PCSS O TRAINING
PROVIDERS' CLINICAL SUPPORT SYSTEM For Opioid Therapies

Co-occurring Psychiatric Illness and Substance Use in Youth

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American Academy of Pediatrics
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Providers' Clinical Support System Opioid Therapies (PCSSO)

- Grant funded by SAMHSA
- Coalition of professional organizations
- Overarching goal: To offer evidence-based trainings on the safe and effective prescribing of opioid medications in the treatment of pain and/or opioid addiction.
- AAP = 2 Webinars per grant year (6 total)
- www.pcss-o.org

CME

CME credit is available for this Webinar upon completion of an evaluation.

More information will be provided near the end of this presentation.

Speakers

Diana Deister, MD

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The speakers have no relevant financial relationships with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in this CME activity.
Dr Deister does intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.

Educational Objectives

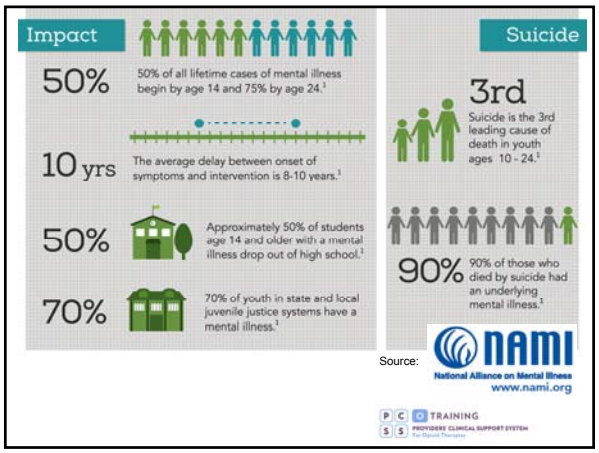
At the conclusion of this activity participants should be able to:

- ✓ Quickly screen for mental health symptoms in youth to identify the most common psychiatric problems
- ✓ Use screening tools when prescribing opioids for youth
- ✓ Incorporate both mental health and substance use screening into routine pediatric settings

Mental Health Facts
CHILDREN & TEENS

Fact: 1 in 5 children ages 13-18 have, or will have a serious mental illness.[1]

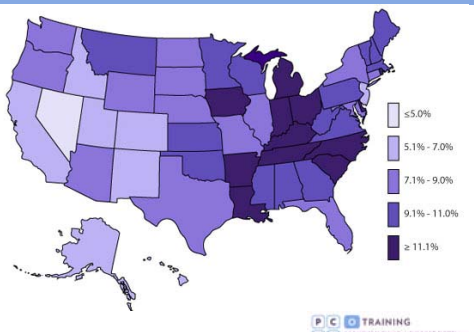
Source: NAMI National Alliance on Mental Illness www.nami.org



Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication

- 9282 face-to-face surveys conducted from 2001-2003 with adults age 18 and older.
- Half of Americans will have a diagnosable mental illness in their lifetime.
  - 50% of cases occur by age 14
  - 75% of cases occur by age 24
- Median age of onset:
  - Anxiety d/o and impulse-control d/o – 11 years
  - SUD's – 20 years
  - Mood d/o – 30 years
- Lifetime prevalence:
  - Anxiety d/o – 29%
  - Impulse control d/o – 25%
  - Mood d/o – 21%
  - SUD's – 15%

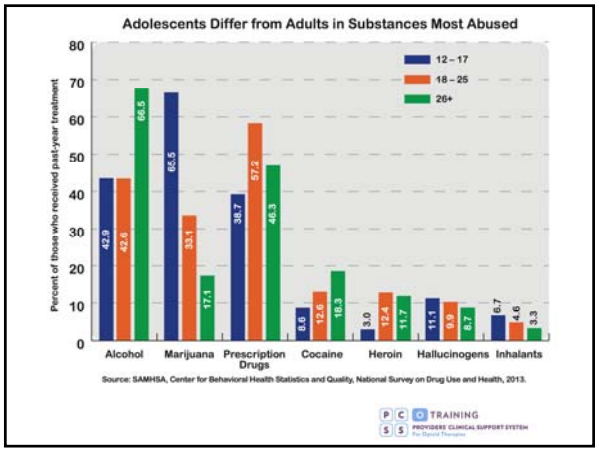
Percent of Youth Aged 4-17 with Current Attention-Deficit/Hyperactivity Disorder by State: National Survey of Children's Health 2011



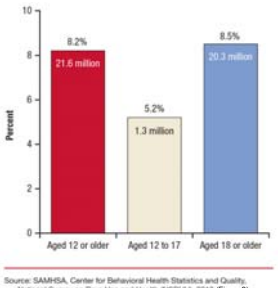
ADHD

- ADHD diagnosis is associated with almost doubled risk of accidental injury (and potential need for pain medication).
  - Medication treatment of ADHD is associated with decreased rates of injury (Dalsgaard, 2015)
- ADHD diagnosis is associated with increased rates of SUD development.
  - Research is inconsistent regarding effect of medication treatment for ADHD on eventual risk of SUD development (Kantak, 2016).
- ABUSE of stimulant medication is associated with increased risk of accidents and ER visits.

- Dalsgaard S, et al. Effect of drugs on the risk of injuries in children with attention deficit hyperactivity disorder: a prospective cohort study. *Lancet Psychiatry*. 2015;2(8):702-709
- Kantak KM, Dwoskin LP. Necessity for research directed at stimulant type and treatment-onset age to access the impact of medication on drug abuse vulnerability in teenagers with ADHD. *Pharmacol Biochem Behav*. 2016;145:24-6

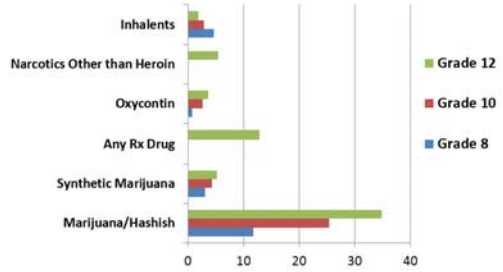


Substance use disorder (SUD) in the past year among individuals aged 12 or older: 2013



Past Year Drug Use. US Students

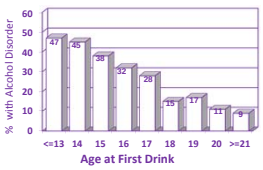
2015 Monitoring the Future Data



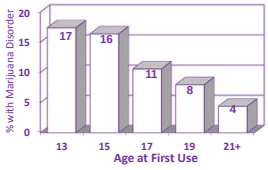
Johnston, L. D., O'Malley, P. M., Miech, R. A., Bachman, J. G., & Schulenberg, J. E. (2016). Monitoring the Future national survey results on drug use, 1975-2015: Overview, key findings on adolescent drug use. Ann Arbor: Institute for Social Research, The University of Michigan.

Age at First Use and Later Risk

Alcohol

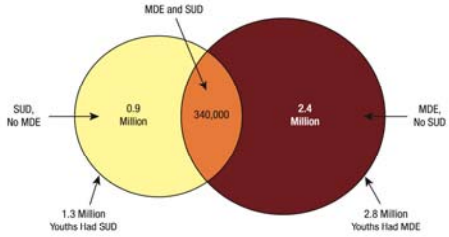


Marijuana



Source: Hingson RW, Heeren T, Winter MR. Age at drinking onset and alcohol dependence. *Arch Pediatr Adolesc Med.* 2006;160:739-746.

Past Year Substance Use Disorders and Major Depressive Episode in the Past Year among Youths Aged 12 to 17: 2014

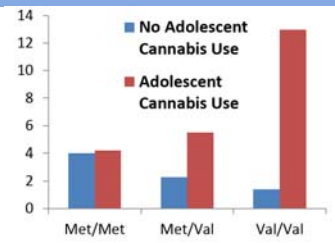


MDE = major depressive episode; SUD = substance use disorder.
Note: Youth respondents with unknown MDE data were excluded.

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 from http://www.samhsa.gov/data

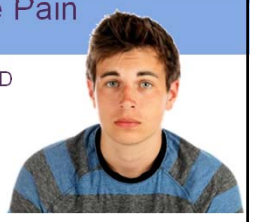
Genetic vulnerability for psychosis following adolescent cannabis use

Percentage of sample who met criteria for Schizophreniform Disorder at age 26



Caspi A, et al. Moderation of the effect of adolescent-onset cannabis use on adult psychosis by a functional polymorphism in the catechol-O-methyltransferase gene: longitudinal evidence of a gene X environment interaction. *Biol Psychiatry.* 2005;57(10):1117-27

Case: Acute Pain



- Bruce is a 15 year old boy with ADHD with a displaced femur fracture who will need post-op pain management.
- He tells you confidentially he has been "experimenting" with alcohol, marijuana, and cigarettes for 6 months, although his parents are not aware.
- His parents are concerned that he will be in pain and not able to do his physical therapy to make a full recovery.

Bruce: 15 y.o. boy using EtOH, MJ, cigarettes, s/p surgery

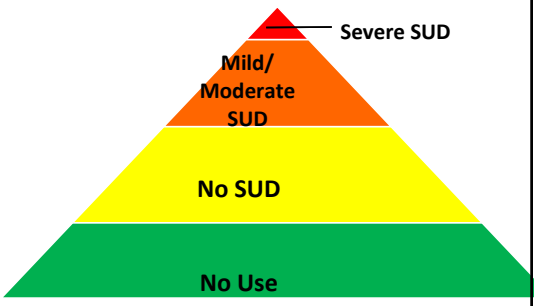
- What factors will you consider in prescribing for Bruce?
- How can you manage your concerns when discussing pain control with his parents while maintaining his confidentiality?
- Is there more information you need to make a plan?

Risk Factors for SUD development

Risk Factors	Domain	Protective Factors
Early Aggressive Behavior	Individual	Self-Control
Lack of Parental Supervision	Family	Parental Monitoring
Substance Abuse	Peer	Academic Competence
Drug Availability	School	Anti-drug Use Policies
Poverty	Community	Strong Neighborhood Attachment

S2BI: Screen to Brief Intervention

Use FREQUENCY to assess RISK



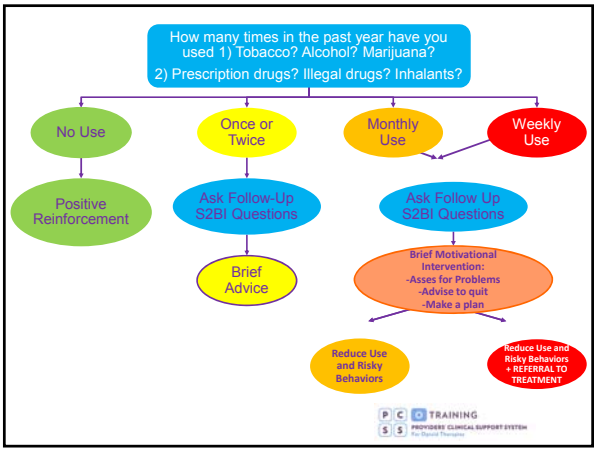
S2BI

In the past year, how many times have you used

- Tobacco?
- Alcohol?
- Marijuana?

STOP if all "Never." Otherwise, CONTINUE.

- Prescription drugs that were not prescribed for you (such as pain medication or Adderall)?
- Illegal drugs (such as cocaine or Ecstasy)?
- Inhalants (such as nitrous oxide)?
- Herbs or synthetic drugs (such as salvia, "K2", or bath salts)?



Sensitivity/Specificity of S2BI

CIDI-SAM interview vs. screen frequency item for detecting a substance use disorder; N=215.

Criterion Standard Dx	Screen Frequency	Sensitivity	Specificity
Any SUD	≥ Monthly use	90%	94%
Severe SUD	≥ Weekly use	100%	94%

Levy, S. Ziemnik, R., Shrier, L., Sherritt, L., Spalding, A. (2013). Using a brief assessment tool to identify substance use disorders in teens. AMERSA 37th Annual National Conference, Bethesda, MD.

Levy S, Weiss R, Sherritt L, Ziemnik R, Spalding A, Van Hook S, Shrier LA. An electronic screen for triaging adolescent substance use by risk levels. JAMA Pediatr. 2014 Sep;168(9):822-8. doi: 10.1001/jamapediatrics.2014.774. PubMed PMID: 25070067; PubMed Central PMCID: PMC4270364.

Bruce: 15 y.o. boy using EtOH, MJ, cigarettes, s/p surgery

- Using the S2BI screener, Bruce reports:
- Using cigarettes once at a party (it was "gross")
- Using alcohol 3 times to "get buzzed"
- Using marijuana 2 times
- He denies use of all "follow up" drug questions.

Give positive reinforcement for non-use of other drugs. Then move on to brief advice regarding current substances (covered in future webinar).

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www.aap.org/mentalhealth

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Mental Health Screening and Assessment Tool From AAP

Comprehensive list of screeners for PCP's for multiple conditions.
www.aap.org/mentalhealth/ScreeningChart

Parent/Family Screening

Tools & Description	# of items Format	Age Group	Admin & Scoring Time	Psychometric Properties	Cultural Considera-tion	Cost & Develo-per
PHQ-9 Patient Health Questionnaire 9 *Screens adults for depression*	9 items Self report	Adult	<5 min to adminis-ter. Scoring <1 min	Excellent internal reliability... Cutoff score of 10 or more Sensitivity: 88% for MDD Specificity: 88% for MDD	Not validated in languages other than English	Freely Access-ible
PHQ-2 First 2 questions from PHQ-9 *Screens adults for depression*	2 items Self-report	Adult	1 min	Overall Sensitivity: 83% to 87% Specificity: 78% to 92%	Not validated in languages other than English	Freely Access-ible

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PHQ-9 / PHQ-2

Over the last 2 weeks, how often have you been bothered by any of the following problems?

Not at all – Several days – More than half the days – Nearly every day

1. **Little interest** or pleasure in doing things
2. Feeling down, **depressed**, or hopeless
3. **Trouble falling or staying asleep**, or sleeping too much
4. Feeling tired or having **little energy**
5. Poor **appetite** or overeating
6. Feeling bad about yourself — or that you are a **failure** or have let yourself or your family down
7. Trouble **concentrating** on things, such as reading the newspaper or watching television
8. **Moving** or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual
9. Thoughts that you would be **better off dead** or of **hurting yourself** in some way

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?
Not difficult -Somewhat -Very -Extremely

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General Psychosocial Screening Tests

Tools & Description	# of Items Format	Age Group	Admin & Scoring Time	Psychometric Properties	Cultural Considera-tion	Cost & Develo-per
PSC-17 Pediatric Symptom Checklist 17 Items *General psychosocial screening and functional assessment in the domains of attention, externalizing, and internalizing symptoms*	17 items Self-admin Parent or youth >11 y	4 - 16 y	<5 min Scoring: 2 min	Subscales have obtained reasonable agreement with validated and accepted parent report instruments.	English, Spanish, Chinese. Reading level: fifth to sixth grades	Freely Access-ible
PSC-35 Pediatric Symptom Checklist 35 Items *General psychosocial screening and functional assessment in the domains of attention, externalizing, and internalizing symptoms*	35 items Self admin Parent or youth >11 y	4 - 16 y	<5 min Scoring: 1 to 2 min	General psychosocial screen Sensitivity: 80% to 95% Specificity: 68% to 100%	English, Spanish, Chinese, Japanese Pictorial version available	Freely Access-ible

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Pediatric Symptom Checklist

Emotional and physical health go together in children. Because parents are often the first to notice a problem with their child's behavior, emotions or learning, you may help your child get the best care possible by answering these questions. Please mark under the heading that best fits your child.

- ❑ Complains of aches/pains
- ❑ Spends more time alone
- ❑ Tires easily, has little energy
- ❑ Fidgety, unable to sit still
- ❑ Has trouble with a teacher
- ❑ Less interested in school
- ❑ Acts as if driven by a motor
- ❑ Daydreams too much
- ❑ Distracted easily
- ❑ Is afraid of new situations
- ❑ Feels sad, unhappy
- ❑ Is irritable, angry
- ❑ Feels hopeless
- ❑ Has trouble concentrating
- ❑ Less interest in friends
- ❑ Fights with others
- ❑ Absent from school
- ❑ School grades dropping
- ❑ Is down on him or herself
- ❑ Visits doctor with doctor finding nothing wrong
- ❑ Has trouble sleeping
- ❑ Worries a lot
- ❑ Wants to be with you more than before
- ❑ Feels he or she is bad
- ❑ Takes unnecessary risks
- ❑ Gets hurt frequently
- ❑ Seems to be having less fun
- ❑ Acts younger than children his or her age
- ❑ Does not listen to rules
- ❑ Does not show feelings
- ❑ Does not understand other people's feelings
- ❑ Teases others
- ❑ Blames others for his or her troubles
- ❑ Takes things that do not belong to him or her
- ❑ Refuses to share

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Bruce: 15 y.o. boy using EtOH, MJ, cigarettes, s/p surgery

- You continued opioid pain medications for 1 week and asked Bruce to follow up with you.
- At the follow up visit, PHQ-9 scored as moderate symptoms
  - "feeling down, depressed, or hopeless" was marked "nearly every day."
  - Bruce reports feeling "down." He denies thoughts of harming himself or killing himself.
  - He denies substance use since his last visit. You advise Bruce to continue avoiding drugs and alcohol during his recovery to due to potential for making depression worse and slowing healing.
  - You make a plan with Bruce and his parents. If he feels worse or has thoughts of self-harm he will tell his parents (or a teacher if at school) and call your office or go to the ER.
- You make a follow up visit in 2 weeks to check in again on depressive symptoms to see if they are improving as Bruce discontinues pain medications and resumes his regular activities.
  - You ask your office staff to give Bruce and his parents Pediatric Symptom Checklists to fill out in the waiting room prior to the next visit.

Therapeutic Use Is Still Exposure

Any legitimate opioid use prior to 12th grade confers:

- one-third higher risk of non-medical use in emerging adulthood (19-23 years)
- 2.7 fold higher risk of nonmedical use for the purpose of "getting high"

Miech R, Johnston L, O'Malley PM, Keyes KM, Heard K. Prescription opioids in adolescence and future opioid misuse. *Pediatrics*. 2015;136(5):e1169-e1177

What?

Patients at higher risk for substance use disorder are more likely to receive chronic opioid therapy

Richardson LR, Russo JE, et al. Mental health disorders and chronic opioid use among adolescents and young adults with chronic pain. *J Adolescent Health*. 2012;50(6):553-8

Psychiatric Symptoms Enhance Vulnerability

Youth with **preexisting mental health** diagnoses had

- **2.4-fold** increased risk of receiving long-term opioids versus no opioids and
- **1.8-fold** increased likelihood of receiving long-term opioids versus some opioids

Richardson LR, Russo JE, et al. Mental health disorders and chronic opioid use among adolescents and young adults with chronic pain. *J Adolescent Health*. 2012;50(6):553-8

Transition to Heroin Use

Nonmedical Rx opioid use initiated at 10-12 years confers 1.84 fold increased risk of IV heroin use in emerging adulthood

Nonmedical Rx opioid use initiated at 13-15 years confers 1.59 fold increased risk of IV heroin use in emerging adulthood

Magdalena C et al (2015). *Nonmedical Prescription Opioid Use in Childhood and Early Adolescence Predicts Transitions to Heroin Use in Young Adulthood: A National Study* J Pediatr 167 (3): 605-12

Pediatric Screening Resources

- AAP Bright Futures Periodicity Schedule: http://pediatrics.aappublications.org/content/pediatrics/133/3/568/F1.large.jpg
- AAP SBIRT Policy: http://pediatrics.aappublications.org/content/128/5/e1330
- Pediatric Substance Use Education and Tools: www.teensubstancescreening.org

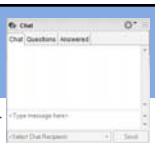
Risk Scales for Chronic Opioid Prescribing

- www.partnersagainstpain.com/printouts/Opioid_Risk_Tool.pdf
- http://integratedcare-nw.org/DIRE_score.pdf

Changes You May Wish to Make in Practice

- Weigh both effectiveness and need to reduce suffering against future risk: are opioids the best option?
- If you don't already, screen for mental health symptoms at every pediatric visit at least beginning by age 11
- If you don't already, screen for substance use, at least beginning by age 11, at any encounter where opioids are being prescribed

Q&A



- Please use the chat box to submit a question for the speakers.
- Next Webinar: June 29, 2016
  - "Rational Pain Management in Children With Chronic Medical Conditions"
- Obtaining CME
  - After the event, you will receive a link taking you to an evaluation. Upon completion, you will be emailed your CME certification.

- The American Academy of Pediatrics (AAP) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.
- The AAP designates this live activity for a maximum of 1.0 *AMA PRA Category 1 Credit(s)™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
- This activity is acceptable for a maximum of 1.0 AAP credits. These credits can be applied toward the AAP CME/CPD Award available to Fellows and Candidate Members of the American Academy of Pediatrics.
- The American Academy of Physician Assistants (AAPA) accepts certificates of participation for educational activities certified for *AMA PRA Category 1 Credit™* from organizations accredited by ACCME. Physician assistants may receive a maximum of 1.0 hours of Category 1 credit for completing this program.
- This program is accredited for 1.0 NAPNAP CE contact hours of which 0 contain pharmacology (Rx), (0 related to psychopharmacology) (0 related to controlled substances), content per the National Association of Pediatric Nurse Practitioners (NAPNAP) Continuing Education Guidelines.

PCSS-O Colleague Support Program and Listserv

- PCSS-O Colleague Support Program is designed to offer general information to health professionals seeking guidance in their clinical practice in prescribing opioid medications.
- PCSS-O Mentors comprise a national network of trained providers with expertise in **addiction medicine/psychiatry and pain management.**
- Our mentoring approach allows every mentor/mentee relationship to be unique and catered to the specific needs of both parties.
- The mentoring program is available at no cost to providers.

For more information on requesting or becoming a mentor visit:
www.pcss-o.org/colleague-support

- **Listserv:** A resource that provides an "Expert of the Month" who will answer questions about educational content that has been presented through PCSS-O project. To join email: pcss-o@aaap.org.

PCSS-O TRAINING
PROVIDERS' CLINICAL SUPPORT SYSTEM
For Opioid Therapies

PCSS-O is a collaborative effort led by American Academy of Addiction Psychiatry (AAAP) in partnership with: Addiction Technology Transfer Center (ATTC), American Academy of Neurology (AAN), American Academy of Pain Medicine (AAPM), American Academy of Pediatrics (AAP), American College of Physicians (ACP), American Dental Association (ADA), American Medical Association (AMA), American Osteopathic Academy of Addiction Medicine (AOAAM), American Psychiatric Association (APA), American Society for Pain Management Nursing (ASPMN), International Nurses Society on Addictions (IntNSA), and Southeast Consortium for Substance Abuse Training (SECSAT).

For more information visit: www.pcss-o.org
For questions email: pcss-o@aaap.org

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