Substance Use Support in Primary Care Pediatrics

A New, Virtual SUD Counseling Service through MCPAP

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Until every child is well™

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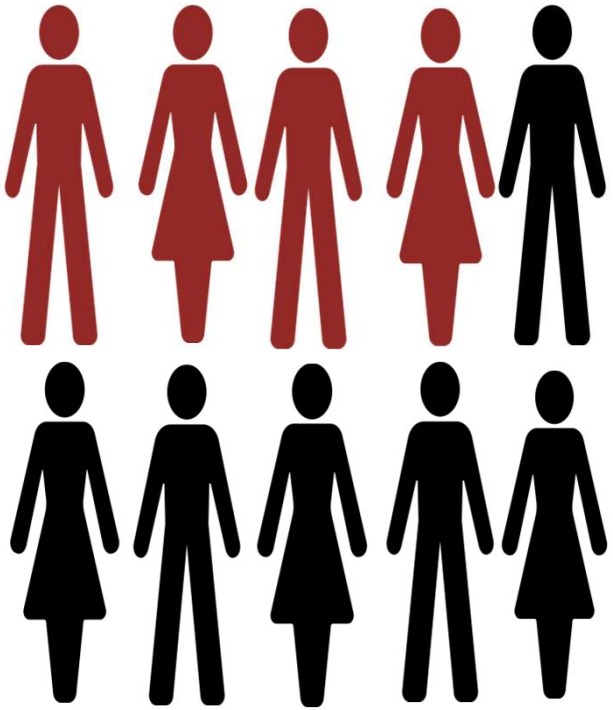
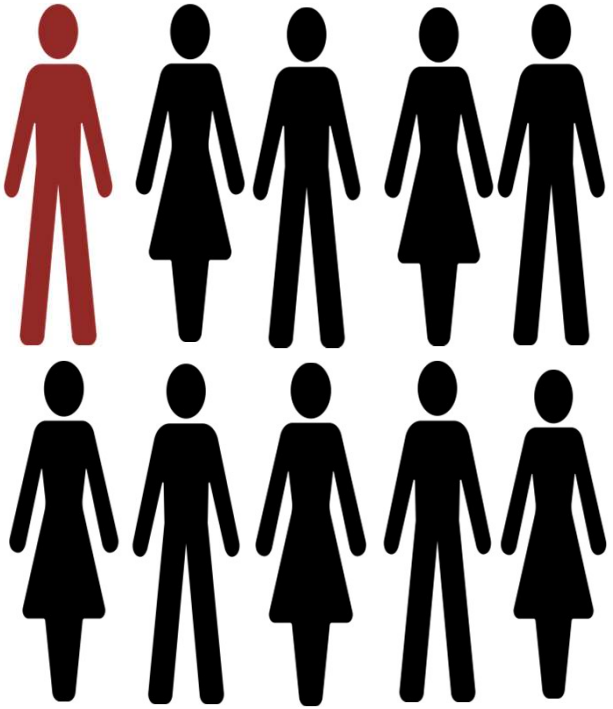
HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

Health care is identify **substance use health risks** and intervene



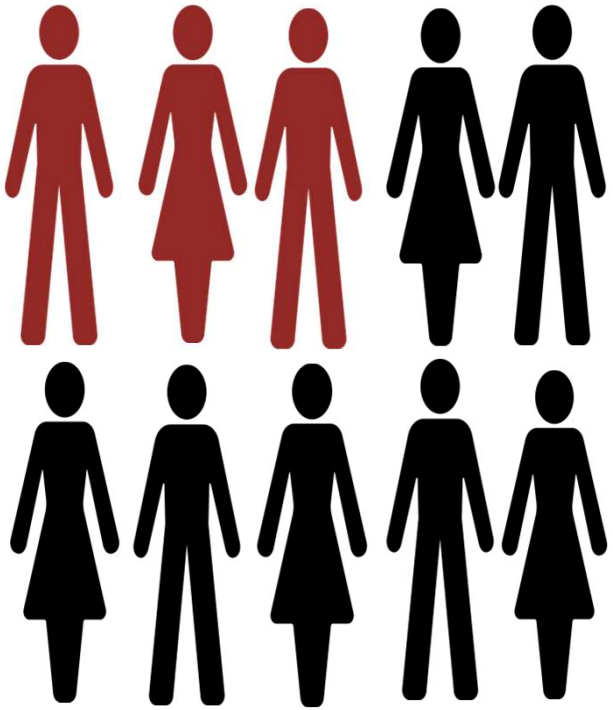
4 in 10 high school aged reported past-year alcohol use



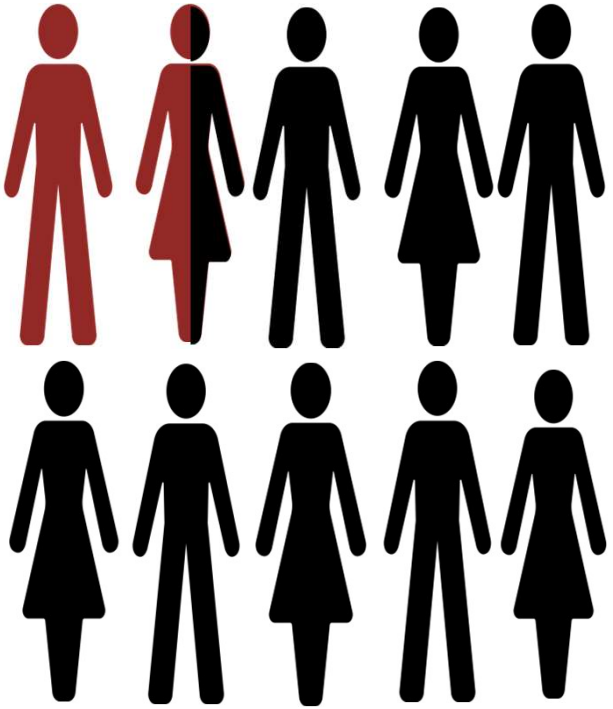
1 in 10 reported a binge in the last 3 months

Presenting for general primary care; unpublished data from the AYAM clinic

Health care is identify **substance use health risks** and intervene



3 in 10 report past-year marijuana use



About 1.5 in 10 report using marijuana monthly or more

Presenting for general primary care; unpublished data from the AYAM clinic

Alcohol

- Black outs
- Unintentional injuries
- Memory loss

Marijuana

- Hallucinations (27%)
- Paranoia/Anxiety (33.6%)
- Any psychotic symptom (42.9%)

Levy S, Weitzman, ER. Acute mental health symptoms in adolescent marijuana users. *JAMA Pediatrics*. 2018 Dec 17;doi 10.1001/jamapediatrics.2018

Tools that quickly and accurately **screen teens substance use disorders** exist

S2BI: Screening to Brief Intervention In the past year, how many times have you used:		
Tobacco/Nicotine? (such as cigarettes, e-cigarettes, “vapes”)	○	Never
	○	Once or Twice
	○	Monthly
	○	Weekly or more

S2BI: Screening to Brief Intervention

In the past year, how many times have you used:

Alcohol?	○	Never
	○	Once or Twice
	○	Monthly
	○	Weekly or more

S2BI: Screening to Brief Intervention

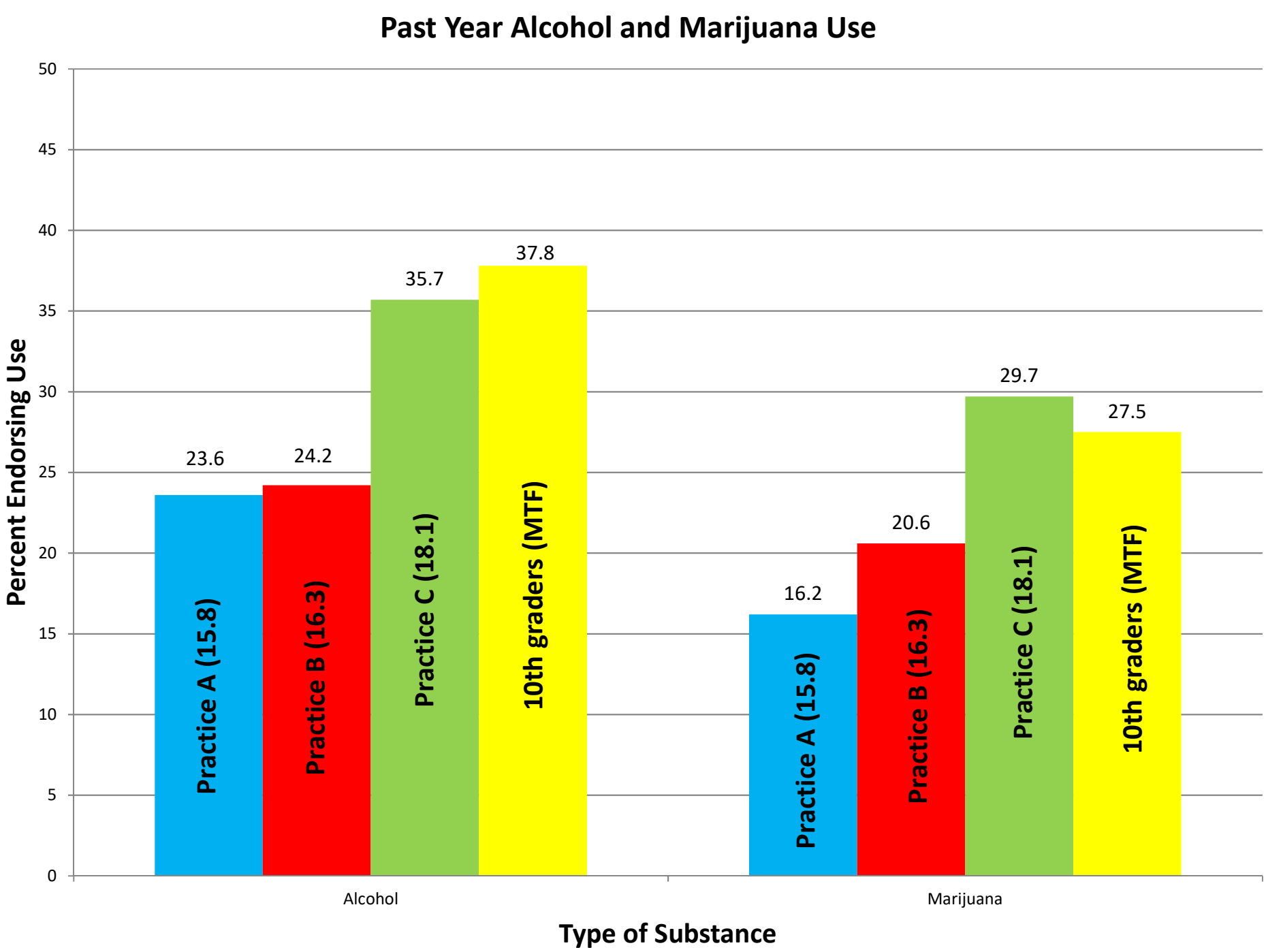
In the past year, how many times have you used:

Marijuana? (smoked, vaped, edibles)	○	Never
	○	Once or Twice
	○	Monthly
	○	Weekly or more

S2BI Sensitivity/Specificity

DSM-5 Moderate or Severe Substance Use Disorder diagnosis

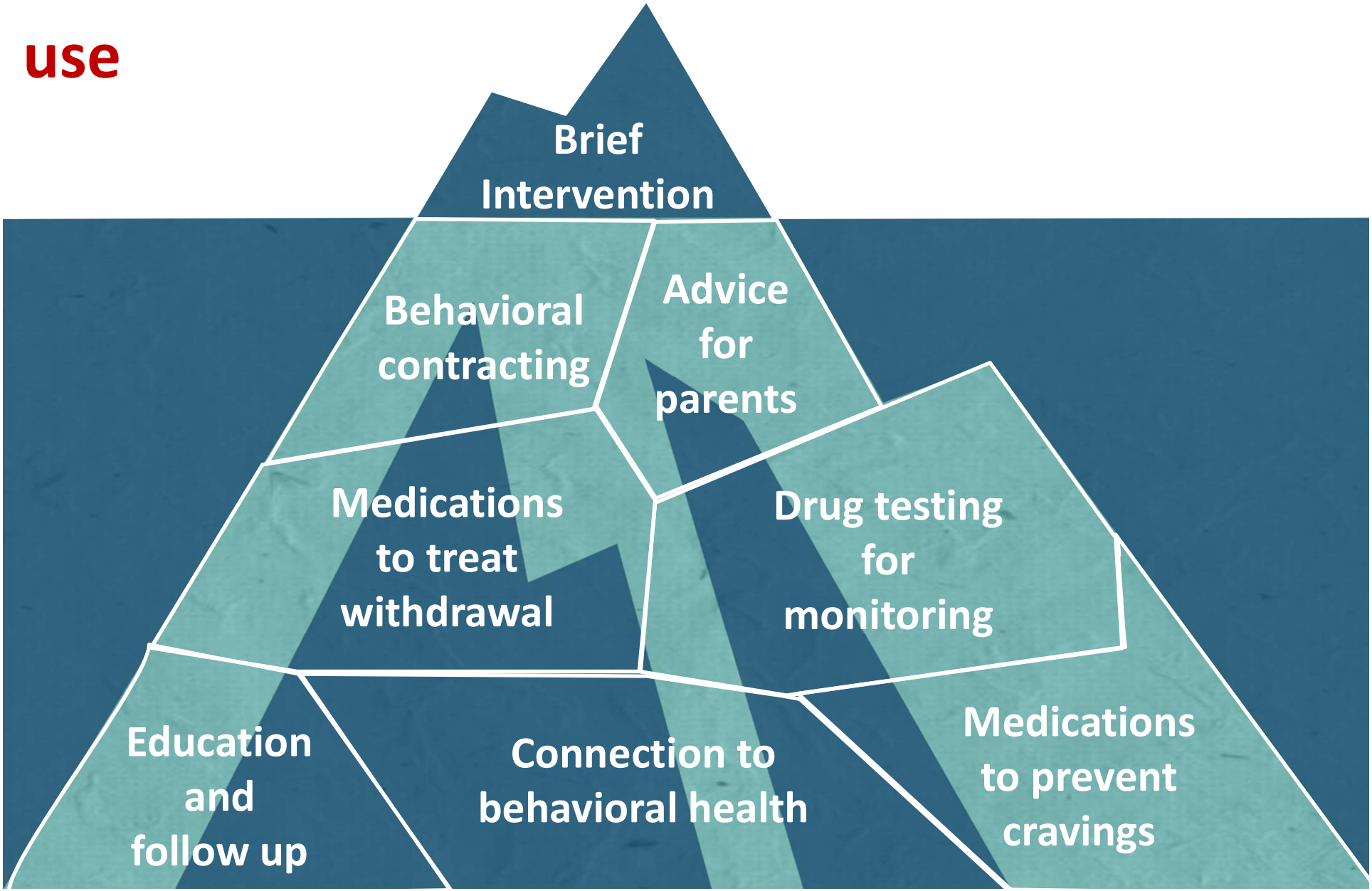
Criterion Standard Dx	Sensitivity (95% CI)	Specificity (95% CI)
Alcohol Use Disorder	100%	93.6%
Cannabis Use Disorder	95.3%	91.6%


Past Year Alcohol and Marijuana Use
Percent Endorsing Use
50
45
40
35
30
25
20
15
10
5
0
23.6
24.2
35.7
37.8
16.2
20.6
29.7
27.5
Practice A (15.8)
Practice B (16.3)
Practice C (18.1)
10th graders (MTF)
Practice A (15.8)
Practice B (16.3)
Practice C (18.1)
10th graders (MTF)
Alcohol
Marijuana
Type of Substance

Poll:
What is the role of the PCP in reducing adolescent substance use?

- Screening, Brief Intervention, Referral to Treatment (SBIRT)
- There is more to the PCP role than just SBIRT
- PCP's do not have a role in reducing adolescent substance use

Primary care providers can make effective interventions to **reduce adolescent substance use**



Medications for Nicotine Use Disorders

Medication	Level of Evidence	Comments
Nicotine Replacement	High (for adults)	No evidence base for use with patients that vape.[1]
Bupropion	High (for adults)	May be a good choice for adolescents with depression and nicotine use disorder.[1]
Varenicline	High (for adults)	Not recommended under age 16. Lack of evidence to support efficacy.[2]

1. Dawson, KL. Overview of pharmacological interventions for adolescent tobacco use disorder. *J Am Acad Child Adolesc Psychiatry,* 2016: 55(10): S20.
2. https://www.fda.gov/NewsEvents/Newsroom/FDAInBrief/ucm631875.htm

Medications for Cannabis Use Disorders

Medication	Level of Evidence	Comments
N-acetyl cysteine	Moderate [1-3]	- Available as over-the-counter supplement - Not FDA approved for CUD

1. McClure EA, *Contemp Clin Trials,* 2014: 39(2): 211-223.
2. Laprevote V, J. *Curr Pharm Des,* 2015: 21(23): 3298-3305.
3. Sherman BJ, *Pharmacotherapy*, 2016: 36(5): 511-35.

Medications for Alcohol Use Disorders

Medication	Level of Evidence	Comments
Naltrexone	Moderate for decreasing alcohol consumption and preventing return to heavy drinking	Consider for: Adolescents with concurrent OUD and AUD Adolescents with strong family history of AUD
Acamprosate	Moderate for decreasing alcohol consumption Low for preventing return to heavy drinking	Rarely used in adolescents due to limited evidence

https://www.effectivehealthcare.ahrq.gov/ehc/products/477/1908/alcohol-misuse-drug-therapy-report-140513.pdf

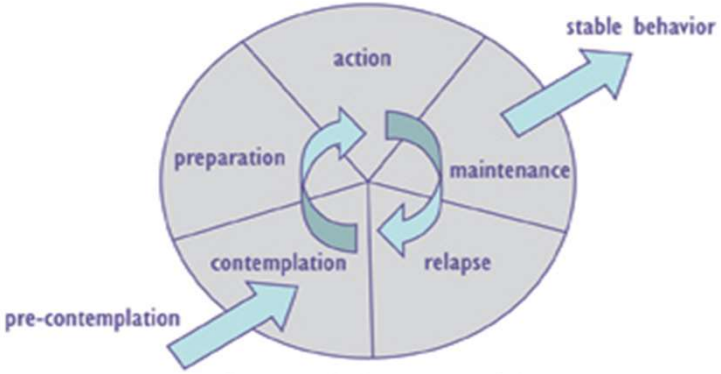
Medications for Opioid Use Disorders

Medication	Level of Evidence (for adults)	Comments
Methadone	High[1]	- Full agonist - Limited access under age 18 - Effect on developing brain unknown
Buprenorphine	High[2]	- Partial agonist - Indicated for patients ≥ 16 years old - Can be prescribed in medical office - Abuse potential less than full agonist - Effects on developing brain unknown
Naltrexone	Insufficient[3]	- Antagonist - Relapse prevention - Hepatotoxic risk

1. Fullerton CA, et al. Medication-assisted treatment with methadone: assessing the evidence. *Psychiatric Services*, 2014: 65(2): 146-157.
2. Thomas CP, et al. Medication-Assisted Treatment with Buprenorphine: Assessing the Evidence. *Psychiatric Services,* 2014: 65(2): 158-170.
3. Minozzi S, et al. Oral naltrexone maintenance treatment for opioid dependence. *Cochrane Database System Review,* 2011.
4. Woody GE, Poole SA, Subramaniam G, et al. Extended vs short-term buprenorphine-naloxone for treatment of opioid-addicted youth: a randomized trial. *JAMA*. 2008;300(17):2003-2011.
5. Marsch LA, Moore SK, Borodovsky JT, et al. A randomized controlled trial of buprenorphine taper duration among opioid-dependent adolescents and young adults. *Addiction*. 2016;111(8):1406-1415. doi:10.1111/add.13363

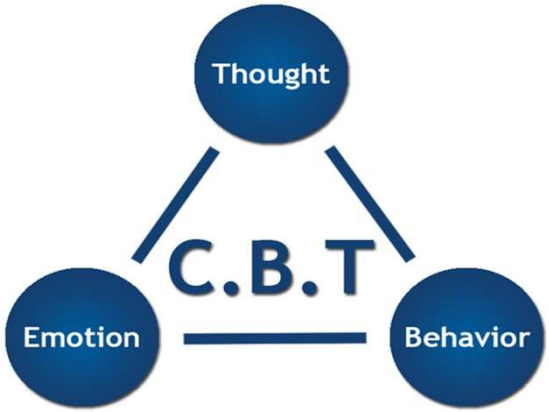
Therapy for Adolescent SUD

Motivational Interviewing

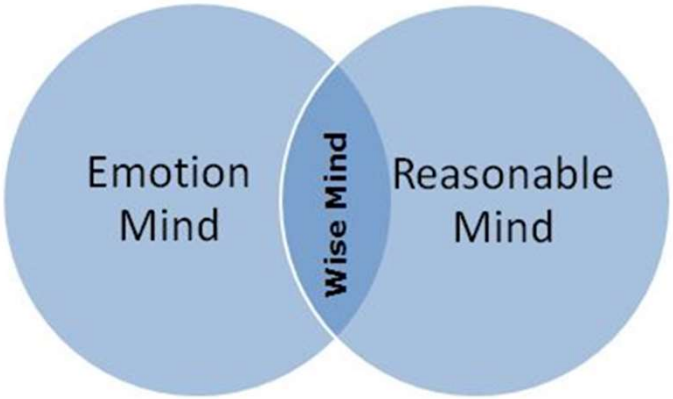


Stages of change model

Cognitive Behavioral Therapy



Dialectical Behavior Therapy



Contingency Management

Behavior → Consequence

Therapy for Adolescent SUD

Technique	Level of Evidence	Comments
Motivational Interviewing	Moderate[1]	Foundational basis of brief interventions
Cognitive Behavioral Therapy	Moderate[2]	Support for teens motivated for behavior change
Dialectical Behavior Therapy	Moderate[3]	Useful for patients with co-occurring mental health or personality disorders
Contingency Management	Moderate[4]	Challenging to implement

1. Jonas DE, *Annals of Internal Medicine,* 2012: 157(9): 645-654.
2. Kaminer Y, In C. Rowe & H. Liddle (eds.), *Adolescent substance abuse: Research and clinical advances*. New York: Cambridge University Press, pp. 346-419, 2006.
3. Dimeff LA, *Addict Sci Clin Pract,* 2008: 4(2):39-47.
4. Benishek LA, Prize-based contingency management for the treatment of substance abusers: a meta-analysis.

ASAP's On-Call Faculty

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Tamara Martinez, MD

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ASAP-MCPAP Call Volume

Drug Testing

17 y/o adolescent with marijuana use disorder, who is pre-comtemplative but willing to do drug testing at mom's request. PCP seeking advice on how to proceed.

Advice Given:

- Drug testing may be useful for self –monitoring, similar to using a scale for a patient who is trying to lose weight.
- If patient stops using marijuana, expect corrected THC levels to fall by about half each week for a couple of weeks until levels become minimal.
- Suggest that parents set up rewards for decreasing THC levels.
- Offer a follow up visit in a month to discuss whether and how drug testing was helpful.

Discuss overall DT plan	• Decide if testing will be done at home, in the lab, or in the office • Confirm that patients and parents will both get results • Determine how results will be shared (by phone, in person visit, etc.)
Plan how to use results	• 1st negative test: OK to go out with friends, curfew 8 pm • 2nd consecutive negative test: curfew extended to 10 pm • 3rd consecutive negative test: driving privileges restored • 4th consecutive negative test: sleep overs allowed • **If a test is positive at any point, start from the beginning.**
Place orders.	• Urine drug toxicology monitoring: Panel with Confirmation • Urine drug toxicology monitoring: Specimen Validity • Alcohol metabolite with confirmation • Nicotine and cotinine
Collect the specimen	• Collect a first morning specimen to maximize concentration. • If collection is at home, recommend that parents "supervise" collection to the extent that they are comfortable. Parents can put dye in the toilet, listen for running water and keep the door open to prevent a teen from using a stored urine sample. • Check for temperature. Use a cup with a temperature strip if possible. • Supervise the specimen until it is dropped off at the lab. • For repeated testing, parents can choose the day for collection, and should always collect the next morning if drug use is suspected. At times testing should be two consecutive days (to avoid use immediately after the test). • We recommend testing periods of 8-12 weeks or as clinically indicated.
Interpret the results	• Check the urine creatinine to confirm specimen integrity. • MARIJUANA: THC is lipid soluble and is stored in fat tissue in heavy/chronic users. To compare consecutive tests, divide the THC level by the creatinine to correct for urine concentration. • ALCOHOL: Alcohol metabolites (ethyl glucuronide and ethyl succinate) can be positive in the urine for up to 5 days after heavy alcohol use. Low levels of these metabolites can be detected even in the absence of alcohol consumption. • OPIATES: Poppy seeds contain small amounts of naturally occurring opiates, and patients who consume them can have small amounts of morphine and codeine in their urine. For tests with low levels of opiates we recommend advising the patient to avoid poppy seeds and retest.

Medication Management: NRT

16 year old male presented to his pediatrician asking for help quitting nicotine vapes. Pediatrician called ASAP-MCPAP and started him on 14 mg nicotine patch plus 4 mg NRT lozenge prn. One month patient returned; he had quit vaping and was wearing the patch 5 days per week. Pediatrician called back to ask for help in tapering NRT.

Advice Given:

- Transition to the 7 mg patch for daily use, and that he continue to take the lozenge prn.
- Follow-up with PCP in 3 weeks to discuss continuing the taper.
- Advise patient to call sooner if he experiences symptoms of nicotine withdrawal or more cravings.
- Encouraged pediatrician to call us back with more questions.
- Reviewed the importance of combining short acting and long acting nicotine replacement therapy for maximal effectiveness.

Source: http://www.childrenshospital.org/conditions-and-treatments/conditions/v/vaping

Behavioral health support

14-year-old male with approximately 1 year history of vaping THC and nicotine. Mother has been setting limits and suspending privileges but use has continued without much improvement. Behavioral health counselor requested help in supporting mother.

Advice Given:

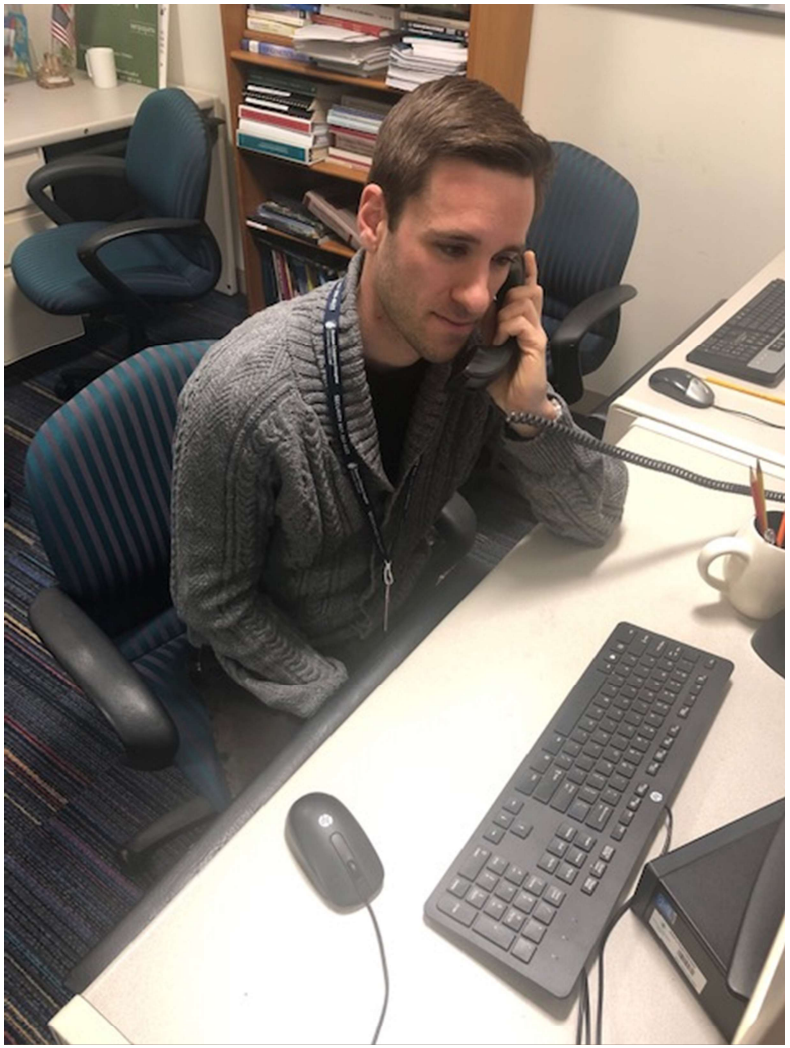
- Advised to ask patient if he would attempt a quit trial.
- Design a behavioral contract with mother that restores privileges for each period of time of no use and resets with each new use.
- Discuss management of withdrawal symptoms or cravings with primary care provider and consider medications if symptoms present.

Choose one or a small number (≤ 5) of behaviors to address.	In most cases, group "substance use" as a single behavior
Set clear expectations that your child(ren) does not have permission to use substances.	Use clear language, avoid euphemisms or generalizations: "You do not have my/our permission to use alcohol/marijuana/nicotine/etc."
Be clear that substance use is NOT ALLOWED in the house.	Consider regular room checks; invite your child to be present (to confirm that you will not be violating personal space) Discard any drugs or paraphernalia found in the house or among personal belongings
Select rewards that are acceptable to you and meaningful to your child (if your child has some say in the rewards, s/he will likely buy in to the contract concept more readily)	Going out with friends Curfew Sleepovers Small gifts (sporting equipment, video games, special clothes, etc.) Dinner at their favorite restaurant/fast food chain Their favorite meal at home Driving or learning to drive Special events (parties, trips) Lessons or tuition Money saved (by you) towards a larger purchase
Use urine drug testing to monitor	See separate guidance
Establish positive rewards for each week without use. (Use shorter time periods and smaller, more frequent rewards for teens who have very frequent use.)	For Example: First week: permission to spend an hour with friends after school Second week: permission to go out on Saturday evening, curfew set to 9 pm Third week: curfew extended to 10 pm Etc.
If use occurs during the contract	Reset to baseline
Ensure rewards are given if a contingency is met. Your child will become de-motivated to pursue behavioral change if his/her efforts are not acknowledged and rewarded as agreed to.	Avoid piling on such as "We are resetting your curfew even though your drug test was negative because you failed a math test." Ignore behavior that is not critical, even if annoying such as Messy room Clothing choices Hair styles Diet/fast food consumption (within reason)

Introducing: ASAP MCPAP-Treatment

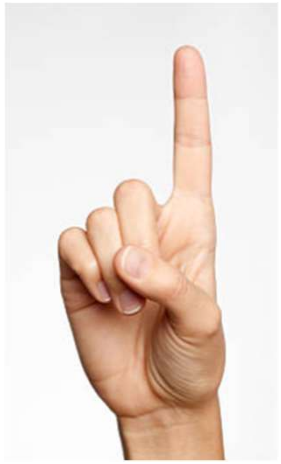
Virtual SUD Treatment for Primary Care Patients

How do I make a referral?



- Call MCPAP
- Ask for the ASAP MCPAP-consultation line

Information for Consultant



Screen for safety/appropriateness for virtual care

Confirm family is aware of referral

Collect contact information

Managing Confidentiality

- Family involved but not aware of referral:

  PCP speaks with family and call back MCPAP coordinator to confirm

- Patient requesting confidential counseling:
  ASAP-MCPAP will collect adolescent's contact information and do a non-billed appointment

ASAP MCPAP staff will complete intake information and schedule appointment.

Communication with practices

After evaluation: written summary with treatment recommendations

Ongoing: Two-way lines of communication

Not every patient is a candidate for virtual visits

- Several situations make virtual care inadvisable:
  - severe depression/active suicidality,
  - autism or communication disorders,
  - child abuse/neglect
- In these cases ASAP MCPAP consultant will suggest a referral to ASAP or another program

ASAP-MCPAP staff

Treatment Team

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