While we’re waiting, please:

 Rename yourself

1. Click the Participants icon
2. Hover over your name & click Rename
3. Add your name, pronouns and organization’s name
4. Click OK

If you connected to the audio using your phone

- Find your participant ID; it should be at the top of your Zoom window
- Once you find your participant ID, press: #number# (e.g., #24321#)
- The following message should briefly pop-up: “You are now using your audio for your meeting”
Housekeeping Reminders

Mute
Please mute when not speaking. Please don’t put the call on hold!

Chat Box
Use the chat box to introduce yourself and questions

Slides + Recording
Slides and recording will be posted to the ATSH Online Home

Tech Issues
Private chat Briana or Meaghan for assistance
Today’s Presenters

Joe Sepulveda, MD, FAPA, FASAM
Chief of Psychiatry
Family Health Centers of San Diego

Kenneth Pettersen, MD
Primary Care Physician
Olive View – UCLA Medical Center
Addiction = Chronic Disease

Joe Sepulveda, M.D., FAPA, FASAM
Chief of Psychiatry, Family Health Centers of San Diego
Medical Director, Substance Use Disorder Services
Medication-Assisted Treatment (MAT) Program
Psychiatric Nurse Practitioner Program
Voluntary Assistant Clinical Professor, UCSD Health Sciences—Dept. of Psychiatry
Diplomate of the American Board of Psychiatry and Neurology
Diplomate of the American Board of Preventive Medicine—Addiction Medicine
Fellow of the American Psychiatric Association
Fellow of the American Society of Addiction Medicine
Agenda

• Stigma vs. Health
• Genetics role in addiction
• Neurobiology of addiction
• Addiction = Chronic Brain Disease
• Stigma associated with treatment
• Addiction is treatable
• Access to treatment... YOU ARE IMPORTANT!!!
What are some things you offer to patients with chronic diseases such as diabetes, asthma, or COPD to help them manage their conditions? And why isn’t this offered to individuals who have addiction?
The Stigma of Addiction

“Addiction is primarily a social problem, not a health problem.”

Reality... Addiction is a Medical Disease

Let’s End the Stigma of Addiction
Twin and adoption studies confirm a genetic role

• Account for between $\frac{1}{2}$ and $\frac{3}{4}$ of the risk for addiction.

• Twins (Monozygotic) > Dizygotic

Genetic factors appear to be stronger drivers than environmental factors for initiation of substance use at an early age.
Genetic Heritability

"Traditional" Medical Diseases

- HTN → 0.25-0.5
- Diabetes Type 1 → 0.30 to 0.55
- Diabetes Type 2 → 0.80
- Adult-onset Asthma → 0.36-0.70

Substance Use Disorders

- Heroin → 0.34
- Marijuana → 0.52
- Alcohol → 0.52
- Cigarette → 0.61

*0.0 = genetics are not a contributing factor at all  
** 1.0 = genetics are the only factor

Monozygotic > Dizygotic
Addiction = Chronic Brain Disease

1. Brain diseases → some form of behavioral expression
   - Alzheimer’s = memory loss
   - Schizophrenia = unusual perceptions of reality and mood changes
   - Opioid addiction = cravings which lead to uncontrollable compulsion

2. Precipitated by fundamental, long-term, changes to the biological structures and functioning of this organ
Addiction and Changes to biological structures

Decreased Brain Metabolism in Drug Abuse Patient

Control

Cocaine Abuser

Decreased Heart Metabolism in Heart Disease Patient

Healthy Heart

Diseased Heart
Neurobiology of Addiction

Binge/intoxication
- ventral striatum (VS), including nucleus accumbens
  euphoria, reward
- dorsal striatum (DS)
  habits, perseveration
- globus 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
Addiction can happen to anyone

1. The longer you are prescribed an opioid the greater likelihood you’ll develop addiction.
   - Prevalence rates as high as 50% for an opioid use disorder on chronic opioid therapy
   - Opioid therapy >90 days at >120 MME = 100x’s as likely to develop OUD
Wait a minute... addiction was a choice

2. ...they chose to try it for the first time = their fault

- Initial voluntary misuse does **NOT** make their condition any less the result of disease

- Addiction = INVOLUNTARY COMPULSIVE USE, cravings **CANNOT** be controlled = Chronic Condition
What cravings and involuntary compulsive use feels like... a patient experience...

• Shaking her head and trying to hold back tears...

• “It’s like God tells you that if you take another breath, your children will die.”

• “You do everything you can not to take a breath. But eventually you do. That’s what it’s like. Your brain just screams at you.”

Source: https://www.usatoday.com/story/news/health/2019/11/02/met-h-use-surges-stronger-cheaper-drugs-imported-
You relapsed = You’re not serious or committed

Percent of Patients Who Relapse

- Drug Addiction: 40 to 60%
- Type II Diabetes: 30 to 50%
- Hypertension: 50 to 70%
- Asthma: 50 to 70%
It takes time for your brain to recover

- Healthy control
- Patient with methamphetamine use disorder
- 1 month of abstinence
- 14 months of abstinence
Selective forgiveness and understanding

3. What other choices lead to chronic disease

- Diet and Exercise → Diabetes, Hypertension and Congestive Heart Failure to name a few.
MOUD and stigma
MOUD ≠ substituting one drug for another
You’ve been on MOUD long enough... you should think about stopping

proportion of days when buprenorphine was taken

14% fewer ED visits
18% fewer admissions

months since starting treatment

Lo-Ciganic et al., 2016
Addiction is a treatable condition

Benefits of Medication Assisted Treatment for Recovery

- Reducing drug-related overdose deaths
- Reducing disease and violent crimes
- Improved treatment outcomes

Helping reduce cravings and withdrawal symptoms
Benefits of MOUD: Decreased Mortality

Death rates:

- Dupouy et al., 2017
- Evans et al., 2015
- Sordo et al., 2017
Overdoses decreased with buprenorphine availability

- Schwartz, AJPH, 2012
Addiction is a treatable disease—Naltrexone

THM: Naltrexone added to standard federal probation lead to 70% less opioid use and 50% less incarceration
THM: Few receive anything that approximates evidence-based care

THM: In contrast, 70%-80% of people with diseases such as HTN and DM receive care
You are making a big difference

Published in final edited form as:

**Why Aren’t Physicians Prescribing More Buprenorphine?**

Andrew S. Huhn, Ph.D. and Kelly E. Dunn, Ph.D.

1Behavioral Pharmacology Research Unit, Johns Hopkins University School of Medicine, Baltimore MD

**THM:** Approx. 48% of X-waivered physicians prescribe on average 5 patients per provider
Questions?
Kenneth Pettersen, MD
Primary Care Physician
Olive View – UCLA Medical Center

Provider: Thank you for coming back today to talk about how the suboxone is working for you.
Group Discussion

• What is one insight you will bring back to your organization?

• Share your responses in the chat box!
# Poll Questions

1. On a scale of 1 – 5, please select the number that best represents your experience with today’s session

2. Please select the number that best represents your response to the statement: Today’s session was a valuable use of my time.

- 5 – Strongly Agree
- 4 – Agree
- 3 – Neutral
- 2 – Disagree
- 1 – Strongly Disagree
References

8. National Institute on Drug Abuse Advancing Addiction Science
14. Additional citations can be found on the PPT slides
Thank you!

For questions contact:

Tammy Fisher  
Vice President  
Center for Care Innovations  
tammy@careinnovations.org

Briana Harris Mills  
Senior Program Coordinator  
Center for Care Innovations  
briana@careinnovations.org