged 21 or Older, by Age at First Use of Alcohol: 2013 NSDUH 2013, SAMHSA





# Current, Binge, and Heavy Alcohol Use: 2013

# **ETOH & Brain Reward Circuits**

### • Dopamine system

- Indirectly increases DA in mesocorticolimbic system
  - Positively reinforces & rewards ETOH's effects
  - Makes ETOH addictive
- Opioid system
  - Indirectly activates the opioid system
    - Reinforces the effects of mu-receptors
    - Creates a 'buzz' high
- GABA system
  - Increases GABA + inhibits glutamate: inhibitory system
    - Decreases anxiety, increases sedation

# **ETOH Biomarkers** R/O Denial

• Elevated MCV + GGT: 95% sensitive for abuse

- GGT elevated 24 hrs to 2 wks after heavy ETOH use
  - Nml = 0.45 females, 0.53 males
- Returns to nml within 2-6 wks of abstinence
- Detects binge drinking
- AST:ALT ratio >2:1 = 90% chance of ALD
- Elevated GGT + AST:ALT >2:1 = 95% sensitive for abuse

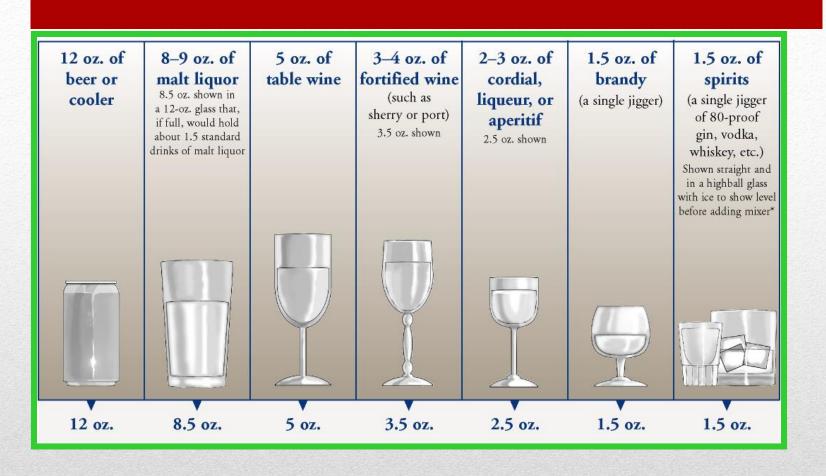


#### Alcohol Screening, Brief Intervention, and Referral to Treatment

# SBIRT Screening

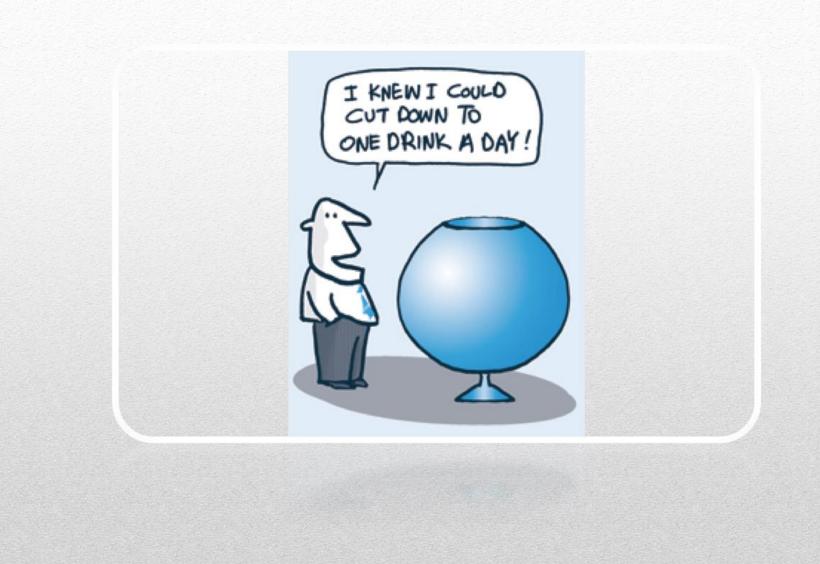
# **SBIRT Treatment Outcomes**

- At risk drinkers
  - Identified
  - Given education and Brief MI
  - Reduce drinking by 25% over following year
- Dependent drinkers (similar across studies & treatment modalities)
  - 1/3 remission x 1 yr
    - Abstinence or non-abstinence remission
  - 1/3 will show substantial improvement, but have some heavy drinking episodes
  - 1/3 will show no effect
  - Relapse occurs in most over ensuing 5-10 yrs



### What's a Standard Drink?

In the U.S., a standard drink is any drink that contains about 14 grams of pure alcohol



#### For healthy men up to age 65—

- no more than 4 drinks in a day AND
- no more than 14 drinks in a week

#### For healthy women (and healthy men over age 65)—

- no more than 3 drinks in a day AND
- no more than 7 drinks in a week

### Maximum 'Healthy' Drinking Limits

- "How many times in the past year have you had X or more drinks in a day?"
  - X is 5 for men and 4 for women, and a response of >1 is considered positive
    - 81.8% sensitive and 79.3% specific for the detection of unhealthy alcohol use
    - 87.9% sensitive and 66.8% specific for the detection of a current AUD
      - Smith, et al. J Gen Intern Med. 2009 July; 24(7): 783–788.

### 1-Item Saitz question (recommended by the NIAAA)



# **Alcohol Medication Treatment**

- Ask about past WD sxs
- Use a CIWA-Ar (www.pcbehavioralhealth.com)
  - 0-8 No medication is necessary
  - 9-14 Medication is optional
  - A score of 15 or over requires meds
    - Consider hospitalization

# Outpatient Alcohol Withdrawal

vomited?"

Observation:

2-

3—

5-6---

Observation:

2—

3-

5-

6-

2-

3-

5-

6-

2-

3-

5-

Observation:

Observation:

0-No tremor

Pulse or heart rate, taken for one minute: \_\_\_\_

Blood pressure:

Date: \_\_\_\_

Nausea and vomiting. Ask "Do you feel sick to your stomach? Have you Tactile disturbances. Ask "Do you have you any itching, pins-and-needles sensations, burning, or numbness, or do you feel like bugs are crawling on or under your skin?" Observation: 0-No nausea and no vomiting 0-None 1-Mild nausea with no vomiting 1-Very mild itching, pins-and-needles sensation, burning, or numbress 2-Mild itching, pins-and-needles sensation, burning, or numbness 3-Moderate itching, pins-and-needles sensation, burning, or numbress 4-Intermittent nausea with dry heaves 4-Moderately severe hallucinations 5-Severe hallucinations 6-Extremely severe hallucinations 7-Constant nausea, frequent dry heaves, and vomiting 7-Continuous hallucinations Tremor. Ask patient to extend arms and spread fingers apart. Auditory disturbances. Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?" 1-Tremor not visible but can be felt, fingertip to fingertip Observation: 0-Not present 1-Very mild harshness or ability to frighten 4-Moderate tremor with arms extended 2-Mild harshness or ability to frighten 3-Moderate harshness or ability to frighten 4-Moderately severe hallucinations 7-Severe tremor, even with arms not extended 5—Severe hallucinations Paroxysmal sweats 6-Extremely severe hallucinations 7-Continuous hallucinations 0-No sweat visible Visual disturbances. Ask "Does the light appear to be too bright? Is its 1-Barely perceptible sweating: palms moist color different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?" Observation: 4-Beads of sweat obvious on forehead 0-Not present 1-Very mild sensitivity 2-Mild sensitivity 7—Drenching sweats 3-Moderate sensitivity Anxiety. Ask "Do you feel nervous?" 4-Moderately severe hallucinations 5-Severe hallucinations 0-No anxiety (at ease) 6-Extremely severe hallucinations 1-Mildly anxious 7-Continuous hallucinations Headache, fullness in head. Ask "Does your head feel different? Does it feel like there is a band around your head?" 4-Moderately anxious or guarded, so anxiety is inferred Do not rate for dizziness or lightheadness; otherwise, rate severity. 0-Not present 1-Very mild 7-Equivalent to acute panic states as occur in severe delirium or acute 2—Mild 3-Moderate 4-Moderately severe 5-Severe 6-Very severe 1-Somewhat more than normal activity 7—Extremely severe Orientation and clouding of sensorium. Ask "What day is this? Where are you? Who am I?" Observation: 0-Orientated and can do serial additions 1-Cannot do serial additions or is uncertain about date 2-Date disorientation by no more than two calendar days 3-Date disorientation by more than two calendar days 4-Disorientated for place and/or person

6--schizophrenic reactions Agitation Observation 0-Normal activity 2— 3-4-Moderately fidgety and restless

5-6-

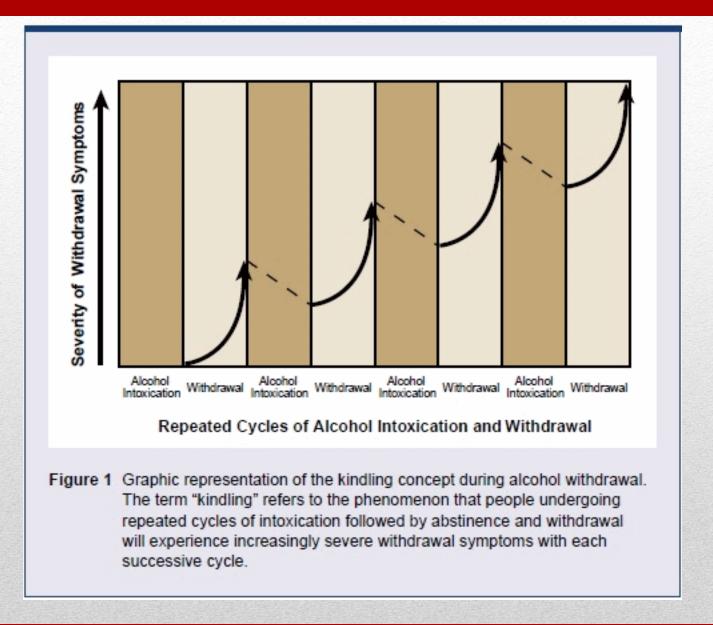
> 7-Paces back and forth during most of the interview or constantly thrashes about

> > Total score: \_\_\_\_\_ (maximum = 67)

Rater's initials

#### Timing of Alcohol Withdrawal Syndromes

Syndrome	Clinical findings	Onset after last drink
Minor withdrawal	Tremulousness, mild anxiety, headache, diaphoresis, palpitations, anorexia, GI upset	6 to 36 hours
Seizures	Generalized, tonic-clonic seizures, status epilepticus (rare)	6 to 48 hours
Alcoholic hallucinosis	Visual (occasionally auditory or tactile) hallucinations	12 to 48 hours
Delirium tremens	Delirium, tachycardia, hypertension, agitation, fever, diaphoresis	48 to 96 hours



#### Alcoholism: Clinical and Experimental Research Vol. 33, No. 9 2009 Double-Blind Trial of Gabapentin vs Lorazepam in the Tx of Alcohol Withdrawal

**Methods:** 100 individuals seeking opt tx of alcohol withdrawal randomized to double-blind treatment with 2 doses of gabapentin (900 mg tapering to 600 mg or 1200 tapering to 800 mg) or lorazepam (6 mg tapering to 4 mg) for 4 days. **Results**: CIWA-Ar scores decreased over time in all groups; **high-dose** gabapentin was statistically superior but clinically similar to lorazepam. During treatment, lorazepam- treated participants had higher probabilities of drinking on the first day of dose decrease (day 2) and the second day off medication (day 6) compared to gabapentin-treated participants. Posttreatment, gabapentin-treated had less probability of drinking during the followup post-treatment period (p = 0.2 for 900 mg and p = 0.3 for 1200 mg) compared to the lorazepam-treated participants (p = 0.55). The gabapentin groups also had less craving, anxiety, and sedation compared to lorazepam.

**Conclusions**: Gabapentin was well tolerated and effectively diminished the symptoms of alcohol withdrawal in our population especially at the higher target dose (1200 mg) used in this study. Gabapentin reduced the probability of drinking during alcohol withdrawal and in the immediate postwithdrawal week compared to lorazepam.

# The COMBINE Study

#### largest alcohol treatment to date

- RCT: 2001- 2004, 1383 recently alcohol-abstinent volunteers (median age, 44 years) with primary alcohol dependence.
- Interventions: 8 groups received management with 16 weeks of naltrexone (100 mg/d) or acamprosate (3 g/d), both, and/or both placebos, with or without a combined behavioral intervention (CBI). A ninth group received CBI only (no pills). Patients were also evaluated for up to 1 year after treatment.
- Main Outcome Measures: Percent days abstinent from alcohol and time to first heavy drinking day.
  - JAMA. 2006;295

- All 9 groups had a substantial reduction in days of drinking
- The patient groups who demonstrated the best drinking outcomes after 16 weeks received:
  - Naltrexone with medical management (MM) counseling alone (no specialty CBI)
  - Or received specialty CBI with placebo pills and MM counseling
  - No advantage found for adding acamprosate either to MM or CBI
- This acamprosate result is puzzling, given the many European studies that have reported an acamprosate effect (over placebo) for maintaining abstinence from alcohol.

#### Results of the COMBINE Study

# Naitrexone

- Mechanism: opioid antagonist
  - Blocks ETOH's euphoric effect
  - Limits heavy drinking relapse
  - Limits craving
- Clinical use
  - Check LFTs
    - May give if mildly elevated
    - Consistent effect is to overall lower LFTs
  - Start after acute ETOH withdrawal
  - Best to start when beginning psychosocial treatment
  - 25 mg and increase after 7d to 50 mg
    - Initial transient S/E's: nausea, HA, dizziness, weakness

# Acamprosate

- Mechanism: GABA agonist and NMDA modulator
  - Not metabolized by liver
  - May help maintain abstinence, reduces heavy drinking
    - Prevents relapse, reduced drinking in those who do
  - US COMBINE Study no advantage over placebo
  - European meta-analyses conclusions
    - Modest effect over placebo
    - Effects increased as tx duration increased (3-12 months)
- Clinical use
  - Check RFTs before use in elderly or renal disease
  - Start after acute ETOH withdrawal
  - Best to start when beginning psychosocial treatment
  - 1998 mg/day (2- 333 mg tabs TID)
    - S/Es: transient diarrhea, bloating, pruritis

# Disulfiram (Antabuse)

- Mechanism: Inhibits aldehyde dehydrogenase
  - DER: ingesting ETOH increases acetaldehyde
    - Flushing, palpitations, decreased BP
    - N/V, SOB, dizziness, blurred vision, confusion
    - Severe: hypotension, tachy/bradycardia, death
      - >500 mg + >20z ETOH
      - Reported to occur rarely w/ smaller doses + 1 drink
- For those highly committed to sobriety
  - Take 250 mg, carry ID
  - Avoid OTC & foods with ETOH
  - Wait 2 wks after d/c for ETOH exposure
- Side-effects: Hepatotoxicity: monitor LFTs closely. Optic neuritis: watch for visual changes. Peripheral neuropathy

- Gabapentin
  - 300-600 bid to tid prn
- Topiramate
  - GABAergic anticonvulsant
  - May improve depressive, anxiety, PTSD and obsessive-compulsive drinking symptoms
  - Positive dbrpc study, may get away with 75 mg qhs (taper up slowly)
    - Topiramate for treating alcohol dependence. JAMA; 2007;298(14):1641–
    - Treatment of alcohol dependence with low-dose topiramate: an open-label controlled study. *BMC psychiatry*. 2011;11(1):41.
- SSRIs
  - Especially effective if also meet MDD criteria

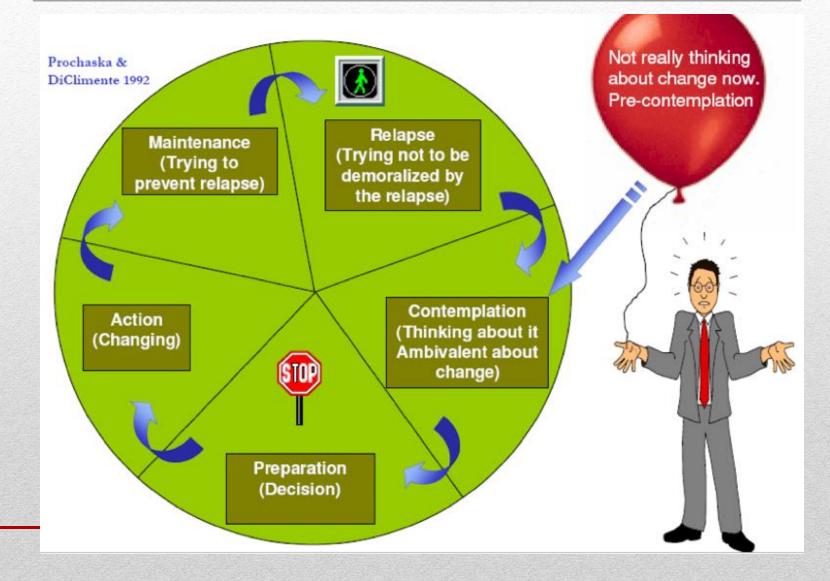
  - Start with citalopram, taper up to 20 mg
    Study showed when trazadone stopped for early recovery insomnia, worsened relapse

### Others ... (not FDA approved)

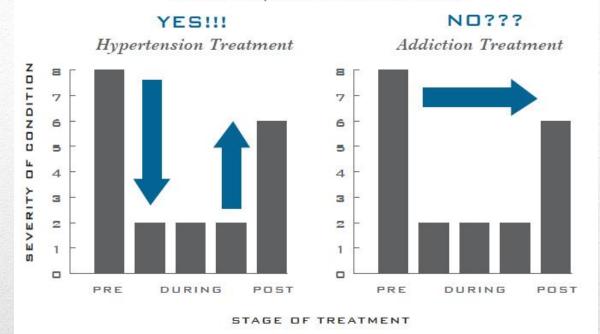


# Counseling Approaches

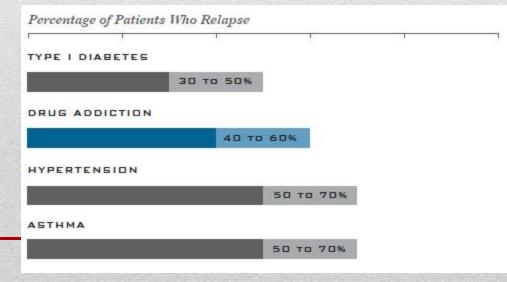
#### Assess Stage Of Change "Where are you at with your drinking?"



#### WHY IS ADDICTION TREATMENT EVALUATED DIFFERENTLY? BOTH REQUIRE ONGOING CARE



NIDA: Principles of Drug Addiction Treatment: A Research-Based Guide (Third Edition)



### Brief MI Strategy Pros & Cons

SBIRT screened positive:

**Pros first**: "What works for you about...?"

• Repeat using a reflective statement

**Cons second**: "What's less useful for you about...?"

- Repeat using a reflective statement
- Brings out change talk

Anything else?

- End with a summarizing statement
- May move pt away from denial

### *Brief MI Strategy* **Ask-Tell-Ask**

Collaborative way to provide medical feedback and education:

- *Ask*: How much do you know about...
- *Tell*: Would you mind if I tell you some further info? Or, What happens to some people is that...?
- *Ask*: How does that fit with your own sense of things? What is your reaction to this information? Where does this leave you?

- CBT
  - ETOH, MJ, Cocaine, Meth, Nicotine
- Contingency management/motivational incentives
  - ETOH, stimulants, opioids, MJ, nicotine
- 12-step facilitation
  - ETOH, stimuls, opiates
- Family Behavioral Therapy

### Evidence Based Treatments NIDA

- MI
  - ETOH, MJ, nicotine
- Matrix Model
  - Stimulants
  - Learn about issues critical to addiction/relapse, direction & support from a therapist, and become familiar with self-help programs. monitored through urine testing.

- 6 criterion required for establishing causation: (1) magnitude of effect; (2) dose response effect; (3) consistent effect; (4) temporally accurate effects; (5) specific effects; (6) plausibility.
- Evidence for criteria 1, 2, 3, 4 and 6 is very strong
  - Rates of abstinence are about <u>twice as high</u> among those who attend AA (criteria1, magnitude)
  - Higher levels of attendance are related to higher rates of abstinence (criteria 2, dose response);
  - Prior AA attendance is predictive of subsequent abstinence (criteria 4, temporal)
  - Mechanisms of action predicted by theories of behavior change are present in AA (criteria 6, plausibility)

#### Alcoholics Anonymous Effectiveness: Faith Meets Science Kaskutas, J Addict Dis 2009

#### Positive AUD/SUD and pt is at preparation stage of change ...

"Others have found these 3 alternatives helpful, which would work best for you?"

- 12-step alone
- 12-step plus intensive outpatient treatment
- 12-step plus residential treatment
- Other programs in your community

# **12 Step Preparation**

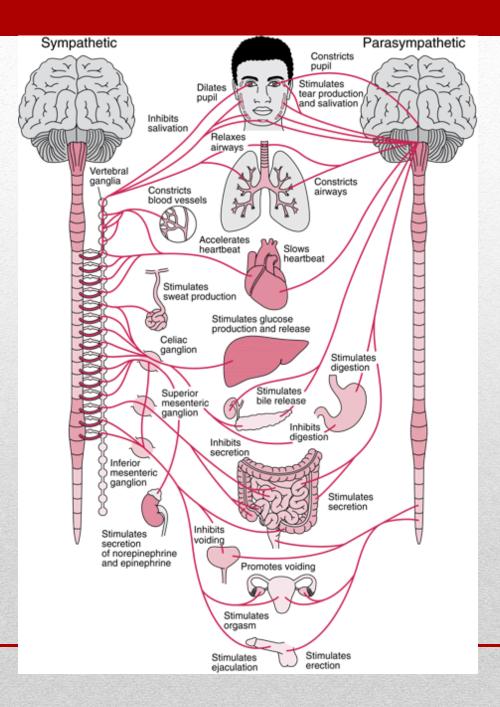
- What are your concerns?
- Can someone go with you to a first meeting?
  - You don't have to talk. Just watch.
- Try a few meetings to find one where you feel socially comfortable
  - Home meeting
  - Action plan to commit to go to one meeting
- Keep eye out for a "temporary" sponsor
- Look at it like rehab after a knee replacement
  - Not easy, hard work, but necessary to walk again



# **AUD Integrative Approaches**

#### www.pcbehavioralhealth.com

- Smart Recovery and Life Ring
- Other 12-Step
  - Adult Children of Alcoholics, Alanon & Alateen
- Mindfulness-based
  - Refuge Recovery
  - Meditation Centers
- Auricular acupuncture for cravings
- Exercise
- Sleep hygeine
- Nutrition and supplements
  - B complex & thiamine
  - Vitamin D
  - Fish Oil: 2000 mg EPA
  - Magnesium
  - MVI
  - NAC



Merck Manual

Thanks to James Gordon MD Center for Mind-Body Medicine (he credits Stephen Levine for idea)



### SOFT BELLY BREATHING EXERCISE (A BACK POCKET RELAXATION TOOL)



# **QUESTIONS** 15 minutes



#### Lunch

12:00-12:45pm



**Behavioral Health & Diversion** 

### CONTROLLED SUBSTANCES RECOGNITION TRAINING

PRESENTED BY THE SHASTA COUNTY SHERIFF'S OFFICE K-9 TEAM Prepared by Agent J. Gunsauls

#### Course outline:

- 1) Introduction and Course Objectives
- 2) Safety briefing
- 3) Controlled substances to be utilized in training: (Methamphetamine, Heroin, Cocaine and Marijuana.)
- 4) Hands on demonstration

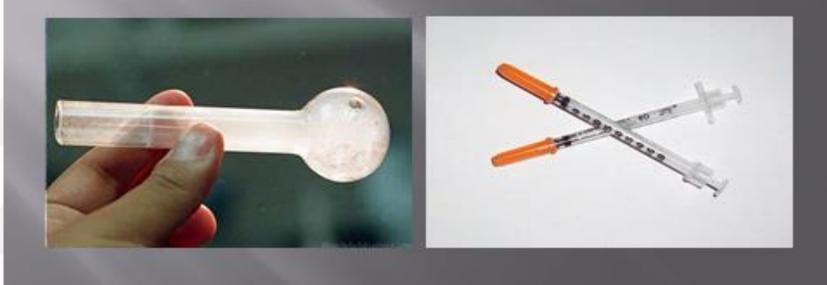
#### METHAMPHETAMINE



#### METHAMPHETAMINE PARAPHERNALIA

GLASS PIPE

SYRINGE







#### **HEROIN PARAPHERNALIA**

#### INJECTING

#### SMOKING FROM FOIL









# **COCAINE PARAPHERNALIA**

SMOKING

#### SNORTING





# MARIJUANA



# MARIJUANA PARAPHERNALIA

#### SMOKING

#### EDIBLES





# Behavioral health in Chronic Pain Management

6

Nitin Bagul MD

Imran Khan MD

Shasta Community Health Center

## Outline

- Assessment of chronic pain
- Psych pts/Dr. Patient relationship
- Substance use disorders
- UDS
- Diversion
- Risk Assessment
- Substance use treatments
- Best Practices



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## Objectives

- Discuss standards of care in chronic pain evaluation and management
- Understand underlying psychiatric issues in chronic pain management
- Explore substance use disorders, treatment and management of substance use disorders in chronic pain population
- Explore issues associated with diversion and risk management

## IMRAN KHAN MD

- Internal Medicine
- Psychiatry

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• Addiction Medicine

#### Opiate Abuse ?

A. HEROIN B. SUBAXONE

C. PRESCRIPTION PAINKILLERS

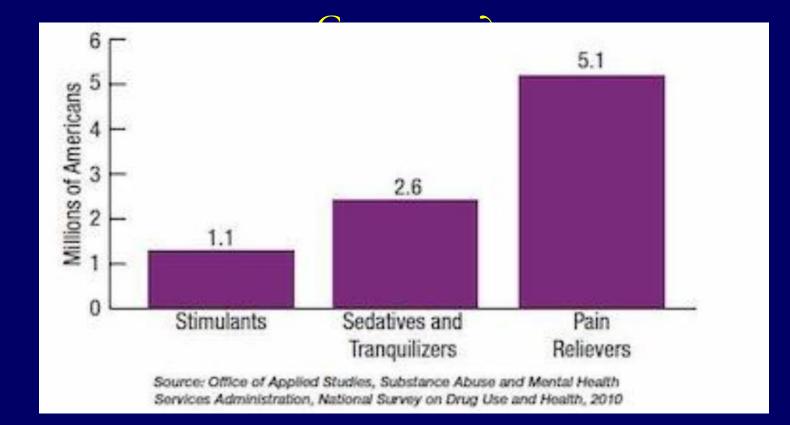
#### Pain

- 116 Million pain persist for weeks to years
- 560B 635B

#### Pain

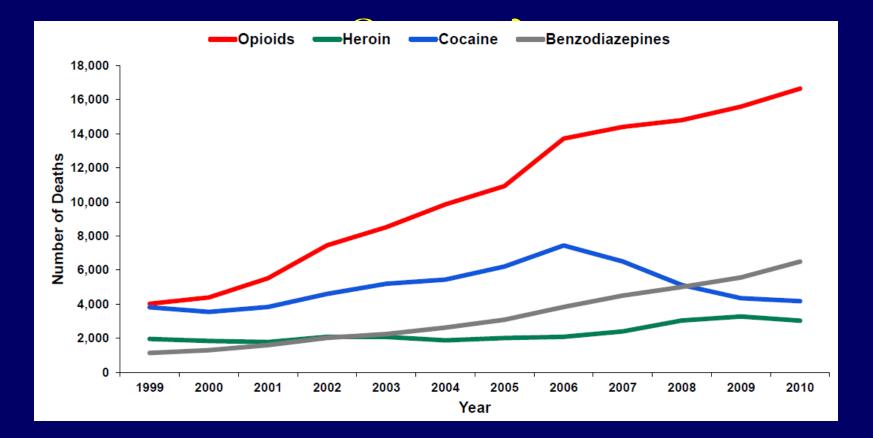
- Up to 35% of primary care patients have chief complaint of pain.
- Numbers could be higher in urgent care/emergency room





#### PRESCRIPTION DRUG ABUSE

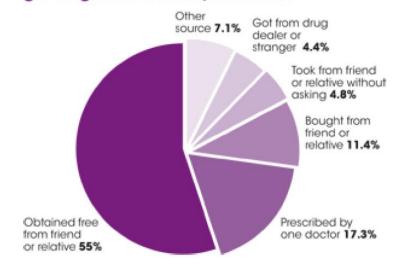
80% of global opioid medications are utilized by US !!





In 2010, 2 million people reported using prescription painkillers non-medically for the first time within the last year—nearly 5,500 a day.

#### People who abuse prescription painkillers get drugs from a variety of sources<sup>7</sup>



SECONDARY AND TERTIARY PREVENTION

#### PRIMARY PREVENTION

#### Pain

- Pain is one of the symptoms of underlying local/systemic malfunction\*
- Every pain needs careful evaluation of underlying etiologic or pathophysiological manifestation.

### Evaluation of pain

• Need to think "outside of opiate box"

#### Acute vs chronic pain

 Chronic pain is pain that persists or recurs for > 3 mo, persists > 1 mo after resolution of an acute tissue injury, or accompanies a nonhealing lesion. Causes include chronic disorders (eg, cancer, arthritis, diabetes), injuries (eg, herniated disk, torn ligament), and many primary pain disorders (eg, neuropathic pain, fibromyalgia, chronic headache).

#### Evaluation

- Patient rapport
- A through history and physical exam
- Arrive at a proper diagnosis
- Establish a proper treatment plan
- Know contraindications to treatments
- Results in better outcome & satisfaction

### Careful history

- HX OF PAIN
- NEUROLOGICAL HX
- FUNCTIONAL ASSESSMENT
  - ADLS,iADLS,work,social,relationship
- PRIOR TREATMENTS, SURGERIES.
- PSYCHIATRIC / SUBSTANCE USE
- REALISTIC EXPECTATIONS

### Physical Exam

- MUSCULO- SKELETAL EXAM
- NEUROLOGICAL EXAM
- FUNCTIONAL EXAM
- MENTAL STATUS EXAM

#### • NOCICEPTIVE PAIN

- VISCERAL PAIN
- SOMATIC
  - OSTEOARTHRITIS,
  - MYOFACIAL

• INFLAMTORY PAIN

• NEUROPATHIC PAIN

• MULTIPLE PAIN SYNDROMES

• MULTIPLE PAIN SYNDROMES

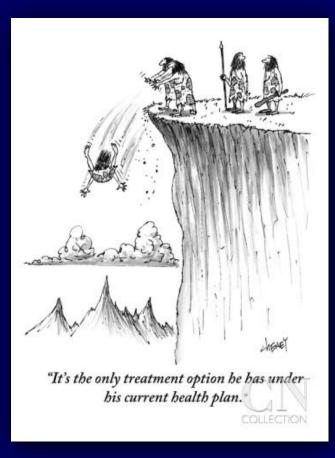
## Diagnostic studies

CT/MRI findings are not significant unless there are corresponding symptoms/signs

Disc bulging are present in most asymptomatic patients

Imaging studies will not pick up show all causes for pain

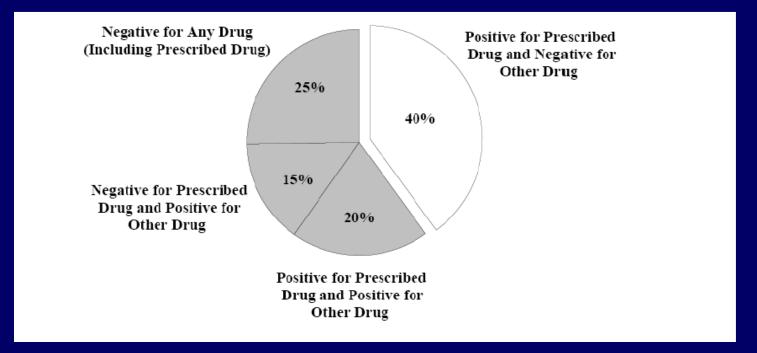
#### TREATMENT



#### TREATMENT

BASED ON ETIOLOGY SHOULD BE BIO – PSYCHOSOCIAL

### Urine Drug Testing



## Understanding Urine Drug SCREENING

Provide useful information about the Recent use but

#### DO NOT

Identify Substance Use Disorders or Physical Dependence

### Understanding Urine DrugTesting

Is not the only way to identify

Drug Use

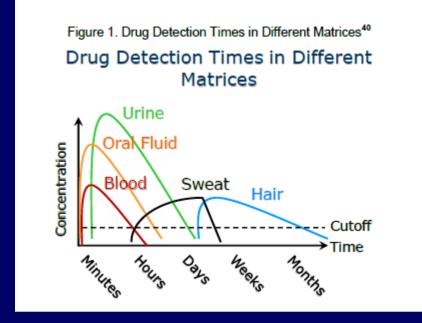
Misuse

Diversion

Suspected substance Use Disorder or Relapse

Matrices Quantification Validity Drugs to test

## Understanding Urine Drug Screening



Quantification

Drugs to test

• Practice of Drug Testing

• Whom to test

- Practice of Drug Testing
  - Frequency

- Practice of Drug Testing
  - Responding to +ve test result

- Practice of Drug Testing
  - Understanding +ve test

## Understanding Utox results

- Opiates
- Alcohol
- Marijuana
- Benzodiazepines
- Stimulants- cocaine, amphetamines etc





FENTANYL

METHADONE

#### POPPY SEEDS



# Managing pain "safely"

## Managing pain "safely"

Inherent risk(s)

Risk assessment

## Risk Assessment – j of pain

#### • LONG TERM USE OF OPIATES

- Long term >16 wks COT for CNCP
- No high quality evidence

- ASSESSMENT OF INDIVIDUAL RISK FACTORS
  - Obtain complete history of substance use
  - Alcohol
  - Tobacco use
- Family hx of substance use
- Fam hx of psychiatric disorder
- Social hx : employment, marital status, legal hx, social network

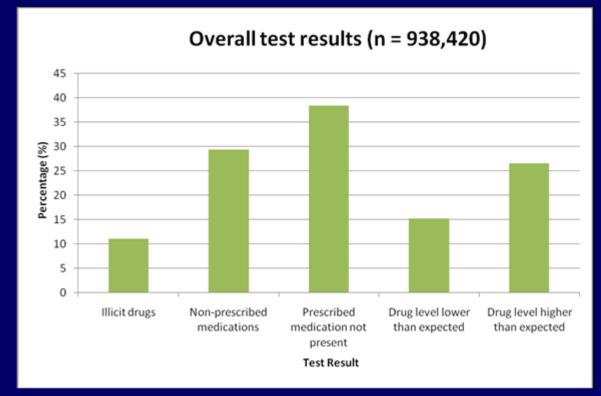
#### • TOOLS FOR RISK ASSESSMENT

- Patient considered for long term oppooid therapy
  - ORT
  - SOAPP
  - DIRE Diagnosis, intractibility, risk and efficacy score

#### • TOOLS FOR RISK ASSESSMENT

- Misuse once opoid Rx begins
  - PMQ
  - COMM
  - PDUQ prescription drug use questionaire

UTOX



**RISK OF ADDICTION** 

Hx of substance use - fishbein pain med 2008COT use will lead to a small number of addiction, can be decreased by selecting pts with no prior hx,

#### PDMP

all states

- doctor shopping and prescriptions written

OTP : exempt

OBOT : included

PDMP

No evidence of OD deaths

Unintentional consequnces

CO MORBID PAIN AND OPOID USE DISORDER

### Risk Assessment – passik&portenoy

#### Probably more predictive

- Selling prescription drugs
- Prescription forgery
- Stealing or borrowing another patient's drugs
- Injecting oral formulation
- •Obtaining prescription drugs from nonmedical sources
- Concurrent abuse of related illicit drugs
- Multiple unsanctioned dose escalations
- Recurrent prescription losses

## Risk Assessment – passik&portenoy

Probably less predictive

 Aggressive complaining about need for higher doses

Drug hoarding during periods of reduced

symptoms

Requesting specific drugs

 Acquisition of similar drugs from other medical sources

Unsanctioned dose escalation 1-2 times

•Unapproved use of the drug to treat another symptom

•Reporting psychic effects not intended by the clinician

Hx of Psychiatric disorders depression 3.5 dysthymia 6 panic 5 gad 2.5 drugs 3.6

- Acute pain management
- Avoiding pitfalls of long term opiate use for non-cancer pain
- Most primary pain syndromes do not respond to opiates
  - Headaches, Migraine, Cluster, Tension, and chronic daily headaches
  - Neuropathic/regional pain syndromes
  - Inflamatory pain
  - Myofacial pain

#### • TREATMENT

- PHRAMCOLOGICAL
- NON PHRAMCOGOLICAL

#### • SAFETY

- PATIENT
- PRACTICE

Proper evaluation – differential

Utox

PDMP

Informed consent

Treatment agreement

Functional assessment – pre /post

Trial -meds

4 As regularly

Periodicaly – reassess pain, diagnosis, co occurring conditions

documentation

#### MEDICAL BOARD AND DEA

chang & Compton, addiction sci clin practice 2013, 8:21

## NITIN BAGUL MD MPH

• Psychiatry

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• Substance use Disorders Clinic

## Evaluation of pain

- Upto 35% of primary care patients have chief complaint of pain.
- Numbers could be higher in urgent care/emergency room
- Pain is one of the symptoms of underlying local/systemic malfunction\*
- Every pain needs careful evaluation of underlying etiologic or pathophysiological manifestation.
- Need to think "outside of opiate box". For example: Chest pain

#### Acute vs chronic pain

 Chronic pain is pain that persists or recurs for > 3 mo, persists > 1 mo after resolution of an acute tissue injury, or accompanies a nonhealing lesion. Causes include chronic disorders (eg, cancer, arthritis, diabetes), injuries (eg, herniated disk, torn ligament), and many primary pain disorders (eg, neuropathic pain, fibromyalgia, chronic headache).

## Evaluation

#### A through history and physical exam

• Patient rapport

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- Arrive at a proper diagnosis
- Establish a proper treatment plan
- Know contraindications to treatments
- Results in better outcome & satisfaction
- Results in better practice
- Peace of mind

## Careful history

- Important questions to be asked include location, duration, quality, severity, and exacerbating/alleivating factors.
- How pain impacts function. ADLS/work/social/relationships
- Prior diagnostics, treatments and surgeries
- Realistic expectations

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• A peek into mood states, psychiatric and substance use history

#### Physical Exam

- Nocioceptive, neuropathic, or combination
- Inspection: Muscle mass, fasciculations
- Peripheral pulses
- Sensory evaluation
- Motor strength and tone
- Reflexes

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• Region specific tests

#### Diagnostic studies

CT/MRI findings are not significant unless there are corresponding symptoms/signs

Disc bulging are present in most asymptomatic patients Imaging studies will not pick up show all causes for pain

#### Chronic Low Back pain

• Etiologies

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- When to order MRI
- Reading MRI findings

## Treatment approaches

- Acute pain management
- Avoiding pitfalls of long term opiate use for non-cancer pain
- Most primary pain syndromes do not respond to opiates
- Headaches: Migraine, Cluster, Tension, and chronic daily headaches
- Neuropathic/regional pain syndromes
- Rheumatologic/arthritis related

#### Physician Patient Relationship

• Appointment time limitations

- Relative lack of training and expertise to treat chronic pain
- Patient beliefs that cure exists

## Introspective Approaches

- Compassionate and empathic care versus limit settings
- Skill sets to work with manipulating/splitting patients
- Reflex reactions versus treatment planning

#### Psychiatric Issues

- 27% of chronic pain patients meet criteria for major depression
- Anxiety, substance use and personality disorders make up large percent of chronic pain patients
- Opioid abuse has been demonstrated in 9-41% of chronic pain patients and 14-34% of patient have illicit substance use.
- Alteration of serotonin and norepinephrine functions
- Psychosocial issues maintain or exacerbate experience of pain



#### Depression in chronic pain patients

• Poor adherence to treatment

- Worse satisfaction with treatment
- Limited functional improvement
- Higher likelihood of substance use or relapse

## Psychiatric Issues In Chronic Pain

Psychiatric condition	Prevalence	Associated factors
Personality disorders	Upto 51%	Self medication, substance abuse, emotional instability
Depression	Upto 45%	Treating mood vs opioid induced depression
Substance use disorders	Upto 34%	Diversion
Anxiety disorders	Upto 25%	Illness perception
PTSD	2-49% *	Substance use
Somatoform disorders	Unknown	Health care costs



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#### Psychiatric Issues That Interfere

- Lack of engagement in activities that cause isolation, dysphoria, perceived low self esteem.
- Attention/ somatic components
- Avoidance
- Perception of disability
- Passive coping and low distress tolerance
- Treating underlying dysphoria/mental disturbance
- Dependency and use for non-therapeutic purposes

## Personality Traits/Behavioral Characteristics

- More extroverted, more demanding, and somatically preoccupied
- Dependent, anxious, and as feeling inadequate and inferior.

- Noncompliant, passive, and as feeling a sense of entitlement.
- Angry, bitter, even paranoid, and resort to drugs and alcohol.

#### Best Practices for Primary Care

#### Behavioral health history

- Mood, anxiety, substance use, past and current psychiatric history and psychosocial function
- Pain vs suffering

- What pain means to the patient
- At minimum pain and its effects on mood, thoughts (cognitions) and sleep



#### Substance Use And Chronic Pain Patients

- Opioid abuse has been demonstrated in 9% to 41% of patients receiving chronic pain management. Illicit drug use has been reported in 14% to 34% of patients in chronic pain management settings.
- Grey zone

- Prior history of substance use
- Ethical concerns

#### DSM V and ICD criteria

A problematic pattern of opioid use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

1. Opioids are often taken in larger amounts or over a longer period than was intended.

- 2. There is a persistent desire or unsuccessful efforts to cut down or control opioid use.
- 3. A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.
- 4. Craving, or a strong desire or urge to use opioids.
- 5. Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home.

6. Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.

- 7. Important social, occupational, or recreational activities are given up or reduced because of opioid use.
- 8. Recurrent opioid use in situations in which it is physically hazardous.

9. Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.

10. Tolerance

11. Withdrawal

## ICD 10 Criteria

Three or more of the following must have been experienced or exhibited together at some time during the previous year:

- A strong desire or sense of compulsion to take the substance;
- Difficulties in controlling substance-taking behavior in terms of its onset, termination, or levels of use;
- Tolerance
- Withdrawal
- Progressive neglect of alternative pleasures or interests because of psychoactive substance use, increased amount of time necessary to obtain or take the substance or to recover from its effects;
- Persisting with substance use despite clear evidence of overtly harmful consequences,

# Differentiating between substance use disorder and chronic opiate treatment

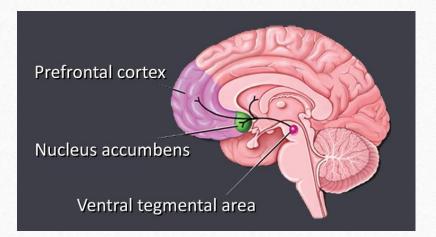
- CANNOT use criteria of Withdrawal or Tolerance that occurs in the context of treatment
- Several genuine chronic pain patients may exhibit drug seeking and overuse behaviors if pain is not adequately treated
- Presence of another substance use disorder, diversion and criminal activity are strong predictors of prescription abuse.

#### ASAM Criteria

- ASAM Criteria- Persistent pattern of dysfunctional pain medication use characterized by any of the following:
- Adverse consequences associated with medication use
- Loss of control over use of medications
- Preoccupation with occupying opioids despite adequate analgesia

#### What causes substance use problems

- Reward pathway
- Conditioning- Classical and Operant
- Positive, negative reinforcement and punishment
- Incentive motivational
- Dependence because of rewarding effects
- Dependence because of withdrawal





#### Understanding Utox Results

• Point of care and GCMS tests

- Finding other drugs- Sharing/vs substance use
- Not finding the prescribed medications- PRN use, inadequate treatment, overuse or diversion
- Finding illicit drugs- Substance use disorder evaluation and treatment

#### Diversion

- Transfer of a prescribed medication from a patient to another person, or
- Using a medication for indications other than prescription.
- Intentional- Such as for monetary gain, sharing, swapping (bartering), recreational, or using to alter mood, sleep or withdrawal states.
- Un-intentional: Lost or stolen meds.

#### Methods of Diversion

- The medicine cabinet
- Providers doctor shopping, drug rings, fraudulent/forged prescriptions
- Providers/pharmacy staff/employee- impaired health care worker, self abuse, writing prescriptions to friends/family, trading meds for money or other gains

- Pharmacy
- theft/break-in/burglary
- In transit losses
- Chain of distribution
- Pain clinics
- Online retailers
- Manufacture/distribution

#### The Medicine Cabinet

• Most Frequent Method of obtaining controlled substance for non-medical use

- Unreasonable quantities
- Unused medications
- Unlocked storage

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#### Why targeting diversion is important

- Nonmedical use of opiates leads to opiate dependence and risk of heroin use
- Most commonly prescribed and abused drug?
- Why Health Care Providers?
- Control at the source

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- Easiest, legal, reliable and economical source

## Managing Diversion

- Any diversion is unlawful, however degrees of seriousness would matter
- Diversion from a patient to his/her spouse for back pain vs pseudo-patient who pushes for certain brand or unusual quantities.
- When diversion is suspected- place strict boundaries, prescribe what's indicated and not what patient wants.
- When there is serious diversion, it is breach of trust, and doctor patient relationship may be terminated.
- Need to document!

## When to suspect diversion

- Strange stories
- Smart Patients: When you don't seem to feel being manipulated
- My doctor says I am Bipolar. You want me to go without sleep?
- I have to attend funeral of my relative in Oregon.
- I am 78. So you just want me to suffer
- My BF just returned from Iraq. I have to receive him in SFO.

#### When to suspect diversion

- Reluctance to cooperate
- You will need to write me Lasix 20 mg next time before I do pee test
- I had bad blood with my previous doctor. I want you to start from Scratch
- Unusual understanding of medical protocols
- Specific demands- 'Watson brand only'.

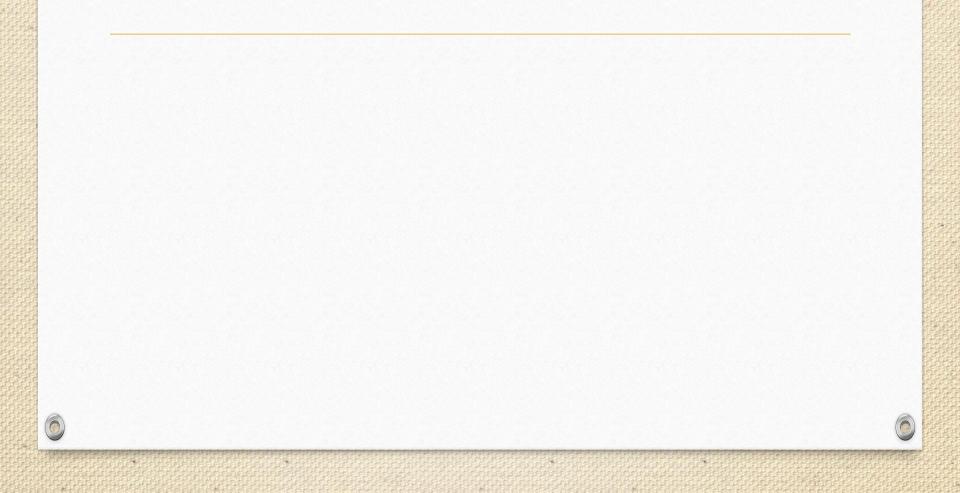
#### Patients with possible risk for diversion

- Is known to have contact with people with active SUDs.
- Cannot produce the remainder of a partially used prescription when asked for a pill or patch count.
- Has attempted to alter or forge prescriptions.
- Has been "doctor shopping" to obtain additional medications.
- Does not comply with the nonpharmacological components of recommended treatment.
- Strongly prefers brand name drugs or drugs with high street value.
- Fails to demonstrate the presence of prescribed opioids in appropriate UDT results.



## Risk Assessment (Imran)

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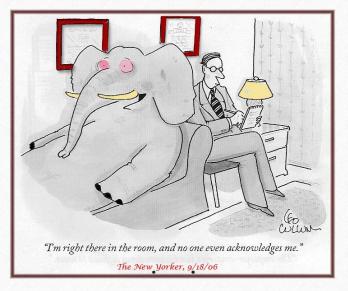
## Managing Pain Safely (Imran)

- The medication management contract
- Doses and quantity limits

- Periodic check for pill counts/Cures/Utox
- Evidence based data vs third party reports
- Incidences of Aberrant behaviors: Documented warning, and Plan of care including discharge for repeated violations

#### Substance use treatments

- Appreciate patient acknowledgement
- Positive Utoxes need to be discussed nonjudgmental approach, and is an opportunity to discuss treatment options.
- Assessment of what is needed and what is locally available
- Most active substance use disorders need psychotherapeutic treatment approaches



#### ASAM Placement Criteria

Criteria	Outpatient (AA/Community Meetings/Therapy	Intensive Outpatient	Medically monitored residential/inpatient	Medically managed inpatient
Intoxication/ Withdrawal	No Risk	Minimal	Some risk	Severe risk
Medical complications	No Risk	Manageable	Some monitoring	Needs medical care
Psych/behavioral complications	No Risk	Mild severity	Moderate severity	Needs psych inpatient
Readiness for change	Cooperative	Needs structure	Resistance. Needs 24 hr monitoring	NA
Relapse potential	Minimal	Needs close monitoring	Unable to stop using as outpatient	NA
Recovery environment	Supportive	Less support but can cope	Danger to recovery	NA



#### Substance use treatments (medications)

- Suboxone- Outpatient based treatment of opioid use disorder
- Needs special DEA licensing

- Methadone- Highly structured outpatient treatment for opioid use disorder'
- Both Methadone and Buprenorphine can be prescribed for pain.

## Special circumstances with Methadone/Suboxone patients

- Evaluation of pain is the first step
- Consider non-pharmacologic/non-opioid treatments
- For acute pain issues treatment with opiates may be needed, however long term opiate prescription will pose risks
- Usually have tolerance to usual doses of pain medications
- May need to withheld Suboxone

#### Therapeutic Modalities

- Acceptance and let go
- Cognitive behavioral therapy
- Chronic pain self management groups

## Multi-disciplinary approaches in pain management

- Anti-inflammatory agents
- Gabapentin and Lyrica
- TCA and SNRI
- Clonidine

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- Physical Therapy and conditioning
- Therapeutic approaches

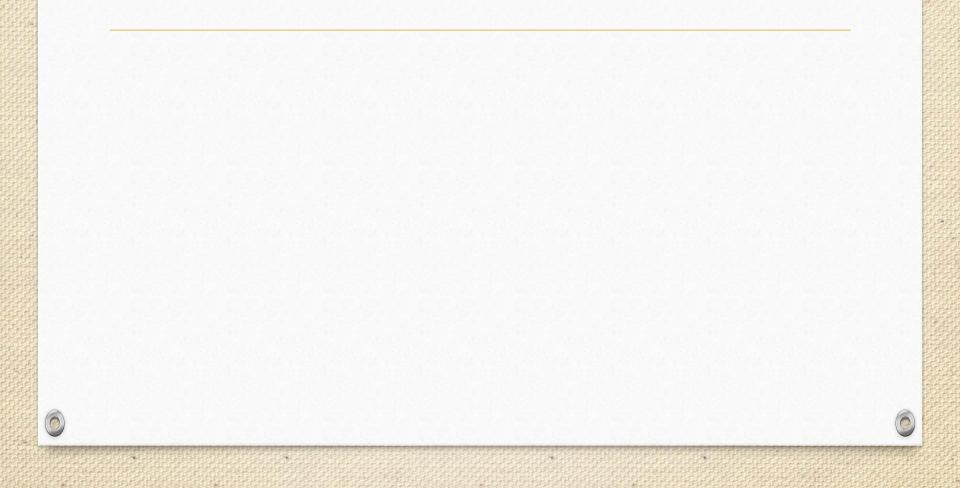
#### Best Practices for Primary Care

• Realistic expectations with available resources

- Understanding substance use and treatments
- Understanding therapeutic modalities for chronic pain

## Questions/Comments

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## **Closing and Evaluation**

# Summary of Day

- Integrated Clinics to treat substance use disorder
- The neuroscience behind SUD
- Screening for SUD
- Behavioral health techniques when working with chronic pain patients/ patients with SUD
- Red flags and warning signs for diversion



# Looking Ahead in 2016: Health Plan Activities

- Provision of tele-consult services for complex patients on high-dose opioids
- Education and coordination around addiction screening and treatment
- Partner with CHCF for continued support in developing and sustaining local efforts targeted at reducing improper use of opioids
- Planning process for creating integrated clinics for high utilizers
- Pharmacy academic detailing
- MPS provider level data sharing
- Tapering guide/ toolkit
- Naloxone Pilot



## Looking Ahead in 2016: Prescriber Activities

- Sign up for tele-consult services for complex patients on high-dose opioids
- Make local opioid oversight committees more robust
- Participate in regional coalitions
- Give feedback on draft plan for integrating chronic pain treatment with Medication Assisted Therapy
- Ask your PHC Regional Medical Director to meet with you and/or your clinicians to review their individual PHC opioid data and to review MPS
- Tapering guide/ toolkit
- Distribute Naloxone and educate patients/families on

how to use it.



# Is there evidence for MED numbers?

# Table 5. Morphine equivalents for strong opioids used in randomized trialsDrug Pain typeMEQ Min MEQ AvMEQMaxNo. of studies

CR oxycodone Nociceptive	20 mg	65.7 mg	146.7 mg	6
Neuropathic	40 mg	81.3 mg	173.3 mg	3
CR morphine Nociceptive	25 mg	56.8 mg	120 mg	2
Neuropathic	28.75 mg	g 91.7 mg	202.5 mg	5

CR—controlled release, MEQ—morphine equivalent.

Adapted from the National Opioid Use Guideline Group.5



# Is there evidence of MED and overdose correlation?

Group Health—9 fold increased risk of overdose at doses >100 MED (for each fatal overdose more than 7 non fatal overdoses)

VA

#### Canada (607,000 patients, 9 years)

All high quality studies, 3 different populations, increasing opioid doses strongly related to large increases in risk of overdose morbidity and mortality (3.7-4.6-fold increase even at 50-100 MED compared to <20 MED)



# MPS Data Sharing Webinars

#### MANAGING PAIN SAFELY DATA SHARING WEBINARS



This February, we will be hosting four county-focused webinars highlighting the data collected through our Managing Pain Safely program. The webinar will include a discussion of aggregate county-level data for specific measures and include a real-life example of provider-level data (all provider identifiable information will be omitted). This will be an opportunity for PHC providers to view the data collected, ask questions, and learn how to request additional data.



http://www.partnershiphp.org/Providers/ HealthServices/Pages/ MPSUpcomingEvents.aspx

#### Northern Region

February 9, 12-1pm: Humboldt and Del Norte Counties

February 10, 12-1pm: Shasta, Siskiyou, Trinity, Modoc, and Lassen Counties

#### Southern Region

February 11, 12-1pm: Mendocino, Lake, Sonoma, and Marin Counties

February 22, 12-1pm: Yolo, Napa, and Solano

#### Contact Us

 For additional information for Northern Region webinars contact: Marya Choudhry at (530) 999-6903 or mchoudhry@partnershiphp.org

 For additional information for Southern Region webinars contact: Danielle Niculescu at (707) 420-7617 or DNiculescu@partnershiphp.org



# NoRxAbuse Kick Off

NoRxAbuse is a coalition for responsible use of prescription drugs. We invite all interested stakeholders to join our effort to improve patient safety and prevent abuse and diversion of prescription drugs.

# NoRx Abuse

#### presents:

#### "Safe Prescribing Saves Lives"

February 4, 2016 Shasta Community Health Center 1035 Placer St. , Redding 6 - 7:30 pm refreshments will be served

#### Featured Speakers:

- Ivan Petrzelka, PharmD, JD, MBA President of NoRxAbuse
- Andrew Deckert, MD, MPH Shasta County Health Officer
- Michael Vovakes, MD, MMI Medical Director, Partnership HealthPlan
- Candy Stockton, MD Medical Director, Shingletown Medical Center
- William Ranker, PharmD, MBA Pharmacist, Owens Healthcare
- Eric Magrini Undersheriff, Shasta County

Register at: http://norxabusekickoff.eventbrite.com

Contact: Marya Choudhry - mchoudhry@partnershiphp.org

#### www.NoRxAbuse.org

Sponsored by Shasta Community Health Center and Partnership HealthPlan



# Thank You!



