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Treatment for Adolescents with Opioid Use Disorder

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Disclosures

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Outline

- Epidemiology
- Screening
- Treatment Strategies
 - Behavioral
 - Pharmacologic



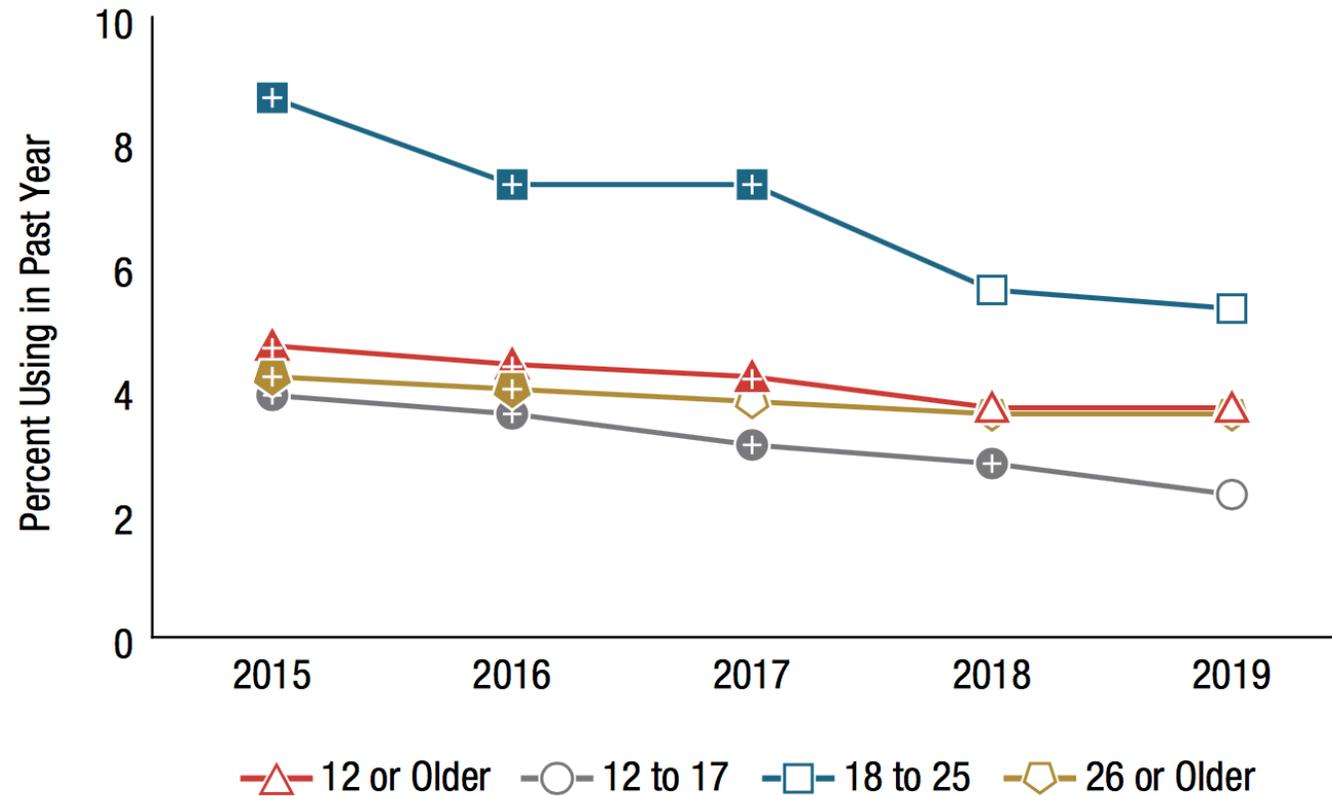


Epidemiology



Opioid Use

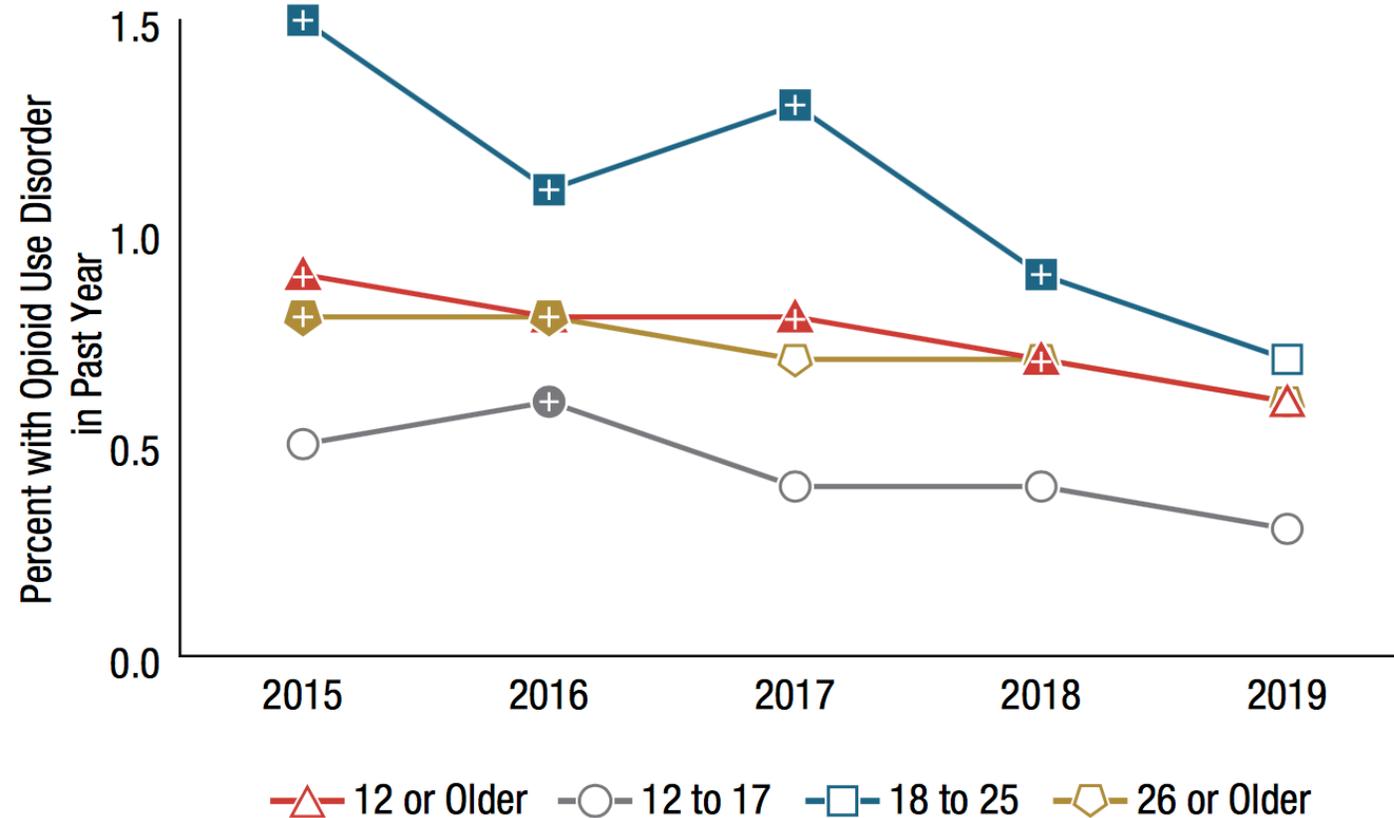
Past Year Opioid Misuse among People Aged 12 or Older





Opioid Use

Past Year Opioid Use Disorder among People Aged 12 or Older





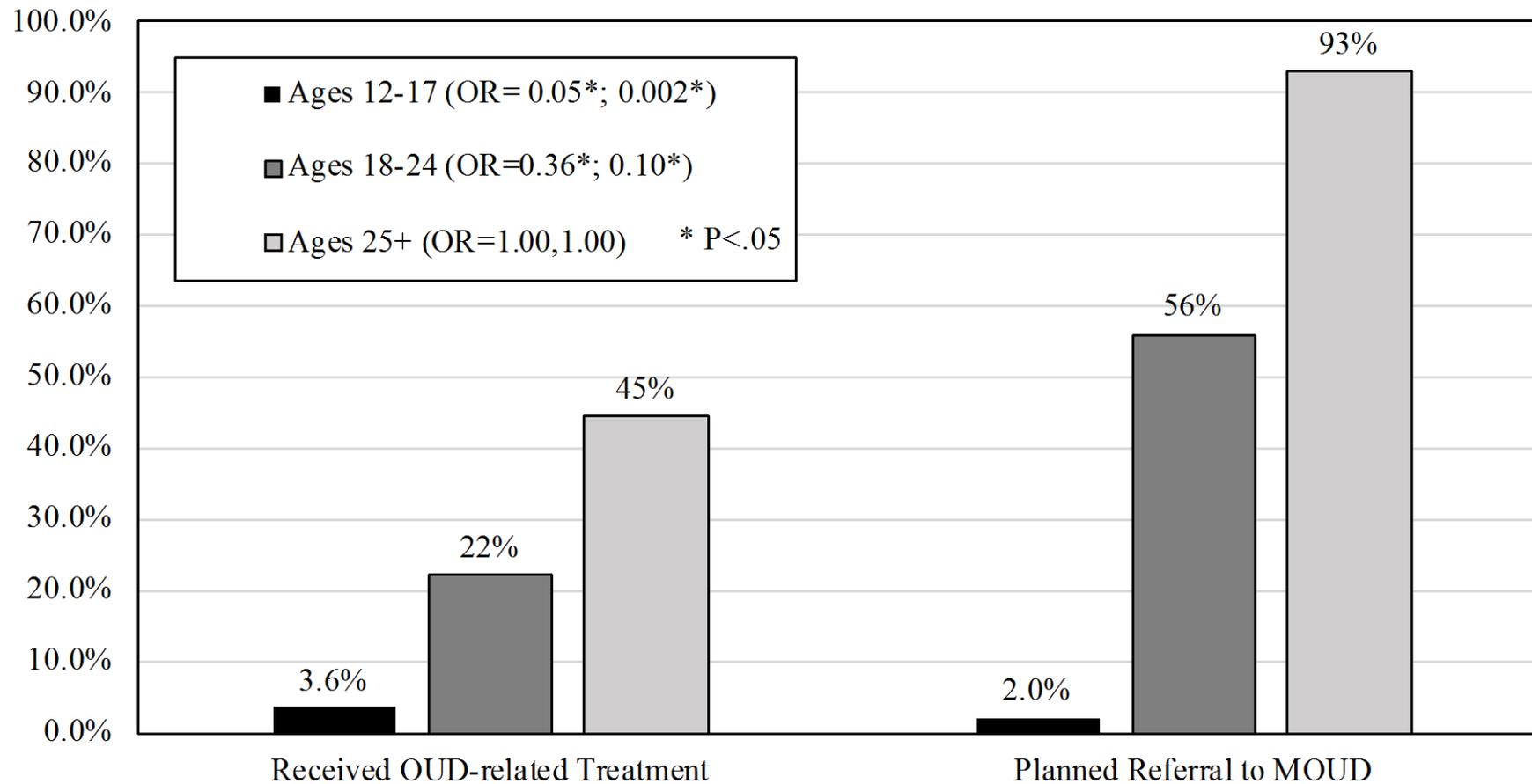
Opioid Use

- Rising mortality in youth (15-24)
 - Overall proportion of deaths attributable to opioids
 - 2.9% in 2001
 - 12.4% in 2016
- Access to care is delayed for adolescents and young adults
 - 4.7% of adolescents and 26.9% of young adults received MOUD within 3 months of an OUD diagnosis
 - Only 1 in 54 receive MOUD after surviving an opioid overdose



Access to treatment

Age Disparity in Access to OUD and MOUD Treatment in 2017





Co-occurring Disorders

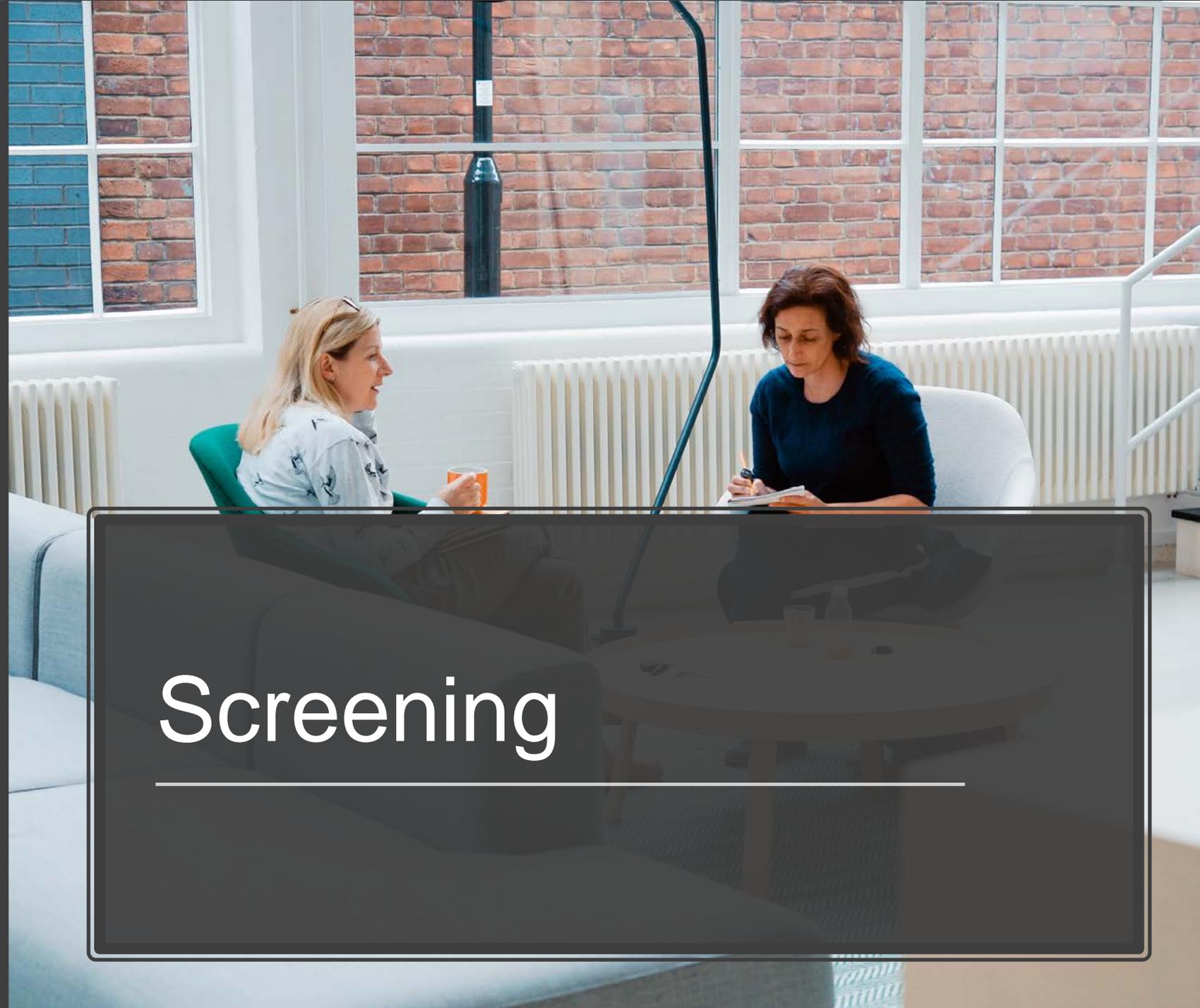
- Outpatient SUD clinic
Total N=483 aged 11-24
- Opioid subgroup n=133
 - Significant association between opioid use and anxiety disorders

Diagnoses	Opioids		
	aOR	95% CI	p-Value
Anxiety-related [†]	2.24 *	[1.43, 3.50]	<0.001
Depression-related [‡]	1.64	[0.96, 2.82]	0.07
Ext/Behav-related ^α	1.22	[0.78, 1.92]	0.38
ADHD	1.319	[0.83, 2.09]	0.24
PTSD	1.084	[0.45, 2.61]	0.86
GAD	3.421 *	[1.37, 8.50]	0.01
MDD	1.55	[0.75, 3.19]	0.23

† Anxiety-related: PTSD, GAD, OCD, Panic D/O, Social Phobia, Anxiety D/O NOS

‡ Depression-related: Dysthymia, Depression NOS, MDD

α Ext/Behav-related: Conduct D/O, ODD, and ADHD



Screening



Screening

S2BI algorithm

In the past year, how many times have you used:
Tobacco? Alcohol? Marijuana?



The CRAFFT+N Interview

To be orally administered by the clinician

Begin: "I'm going to ask you a few questions that I ask all my patients. Please be honest. I will keep your answers confidential."

Part A

During the PAST 12 MONTHS, on how many days did you:

1. Drink more than a few sips of beer, wine, or any drink containing alcohol? Say "0" if none. # of days
2. Use any marijuana (weed, oil, or hash by smoking, vaping, or in food) or "synthetic marijuana" (like "K2," "Spice")? Say "0" if none. # of days
3. Use anything else to get high (like other illegal drugs, prescription or over-the-counter medications, and things that you sniff, huff, or vape)? Say "0" if none. # of days
4. Use any tobacco or nicotine products (for example, cigarettes, e-cigarettes, hookahs or smokeless tobacco)? Say "0" if none. # of days

Did the patient answer "0" for all questions in Part A?

Yes

No

Ask CAR question only, then stop

Ask all six CRAFFT* questions below

Part B	No	Yes
C Have you ever ridden in a CAR driven by someone (including yourself) who was "high" or had been using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
R Do you ever use alcohol or drugs to RELAX , feel better about yourself, or fit in?	<input type="checkbox"/>	<input type="checkbox"/>
A Do you ever use alcohol or drugs while you are by yourself, or ALONE ?	<input type="checkbox"/>	<input type="checkbox"/>
F Do you ever FORGET things you did while using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
F Do your FAMILY or FRIENDS ever tell you that you should cut down on your drinking or drug use?	<input type="checkbox"/>	<input type="checkbox"/>
T Have you ever gotten into TROUBLE while you were using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>

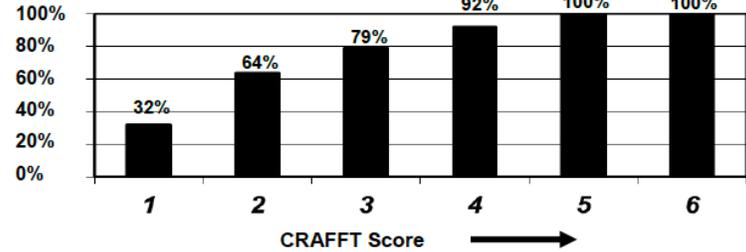
*Two or more YES answers suggest a serious problem and need for further assessment. See back for further instructions →

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1. Show your patient his/her score on this graph and discuss level of risk for a substance use disorder.

Percent with a DSM-5 Substance Use Disorder by CRAFFT score*



*Data source: Mitchell SG, Kelly SM, Gryczynski J, Myers CP, O'Grady KE, Kirk AS, & Schwartz RP. (2014). The CRAFFT cut-points and DSM-5 criteria for alcohol and other drugs: a reevaluation and reexamination. Substance Abuse, 35(4), 376-80.

2. Use these talking points for brief counseling.



1. **REVIEW** screening results

For each "yes" response: "Can you tell me more about that?"



2. **RECOMMEND** not to use

"As your doctor (nurse/health care provider), my recommendation is not to use any alcohol, marijuana or other drug because they can: 1) Harm your developing brain; 2) Interfere with learning and memory, and 3) Put you in embarrassing or dangerous situations."



3. **RIDING/DRIVING** risk counseling

"Motor vehicle crashes are the leading cause of death for young people. I give all my patients the Contract for Life. Please take it home and discuss it with your parents/guardians to create a plan for safe rides home."



4. **RESPONSE** elicit self-motivational statements

Non-users: "If someone asked you why you don't drink or use drugs, what would you say?" Users: "What would be some of the benefits of not using?"



5. **REINFORCE** self-efficacy

"I believe you have what it takes to keep alcohol and drugs from getting in the way of achieving your goals."

3. Give patient Contract for Life. Available at www.crafft.org/contract

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Treatment



Behavioral Treatments

	Sample Size	Design	Intervention Conditions	Treatment Outcomes	Discussion
Davis et al. (2019)	Age 12-17: n = 252 Age 18-25: n = 533	Latency of return to first self-reported opioid use.	A-CRA vs. MET/CBT or CBT alone	Days to first opioid use for combined age groups: A-CRA: 59.6; MET/CBT or CBT: 58.3; TAU: 63.9	Equivalent outcomes in female adolescents. Male adolescents in TAU or A-CRA had shorter latency to opioid use than MET/CBT or CBT.
Godley et al. (2017)	Opioid problem use (OPU): n = 306 Marijuana and alcohol problem use (MAPU): n = 3,721	Efficacy of A-CRA in OPU vs. MAPU groups.	A-CRA in OPU group vs. A-CRA in MAPU group	Initiation: MAPU:79%; OPU:82% Engagement: MAPU: 63%; OPU: 67%; Retention: MAPU: 8.9; OPU: 8.9 sessions	Equivalent treatment initiation, engagement, retention, satisfaction between groups.
Pugatch et al. (2014)	Age 16-22: N = 42 Parents/guardians: N = 72	Thirteen 90-minute groups for adolescents. Parent modules.	Group therapy, MAT, individual counseling, parent guidance	52% reported weekly abstinence from all substances; 57% completed treatment (≥ 10 sessions)	Promising rates of treatment completion, parent engagement, and enhancement of knowledge/relapse prevention skills.



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MOUD in Youth

MOUD is recommended by AAP in youth

POLICY STATEMENT

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

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Medication-Assisted Treatment of Adolescents With Opioid Use Disorders

COMMITTEE ON SUBSTANCE USE AND PREVENTION

MOUD in Youth

- Buprenorphine
 - The **only** addiction medication approved by FDA for adolescents, 16+ for opioid use disorder
 - Woody et al. (2008) N=152, ages 15-21
 - 2-week detox vs. 8-week buprenorphine maintenance, total 12 weeks
 - » Week 8: Fewer opioid positive urine tests (54% vs. 23%; OR = 5.07; P = .001)
 - » Week 12: Greater tx retention (20.5% vs 70%; P < .001)
 - » Supported maintenance therapy and not just taper
 - Disparities in sex, age and race/ethnicity for receipt



MOUD in Youth

- Naltrexone XR injectable
 - Fishman et al. (2010) N=16, ages 16-20
 - Case series
 - 10/16 had substantially decreased opioid use
 - Well tolerated, no overdoses
 - Vo et al (2018) n=14 naltrexone; n= 21 TAU, ages 17–25
 - Pilot home-based delivery of naltrexone XR
 - 9/14 received at least 1 home-based dose
 - » Home group: 3.3 doses over 5 months vs. 2.0 dose TAU
- Methadone
 - Pregnancy or 2 treatment failures of detoxification or psychosocial interventions without pharmacotherapy
 - DeAngelis and Lehmann (1973) N=37
 - » 18 month, low dose methadone (20 mg)
 - » 48% retained at 12 months
 - » 35% abstinent and working or in school at 18 months



MOUD in Youth

- Opioid withdrawal
 - Buprenorphine is primary treatment vs. clonidine only
 - Marsch et al. (2005) N=36, ages 13-18
 - 28-day outpatient double-blind RCT
 - Buprenorphine group had greater tx retention (72% vs 39%; $P < .05$)
 - More opioid negative urine test results (64% vs 32%; $P = .01$)

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Naloxone

- **FDA approved for use in all pediatric ages**
- Used to rapidly reverse effects of opioid overdose
- Short 1/2 life 30-90 minutes
- When in doubt, give naloxone.





Summary

- Youth have been significantly impacted by the opioid overdose epidemic
- Behavioral treatments are largely understudied
- MOUD is widely underutilized
- MOUD should be used in adolescent and young adults
 - Buprenorphine is FDA approved 16+
 - Naltrexone XR is promising
- Naloxone is FDA approved all ages

Questions?



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Harm Reduction March 2021 – June 2021		
Date	Topic	Presenter
5/21	Micro-dosing	Melissa Weiner, MD, Yale
6/04	Mindfulness-Oriented Recovery Enhancement(MORE)	Katy Bottonari PhD, MUSC & Ralph H. Johnson VAMC

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