



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
 - MPS County Webinar Flyer
- **CME Logistics**
- **Q&A Process**



HOUSEKEEPING

- Restroom Locations
- Electronic Devices
- WIFI Name: HCOE Visitor
- WIFI Code: Humboldt
- No Smoking on HCOE property
- 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



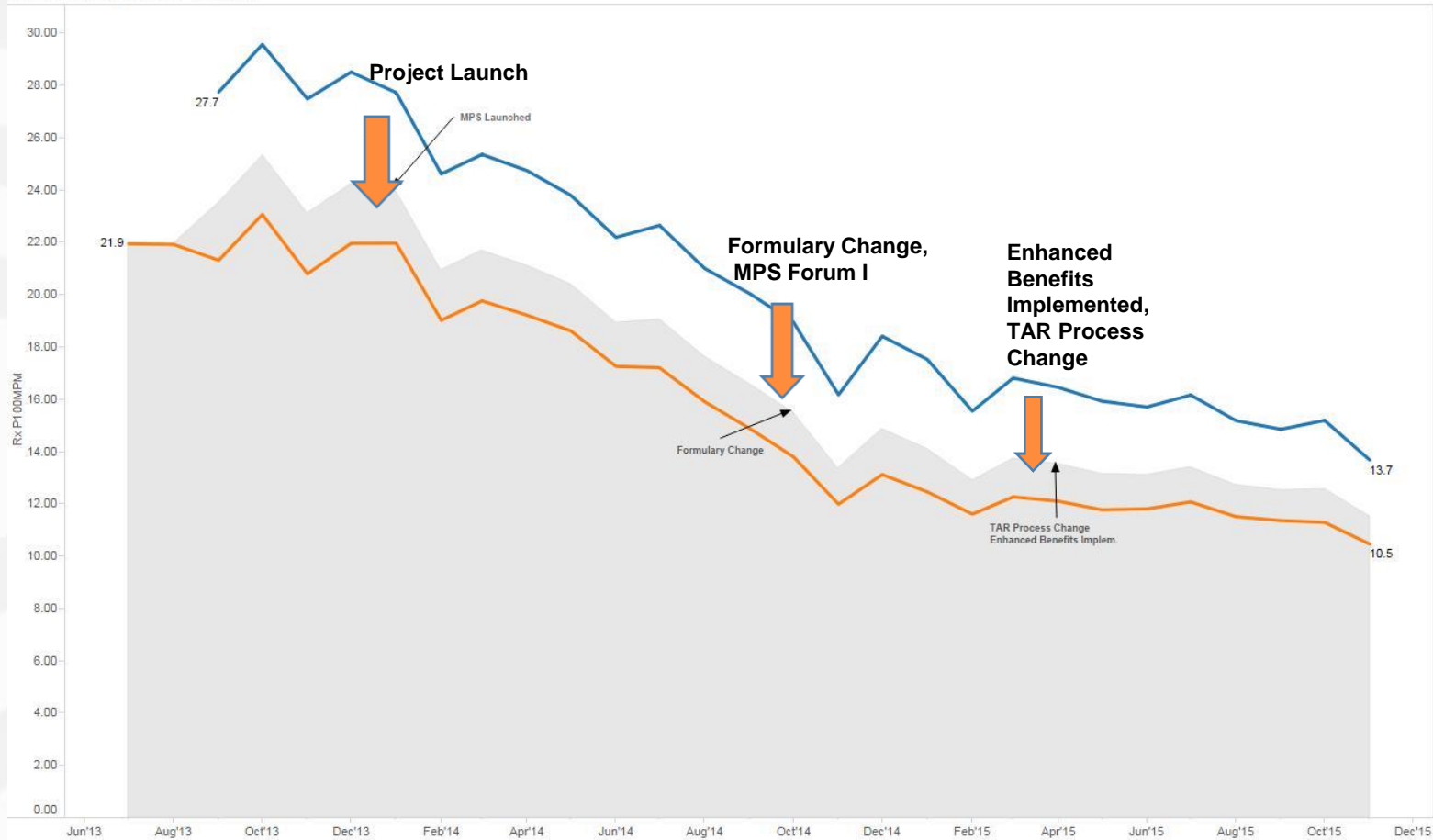


Accomplishments:

Review of PHC Opioid
Prescription Data

MPS Data – Total Prescriptions

Opioid Prescriptions P100MPM

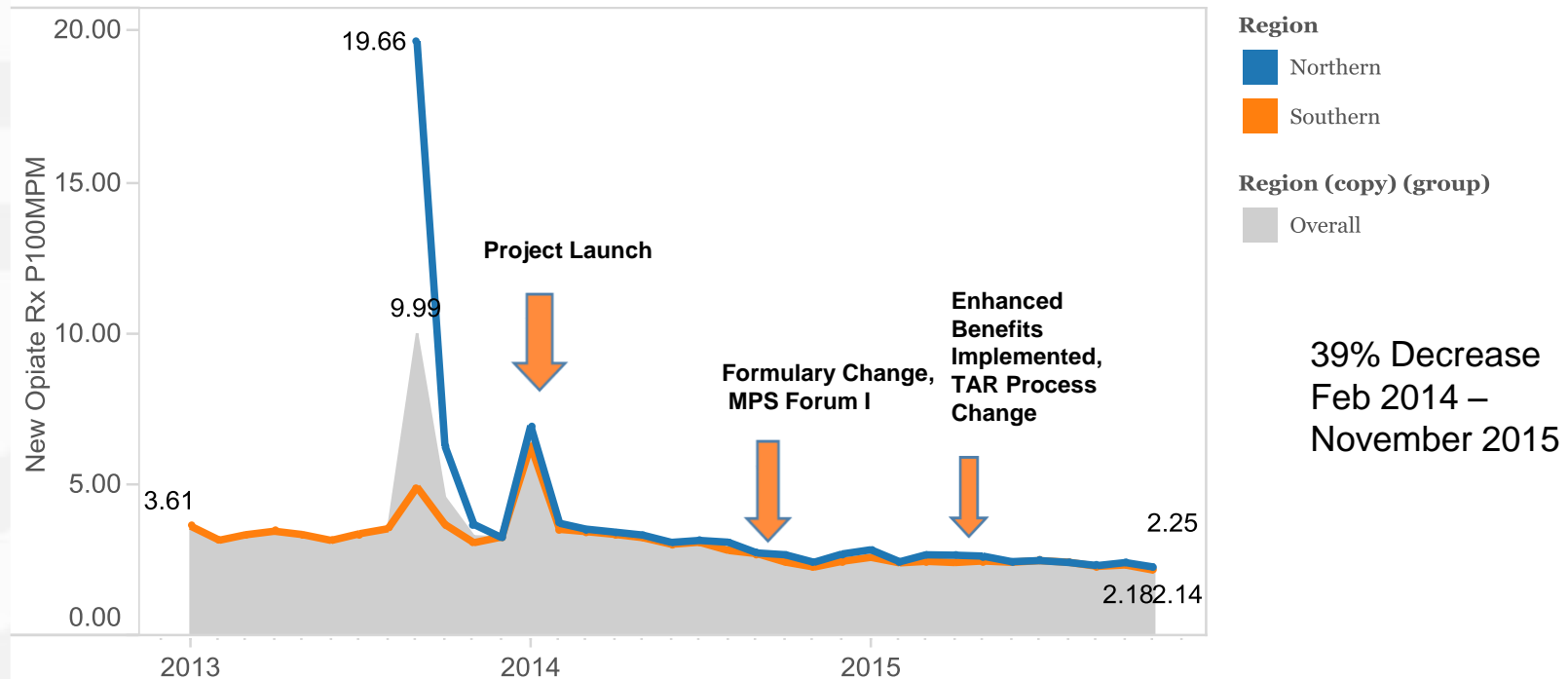


Region
■ Northern
■ Southern
■ Overall

52% Decrease
Jan 2014 –
November 2015

MPS Data – Initial Prescriptions

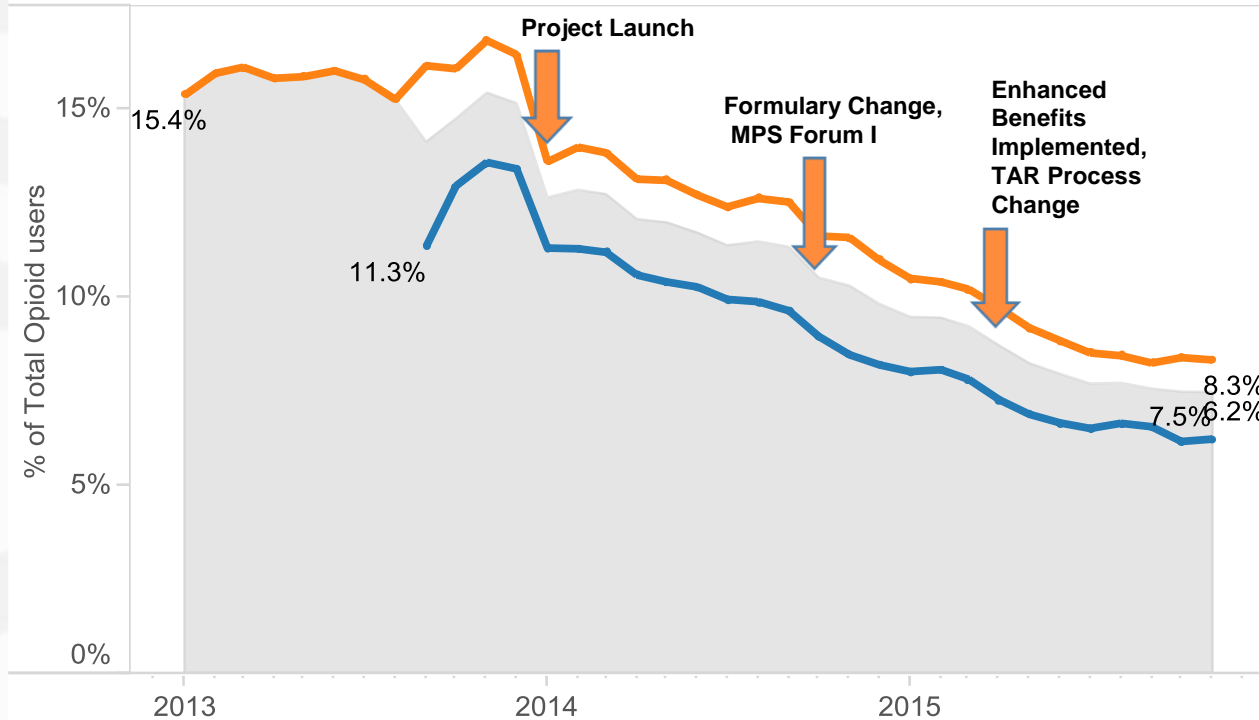
Initial Opiate Fills P100MPM



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

% Opioid Users on Unsafe Dose (>120 MED)



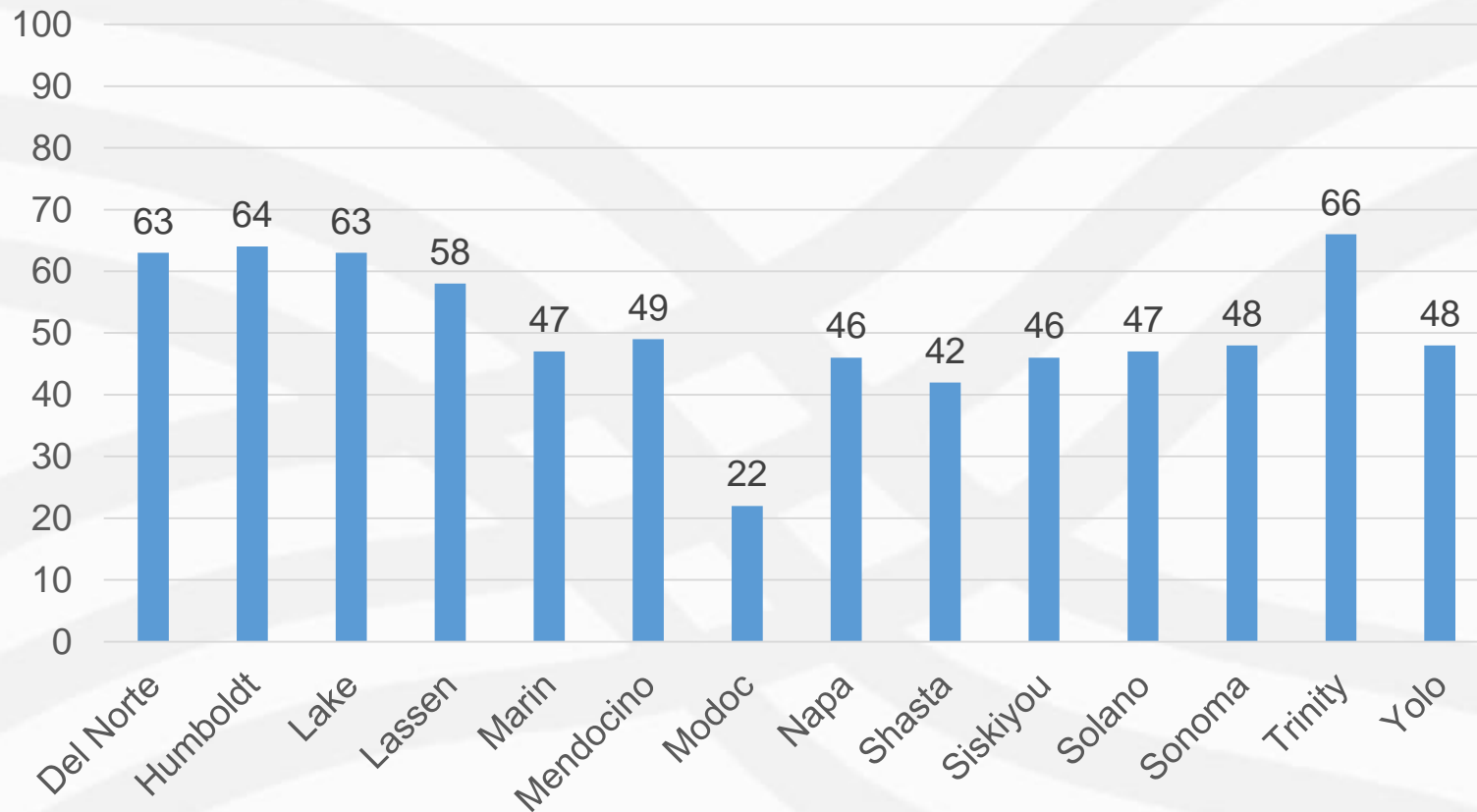
■ Northern
■ Southern
Region (copy) (group)
■ Overall

40% Decrease
Jan 2014 –
November 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.

Percent Decrease of Unsafe Dose

% Decrease Unsafe Dose
December 2013-November 2015





Accomplishments:

Health Plan Activities

MPS Workgroups

MPS Technical Support

Data Management

Pharmacy

Provider Network

Care Coordination/Utilization Management/ Member Services

Legislative Policy/Regulation/Communication

Community Support

MPS Steering Committee

Interventions

Education

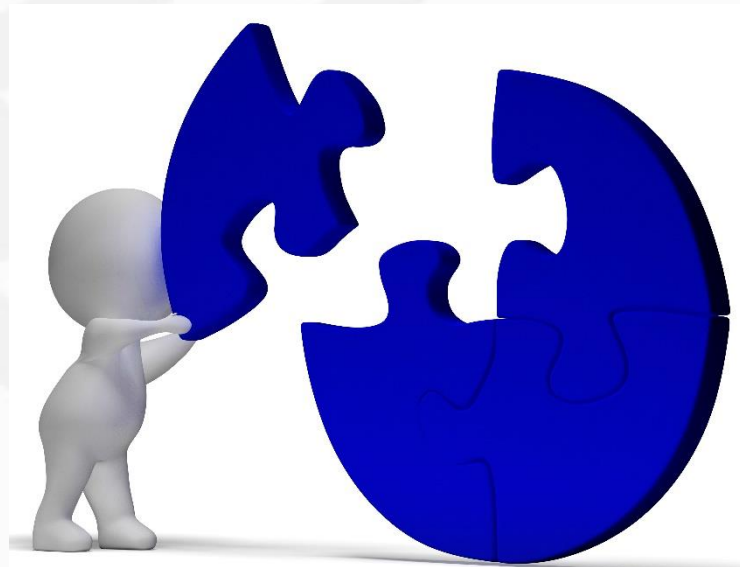
Health plan pharmacy prior authorization changes

Additional options for treating pain

Community activation

Aligned incentives

Additional resources

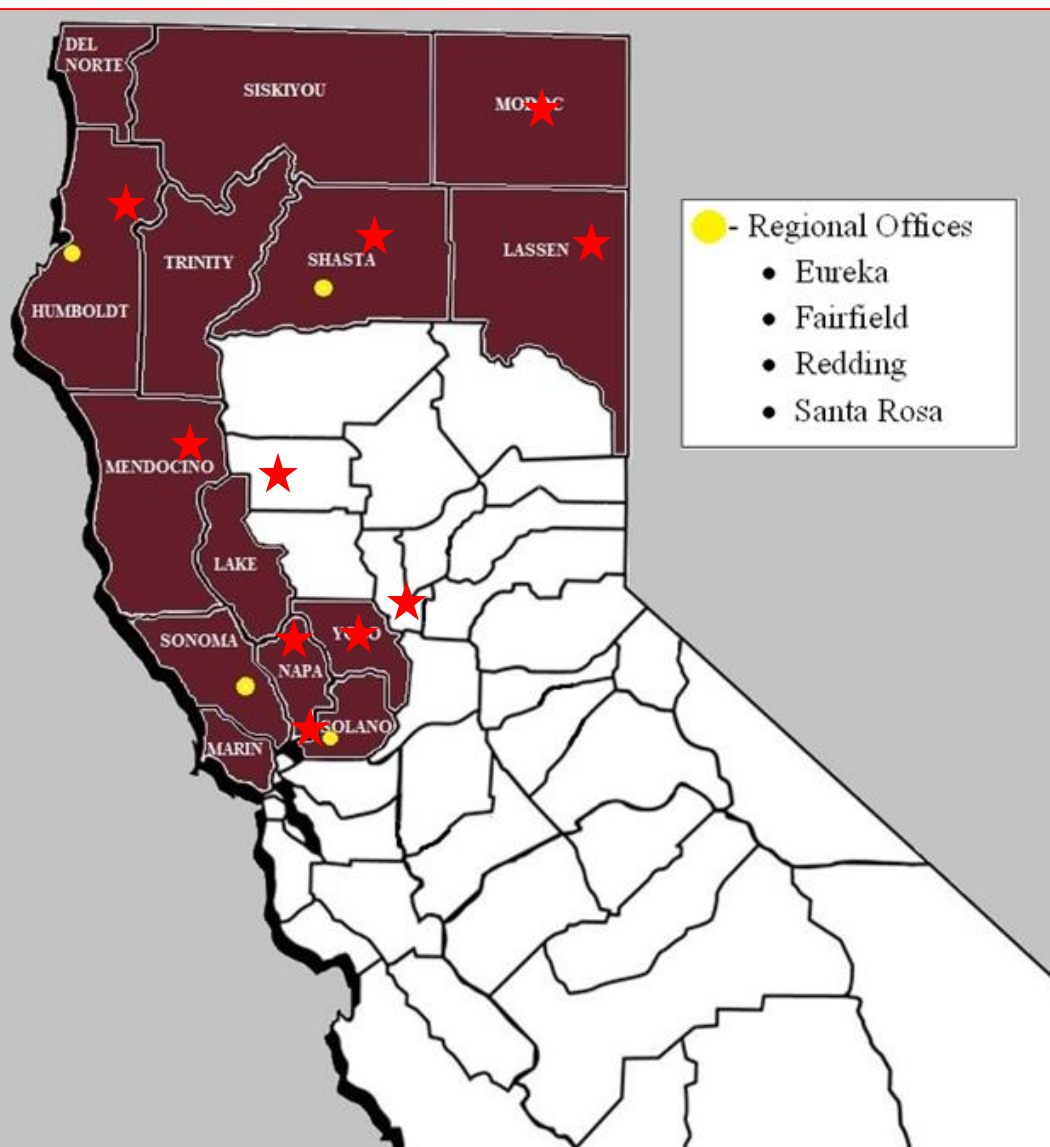





Accomplishments:

Community Coalitions

PHC Counties Participating in CHCF Regional Opioid Safety Coalition Grant Program

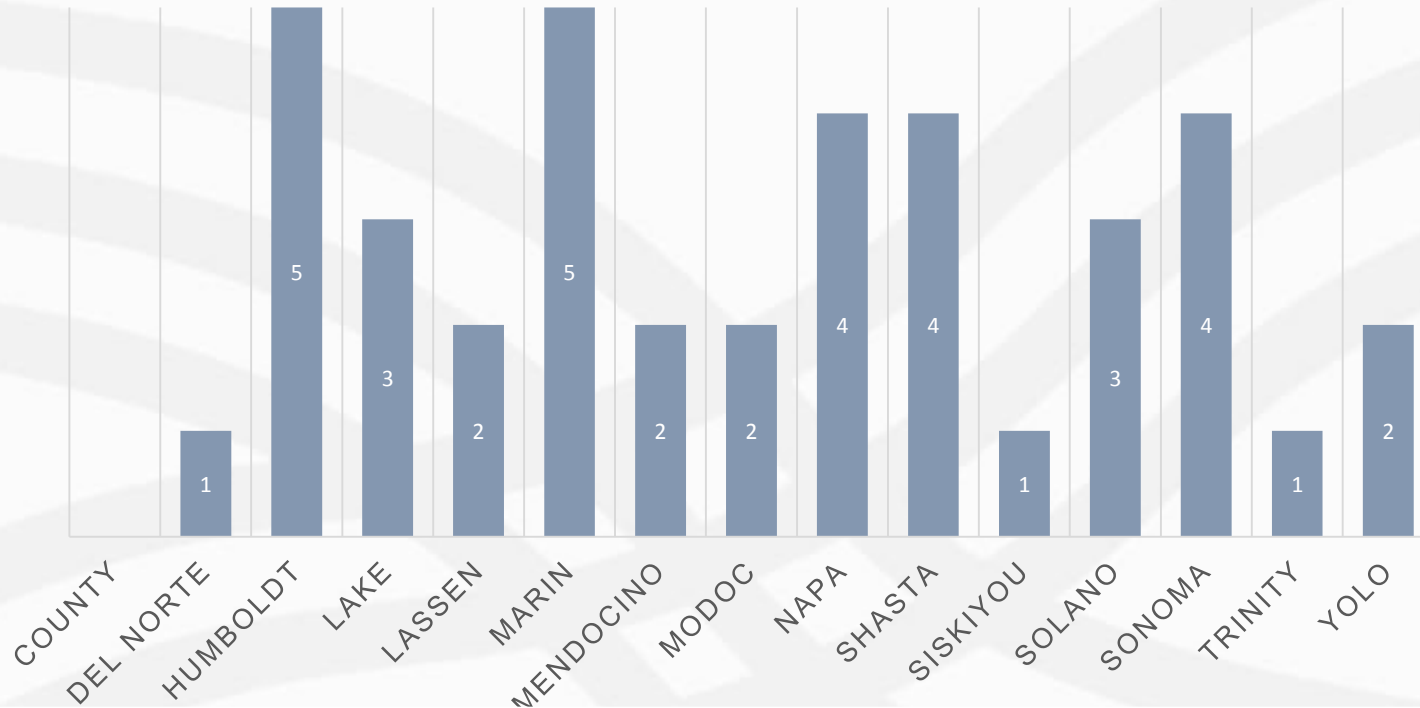


10 PHC Counties are participating in CHCF's Regional Opioid Safety Coalition Grant Program

 CHCF Opioid Safety Coalition County

Community Coalition Status

PHC COUNTY COALITION STATUS



Key

1	Little or No Effort (Yet)
2	Initial Meetings, Beginning of Framework Formation
3	Framework Formation, Action Teams Initiating
4	Strong Effort- Framework Implemented, Regular Meetings, Active Action Teams, Working towards Milestones
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

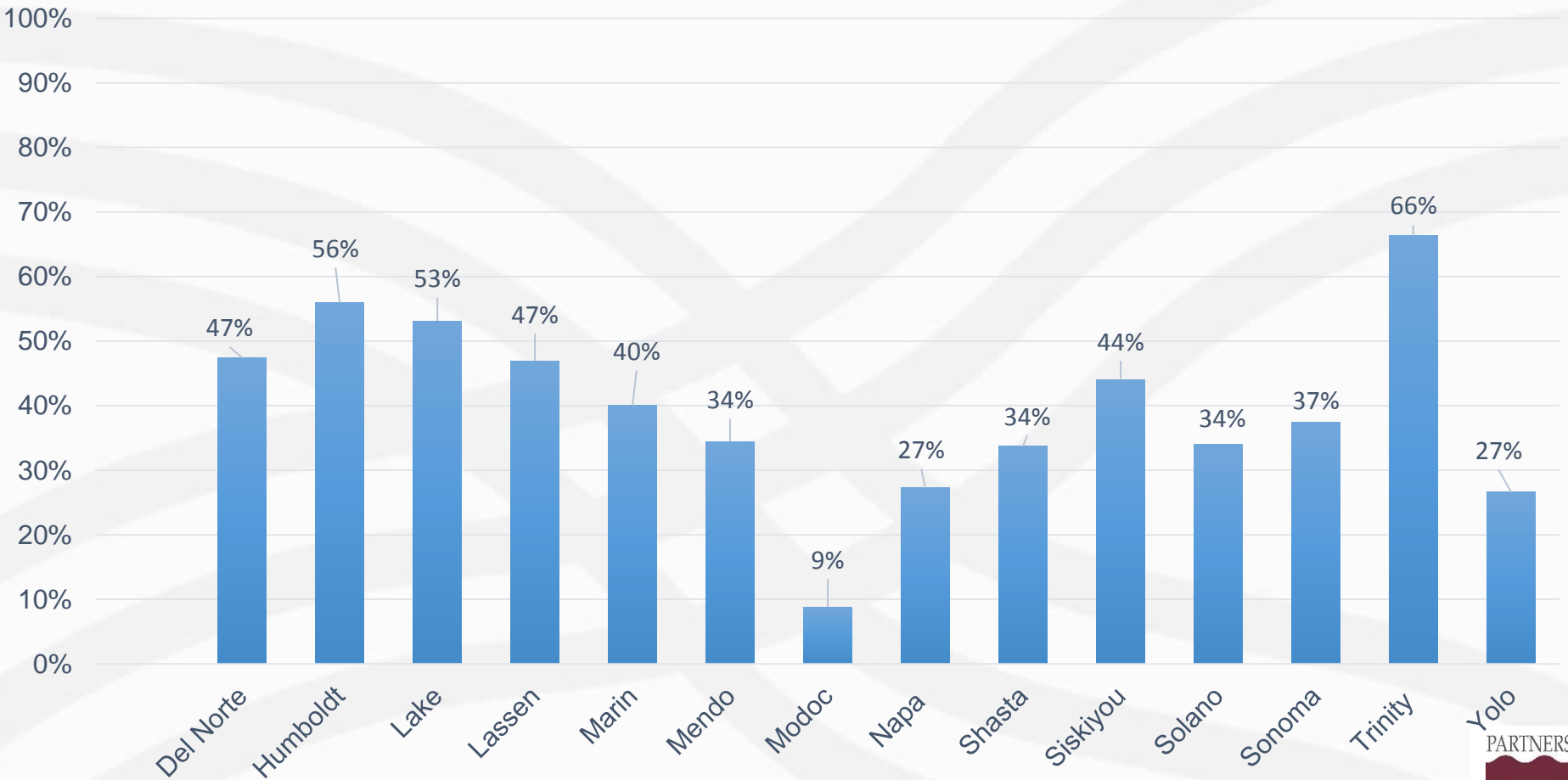
By December 31, 2016, we will improve the health of PHC members by ensuring that prescribed opioids are for appropriate indications, at safe doses, and in conjunction with other treatment modalities as measured by a:

- 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%

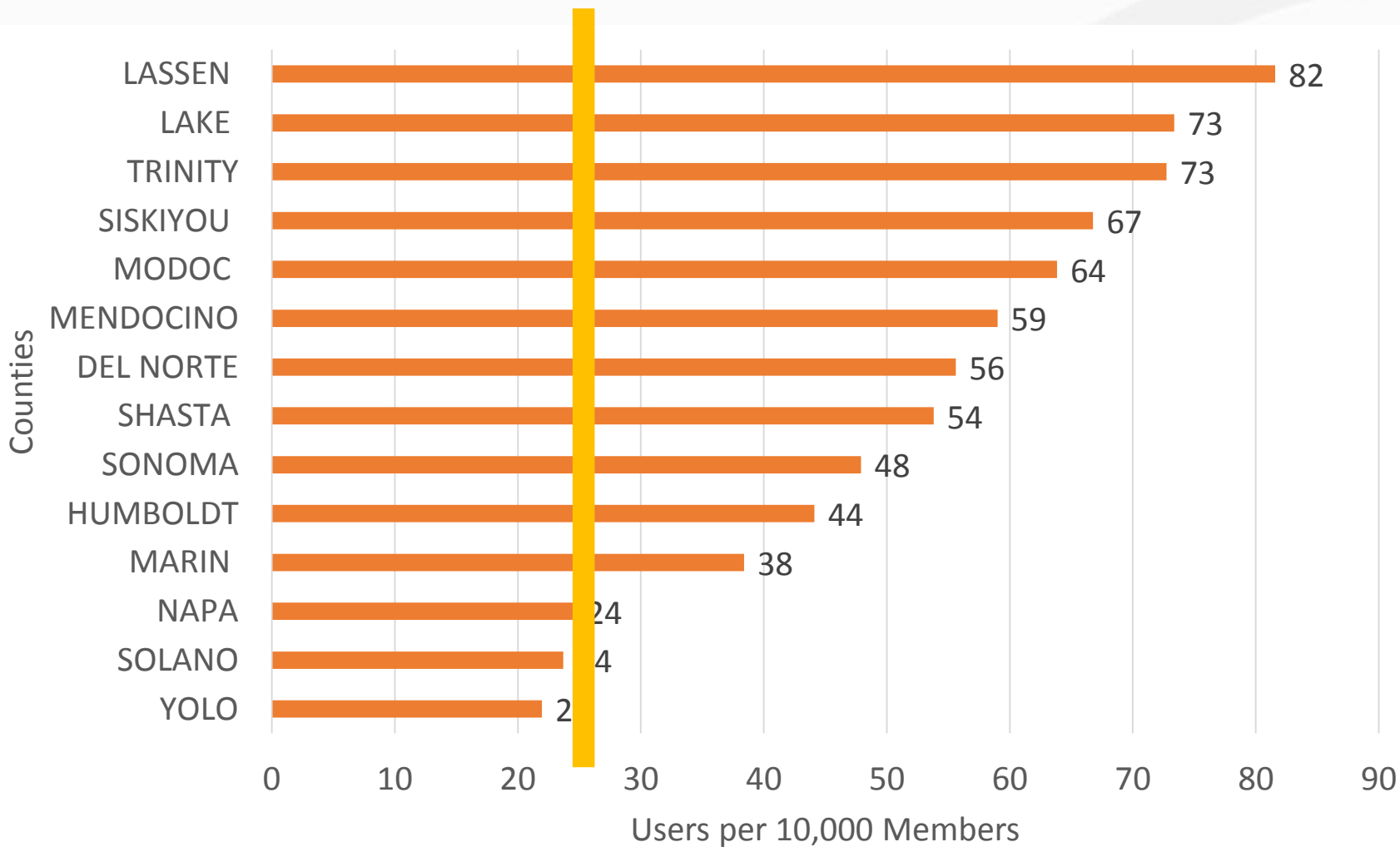
*Defined as greater than 120 mg. MED

Percent Decrease of Unsafe Dose

% Decrease Unsafe Dose January 2014-October 2015



Rate of High Opioid Users: End of 2015





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

Looking Ahead in 2016: 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



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
- DSM V
- 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.

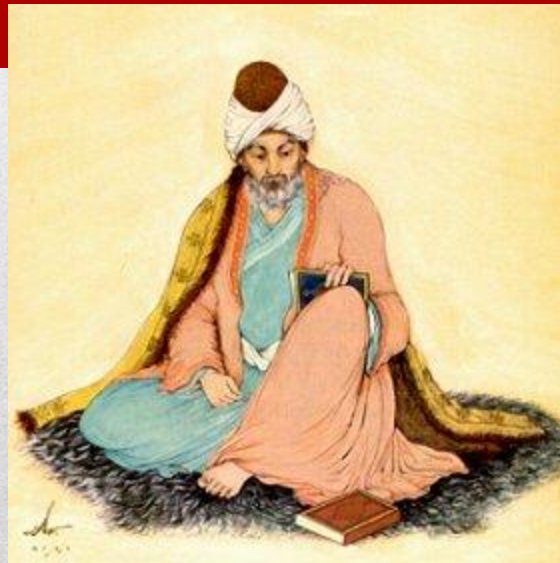
Reverse

Summarizing

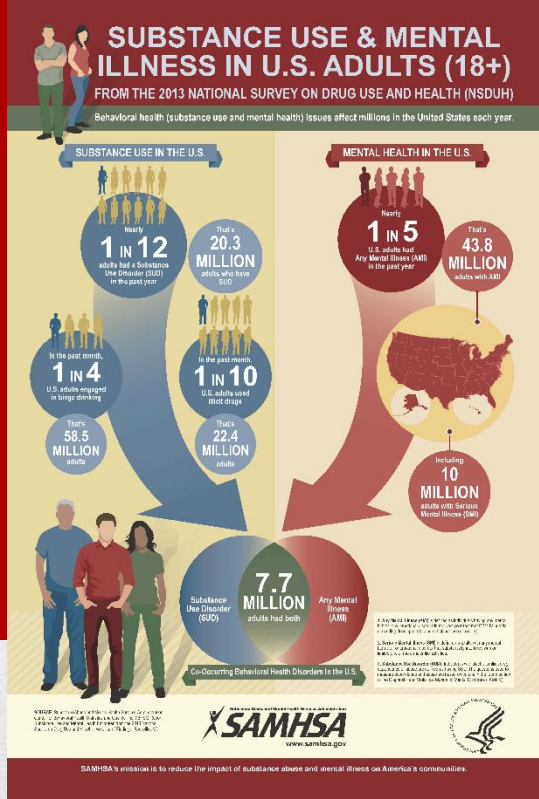
Empathy Exercise



***“The wound is the place
where
the light enters you.”***

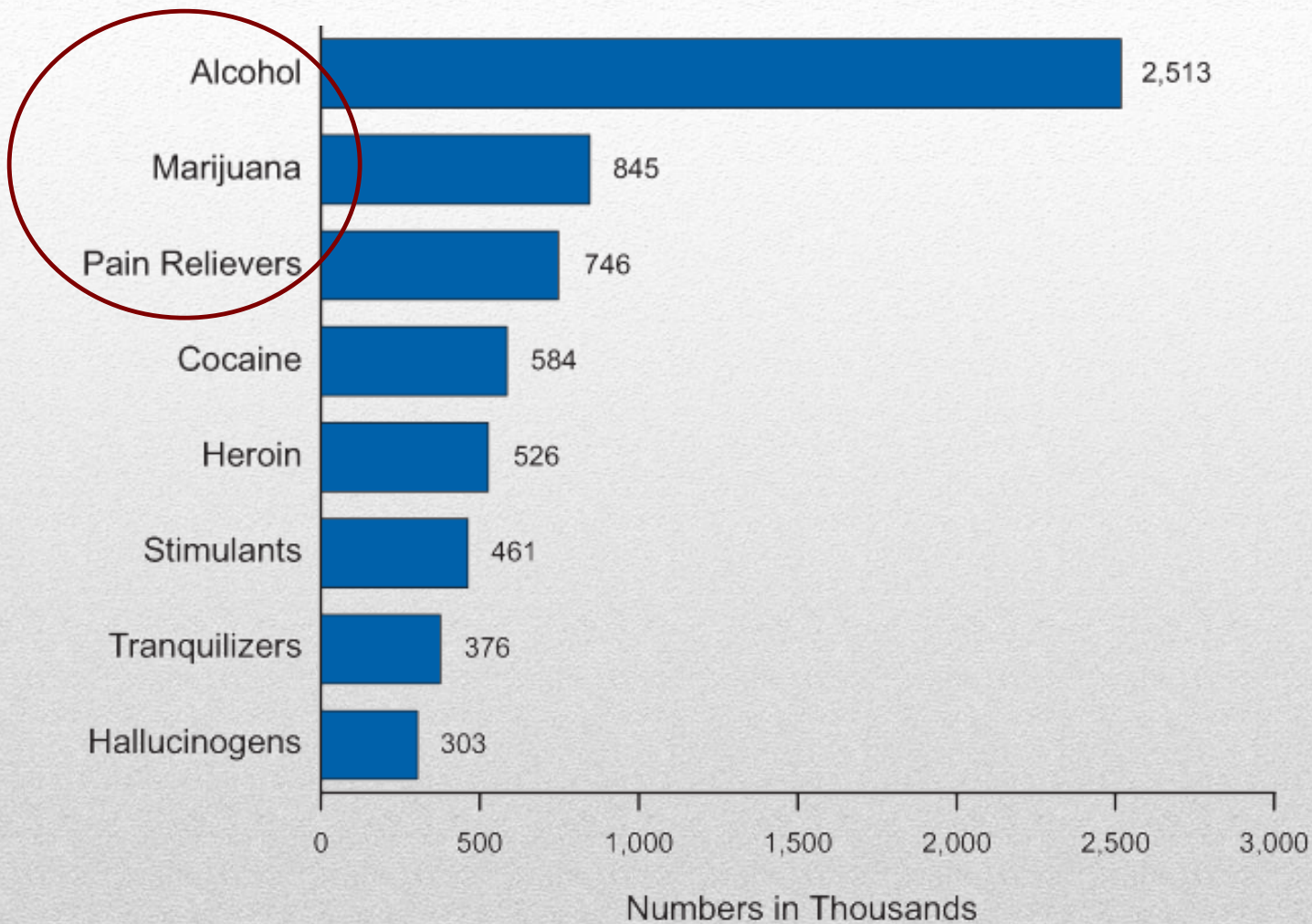


Rumi

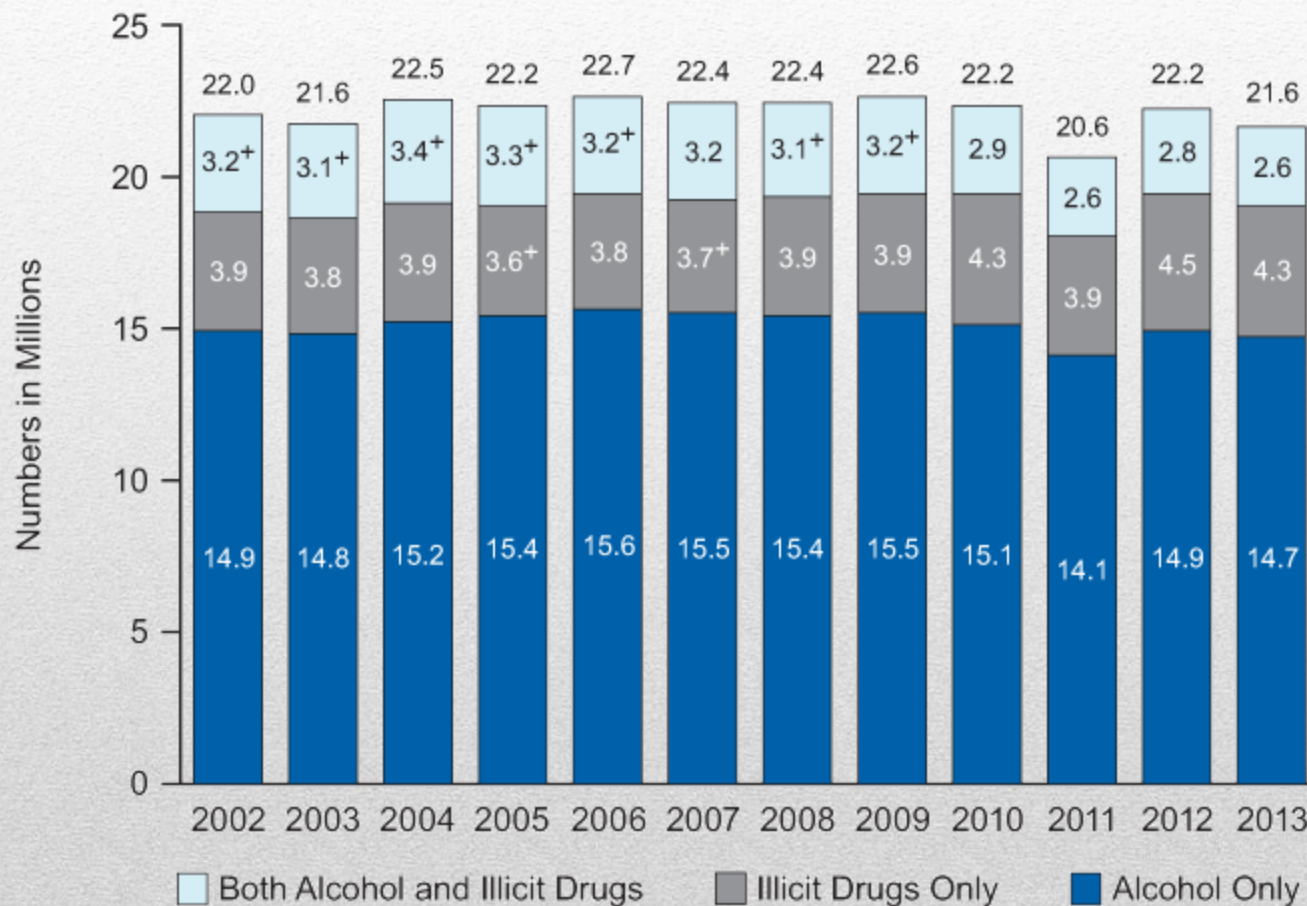


EPIDEMIOLOGY

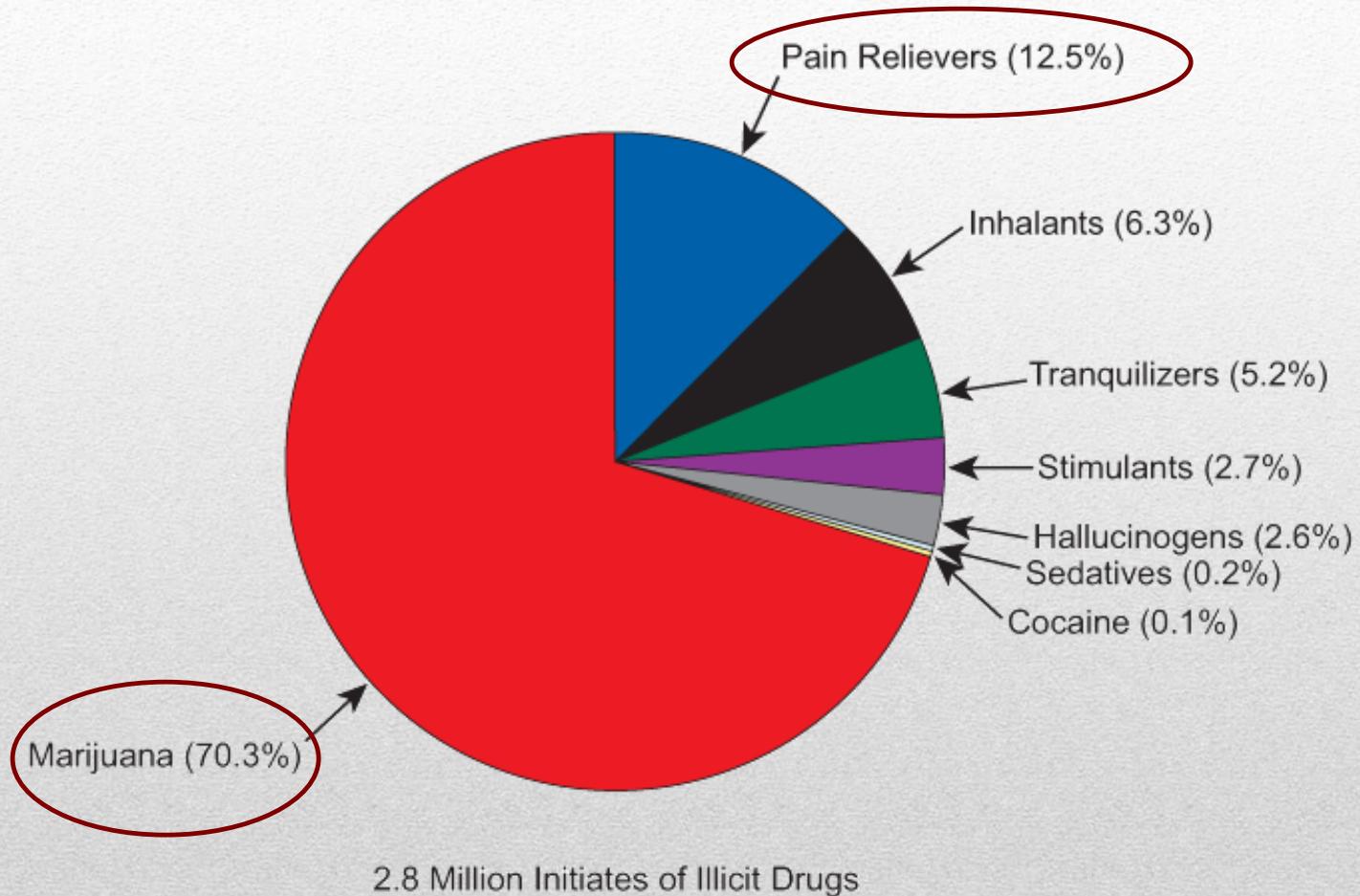
Substances for Which Most Recent Treatment Was Received in the Past Year among Persons Aged 12 or Older: 2013



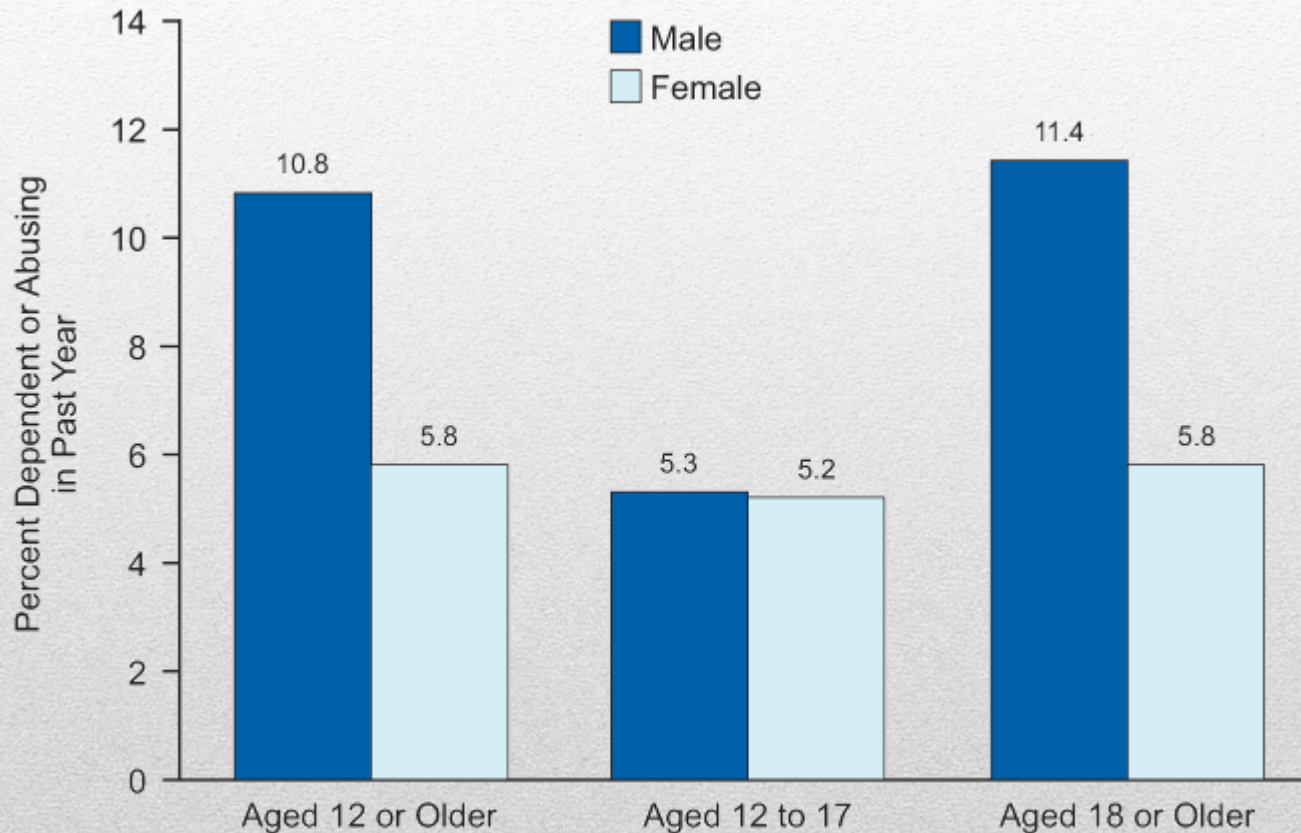
Substance Dependence or Abuse in the Past Year among Persons Aged 12 or Older: 2002-2013



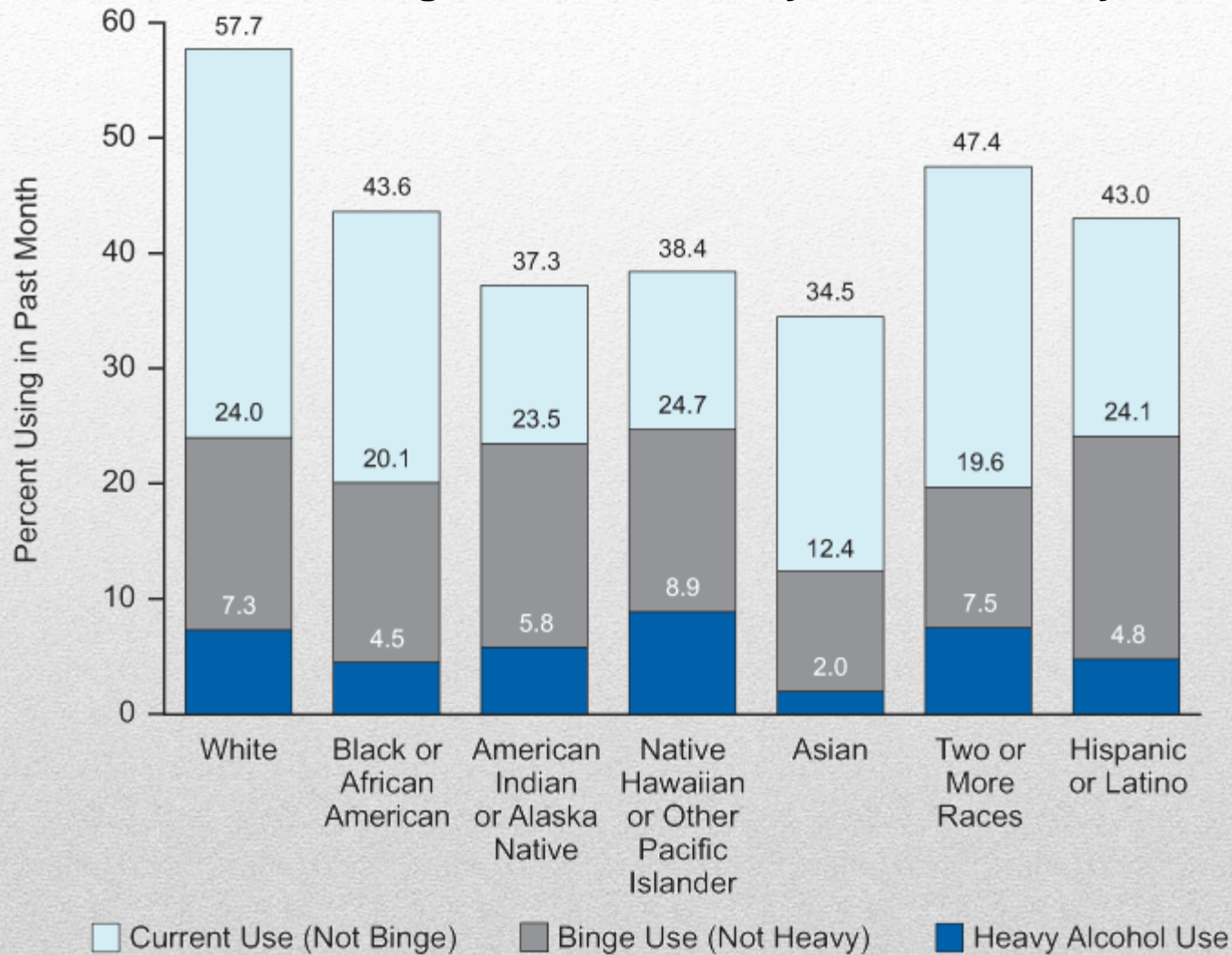
First Specific Drug Associated with Initiation of Illicit Drug Use among Past Year Illicit Drug Initiates Aged 12 or Older: 2013



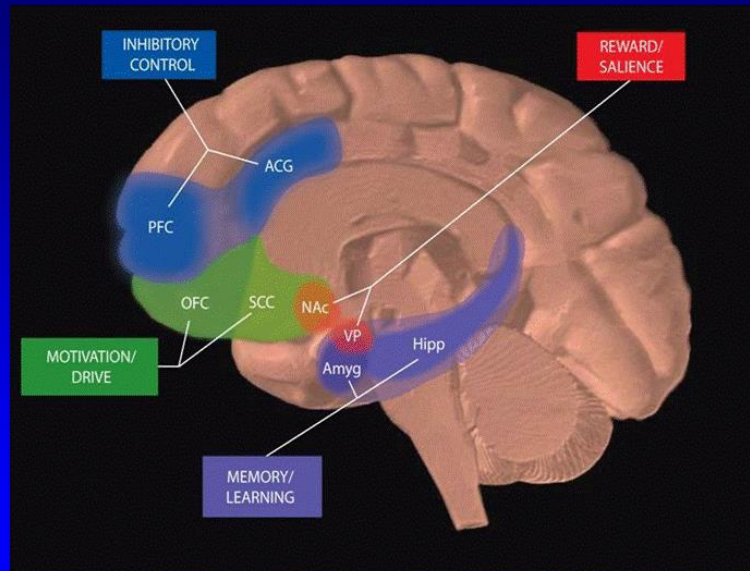
Substance Dependence or Abuse in the Past Year, by Age and Gender: 2013



Current, Binge, and Heavy Alcohol Use among Persons Aged 12 or Older, by Race/Ethnicity: 2013



Circuits Involved In Drug Abuse and Addiction



All of these brain regions must be considered in developing strategies to effectively treat addiction

NIDA

THE BRAIN & ADDICTION

SUDs as a Chronic Brain-Based Disease



Epigenetics & SUDs



Adverse Childhood Events (ACE)

CDC & Kaiser San Diego Study

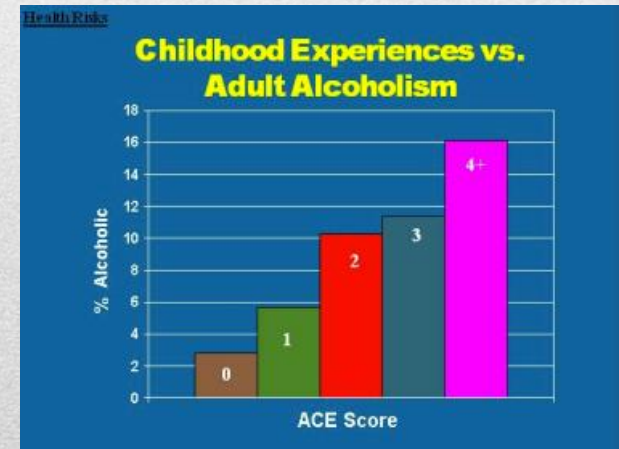
<http://www.cdc.gov/violenceprevention/acestudy/>

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?”

Drug and stress innate immune gene induction
creates the neurobiology of addiction

Disrupts frontal cortical
behavioral control
mechanisms.

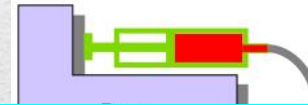
Increases limbic
negative affect,
craving and anxiety.

Frontal Cortex
Goal setting
Motivation
Planning
Impulse Inhibition

Amygdala
Hippocampus
Anxiety, Urgency
Negative Affect
Craving
Impulsiveness

Adapted from Crews and Boettger

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



SEX DRUGS & ROCK 'N ROLL

Dopamine

Sex, food, drugs, social connections
VTA (mesolimbic)

Pleasure, reward, socializing

Addiction *

Psychosis *

Pain processing
PNS & CNS pain system

Chronic pain *

Movement
Substantia Niagra

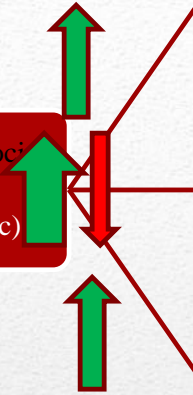
Parkinson's disease

Executive Function
PFC

ADHD *

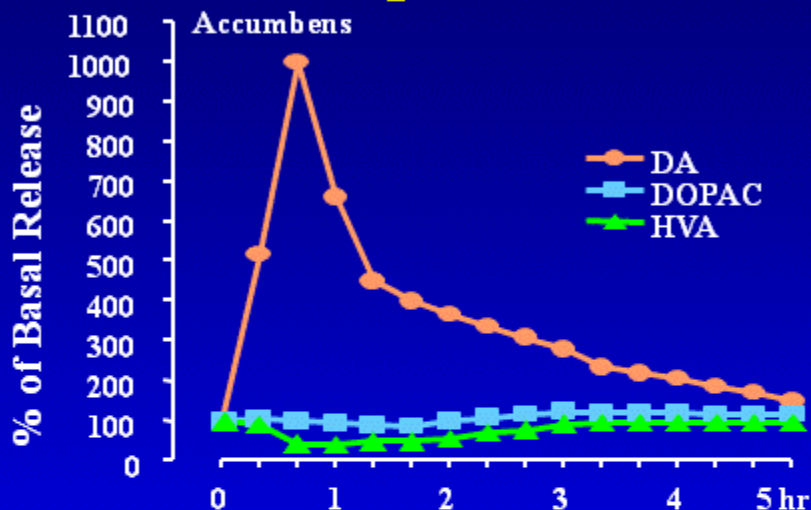
Inhibits PRL
hypothalamus

Stop lactating

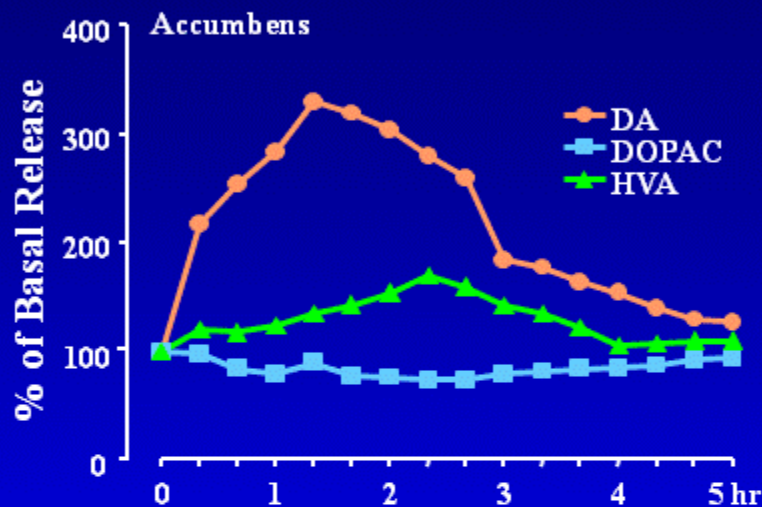


Effects of Drugs on Dopamine Release

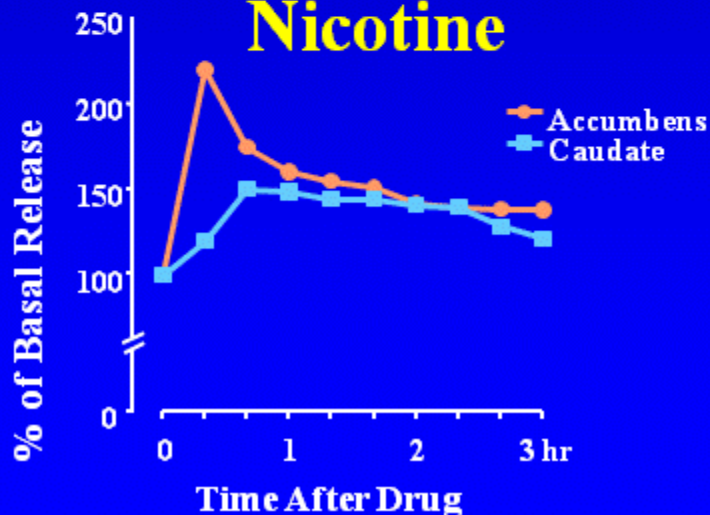
Amphetamine



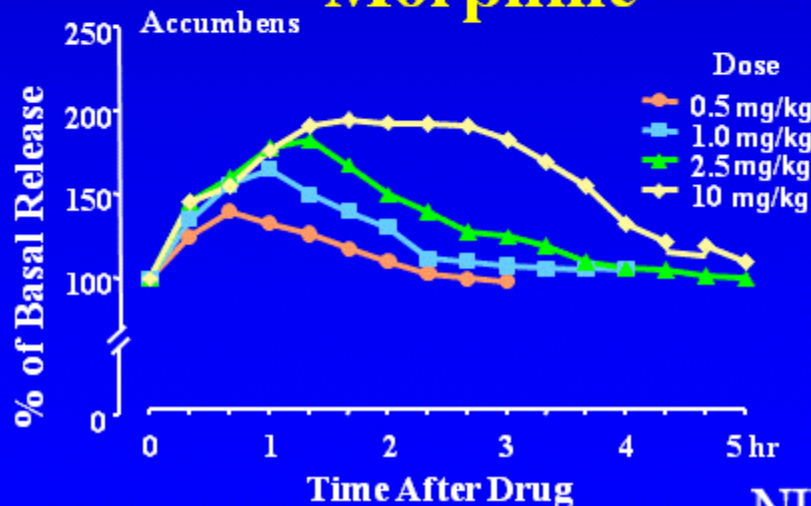
Cocaine



Nicotine



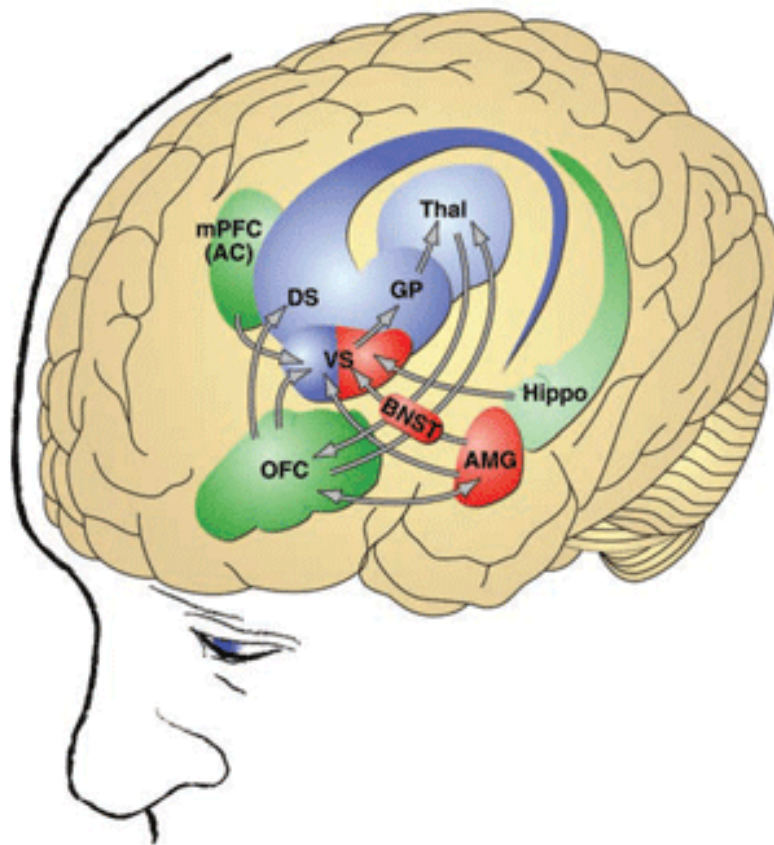
Morphine



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



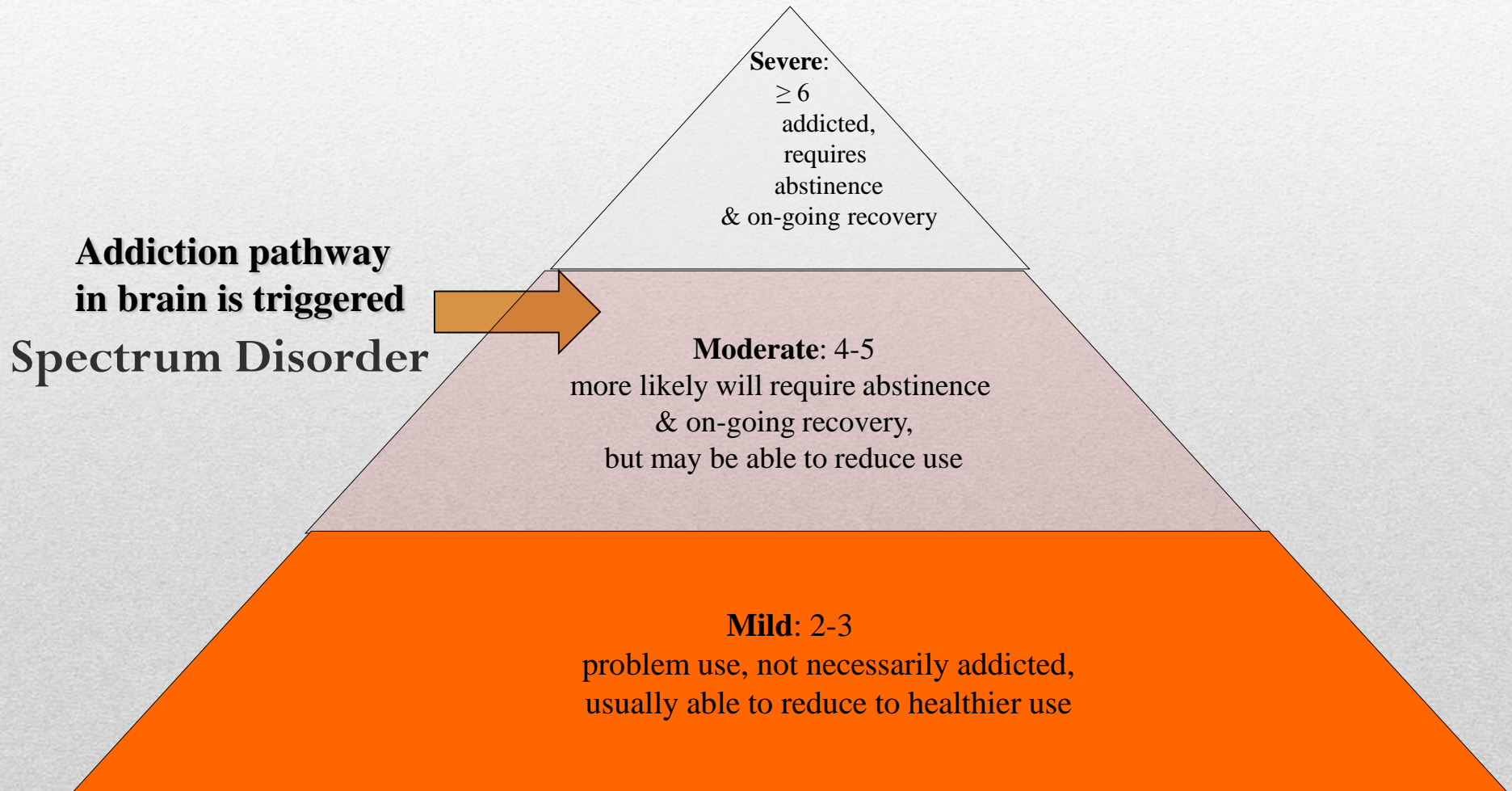
DIAGNOSTIC AND STATISTICAL
MANUAL OF
MENTAL DISORDERS
FIFTH EDITION
DSM-5

AMERICAN PSYCHIATRIC ASSOCIATION

DSM 5 CRITERIA

Alcohol Use Disorder

DSM 5: Alcohol/Drug Use Disorder



Impaired Control
(1-4)

Social
Impairment
(5-7)

Risky Use
(8-9)

Pharmacological
Criteria
(10-11)

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 alcohol
 - 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 **C**ontrol
 - **C**ompulsive use
 - **C**ontinued use despite harm
 - **C**raving
-

- 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)*

Single Question Screen
(National Institute on Alcohol Abuse and Alcoholism, Variations Exist)

Question: How many times in the past year have you had X or more drinks in a day? (X is 5 for men, 4 for women.)

Scoring: One or more is considered a positive screen for alcohol misuse.

Score	Sensitivity (95% CI)	Specificity (95% CI)	+LR	-LR
≥1	82% (73%–89%)	79% (73%–84%)	3.9	0.2

AUDIT-C

Question	Points				
	0	1	2	3	4
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2–4 times a month	2–3 times a week	4 or more times a week
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7–9	10 or more
3. How often do you have 6 or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily

Scoring: Points from the 3 questions are summed for a total 0 to 12. A positive screen for alcohol misuse is usually considered ≥4 for men and ≥3 for women but may be adjusted for increased sensitivity or specificity. If patients answer *never* for the first question, scores of 0 can be entered for questions 2 and 3.

Score	Sensitivity	Specificity	+LR (95% CI)	-LR (95% CI)
Men ≥4	0.86	0.89	7.8 (5.5–11.1)	0.16 (0.1–0.2)
Women ≥3	0.73	0.91	7.9 (6.2–10)	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.

None or not much			Better				Much better		
1	2	3	4	5	6	7	8	9	10

Remarks:

Health: Has your health improved? In what way and how much? Think about your physical and mental health: Are you eating and sleeping properly, exercising, taking care of health problems or dental problems, feeling better about yourself, etc?

None or not much			Better				Much better		
1	2	3	4	5	6	7	8	9	10

Remarks:

Lifestyle: How much better are you in taking care of personal responsibilities? Think about your living conditions, family situation, employment, relationships: Are you paying your bills? Following through with your personal or professional commitments?

None or not much			Better				Much better		
1	2	3	4	5	6	7	8	9	10

Remarks:

Community: Are you a better member of the community? Think about things like obeying laws and meeting your responsibilities to society: Do your actions have positive or negative impacts on other people?

No or not much			Better				Much better		
1	2	3	4	5	6	7	8	9	10

Remarks:

Brief Addiction Monitor

THE UNITED STATES

We account for:



OF THE GLOBAL
POPULATION

&



OF THE GLOBAL PRESCRIPTION
OPIATE CONSUMPTION

PRESCRIPTION OPIATE SUD

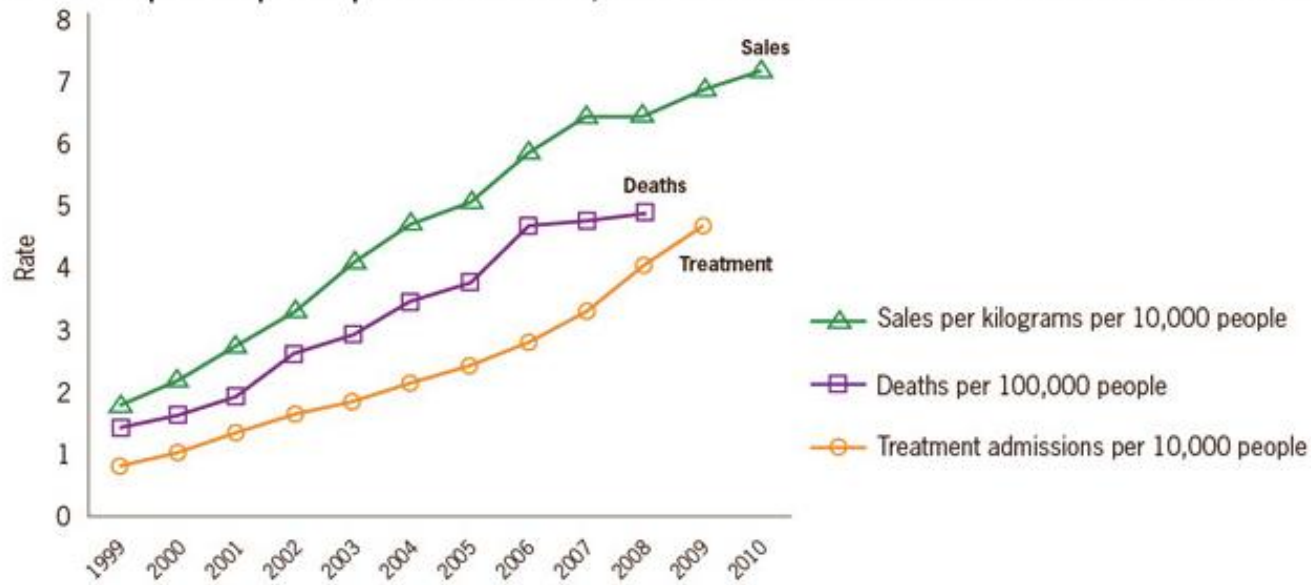
#3 most abused substance in the U.S.



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)

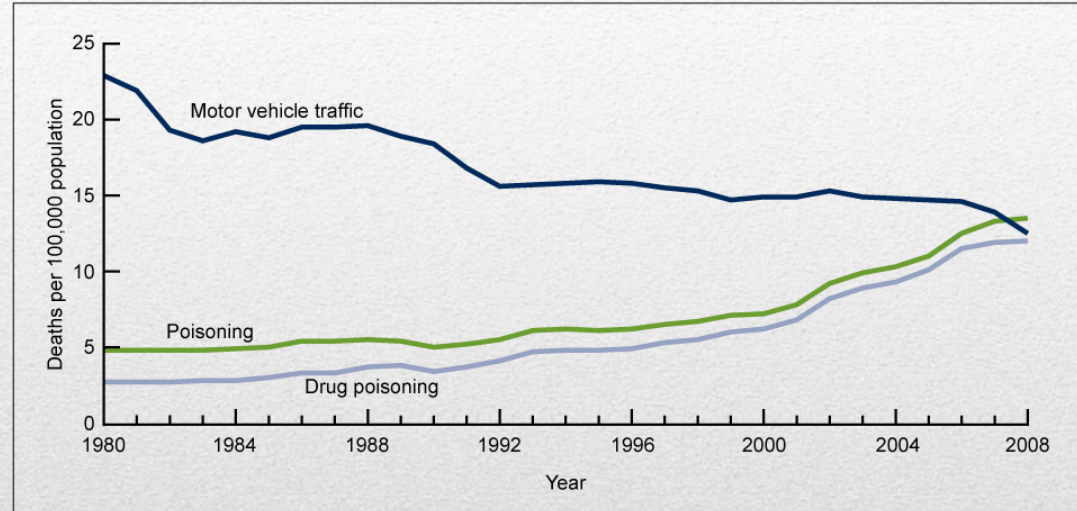


SOURCES: National Vital Statistics System, 1999-2008; Automation of Reports and Consolidated Orders System (ARCOS) of the Drug Enforcement Administration (DEA), 1999-2010; Treatment Episode Data Set, 1999-2009

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.

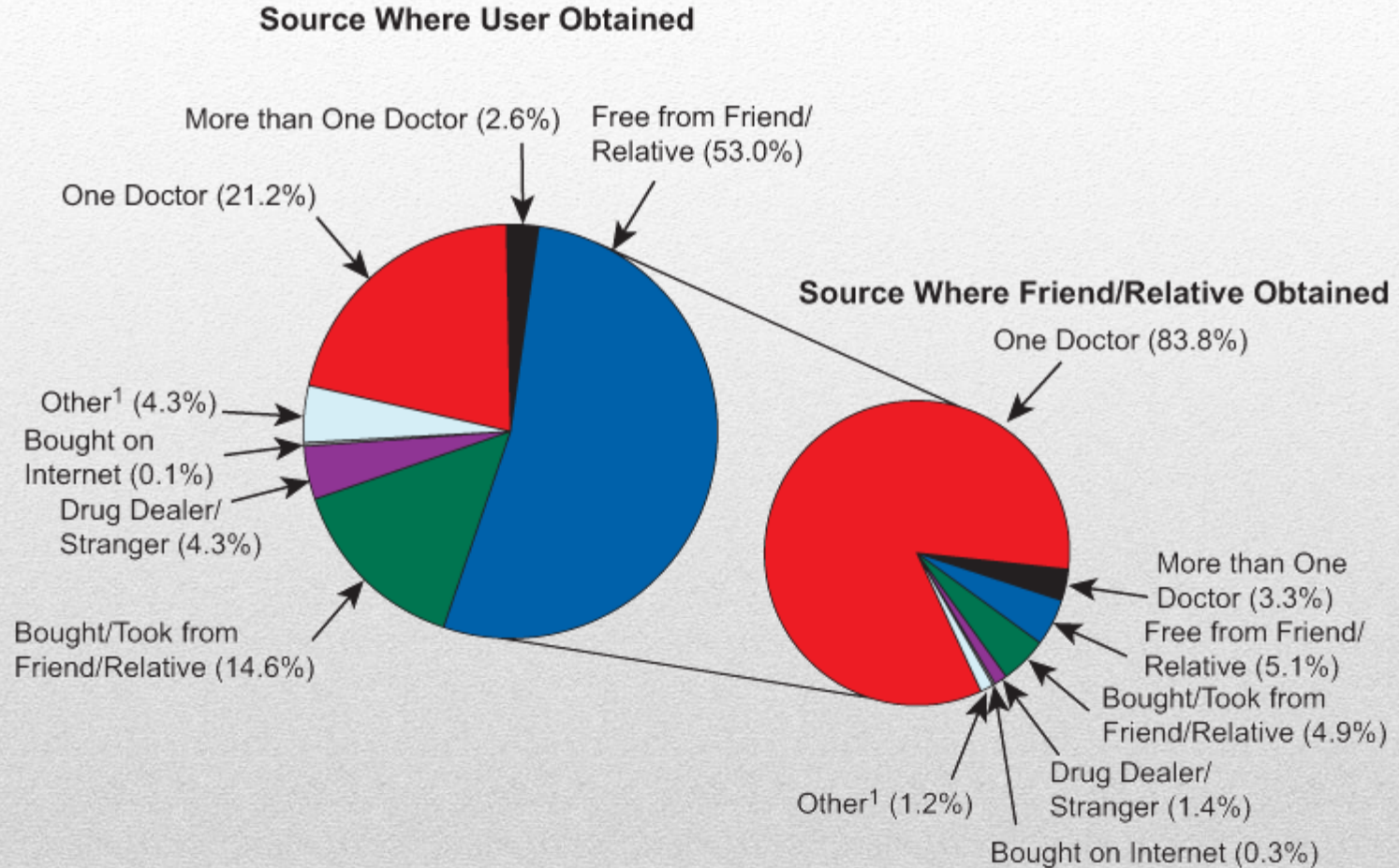
Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. (2014) Available from URL: <http://www.cdc.gov/injury/wisqars/fatal.html>.

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



She gets her hair
from her mom.

Her eyes from her dad.

And her drugs
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.

BE AWARE. DON'T SHARE.

For more information, go to www.lockyourmeds.org.



**Tell pts w/ abusable
prescription meds
to lock them up!**

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

Addiction:
Substance Use Disorder

Prescription Drug Misuse

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

Total Chronic Pain Population

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
- 2 = frequent shifting or extraneous movements of legs/arms
- 3 = frequent shifting or extraneous movements of legs/arms
- 4 = unable to sit still for more than a few seconds
- 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
- 3 = pupils moderately dilated
- 4 = pupils so dilated that only the rim of the iris is visible
- 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
- 3 = 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
- 3 = 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
- 2 = nausea or loose stool
- 3 = vomiting or diarrhea
- 4 = vomiting or diarrhea
- 5 = multiple episodes of diarrhea or vomiting

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 if male
1. Family History of Substance Abuse	<input type="checkbox"/> Alcohol <input type="checkbox"/> Illegal Drugs <input type="checkbox"/> Prescription Drugs		1 2 4	3 3 4
2. Personal History of Substance Abuse	<input type="checkbox"/> Alcohol <input type="checkbox"/> Illegal Drugs <input type="checkbox"/> 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	<input type="checkbox"/> Attention-Deficit/Hyperactivity Disorder; <input type="checkbox"/> Obsessive Compulsive Disorder; <input type="checkbox"/> Bipolar Disorder; <input type="checkbox"/> Schizophrenia <input type="checkbox"/> Depression		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

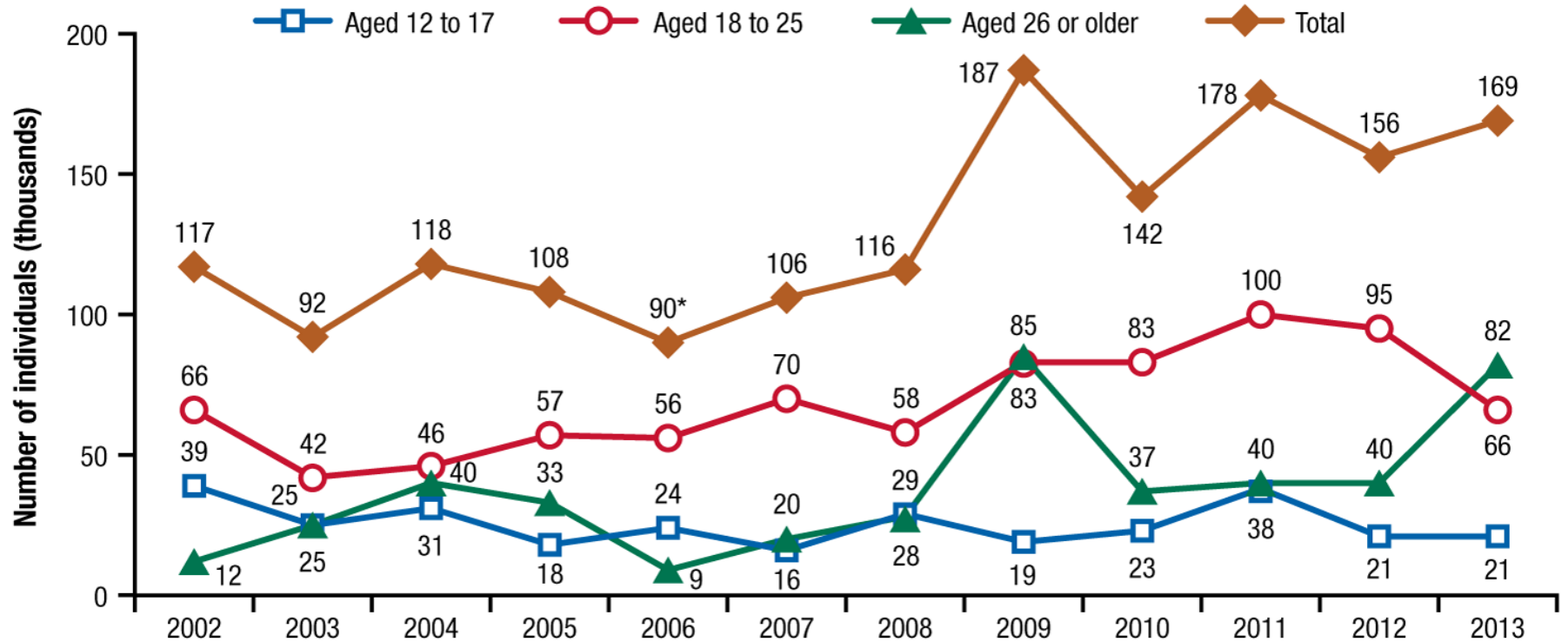
- Opiate Replacement Therapy (ORT)
 - Suboxone
 - Methadone
- Help families and pts to understand this
 - Compare to thyroid replacement therapy
- Why?
 - Likely chronic endogenous opioid deficiency
 - Need chronic opioid receptor occupation (other opiates don't do this)
 - Acute WD can be managed
 -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

Best Evidence-Based Treatment for Opioid SUD

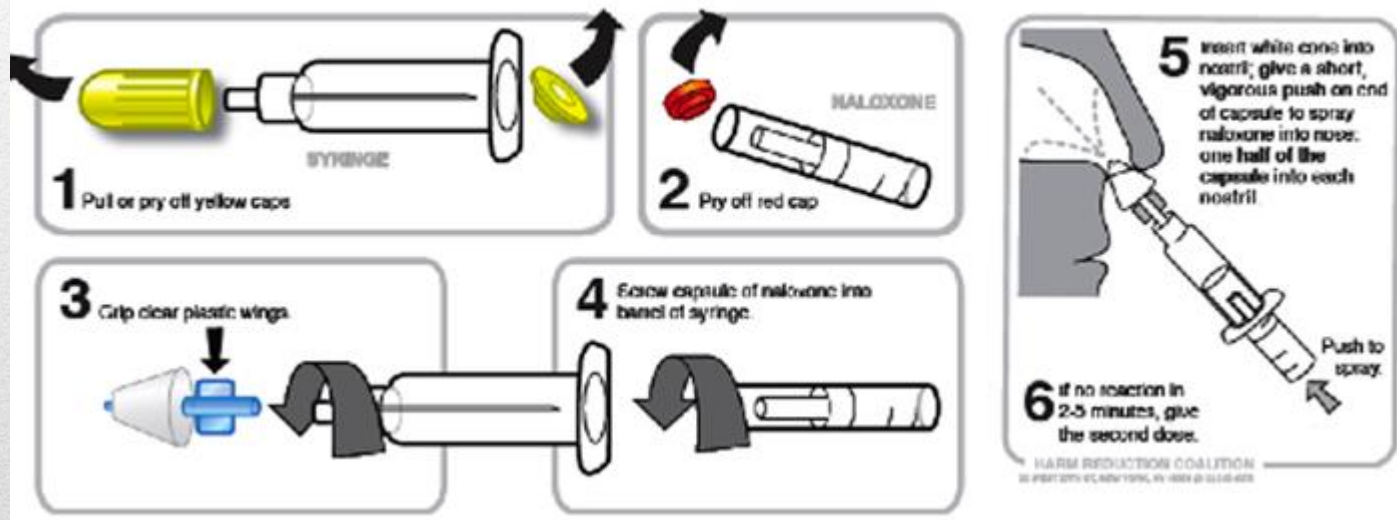
- Anxiety/Depression
- Sleep disturbances
- Fatigue
- Dysphoria/Irritability
- Decreased ability to focus on a task
- Deficits in executive control
- **Can mimic:**
 - **Mood disorder**
 - **Sleep disorder**
 - **ADHD**

Post Acute WD Syndrome (PAWS):
Opioids


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



HOW TO GIVE NASAL SPRAY NARCAN



Naloxone Saves Lives

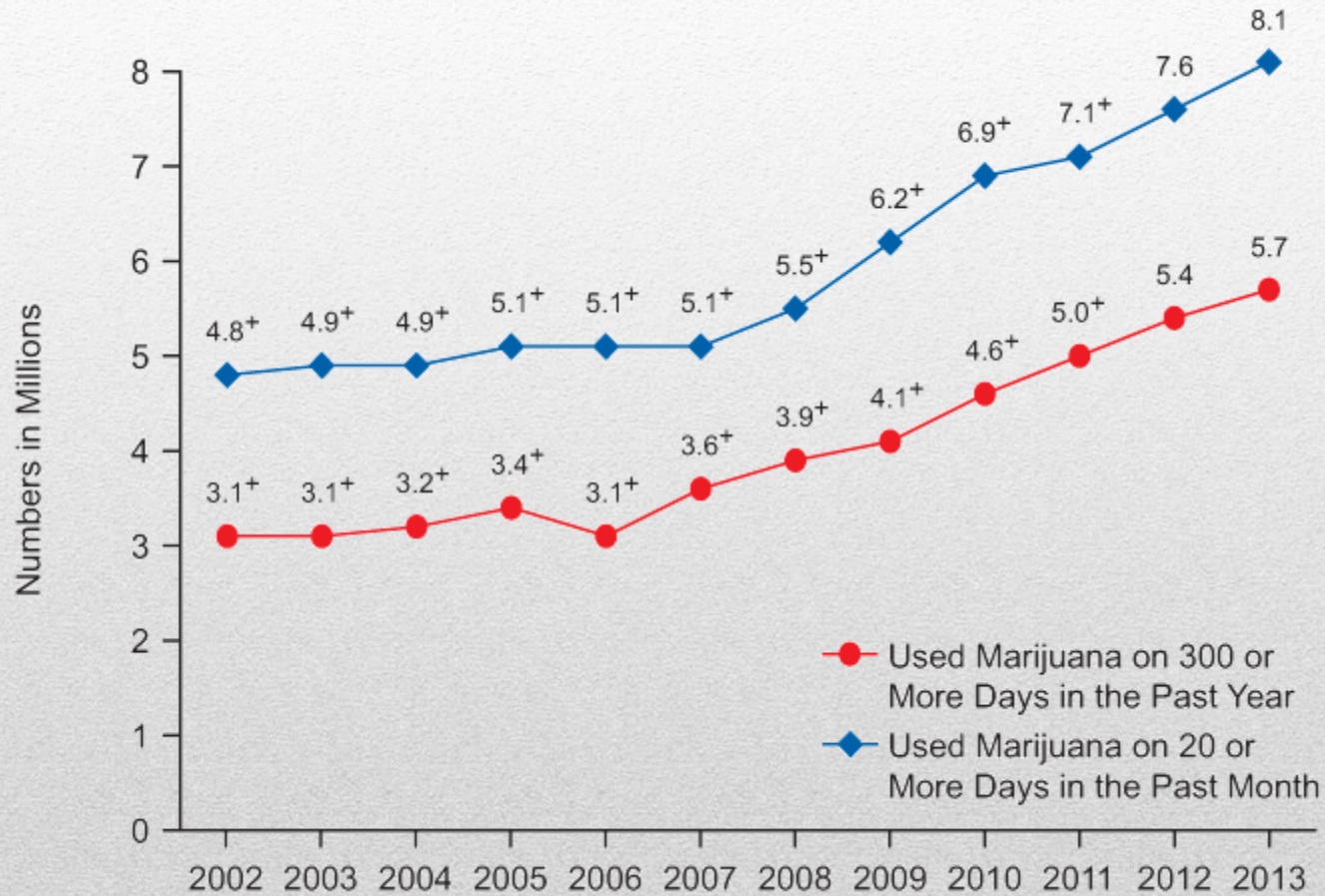


"Emerald Triangle" by O'Dea -
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Commons -
[https://commons.wikimedia.org/
wiki/](https://commons.wikimedia.org/wiki/)

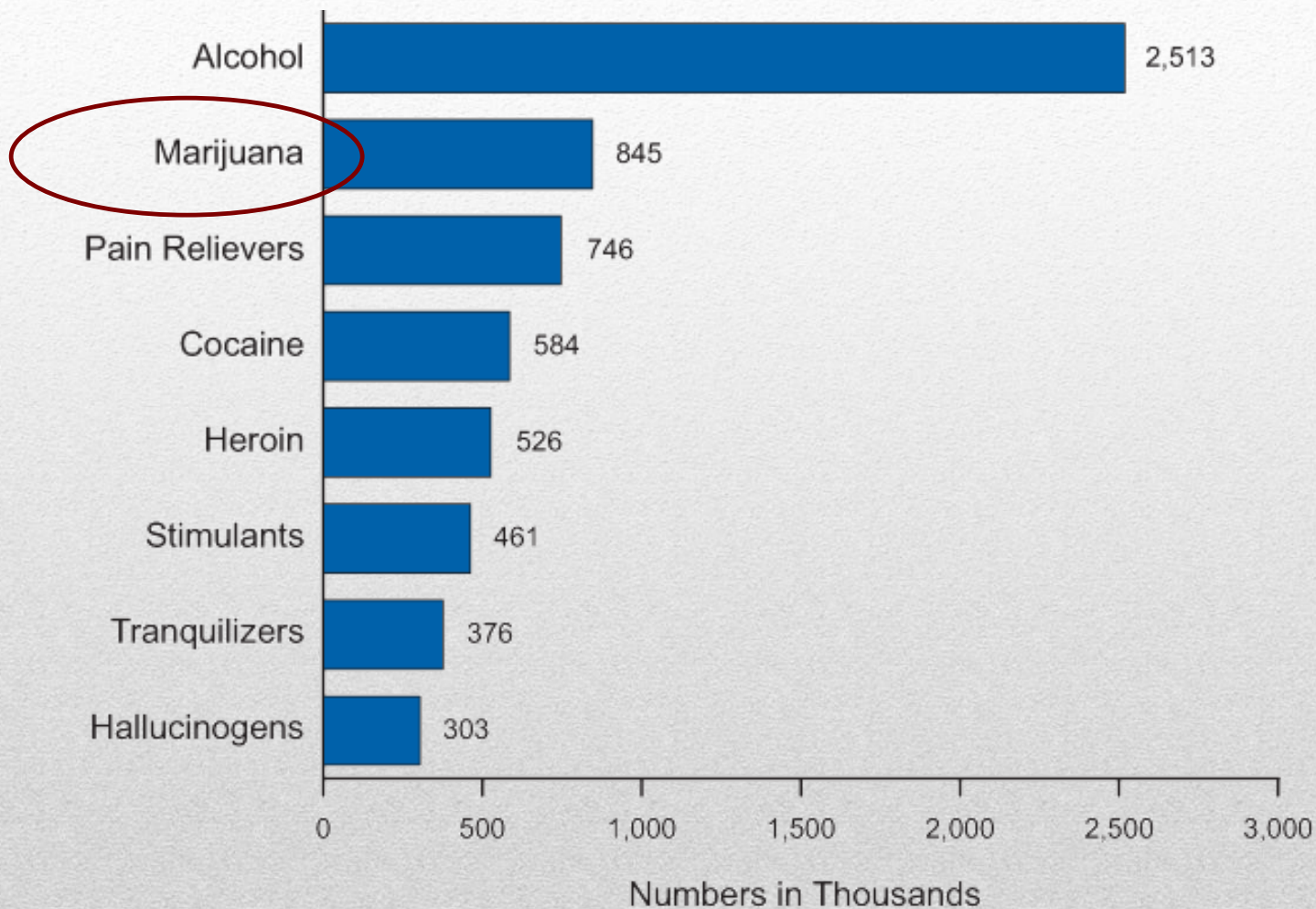
MARIJUANA

#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



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



Endocannabinoids

neuromodulators scattered throughout the brain and spinal cord

CB1: in brain & spinal cord

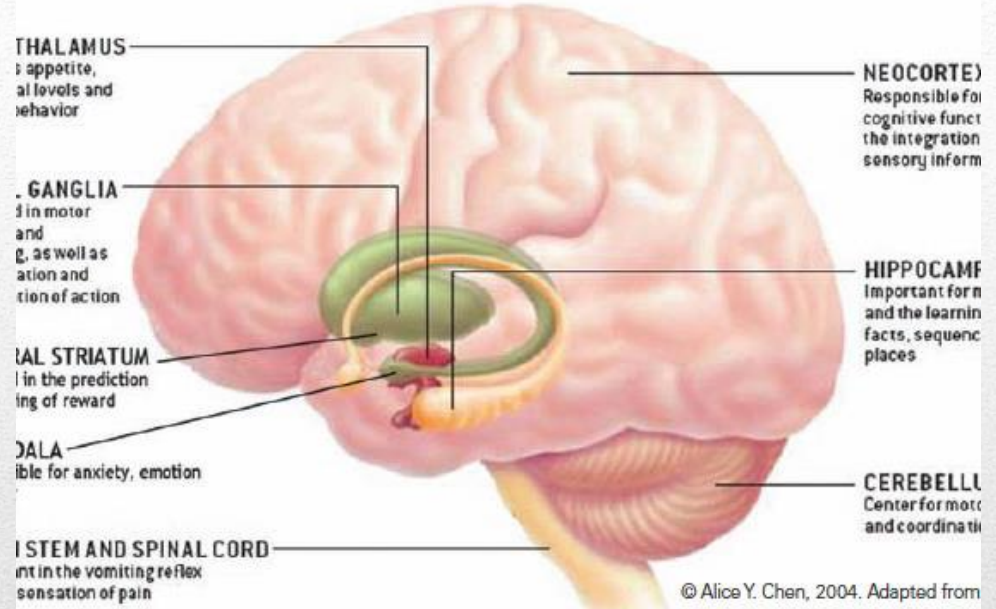
CB2: in immune system

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

Marijuana's Effects on the Brain



When marijuana is smoked, its active ingredient, THC, travels throughout the body, including the brain, to produce its effects. It attaches to sites called cannabinoid receptors on nerve cells in the brain, affecting the way those cells function. These receptors are abundant in parts of the brain that regulate movement, coordination, learning and memory, as well as emotions 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

- Dunedin prospective study: 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 ≥ 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
0 | Monthly or less
1 | 2-4 times
a month
2 | 2-3 times
a week
3 | 4 or more times
a week
4 |
| 2. | How many hours were you “stoned” on a typical day when you had been using cannabis? | Less than 1
0 | 1 or 2
1 | 3 or 4
2 | 5 or 6
3 | 7 or more
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
0 | Less than monthly
1 | Monthly
2 | Weekly
3 | Daily or
almost daily
4 |
| 4. | How often during the past 6 months did you fail to do what was normally expected from you because of using cannabis? | Never
0 | Less than monthly
1 | Monthly
2 | Weekly
3 | Daily or
almost daily
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
0 | Less than monthly
1 | Monthly
2 | Weekly
3 | Daily or
almost daily
4 |
| 6. | How often in the past 6 months have you had a problem with your memory or concentration after using cannabis? | Never
0 | Less than monthly
1 | Monthly
2 | Weekly
3 | Daily or
almost daily
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
0 | Less than monthly
1 | Monthly
2 | Weekly
3 | Daily or
almost daily
4 |
| 8. | Have you ever thought about cutting down, or stopping, your use of cannabis? | Never
0 | Yes, but not in the past 6
months
2 | | Yes, during the past
6 months
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

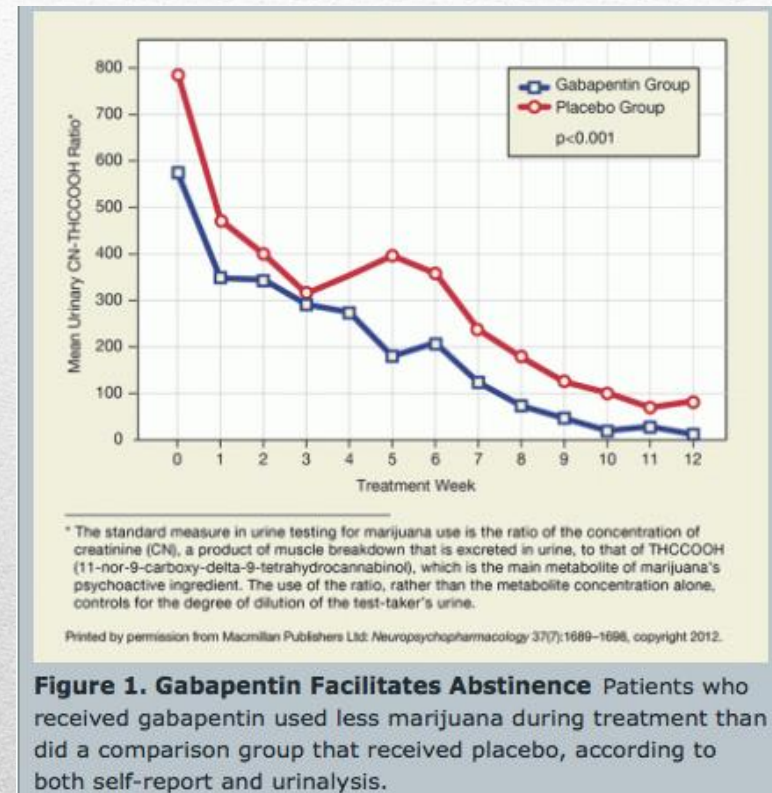
- NIDA

Marijuana Withdrawal Symptoms

Gabapentin Treatment for CUD

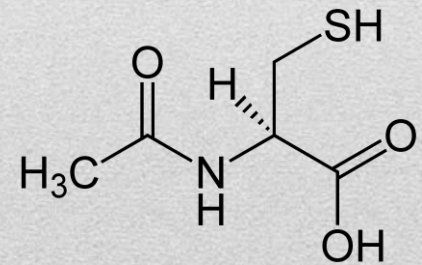
Treated with gabapentin in a pilot RCT DBP x 12 wks, tapered up to 300/300/600:

- 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



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



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 ?





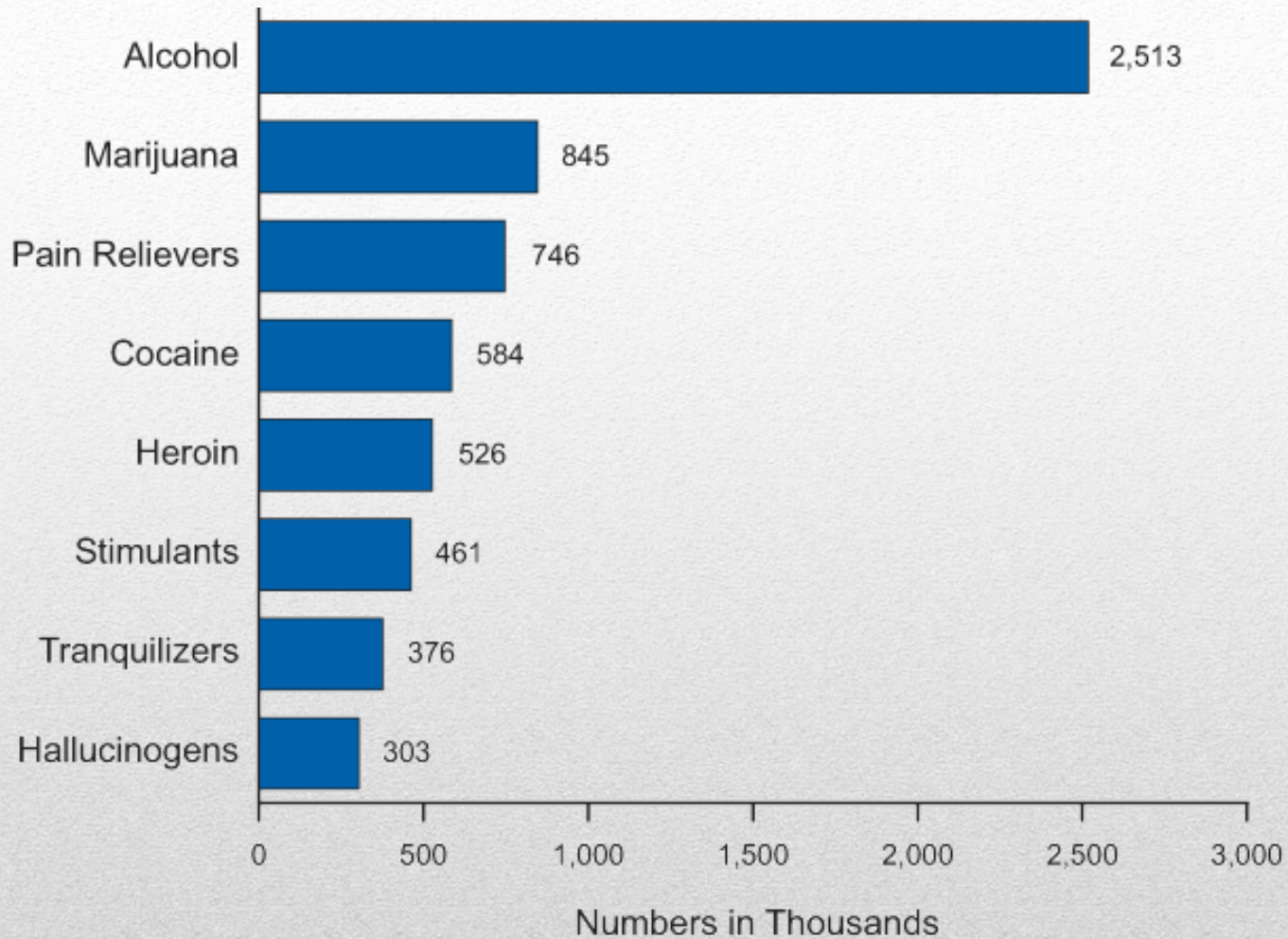
BREAK

15 minutes



ALCOHOL

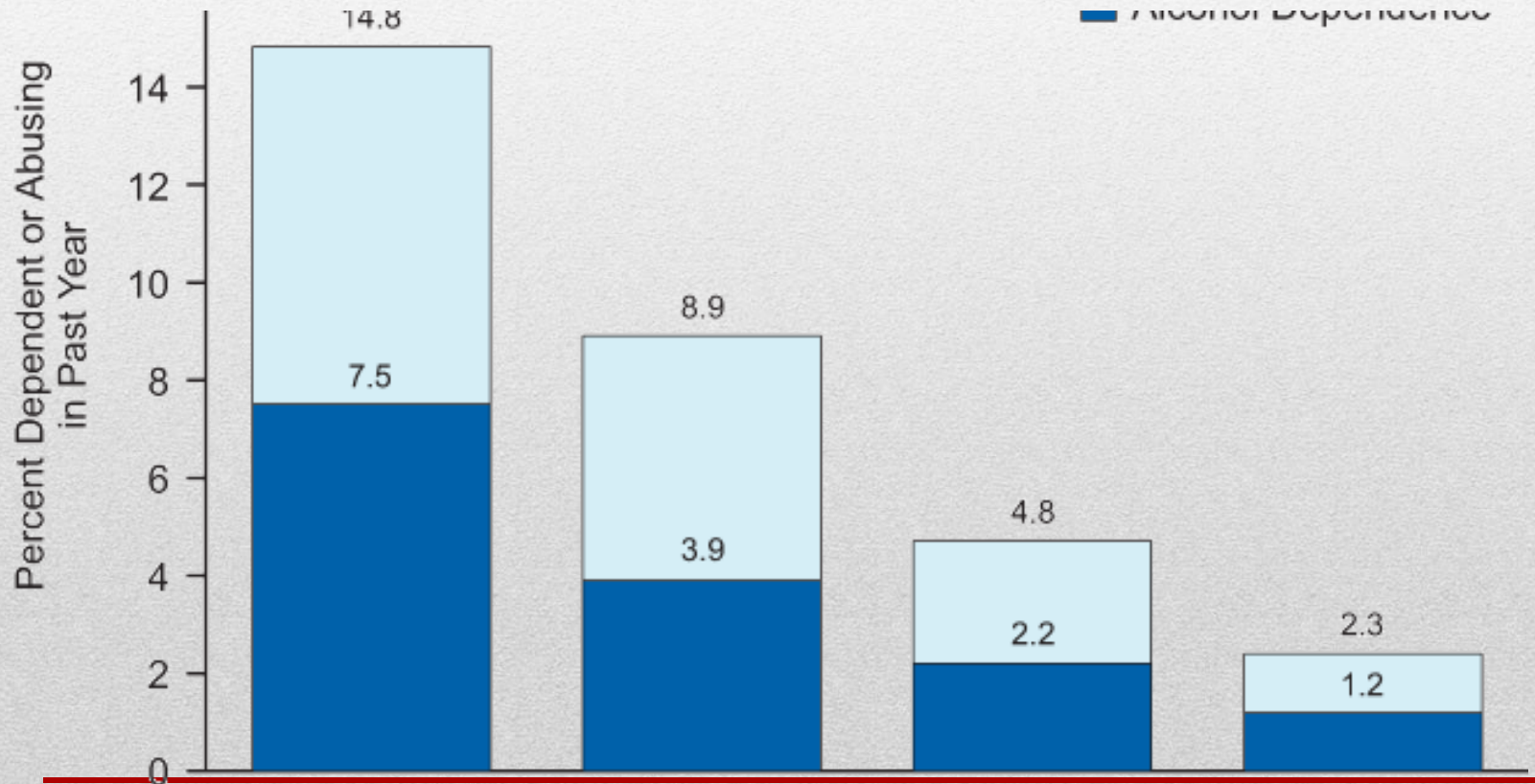
#1 most abused substance in the U.S.

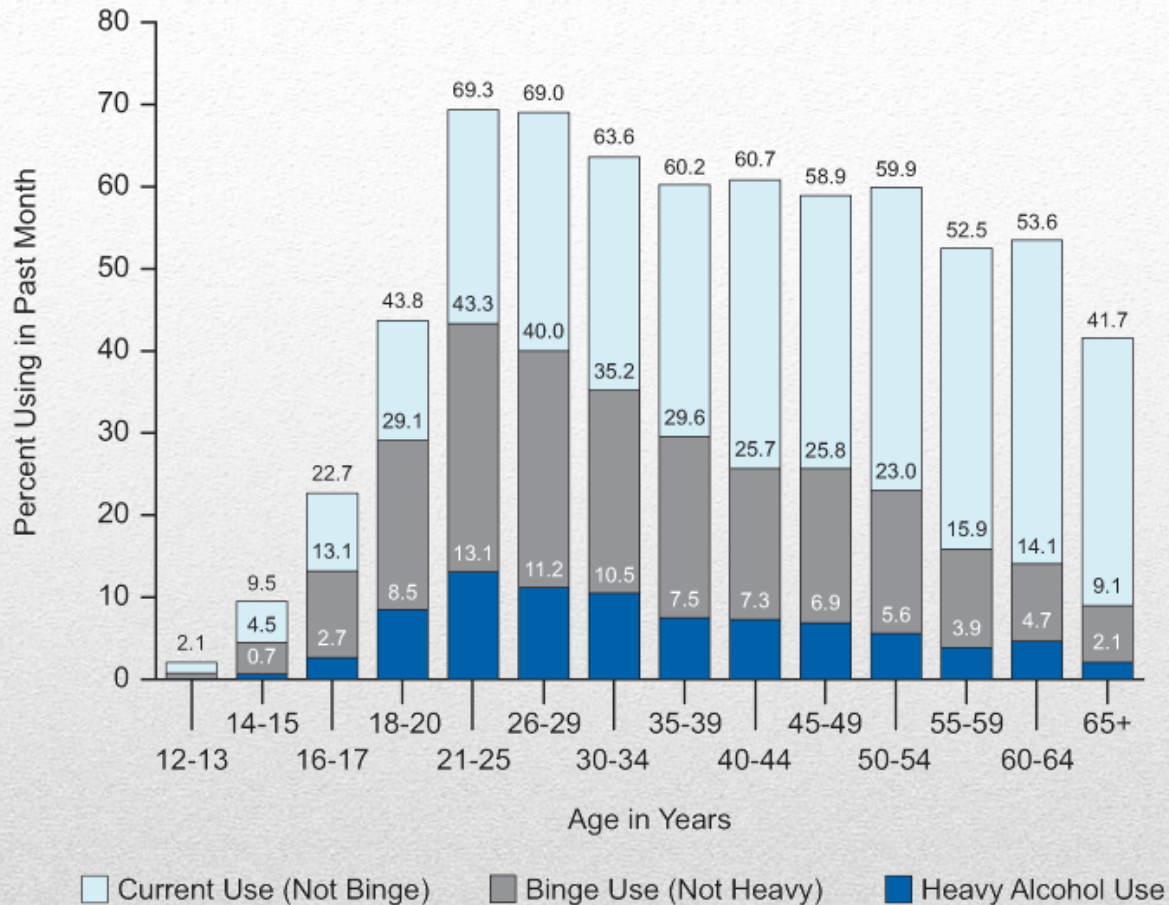


Substances for Which Most Recent Treatment Was Received in the Past Year: 2013

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
-

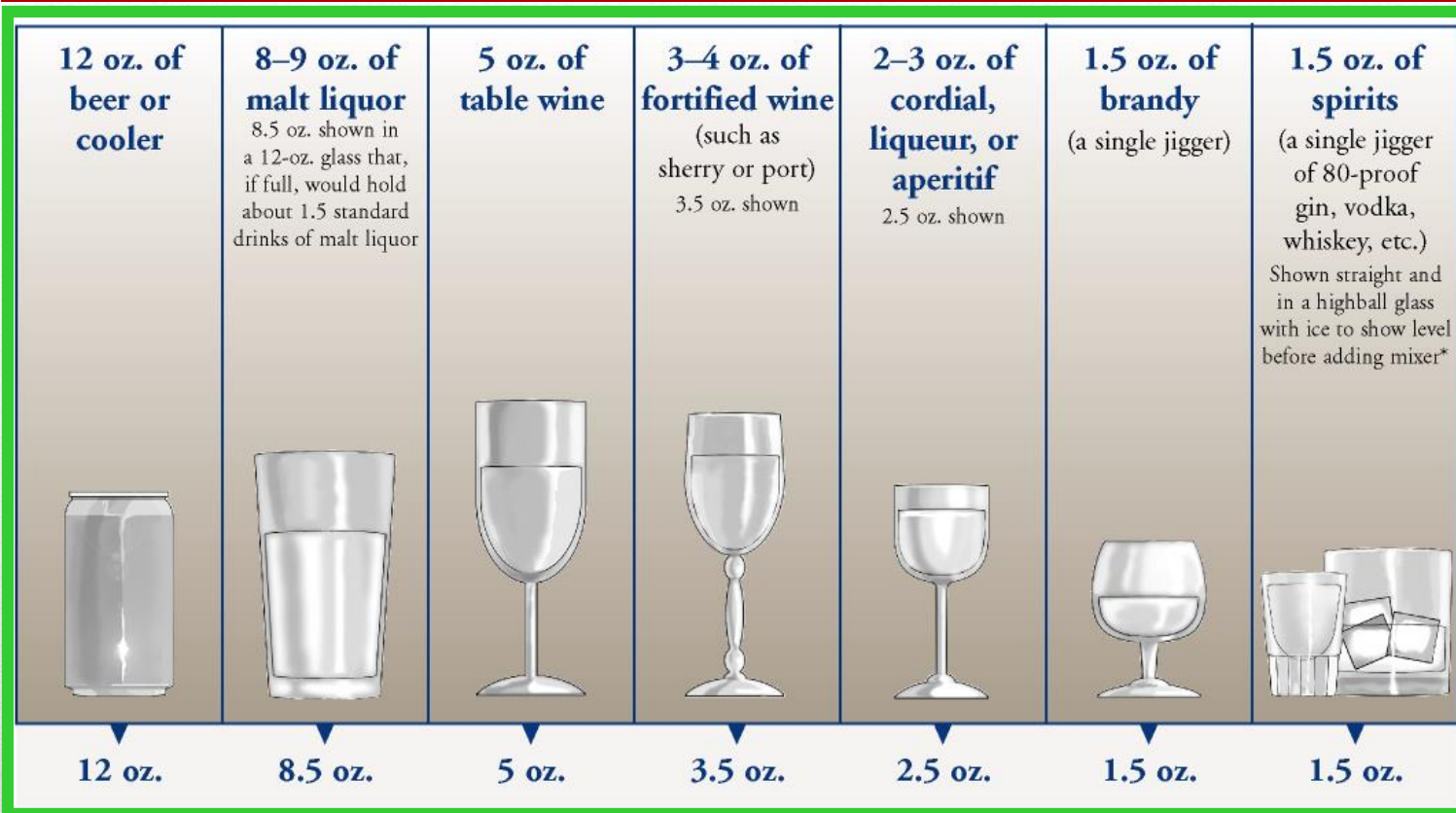


Alcohol Screening, Brief Intervention,
and Referral to Treatment

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

I KNEW I COULD
CUT DOWN TO
ONE DRINK A DAY!



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

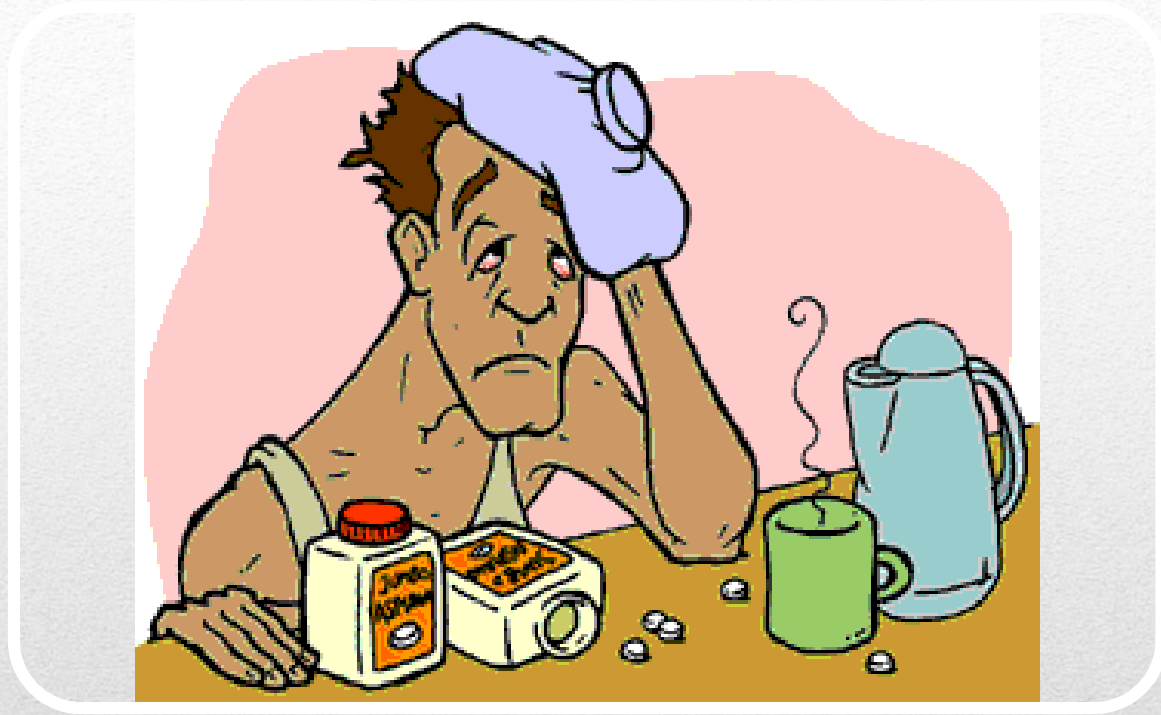
(and healthy men over age 65)—

- 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

Patient: _____ Date: _____ Time: _____

Pulse or heart rate, taken for one minute: _____ Blood pressure: ____/____

Nausea and vomiting. Ask "Do you feel sick to your stomach? Have you vomited?"

Observation:

- 0—No nausea and no vomiting
- 1—Mild nausea with no vomiting
- 2—
- 3—
- 4—Intermittent nausea with dry heaves
- 5—
- 6—
- 7—Constant nausea, frequent dry heaves, and vomiting

Tremor. Ask patient to extend arms and spread fingers apart.

Observation:

- 0—No tremor
- 1—Tremor not visible but can be felt, fingertip to fingertip
- 2—
- 3—
- 4—Moderate tremor with arms extended
- 5—
- 6—
- 7—Severe tremor, even with arms not extended

Paroxysmal sweats

Observation:

- 0—No sweat visible
- 1—Barely perceptible sweating; palms moist
- 2—
- 3—
- 4—Beads of sweat obvious on forehead
- 5—
- 6—
- 7—Drenching sweats

Anxiety. Ask "Do you feel nervous?"

Observation:

- 0—No anxiety (at ease)
- 1—Mildly anxious
- 2—
- 3—
- 4—Moderately anxious or guarded, so anxiety is inferred
- 5—
- 6—
- 7—Equivalent to acute panic states as occur in severe delirium or acute schizophrenic reactions

Agitation

Observation:

- 0—Normal activity
- 1—Somewhat more than 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

Tactile disturbances. Ask "Do you have any itching, pins-and-needles sensations, burning, or numbness, or do you feel like bugs are crawling on or under your skin?"

Observation:

- 0—None
- 1—Very mild itching, pins-and-needles sensation, burning, or numbness
- 2—Mild itching, pins-and-needles sensation, burning, or numbness
- 3—Moderate itching, pins-and-needles sensation, burning, or numbness
- 4—Moderately severe hallucinations
- 5—Severe hallucinations
- 6—Extremely severe hallucinations
- 7—Continuous hallucinations

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?"

Observation:

- 0—Not present
- 1—Very mild harshness or ability to frighten
- 2—Mild harshness or ability to frighten
- 3—Moderate harshness or ability to frighten
- 4—Moderately severe hallucinations
- 5—Severe hallucinations
- 6—Extremely severe hallucinations
- 7—Continuous hallucinations

Visual disturbances. Ask "Does the light appear to be too bright? Is its 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:

- 0—Not present
- 1—Very mild sensitivity
- 2—Mild sensitivity
- 3—Moderate sensitivity
- 4—Moderately severe hallucinations
- 5—Severe hallucinations
- 6—Extremely severe hallucinations
- 7—Continuous hallucinations

Headache, fullness in head. Ask "Does your head feel different? Does it feel like there is a band around your head?"

Do not rate for dizziness or lightheadness; otherwise, rate severity.

- 0—Not present
- 1—Very mild
- 2—Mild
- 3—Moderate
- 4—Moderately severe
- 5—Severe
- 6—Very severe
- 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

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

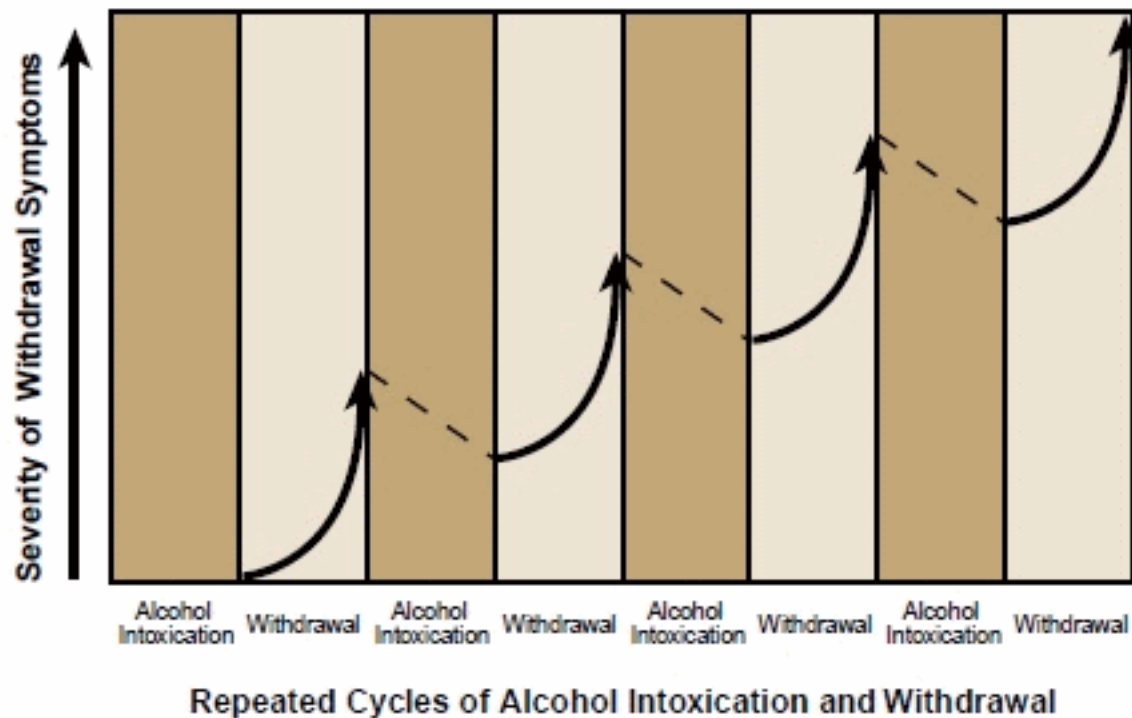


Figure 1 Graphic representation of the kindling concept during alcohol withdrawal. The term "kindling" refers to the phenomenon that people undergoing repeated cycles of intoxication followed by abstinence and withdrawal will experience increasingly severe withdrawal symptoms with each successive cycle.

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. Post-treatment, gabapentin-treated had less probability of drinking during the follow-up 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

Naltrexone

- 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 + >2oz 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 dbprc study, may get away with 75 mg qhs (taper up slowly)
 - Topiramate for treating alcohol dependence. *JAMA*; 2007;298(14):1641–1651.
 - 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)

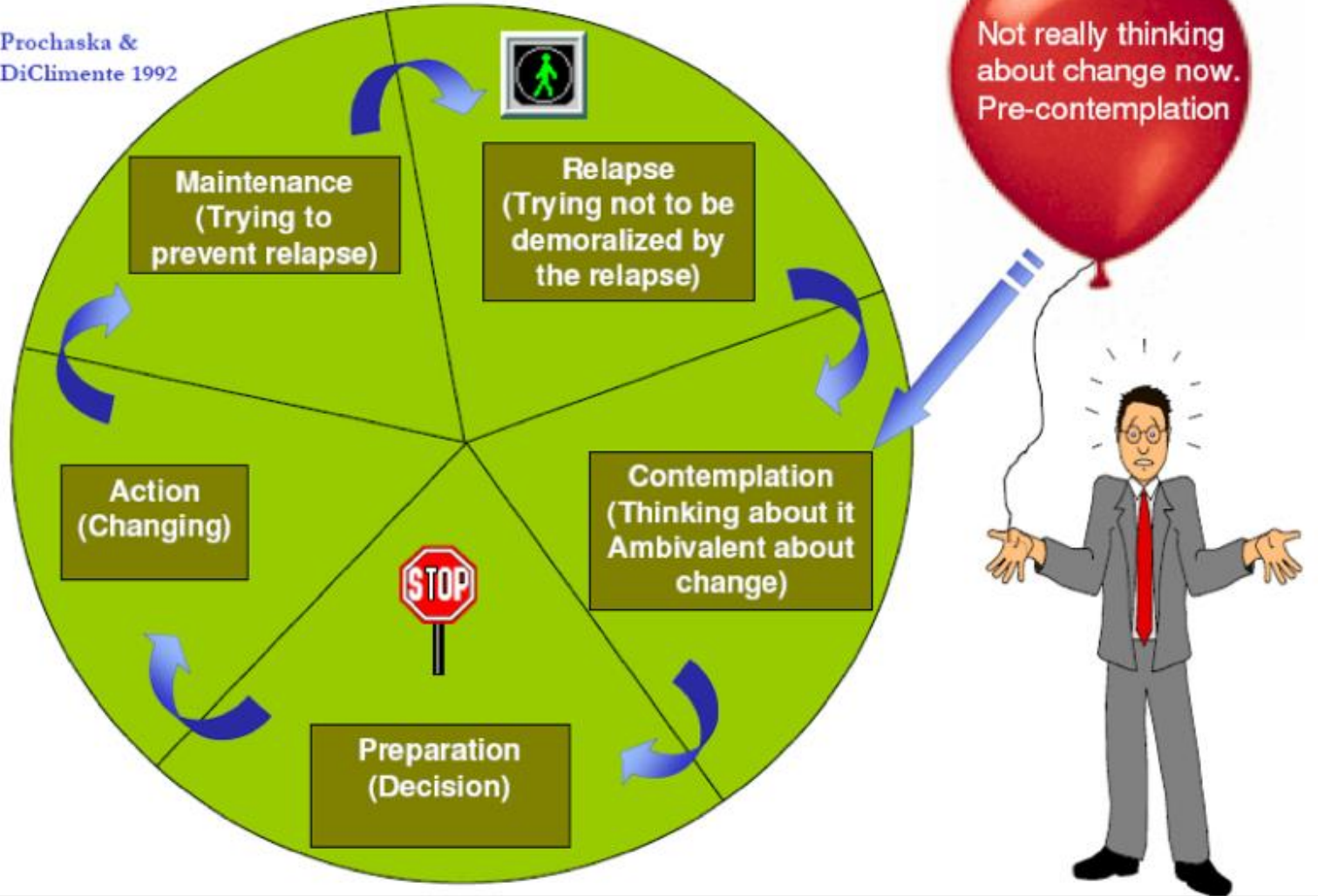


Counseling Approaches

Assess Stage Of Change

“Where are you at with your drinking?”

Prochaska &
DiClemente 1992

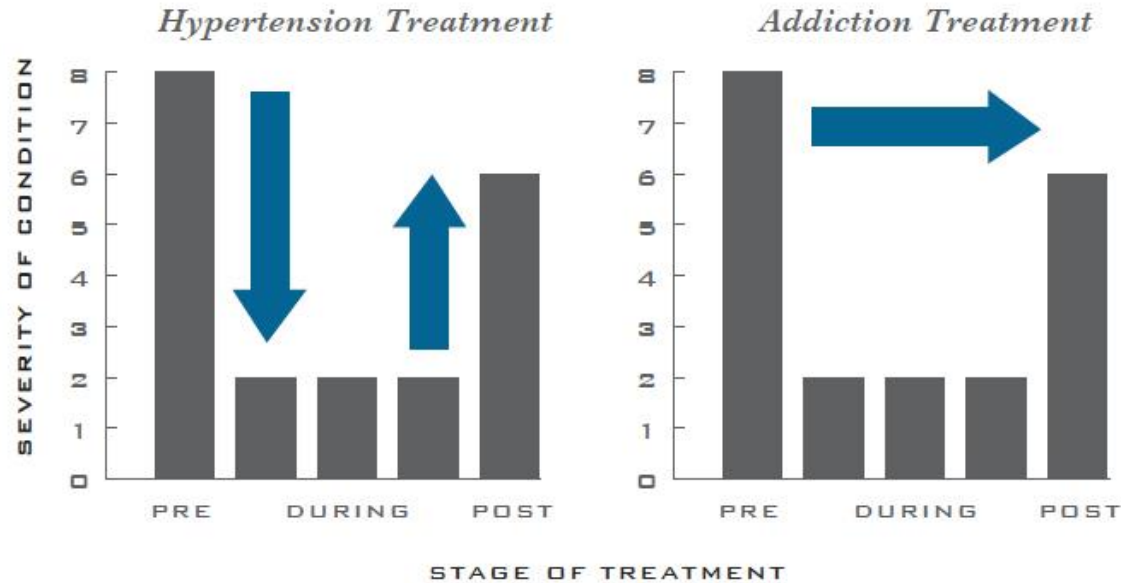


WHY IS ADDICTION TREATMENT EVALUATED DIFFERENTLY?

BOTH REQUIRE ONGOING CARE

YES!!!

NO???



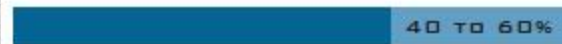
NIDA: Principles of Drug Addiction Treatment:
A Research-Based Guide (Third Edition)

Percentage of Patients Who Relapse

TYPE I DIABETES



DRUG ADDICTION



HYPERTENSION



ASTHMA



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, stimulants, opiates
- Family Behavioral Therapy
- 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.

Evidence Based Treatments

NIDA

- 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 twice as high among those who attend AA (criteria 1, 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

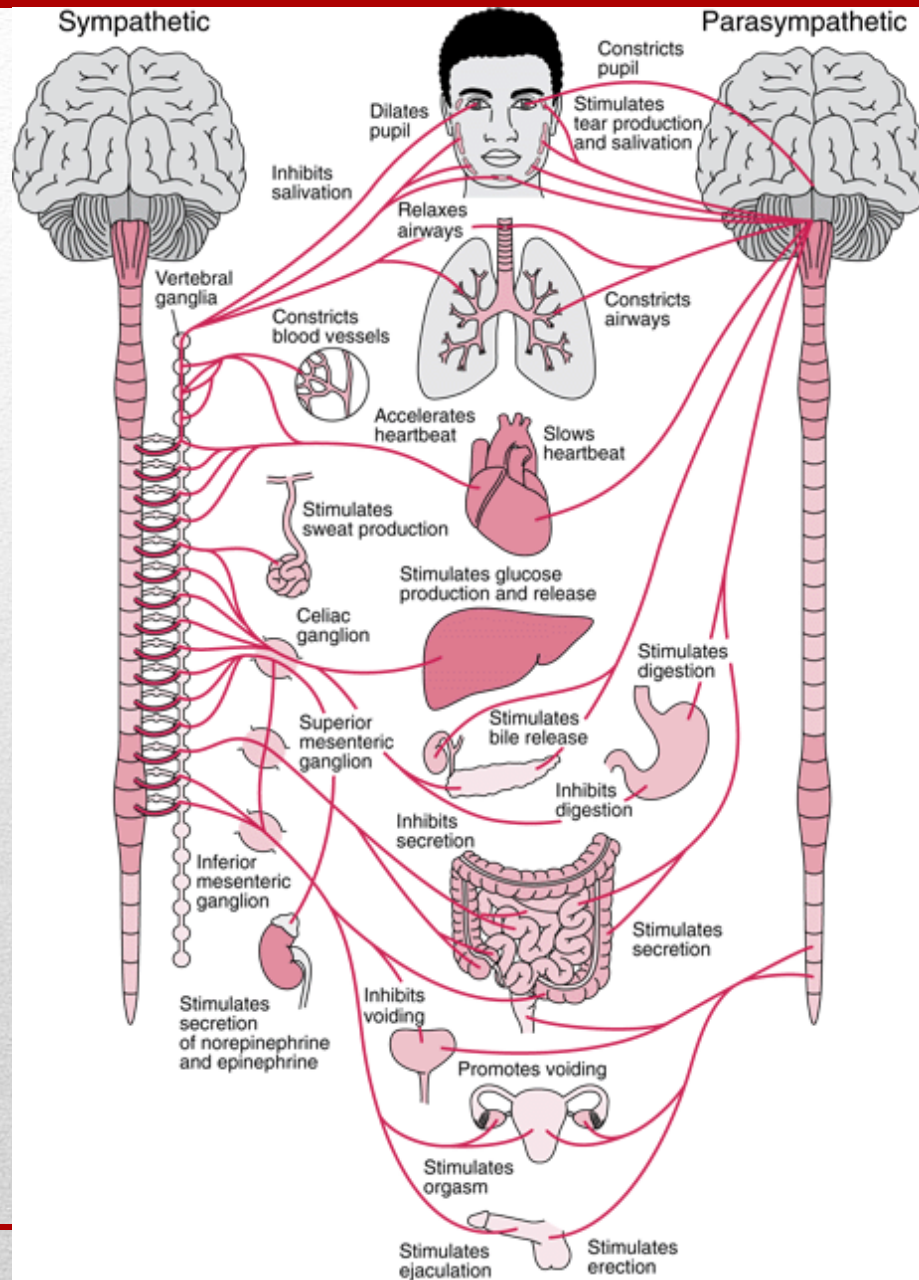


- What are your concerns?
 - Can someone go with you to a first meeting?
 - You don't have to talk. Just watch.
 - Try a few meetings to find one where you feel socially comfortable
 - Home meeting
 - Action plan to commit to go to one meeting
 - Keep eye out for a “temporary” sponsor
 - Look at it like 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 hygiene
 - Nutrition and supplements
 - B complex & thiamine
 - Vitamin D
 - Fish Oil: 2000 mg EPA
 - Magnesium
 - MVI
 - NAC
-



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

PARTNERSHIP



of CALIFORNIA

Lunch

12:00-12:45pm



Break Out- Suboxone Induction

Candy Stockton, MD
Shingleton Medical Center

Willard Hunter, MD
Open Door Community Health Center



Buprenorphine MAT

R. Corey Waller MD, MS, FACEP, FASAM
President, Michigan Society of Addiction Medicine
Director, Center for Integrative Medicine
Medical Staff Chief, Division of Pain Management

Objectives

- How to Choose the right patients
- Special needs for pregnant patients
- Workflow
- Documentation
- Long Term Planning
- Regulatory Requirements

Who is appropriate for buprenorphine?

Positive DSM 5 with a score of 2 or greater

Positive DAST (6 or greater)for opioids

Per the SAMHSA guidelines, a patient should have a 1 year history of opioid use disorder prior to use of methadone. (however, many caveats)

No guidance on Buprenorphine

Before the first dose

Informed consent should be obtained

Physical exam

Toxicological evaluation

Dose Equivalents

Buprenorphine/naloxone

Suboxone (SL-film)	Zubsolv (ODT)	Bunavail (B-Film)
2 mg / 0.5 mg	1.4 mg / 0.36 mg	---
4 mg / 1 mg	2.9 mg / 0.71 mg	2.1 mg / 0.3 mg
8 mg / 2 mg	5.7 mg / 1.4 mg	4.2 mg / 0.7 mg
12 mg / 3 mg	8.6 mg / 2.1 mg	6.3 mg / 1 mg
----	11.4 mg / 2.9 mg	----

First dose when flipping from full agonist opioids

In general the patient should either be completely negative for opioids in the urine or in mild to moderate withdrawal based on the clinical opioid withdrawal scale (COWS)

Patients who are negative for opioids can be given up to 8 mg

Patients who are positive for opioids, but in moderate withdrawal should receive 2-4 mg.

If the withdrawal worsens then can give up to 24 mg to abate withdrawal

Partial agonist/agonist-antagonist

Nubaine:

- Nalbuphine belongs to the agonist-antagonist group. This exerts its analgesic actions by agonistic activity at opioid kappa (“κ”) receptors. It possess opioid mu (“μ”) receptor antagonistic activity leading to less abuse potential (and unwanted withdrawal).

Stadol:

- Butorphanol exhibits partial agonist and antagonist activity at the μ opioid receptor, as well as competitive antagonist activity and partial agonist activity at the κ opioid receptor.

Buprenorphine:

- Buprenorphine is considered a partial μ-opioid agonist displaying high affinity for and slow dissociation from the μ-opioid receptor.

Antagonist

Narcan:

Nalaxone

Vivitrol:

Naltrexone

Typical opioid “flip”

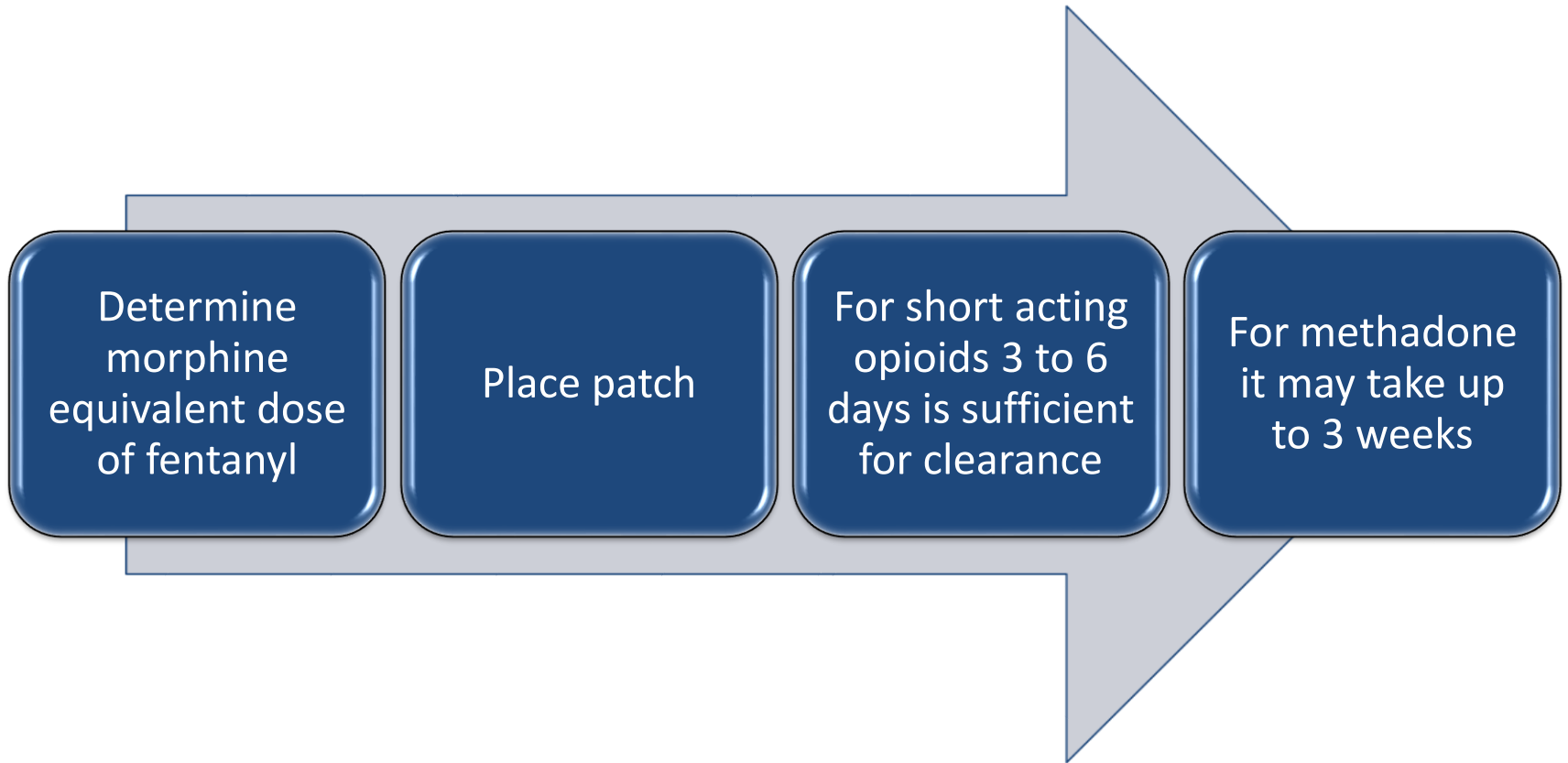


Other types of induction

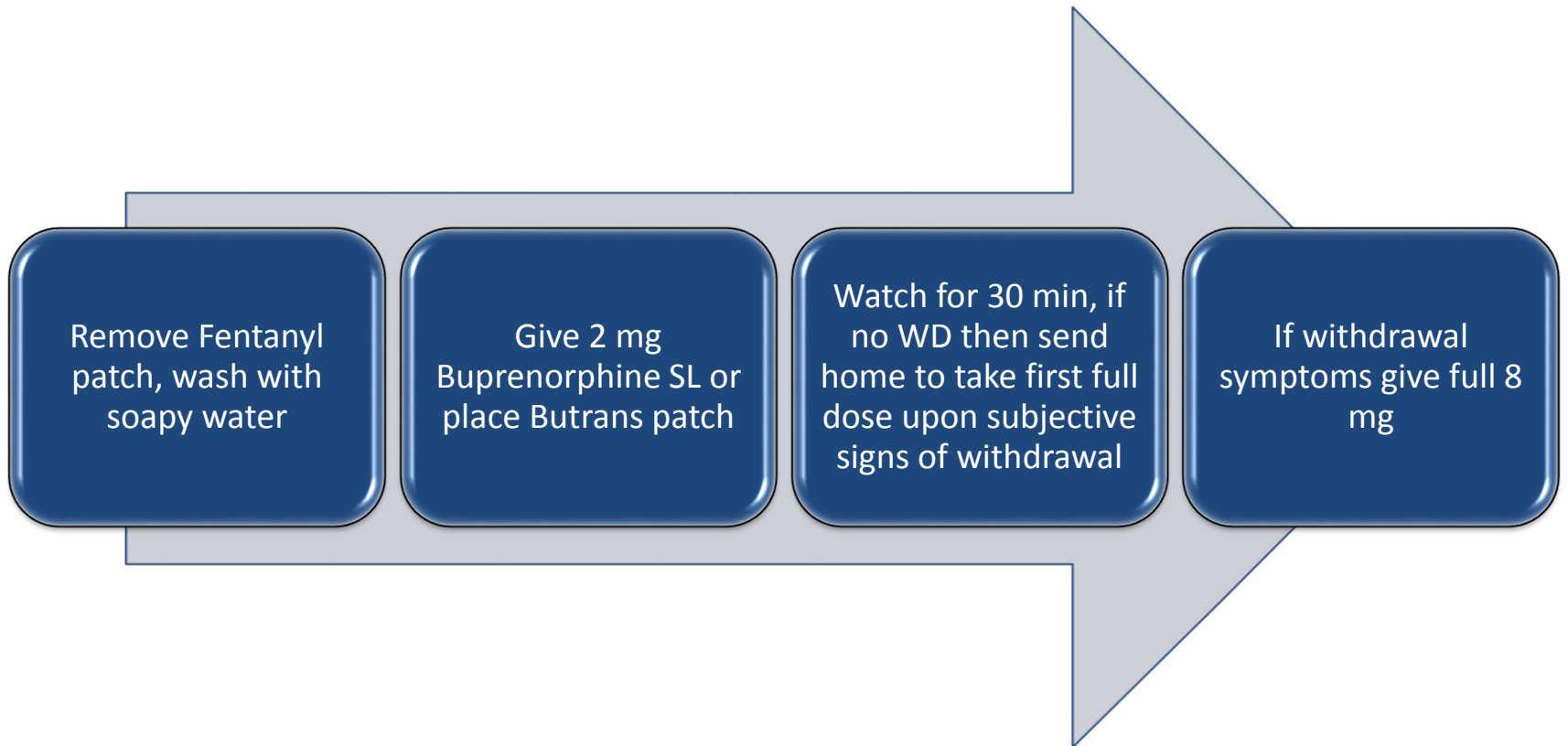
Butrans- Place transdermal buprenorphine patch on skin. It takes 36 hours to peak. After 36-48 hours remove the patch and give 1st SL buprenorphine dose of 4-8 mg

Fentanyl Bridge- For patients on opioids place morphine equivalent patch on skin. Have patient return in 72 hours. Give 2 mg of buprenorphine, remove the patch and have patient take next SL dose of Bup when they start to experience withdrawal

Fentanyl Bridge



Induction



Fentanyl Bridge Data

Of the 54 inductions attempted for short acting opioids all completed, however patients with greater than 90 mg of methadone have had mixed results

We now use it as a “standard” option along with Butrans

Works great for patients in the hospital

- Can discharge on fentanyl and start Buprenorphine on first out patient visit

We now use it for pregnant patients as well

Risks

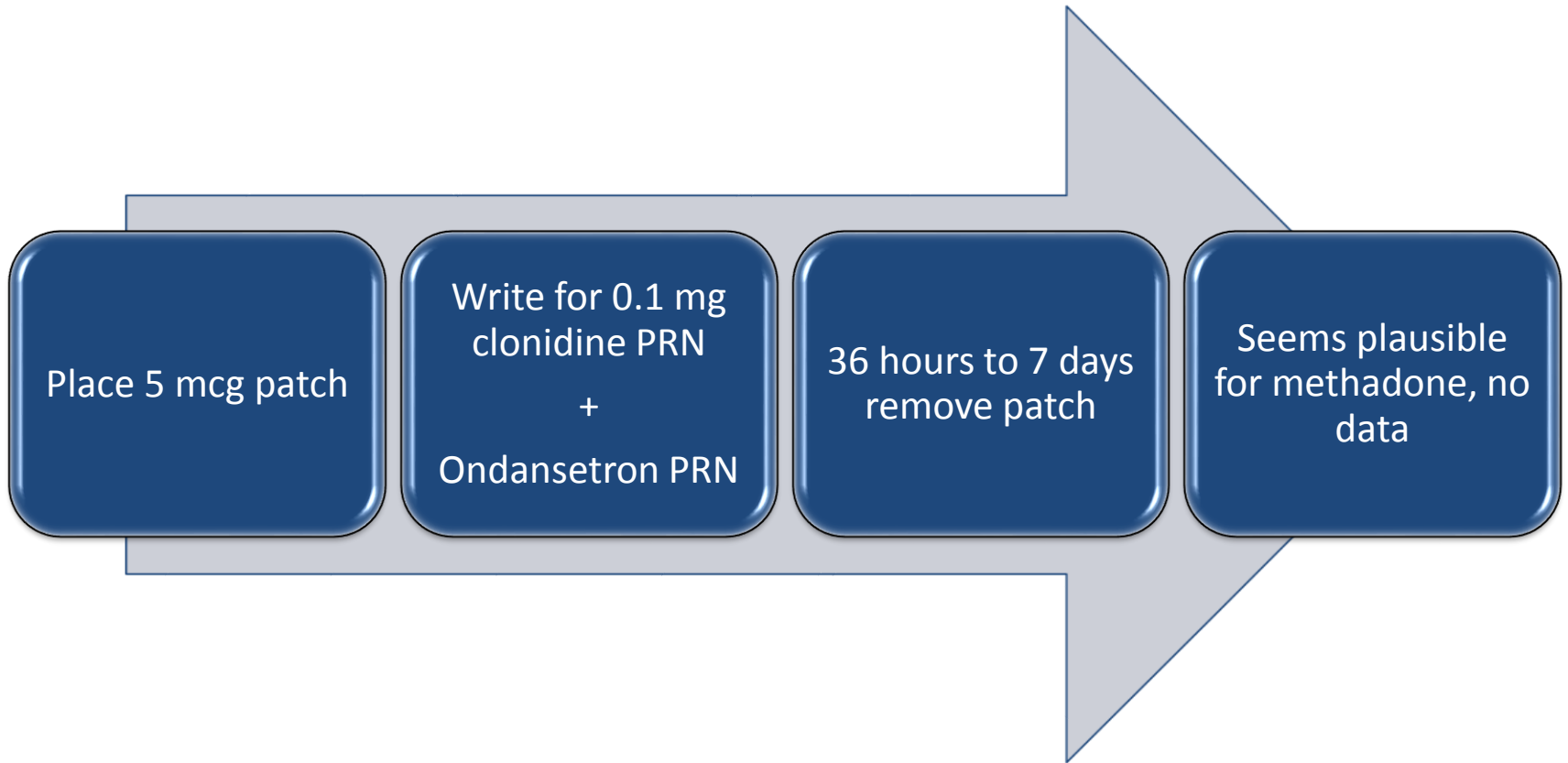
Not considered
standard of care

- Patients should be apprized of the risks, benefits and alternatives
- Close monitoring is required

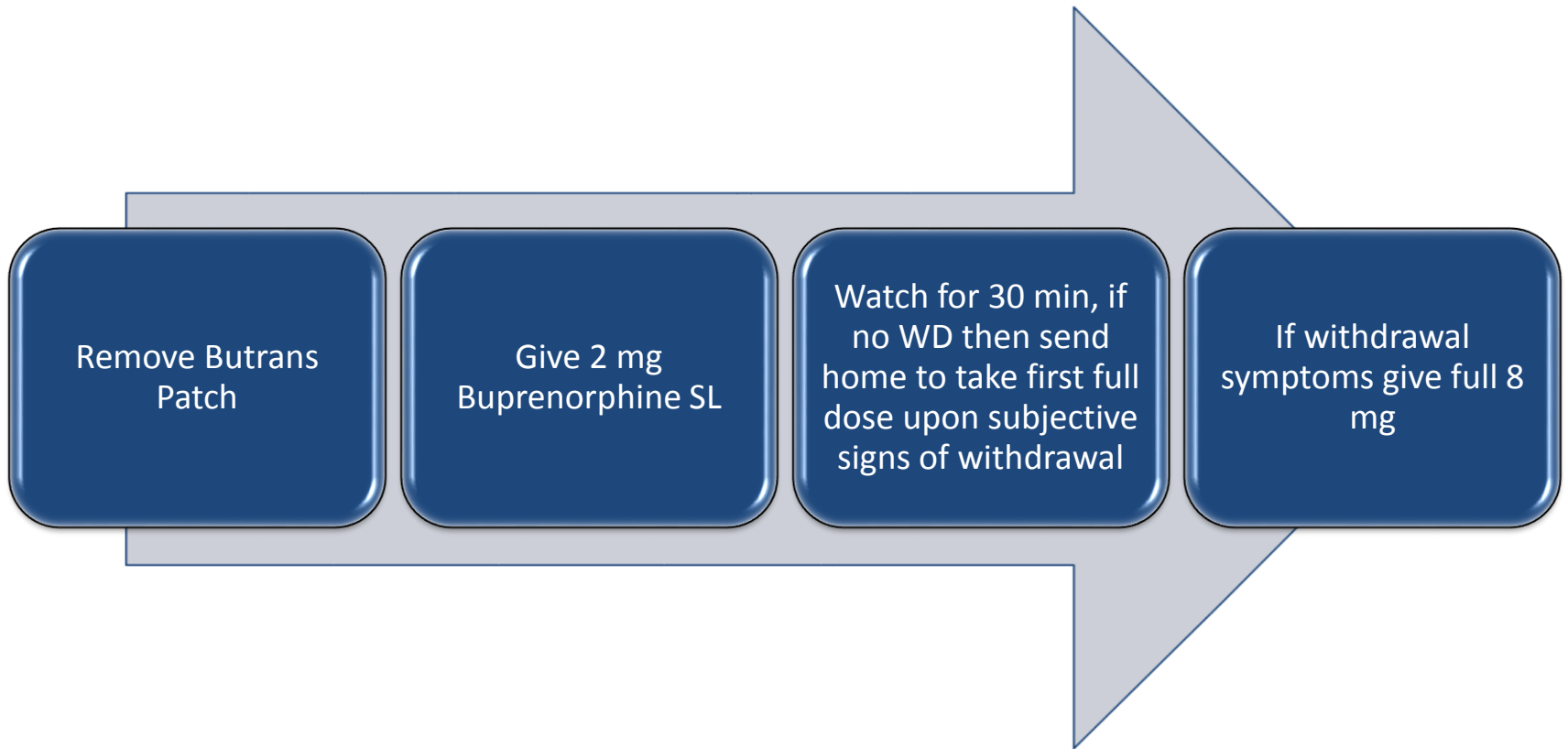
Fentanyl has
abuse potential

- If patients previous drug of choice then not a great med
- If patient is an injector then use Mylan brand patch
- If patient is an oral abuser then the liquid brands are preferred
- Write for 1-2 patches at a time

Butrans Bridge



Induction



Data

Kornfeld et al, Transdermal Buprenorphine, Opioid Rotation to Sublingual Buprenorphine, and Avoidance of Precipitated Withdrawal: A Review of the Literature and Demonstration in Three Chronic Pain Patients Treated with Butrans

We have used on 16 patients with same positive results.

We now use it for pregnant patients as well

Pregnant Patients

Main risk is unabated withdrawal leading to preterm labor and/or precipitous delivery

Higher in 1st and 3rd trimester

Probably overstated risk if monitored appropriately.

Same pre-eval requirements as non-pregnant patients

Pregnant Patients

For first few, OK to do in OB triage or in collaboration with OB and/or fetal monitoring.

My first 5 were inpatient and no anomalies were found to justify the need for inpatient monitoring

Induction should always be done in person and watched for 1 hour after 1st dose

MOTHER Study

Addiction. 2012 Nov;107 Suppl 1:28-35. doi: 10.1111/j.1360-0443.2012.04036.x.

- Maternal Opioid Treatment: Human Experimental Research (MOTHER)--approach, issues and lessons learned.
- Jones HE1, Fischer G, Heil SH, Kaltenbach K, Martin PR, Coyle MG, Selby P, Stine SM, O'Grady KE, Arria AM.

The Maternal Opioid Treatment: Human Experimental Research (MOTHER) project, an eight-site randomized, double-blind, double-dummy, flexible-dosing, parallel-group clinical trial is described. This study is the most current--and single most comprehensive--research effort to investigate the safety and efficacy of maternal and prenatal exposure to methadone and buprenorphine.

At least seven important lessons have been learned from the MOTHER study: (i) an interdisciplinary focus improves the design and methods of a randomized clinical trial; (ii) multiple sites in a clinical trial present continuing challenges to the investigative team due to variations in recruitment, patient populations and hospital practices that, in turn, differentially impact recruitment rates, treatment compliance and attrition; (iii) study design and protocols must be flexible in order to meet the unforeseen demands of both research and clinical management; (iv) staff turnover needs to be addressed with a proactive focus on both hiring and training; (v) the implementation of a protocol for the treatment of a particular disorder may identify important ancillary clinical issues worthy of investigation; (vi) timely tracking of data in a multi-site trial is both demanding and unforgiving; and (vii) complex multi-site trials pose unanticipated challenges that complicate the choice of statistical methods, thereby placing added demands on investigators to effectively communicate their results

Birth Plan

Patient example: 23 y/o on 8mg of buprenorphine-naloxone 2 times per day (BID)

Spontaneous vaginal delivery:

- Decrease Buprenorphine to 8 mg daily
- May use epidural but would use fentanyl as opioid
- Add Ketorolac 15-30mg IV every 6-8 hours or Ibuprofen 800mg every 8 hours
- After 36 hours return to 8mg of Buprenorphine-naloxone BID
- Discharge on same dose with no further opioid prescriptions

C-section Delivery:

- Decrease buprenorphine to 8mg daily
- Spinal analgesia using fentanyl as the opioid
- Add Ketorolac 15-30mg IV every 6-8 hours or Ibuprofen 800mg every 8 hours
- If still painful would use Patient Controlled Analgesia (PCA) at 150 mcg/4 hours with no basal rate for 36-48 hours
- May add 1 gram of IV acetaminophen Q 6 hours
- Increase buprenorphine-naloxone to 8 mg 3 times per day and call provider to obtain insight and provide appropriate care transition

Early Monitoring

Patient should be monitored closely for diversion, and ingestion of other sedatives such as Alcohol and/or Benzo's

Generally patient should be seen weekly for 6 weeks, bi-weekly for 8 weeks and the monthly there after.

This is only if the urine toxicology is positive for buprenorphine and negative for other elicit substances. If they are negative for bup or positive for other substances then they should continue weekly until stable

Long Term Planning

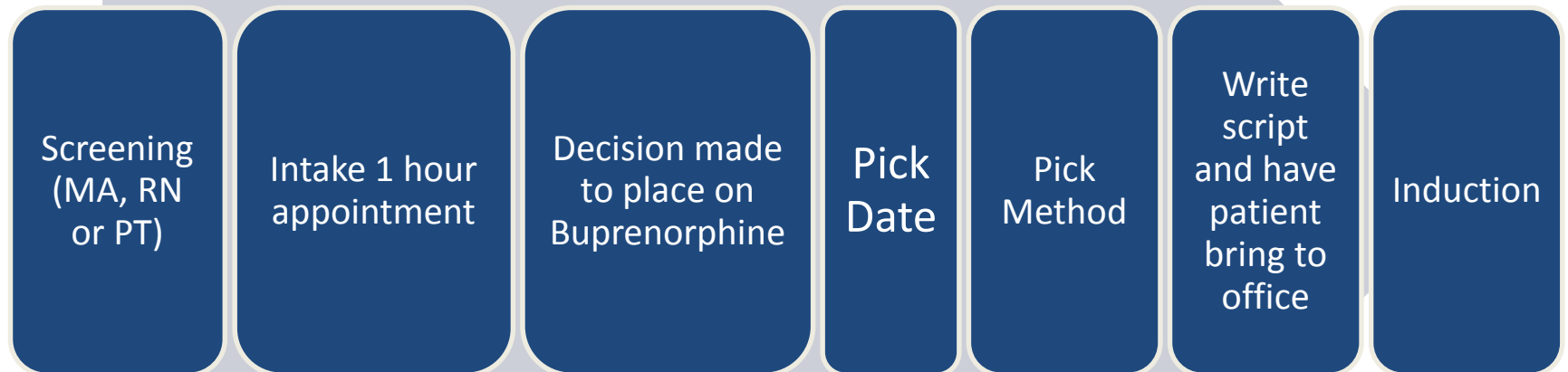
Need 18 months to 2 years for neuronal Stabilization

Patient centered wean

Early High intensity BH with long term recovery program
(groups etc)

Hope is for long term abstinence (70-80%)

Work Flow in Primary Care



Patient Documentation

HPI

- Drug use from age of 12 to current
- DSM 5 Criteria met
- DAST Criteria met
- Co-Occuring evaluation
- PE
 - Focused on Mental Status
 - Sequela of drug abuse (injection marks, superficial skin infections, Murmurs)

Documentation

Labs

- Hep C, HIV, STDs, CMP, CBC, UDS

Diagnosis

- Use DSM 5 Designation

Plan

- Include medication dose and frequency
- Include BH referral and basic plan (i.e. CBT, DBT, 12 step, Contingency Management)
- Other drug use and plan of action (Benzo, MJ, etc.)

Office based Documentation

Keep an active list of all current patients (seen within the last 30 days)

Keep a list of all past patients and why they are no longer patients

Call your regional DEA agent and ask for a preemptive visit and evaluation.

Regulatory Requirements

DATA
2000

- Must have X license
- 30 patients year 1
- Can apply for 100 patients year 2

FAQ's

- With a DATA 2000 waiver, can I *prescribe* approved buprenorphine products for opioid addiction in more than one practice location? Can I *dispense* approved buprenorphine products from more than one location?
 - Physicians with DATA 2000 waivers may prescribe approved buprenorphine products for opioid addiction in any appropriate practice setting in which they are otherwise credentialed to practice (e.g., office, hospital). However, they may store and dispense approved buprenorphine products (or any other controlled substances) only at the practice address(es) that they have registered with the DEA. Only one DATA-waiver unique identification number will be issued for each DATA-waived physician, no matter how many practice locations or DEA registrations a physician may have.

FAQ's

- I've heard this new model for the treatment of opioid addiction referred to as "office-based opioid therapy." Does that mean that physicians with DATA 2000 waivers can use approved buprenorphine products to treat opioid addiction only in the office-based setting?
 - **No.** Treatment of opioid addiction under the authority of a DATA 2000 waiver is not confined to the office-based setting. Physicians with DATA 2000 waivers may treat opioid addiction with approved buprenorphine products in any practice settings in which they are otherwise credentialed to practice and in which such treatment would be medically appropriate (e.g., office, community hospital, health department).

FAQ's

- Can physicians and other authorized hospital staff administer buprenorphine to a patient who is addicted to opioids but who is admitted to a hospital for a condition other than opioid addiction?
 - Neither the Controlled Substances Act (as amended by the Drug Addiction Treatment Act of 2000) nor DEA implementing regulations (21 CFR 1306.07(c)) impose any limitations on a physician or other authorized hospital staff to maintain or detoxify a person with an opioid treatment drug like buprenorphine as an incidental adjunct to medical or surgical conditions other than opioid addiction.
 - Thus, a patient with opioid addiction who is admitted to a hospital for a primary medical problem other than opioid addiction, e.g., myocardial infarction, may be administered opioid agonist medications (e.g., methadone, buprenorphine) to prevent opioid withdrawal that would complicate the primary medical problem. A DATA 2000 waiver is not required for practitioners in order to administer or dispense buprenorphine (or methadone) in this circumstance. It is good practice for the admitting physician to consult with the patient's addiction treatment provider, when possible, to obtain treatment history

- May physicians in residency training programs obtain DATA waivers?
 - The DATA legislation does not specify that a physician in a residency training program who otherwise meets the qualifications for a DATA waiver is ineligible to apply for and obtain a waiver. Therefore, SAMHSA has granted DATA waivers to physicians in residency training who have unrestricted licenses and the appropriate DEA registration. Individual States may have laws with more restrictive rules regarding who may prescribe or dispense Schedule III narcotic drugs for detoxification or maintenance treatment.

FAQ's

- **Are there specific Federal record keeping requirements for office-based opioid therapy?**
 - DEA record keeping requirements for office-based opioid therapy go beyond the Schedule III record keeping requirements. According to DEA: Practitioners must keep records (including an inventory that accounts for amounts received and amounts dispensed) for all controlled substances dispensed, including approved buprenorphine products (21 PART 1304.03[b]). In some cases, patients return to the prescribing physician with their filled approved buprenorphine products prescriptions so that the practitioner can monitor the induction process. While it is acceptable for the patient to return to the practitioner with their filled prescription supplies, practitioners shall not store and dispense controlled substances that are the result of filled patient prescriptions.

References

- Kranzler, Ciraulo and Zindel, Clinical Manual of Addiction Psychopharmacology (2nd addition) American Psychiatric Publishing. 2014
- The ASAM National Practice Guideline For the Use of Medications in the Treatment of Addiction Involving Opioid Use. 2015
- The State of Michigan MAT Treatment Guidelines For Opioid Use Disorder, R. Corey Waller. 2014

Question 1

- Which of the following is correct?
 - A. You can safely start buprenorphine while a patient is still taking a full agonist
 - B. The first dose can be up to 24 mg if patient is in withdrawal
 - C. Patients must be completely free of other opioids
 - D. Patients should be given a 30 day prescription on day 1

Answer: **B**



Break Out- Behavioral Health & Diversion

BEHAVIORAL HEALTH IN SUBSTANCE ABUSE IN RELATION TO CHRONIC PAIN

RUBY BAYAN, MD
ADULT, CHILD AND
ADDICTION
PSYCHIATRY



Bio-Psycho-Social model of addiction in relation to chronic pain



Biological



Psychological

Social

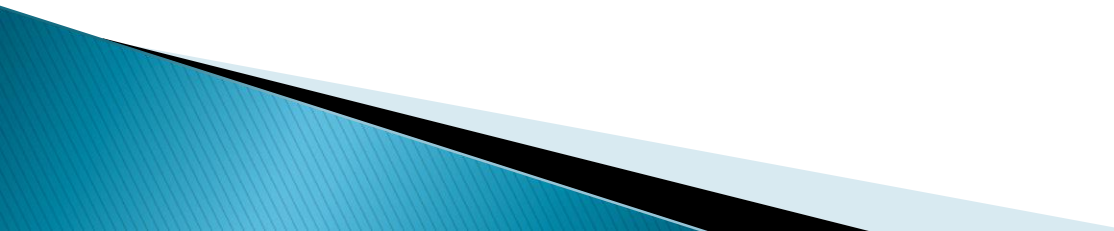
Biological

- ▶ 1. Physical pain
- ▶ Chronic pain
- ▶ improper or untreated pain
- ▶ 2. Psychiatric
- ▶ Dual diagnosis or co- occurring or
- ▶ morbidity

Specific Mental Disorder and Substance Use Risk

- ▶ All mood disorder : 32%
- ▶ Bipolar I Disorder: 62%
- ▶ Anxiety Disorders: 23%
- ▶ Schizophrenia: 47%
- ▶ Personality Disorders
 - ▶ Anti-social: 83.6%
 - ▶ Borderline: 50%

Co occurring Disorders in Substance Abuse Treatment

- ▶ Estimates of psychiatric co-morbidity among clinical populations in substance abuse treatment program setting range from 50 to 70%
 - ▶ Estimates of substance abuse co-morbidity among clinical populations in mental health treatment setting range from 20 to 50 %
- 

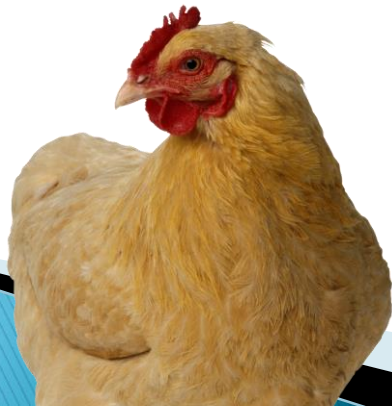
DSM V Substance Induced Mental Disorder

- ▶ OPIOID INDUCED DISORDERS
- ▶ Psychotic
- ▶ Depression/Mood Disorders
- ▶ Anxiety
- ▶ Sleep
- ▶ Sexual Dysfunction
- ▶ Neurocognitive Disorders
 - ▶ Intoxication Delirium
 - ▶ Withdrawal Delirium



CHICKEN OR THE EGG

- ▶ Does it matter?
- ▶ Whether if it's Primary or Secondary, both require "PRIMARY TREATMENT"
- ▶ We can use psychotropics that may be useful or helpful for substance abuse and pain. HOWEVER, other non pharmacologic treatment or intervention is necessary for good outcome.



OR



Psychotropic Use

- ▶ Psychotic Disorders
- ▶ 1. Atypicals especially
 - ▶ Olanzapine(Zyprexa)
 - ▶ Ziprasidone (Geodon)
- ▶ 2. Clozapine (Clozaril) has a unique role in reducing relapse and suicidal behavior

Anxiety Disorders

- ▶ Benzodiazepine and hypnotics may be used sparingly (use contract)
- ▶ Antihistamines like Hydroxyzine (Vistaril)
- ▶ Quetiapine (Seroquel) as a stand alone treatment for anxiety and insomnia. Soeiro-deSouza et al. Experimental and Therapeutic medicine
- ▶ SSRI

MOOD DISORDERS

- ▶ Bipolar : Anticonvulsants:

 - Topiramate,

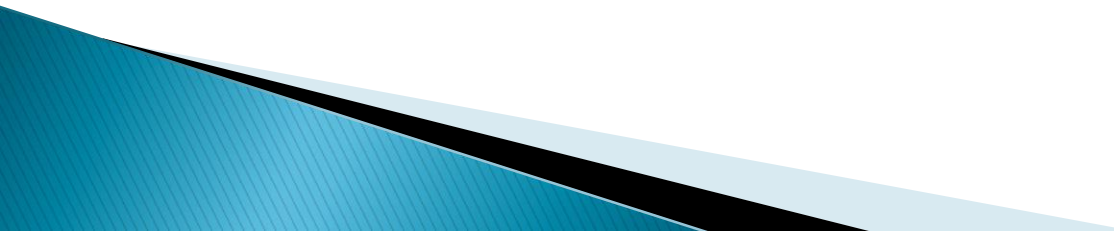
 - Gabapentin

 - Carbamazepine

 - *may confer some protection from withdrawal and decreases the craving for the abused drug and has been used for chronic pain.

DEPRESSION: SNRIs like Cymbalta or Effexor have been known to help pain.

Non Pharmacological Treatments

- ▶ 12 Step Facilitation
 - ▶ Motivational Interviewing
 - ▶ Cognitive Behavioral Therapy
 - ▶ Family and Marital Therapy
 - ▶ Residential Treatment Program
 - ▶ Intensive Out patient program
- 

▶ Biological

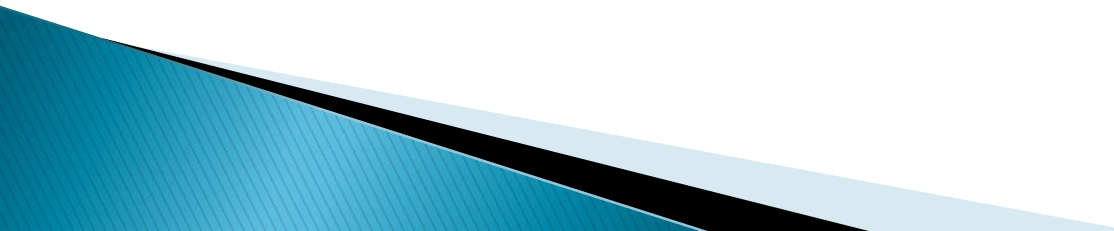


▶ Psychological

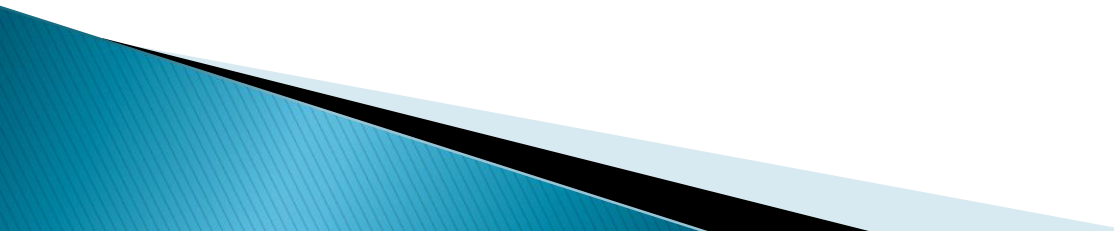
Social



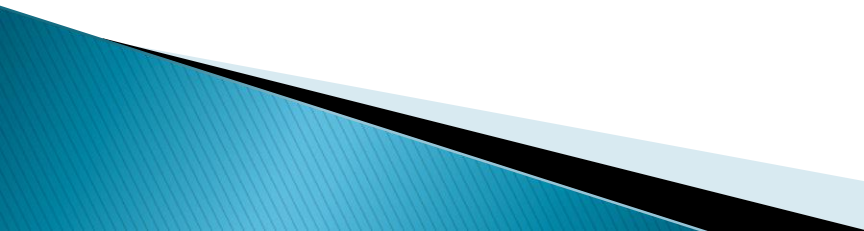
PSYCHOLOGICAL FACTORS

- ▶ Stress
 - ▶ Loneliness, isolation
 - ▶ Poor self esteem
 - ▶ History of childhood abuse
 - ▶ Sexual orientation issues
 - ▶ Poor Coping Skills
- 

SOCIAL FACTORS

- ▶ Poverty
 - ▶ Unemployment
 - ▶ Poor support system (esp family)
 - ▶ Homelessness
 - ▶ Problem with the law
- 

Psycho-Social Intervention

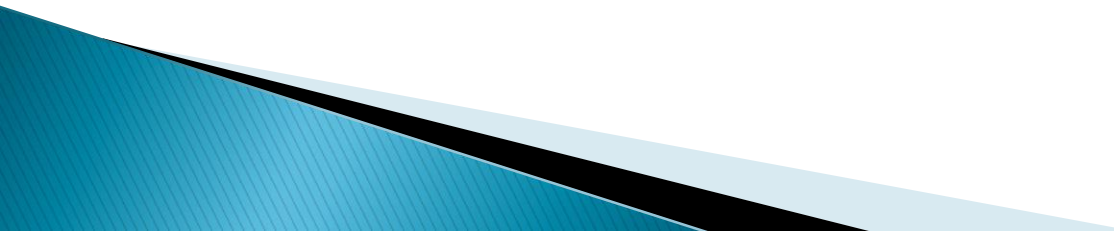
- ▶ See non pharmacologic intervention for the patient
 - ▶ Availability of mental health services and Dual Dx
 - ▶ Community Services to assist in the Social issues i.e. housing, employment.
 - ▶ Community outreach programs
 - ▶ Availability of drug treatment programs and follow up
- 

DIVERSION



- ▶ “EIGHTY PERCENT OF NEW HEROIN ADDICTED INDIVIDUALS REPORT USING PRESCRIPTION OPIOIDS AS A GATEWAY DRUG”
 - SAMHSA

What is Diversion?

- ▶ By definition, it is the intentional removal of a medication from legitimate distribution and dispensing channels for illicit sale, distribution or use.
 - ▶ OR
 - ▶ Diverting drugs from their lawful medical purpose
- 

Effect on the Health Care System

- ▶ Drug diversion costs to the health insurers are estimated \$72.5 billion per year (including \$24.9 billion for private insurers)
- ▶ The cost include fraudulent claims for prescriptions for spurious pain conditions, costs that accrue if individuals taking the diverted drugs become addicted, and the cost as a result of additional comorbidities that occur in the drug abuser



STREET DRUG MEAN PRICES PER MILLIGRAM

Hydromorphone:	\$ 3.29
Buphenorphine:	\$ 2.13
Oxymorphone:	\$ 1.57
Oxycodone:	\$ 0.97
Methadone:	\$ 0.96
Hydrocodone:	\$ 0.81
Morphine:	\$ 0.52
Tramadol:	\$ 0.05

▶ ncbi.nlm.nih.gov

INTENTIONAL VS UNINTENTIONAL

INTENTIONAL: for personal use, for use of others, for sale, for barter

!!!!!!! RED FLAGS !!!!!!!



1. Running out of medication early
2. Lost or stolen prescriptions
3. Visit without appointment or wanting an appointment towards the end of office hours or at the end of the week.

Red Flags



- ▶ 4. Comes to the office knowing that their primary provider is not available and insisting to see someone.
- ▶ 5. Wants to be seen immediately because they are late for their flights, meeting, child's soccer game.
- ▶ 6. Self reports of multiple drug intolerance and allergy and asks for a particular drug.

Red Flags

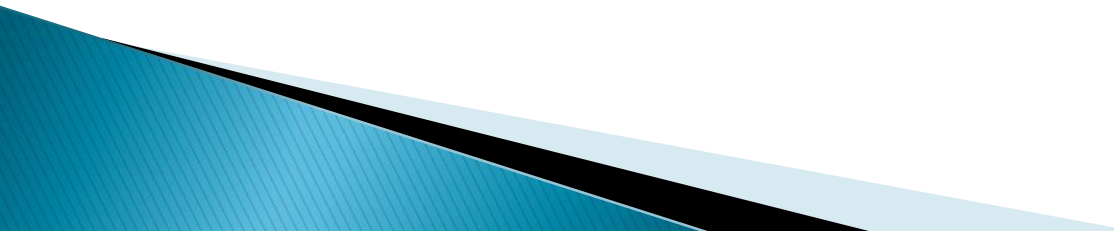


- ▶ 7. Doctor or pharmacy shopping
- ▶ 8. Resistance to change in therapy
- ▶ 9. Resistance to drug test
- ▶ 10. Negative urine drug test for prescribed medication
- ▶ 11. Positive urine drug test for prescribed medication

Unintentional

- ▶ It is important to discuss with patients the need to be very careful with their medication especially with family and friends who are using the same medication or any one whom may have any substance abuse problems. Giving them information about the street value of the medication and the discomfort and inconvenience if they lose their pain medication.

CONT. UNTINTENTIONAL

- ▶ They need to be impressed that increasing their pain medication is not in their best interest and maybe a violation of their treatment contract.
 - ▶ They need to be impressed that they need to take the medication according to the schedule their provider have given them and bring to their attention if this is not working.
 - ▶ Remind them that their care is a partnership and trust is a very important to this relationship
- 

CONFRONTING THE PATIENT

AVOID LOCKING HORNS



Motivational interviewing

Techniques: 5 general principles

- ▶ Express empathy
- ▶ Develop discrepancy
- ▶ Avoid arguments
- ▶ Roll with resistance
- ▶ Support self efficacy
- ▶ *****
- ▶ ☹️
- ▶ Check your transference and counter transference

PREVENTION

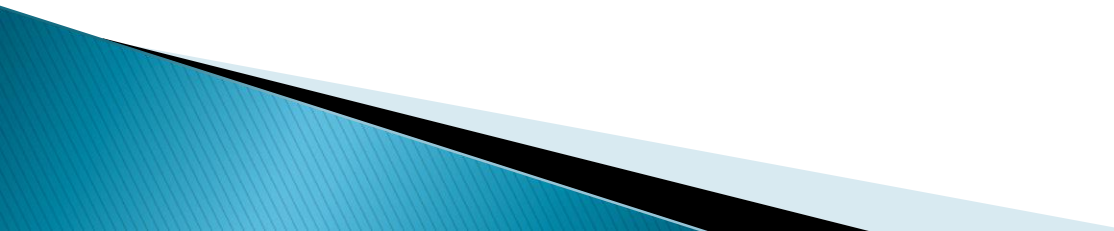
- ▶ PREVENTION
- ▶ PREVENTION

1. UNIVERSAL PRECAUTION

TEN PRINCIPLES

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 pain.

Universal Precautions

- ▶ 2. Psychological assessment including risk of addictive disorder.
 - ▶ Include family history of substance abuse and personal history of substance use and abuse.
 - ▶ Psychiatric history and dual diagnosis and treatment
 - ▶ History of drug related arrests such as DUI
- 

Universal Precautions

- ▶ 3. Informed consent
- ▶ Challenge: Issue with minors and their parents or guardians.
- ▶ 4. Treatment Agreement ***very important
- ▶ must be very clear, simple to understand. Must be discussed with patient carefully.. Must include the use
- ▶ drug screen and referral to other
- ▶ specialties if needed.
- ▶

Universal Precautions

- ▶ 5. Pre-/post-treatment assessment of pain and level of function.
- ▶ 6. Appropriate trial of opioid therapy +/- adjunctive medication.
- ▶ 7. Reassessment of pain score and level of function,

Universal Precautions

- ▶ 8. Regularly assess the “Four A” of pain medicine:
 - ▶ ANALGESIA
 - ACTIVITY
 - ADVERSE Reaction
 - ABBERANT Behavior

Universal Precautions

- ▶ 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.

Universal Precautions

- ▶ 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
- ▶ Pain Med. 2009
- ▶ PassikSD et al Clin. Ther. 2004

CONT. PREVENTION

- ▶ 2. PRESCRIPTION MONITORING PROGRAM
- ▶ 3. PILL COUNT. Have patient bring their bottle every office visit.(Include in agreement or contract)
- ▶ 4.FREQUENT URINE DRUG SCREEN (Should be in the contract)
- ▶ 6. REPORTING OF DECEASED PATIENTS WHO MAY BE GETTING OPIOID OR DOCTORS WHO MAY HAVE PRESCRIBED OPIOIDS.
- ▶

cont. PREVENTION

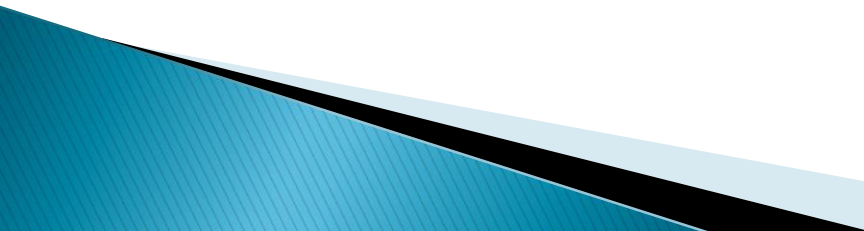
- ▶ 7. MAY NEED TO CHECK FOR ID PHOTO
- ▶ FILLING THE MEDICATIONS.
- ▶ 8. E-SCRIPT CAN BE VERY HELPFUL .

URINE DRUG SCREEN

- ▶ NOT ALL POSITIVES ARE POSITIVES AND NOT ALL NEGATIVES ARE NEGATIVE!!!!

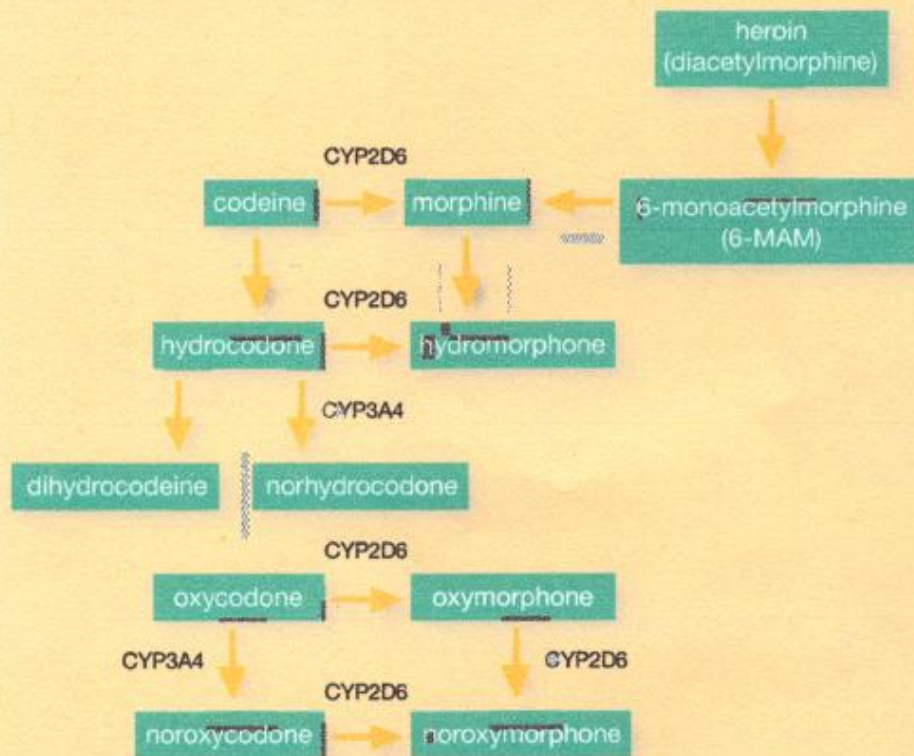


RESULTS OF URINE DRUG TEST (UDT) MAY BE MISLEADING

- ▶ Immunoassay testing for opiates is very responsive for morphine and codeine but does not distinguish which is present.
 - ▶ Opiate immunoassay show lower sensitivity for semisynthetic opioids, so even large concentration of the drug/metabolites in urine may not be reliably detected by immunoassay. So negative results for hydromorphone or hydrocodone does not excludes the use of these opioids.
- 

Examples of opioid metabolism cyto P450enzymes in phase I

Figure 1. Examples of metabolism of opioids, showing major cytochrome P450 enzymes involved in phase 1 metabolism



Not comprehensive pathways, but may explain the presence of apparently unprescribed drugs

Opiate Metabolism

- ▶ 1. Codeine is metabolized to morphine.
- ▶ 2. Rx for codeine does not normally explain the presence of codeine alone. **Codeine metabolizes to morphine but the reverse does not occur.** (unless codeine is an impurity from the manufacturer.)
- ▶ 3. Positive test for morphine with the presence of 6-monoacetylmorphine, a heroine metabolite
 - ▶ is proof of heroine use.

Opiate metabolism Cont.

- ▶ 4. (6-MAM) detection is only a few hours after heroine use due to its short biologic $\frac{1}{2}$ life in the body of 25 to 30 minutes. Heroine has even a shorter biological $\frac{1}{2}$ life of 3 to 5 minutes and seldom detected in UDT.
- ▶ 5. A more specific immunoassay need to be used for synthetic opiates. Hydrocodone to hydromorphone. Oxycodone to Oxymorphone. If concentration of Oxycodone is higher than oxymorphone, Oxycodone is the parent drug.

What about negative result?

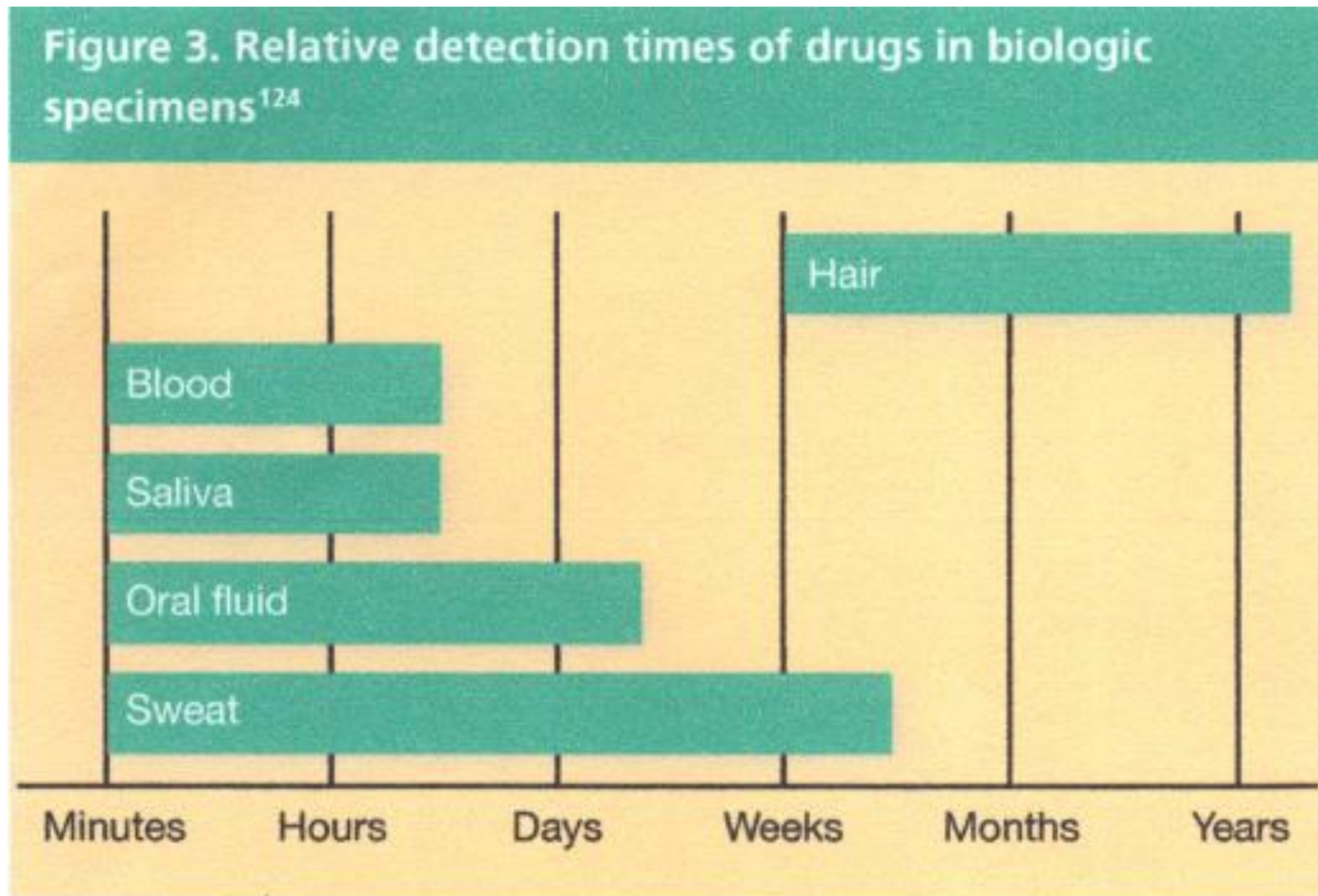
Table 9. Common reasons why a particular drug or medication is not detected in a patient's urine sample

- The patient has not recently used the drug/medication or in sufficient quantities to be detected
- The patient has not used the drug/medication recently or at all
- The test used was not sufficiently sensitive to detect the drug/medication at the concentration present
- Clerical/laboratory errors caused a positive UDT result to be reported as negative
- The patient excretes the drug/medication and/or metabolites at a different rate than normal (eg, rapid metabolism, pH effects of the urine, effects of other drugs)
- The tested sample was not the patient's own urine
- The patient has diverted the medication

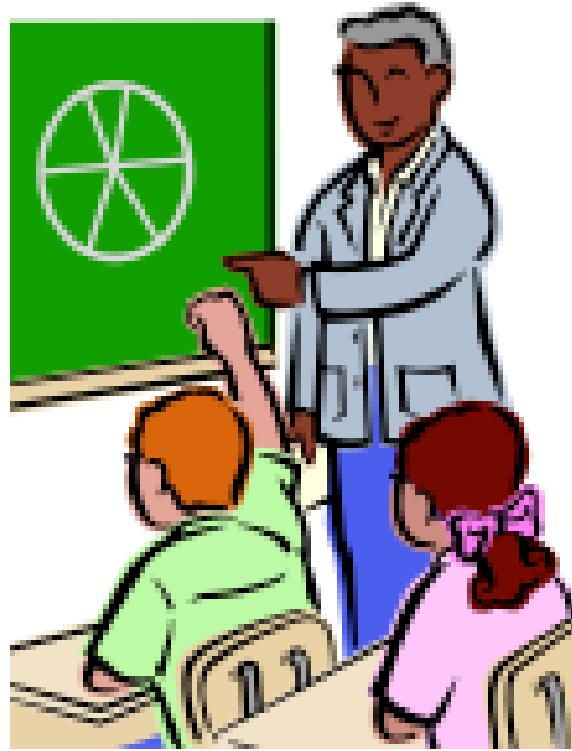
Table 8. Examples of potential false positives due to cross-reacting compounds for certain immunoassays

Immunoassay affected ^a	Cross-reacting drug ^b
Opiates	Quinolone antibiotics (eg, levofloxacin, ofloxacin) ^{96,97}
Buprenorphine	Tramadol (analgesic) ¹¹⁴
Fentanyl; MDMA (Ecstasy), amphetamine	Trazodone (antidepressant) ^{98,102,111,116}
Benzodiazepine, LSD	Sertraline (antidepressant) ^{118,119}
Methadone	Quetiapine (atypical antipsychotic) ¹⁰⁵
Methadone	Tapentadol (analgesic) ¹²¹
PCP	Venlafaxine (antidepressant) ^{100,103}
PCP	Dextromethorphan (antitussive) ¹⁰⁸
PCP	Tramadol (analgesic) ^{109,123}
PCP	Lamotrigine (anticonvulsant) ¹²⁰
Amphetamine	Selegiline (for Parkinson's disease) ⁹⁹
Amphetamine	Promethazine (for allergies, agitation, nausea, vomiting) ¹⁰⁷
Amphetamine	<i>l</i> -methamphetamine (over-the-counter nasal inhaler) ¹⁴
Amphetamine	Pseudoephedrine (over-the-counter decongestant) ¹¹⁵
Amphetamine	Bupropion (antidepressant) ¹⁰⁴
Amphetamine	Ranitidine (histamine H ₂ -receptor antagonist) ¹¹²
Fentanyl	Risperidone (antipsychotic) ¹¹³
THCA, benzodiazepine	Efavirenz (antiretroviral) ^{101,106,122}
THCA	Proton pump inhibitors (eg, pantoprazole) ¹¹⁰

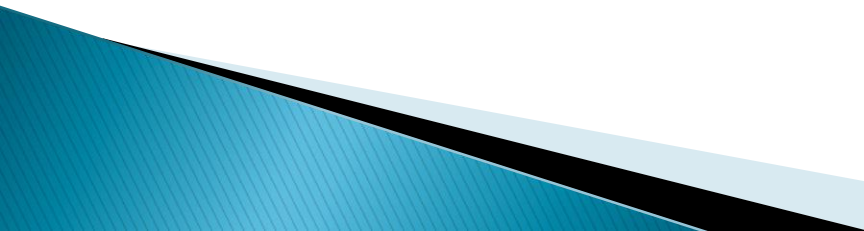
Alternative specimens



IN SUMMARY



Summary

1. It is important to remember the Bio–Psycho–Social components of chronic pain.
 2. Biological markers especially genetic predisposition to psychiatric and addiction is important in prescribing for both pain medications and psychotropics.
 3. It is important to understand Universal Precautions to prepare the patient for monitoring when prescribing opioids. It is important to make a contract.
- 

Cont.

- ▶ 4. Be aware of the “red flags”.
- ▶ 5. If DIVERSION is suspected, it helps to use Motivational interviewing to bring this to the patient’s attention.
- ▶ 6. Understanding of the results of UDT is important and may help explain diversion. Use it as often as possible
- ▶ 7. To avoid Diversion, use always the Universal Precautions. Refer to the contract if patient misuse, or sell the medication.
- ▶ 8. Be part of Prescription Monitoring Program

- ▶ 9. Use e- script.
- ▶ Last but NOT the least,
- ▶ HOW would you like for your loved one who has chronic pain and psychiatric illness and/or addiction be treated?

- ▶ Thank you all!



A Prescription Walks Into A Pharmacy

Drug Diversion and the Pharmacist's Role In Diversion Prevention

Bryan Coleman, PharmD

Staff Pharmacist, Cloney's Pharmacies

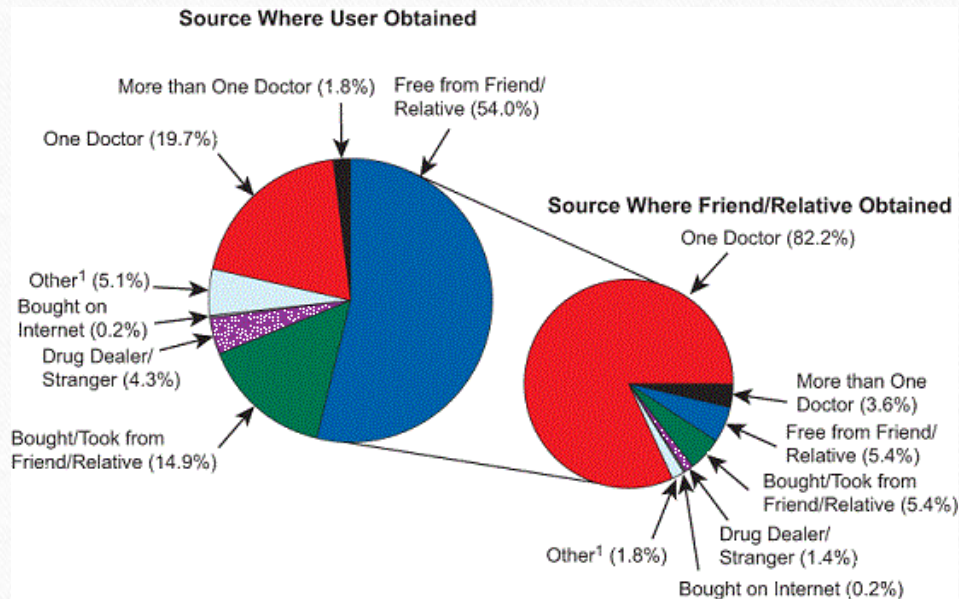
Where Do Prescription Medications Go?

- Consumption - The patient uses the medication its intended purpose
- Destruction - unused medications are removed from access to the public (e.g.: Drug Take Back Day, Waste Management, Returned to Pharmacy...where available)
- Diversion - Medication is either used for a non-medical purpose by the patient or someone other than the patient obtains the medication (theft, sale, trade)

Diversion: Prevalence

- In 2014, an estimated 6.5 million people over the age of 12 reported non-medical use of prescription drugs in the past month (1.6%)
- 66.2% of those were using prescription pain relievers
- The remaining 33.8% included sedatives, stimulants, and anxiolytics

Where Do Diverted Drugs Come From



Preventing Diversion: What Do Pharmacists Look For?

- The easy stuff:
 - Is it stolen?
 - Is it altered? (commonly strength/quantity)
 - Is it forged?
 - How far is the patient/prescriber from the pharmacy?
 - Are they paying cash? (with or without insurance)

Diversion Prevention: Other Signs

- More difficult:
 - Does the diagnosis match the dose/duration?
 - Does medication history make sense?
 - For Low Back pain, have NSAIDS, lidocaine, PT been tried?
 - Rapid Dose escalation?
 - Provider vs Diagnosis
 - Rheumatologist vs Family Practice
 - Pain Management vs Family Practice

Where Pharmacists Need Your Help

- Information
- Cooperation
- Understanding

Information

- HIPPA allows for the transfer of protected health information for the billing or treatment of a patient.
- Access to patient medication history, treatment history, or other information is often requested if:
 - Patient is refilling early
 - Dose has escalated
 - Patient has recently filled a prescription for a similar drug from another provider

Cooperation

- If diversion is suspected or reported we may:
 - Deny filling the patient's prescription
 - Contact your office to express our concerns
 - Request a review of the patient's prescription history to verify necessity of dose/quantity
 - Suggest a U-tox
 - Suggest a change of medication or dose
- Please know we have your patient's best interests in mind

Understanding

- Since August Cloney's pharmacies have received reports of:
 - Sales of pain medications for money x 2
 - U-tox was done, patient's future prescriptions for narcotics cancelled
 - Provider will follow-up with patient, schedule U-tox
 - Trading of pain medications for methamphetamine
 - Reported to prescriber, U-tox scheduled, narcotics continued
 - Overdose death of a patient in a substance abuse treatment program

Conclusions

- 6.5 Million Americans have reported nonmedical use of prescription drugs
- The majority of diverted prescriptions are obtained from single prescriber or a friend/relative who obtained them from a single prescriber
- Pharmacists actively look for ways to prevent diversion by reviewing prescriptions for authenticity and necessity based on diagnosis among other factors
- Pharmacists need your help to keep prescription drugs from being used for nonmedical purposes while allowing legitimate use of medications to continue with as little inconvenience to your patients and staffs as possible.

References

- *Substance Abuse and Mental Health Services Administration, Results from the 2012 National Survey on Drug Use and Health: Summary of National Findings, NSDUH Series H-46, HHS Publication No. (SMA) 13-4795.* Rockville, MD: Substance Abuse and Mental Health Services Administration, 2013. Retrieved 16Dec2015 from <http://archive.samhsa.gov/data/NSDUH/2012SummNatFindDetTables/NationalFindings/NSDUHresults2012.htm#ch2.16>
- Center for Behavioral Health Statistics and Quality. (2015). Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Retrieved 16Dec2015 from <http://www.samhsa.gov/data/>



Charles VanBuskirk, Deputy Coroner
Humboldt County



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
- Induction of Suboxone
- 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.

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.



Visit the MPS Upcoming Events webpage to register for one of the following webinars.

<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

Thank You!

