Integrated Care Training Program

UW Psychiatry & Behavioral Sciences

9/28/21

Working in Primary Care Settings: How can I work with PCPs to treat adult ADHD? Part 1: Clinical and Diagnostic Issues

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Presenter's Disclosure: Mark A. Stein

Source	Consultant/ Advisory	Stock	Speaker	Research
Medicie	x			
Genomind	x			
NIMH				x
Mind Medicine	x			
Myriad	x			

Learning Objectives

Describe	Describe diagnostic challenges and strategies
Review	Review relationship of ADHD with Substance Use Disorders and Impact on Treatment
Identify	Identify opportunities to support PCP's and care managers in managing ADHD

- Increase familiarity with how ADHD presents in adults

Prevalence of ADHD Across the Lifespan

- Children
  - 8-11%, depending on age and gender[1]
- Adolescents
  - 75% of children with ADHD have the disorder as adolescents[2]
- Adults
  - National Comorbidity Survey Replication: 4.4% prevalence of ADHD among US adults[3]
  - Only 11% of adults with ADHD are treated[3]
  - Self-report measures among adults applying for a driver's license: 4.7% prevalence[4]
  - Adult college students: 4% met DSM-IV criteria for ADHD[5]

1. Visser et al., *J Am Acad Child Adolesc Psychiatry*. 2014 : 53:34-46. 2. Wilens TE. *Psychiatr Clin North Am*. 2004;27:283-301. 3. Kessler R et al. *Am J Psychiatry.* 2006;163:716-723.
4. Barkley AR et al. *Pediatrics.* 1996;98:1089-1095.
5. Heiligenstein J et al. *Am J Coll Health*.1998; 46:185-188.

Persistent Symptoms of ADHD Are Associated With Potentially Serious Consequences

Consequences of persistent inattention:

- 15–25% of children have poor academic outcome[1]
- Almost 30% of ADHD subjects fail grades[1]
- 46% of ADHD pupils suspended[1]
- Lower occupational attainment; lower earning across SES levels

Consequences of persistent impulsivity:

- Four times as likely to have a sexually transmitted disease[2]
- Three times more likely to be currently unemployed[2]
- Twice as likely to have been arrested[3]
- 78% more likely to be addicted to tobacco[3]
- Five times more likely to have their license suspended[2]
- Lower life expectancy (suicide, CV, TBI)

1. Barkley RA. *Attention-Deficit Hyperactivity Disorder. A Handbook for Diagnosis and Treatment*, 2nd ed. New York: Guilford Press;1998. Barkley RA. *J Am Acad Child Adolesc Psychiatry.* 2006;45:192-202. 3. Biederman J et al. *J Clin Psychiatry*. 2006;67:524-540.

ADHD: DSM-5 Criteria

- American Psychiatric Association, 2013

ADHD is classified as a neurodevelopmental disorder:

A. Threshold level of symptoms of Inattention and/or Hyperactivity – impulsivity must be present for 6 months or more (5 in individuals ≥ 17 years)

B. Several symptoms must be present before 12 years of age

C. Impairment from symptoms must be present in 2 or more settings (e.g. school, work, home, other)

D. Significant impairment: social, academic, or occupational

E. Symptoms must not be better accounted for by other mental (or physical) disorders

Inattention Symptoms and their Manifestation Across the Lifespan

Inattention-related problems and executive dysfunction represent leading reasons for seeking treatment in all age groups, and especially adolescents and adults.

DSM-5 Symptom Domain	Common Adult Manifestation

• Difficulty sustaining attention
• Does not listen
• No follow-through
• Cannot organize
• Loses important items
• Easily distractible, forgetful
	• Poor time management
	• Difficulty
	  – Initiating/completing tasks
	  – Changing to another task
	  – Multi-tasking
	• Procrastination
	• Avoids tasks that demand attention
	• Adaptive behavior can mitigate
	  – Self select lifestyle; Support staff

American Psychiatric Association, 2013; *ADHD in Adulthood 1999*, Weiss, Hechtman, and Weiss.

Hyperactivity Symptoms and their Manifestation Across the Lifespan

***Aimless* restlessness often migrates to *purposeful* restlessness in adolescents and adults; and is generally less impairing with age.**

DSM-5 Symptom Domain	Common Adult Manifestation
• Squirms and fidgets	• Adaptive behavior
• Cannot stay seated	– Work long hours
• Runs/climbs excessively	– Do many activities, multiple jobs or a very active job
• Cannot play/work quietly	• Constant activity/inability to settle down
• "On the go"/ "driven by motor"	• Avoids situations requiring low activity; easily "bored"
• Talks excessively	• Often felt rather than manifested

American Psychiatric Association, 2013; *ADHD in Adulthood 1999*, Weiss, Hechtman, and Weiss.

Impulsivity Symptoms and their Manifestation Across the Lifespan

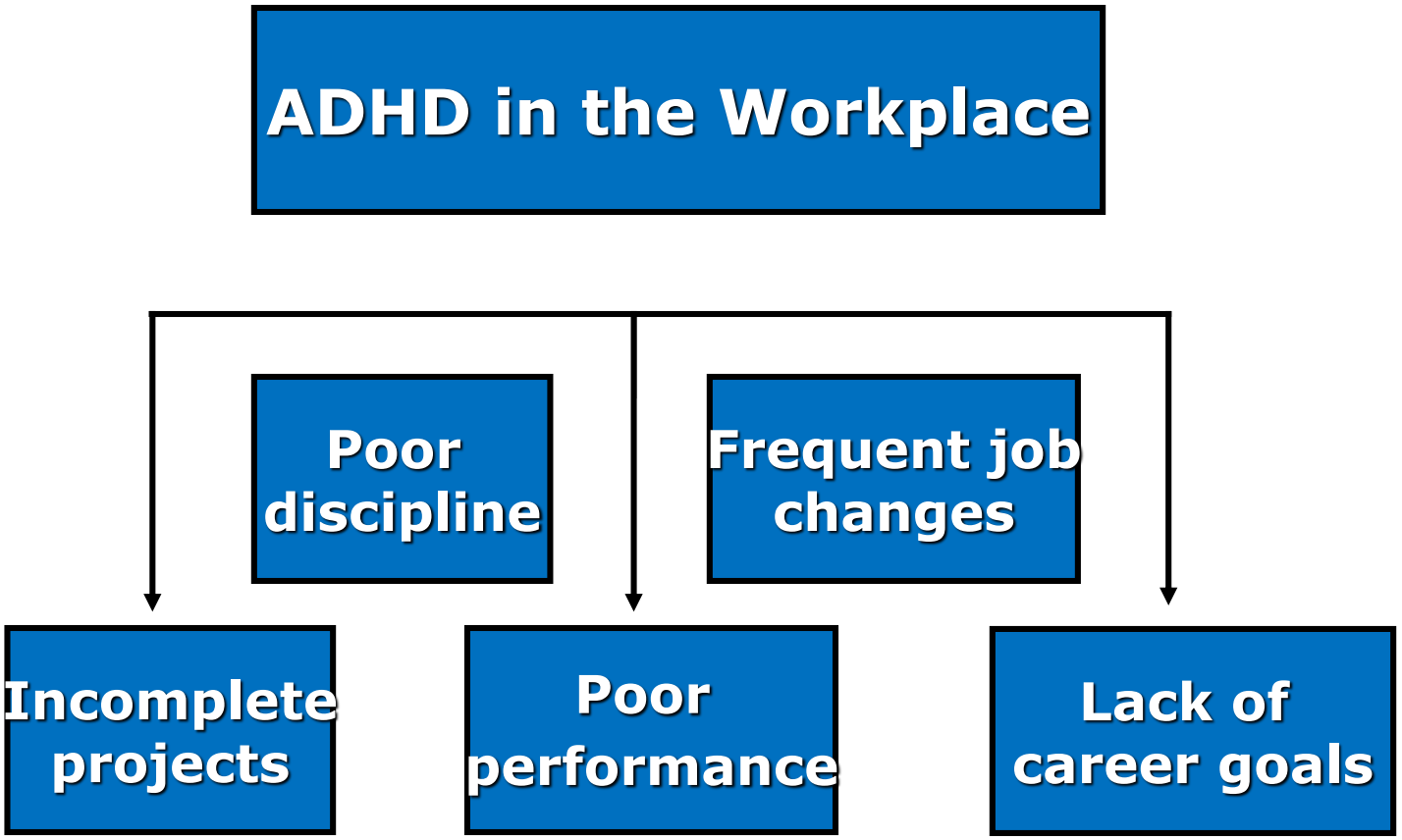
Impulsivity often decreases with age, but when present, often carries serious consequences.

DSM-5 Symptom Domain	Common Adult Manifestation

• Blurts out answers
• Cannot wait turn
• Intrudes/interrupts others
	• Low frustration tolerance
	  – Quitting a job
	  – Ending a relationship
	  – Losing temper
	  – Driving too fast
	• Makes hasty decisions
	• Impulsive aggression
	  • Verbal predominates

American Psychiatric Association, 2013; *ADHD in Adulthood 1999*, Weiss, Hechtman, and Weiss.

Workplace Difficulties in Adults With ADHD



Weiss M, et al. Baltimore, MD: *The Johns Hopkins University Press*; 1999.

Less Complicated ADHD: Previously Diagnosed

Those diagnosed earlier, whose symptoms and impairment persist (50-66% of ADHD youth)

- Shifting targets and duration, responsibilities
- Emerging comorbidities and risk factors
- Treatment history, attributions, tolerability issues
  - Adherence, participation or engagement has changed
  - Decreased monitoring, structure, scaffolding/supports
- Accessing treatment challenges
  - Medication provider
  - Psychosocial treatment
    - Individual
    - Family
    - Educational needs

Newly diagnosed (more of a diagnostic challenge)

Hitting the wall

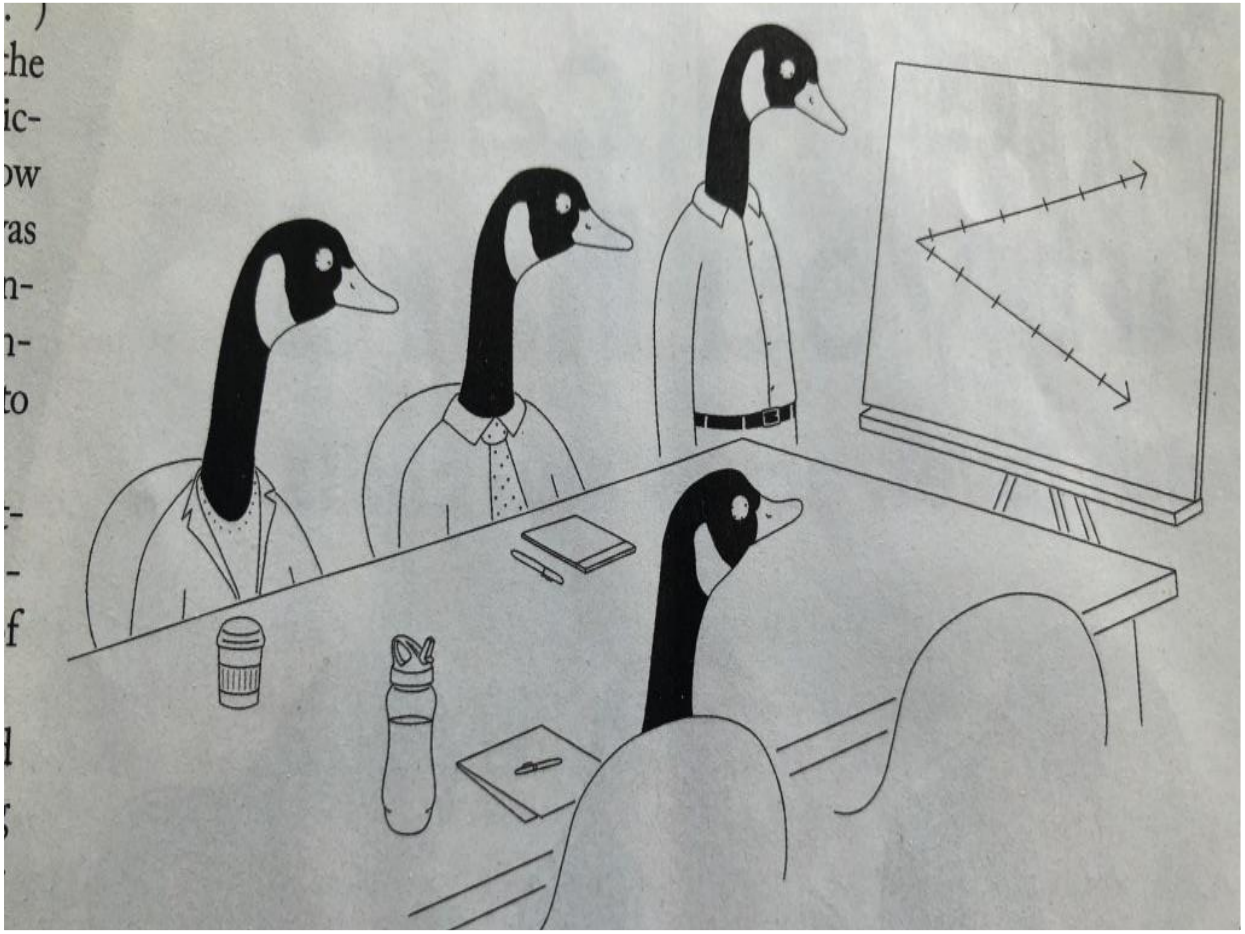
- Milder cases or those with compensatory skills/supports
  - helicopter parents, giftedness, small classrooms
  - Environmental factors-frequent moves, school issues
- Misattributions (red herrings) that delay identification and Rx
  - Trauma (ACES),
  - exposures,
  - mild anxiety, sensory disorder?
- More prominent comorbidity
  - Substance use or Conduct Problems
  - Depression (vs. demoralization)
  - Traumatic brain injury

Adult ADHD

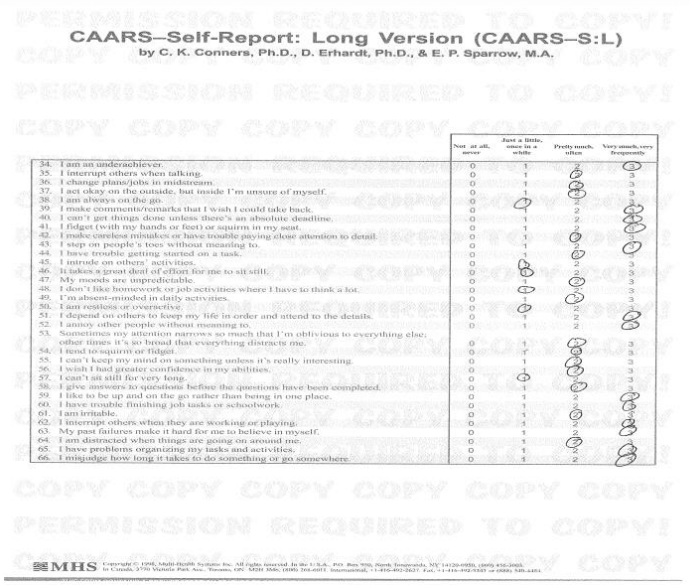
- Suggested evaluation procedures:
  - Physical Examination and labs
  - Interview with patient
  - Review of previous medical/educational records
  - Corroborating data from medical or school records, parent, spouse, employer
  - Rating Scales (CAARS, WURS)

Pseudo ADHD-Mimics

- August Referrals
- COVID-19 specific
- Self identified without impairment
- Drug seeking



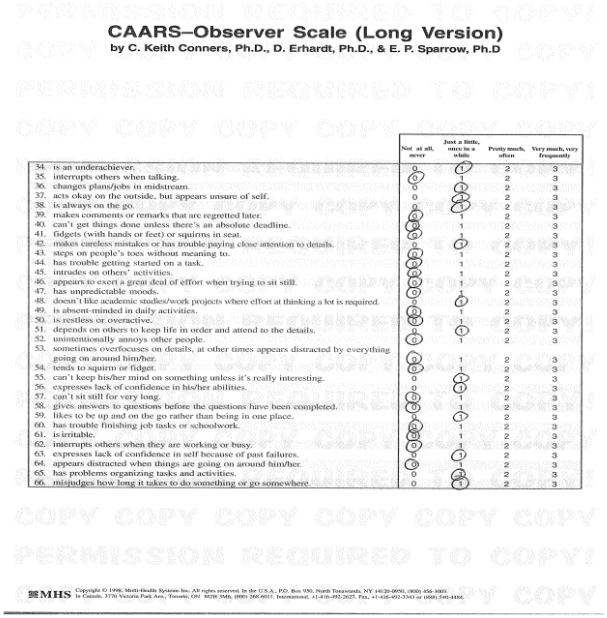
--struggles to get things done, impulsive, difficulty focusing on schoolwork, having to reread things, turning things in. ..always been very social and talkative… own piercings and engaged in risky behavior, tried friends MAS



CAARS–Self-Report: Long Version (CAARS–S:L)

by C. K. Conners, Ph.D., D. Erhardt, Ph.D., & E. P. Sparrow, M.A.

	Not at all, never	Just a little, once in a while	Pretty much, often	Very much, very frequently
34. I am an underachiever.	0	1	2	3
35. I interrupt others when talking.	0	1	2	3
36. I change plans/jobs in midstream.	0	1	2	3
37. I act okay on the outside, but inside I'm unsure of myself.	0	1	2	3
38. I am always on the go.	0	1	2	3
39. I make comments/remarks that I wish I could take back.	0	1	2	3
40. I can't get things done unless there's an absolute deadline.	0	1	2	3
41. I fidget (with my hands or feet) or squirm in my seat.	0	1	2	3
42. I make careless mistakes or have trouble paying close attention to detail.	0	1	2	3
43. I step on people's toes without meaning to.	0	1	2	3
44. I have trouble getting started on a task.	0	1	2	3
45. I intrude on others' activities.	0	1	2	3
46. It takes a great deal of effort for me to sit still.	0	1	2	3
47. My moods are unpredictable.	0	1	2	3
48. I don't like homework or job activities where I have to think a lot.	0	1	2	3
49. I'm absent-minded in daily activities.	0	1	2	3
50. I am restless or overactive.	0	1	2	3
51. I depend on others to keep my life in order and attend to the details.	0	1	2	3
52. I annoy other people without meaning to.	0	1	2	3
53. Sometimes my attention narrows so much that I'm oblivious to everything else; other times it's so broad that everything distracts me.	0	1	2	3
54. I tend to squirm or fidget.	0	1	2	3
55. I can't keep my mind on something unless it's really interesting.	0	1	2	3
56. I wish I had greater confidence in my abilities.	0	1	2	3
57. I can't sit still for very long.	0	1	2	3
58. I give answers to questions before the questions have been completed.	0	1	2	3
59. I like to be up and on the go rather than being in one place.	0	1	2	3
60. I have trouble finishing job tasks or schoolwork.	0	1	2	3
61. I am irritable.	0	1	2	3
62. I interrupt others when they are working or playing.	0	1	2	3
63. My past failures make it hard for me to believe in myself.	0	1	2	3
64. I am distracted when things are going on around me.	0	1	2	3
65. I have problems organizing my tasks and activities.	0	1	2	3
66. I misjudge how long it takes to do something or go somewhere.	0	1	2	3



CAARS–Observer Scale (Long Version)

by C. Keith Conners, Ph.D., D. Erhardt, Ph.D., & E. P. Sparrow, Ph.D

	Not at all, never	Just a little, once in a while	Pretty much, often	Very much, very frequently
34. is an underachiever.	0	1	2	3
35. interrupts others when talking.	0	1	2	3
36. changes plans/jobs in midstream.	0	1	2	3
37. acts okay on the outside, but appears unsure of self.	0	1	2	3
38. is always on the go.	0	1	2	3
39. makes comments or remarks that are regretted later.	0	1	2	3
40. can't get things done unless there's an absolute deadline.	0	1	2	3
41. fidgets (with hands or feet) or squirms in seat.	0	1	2	3
42. makes careless mistakes or has trouble paying close attention to details.	0	1	2	3
43. steps on people's toes without meaning to.	0	1	2	3
44. has trouble getting started on a task.	0	1	2	3
45. intrudes on others' activities.	0	1	2	3
46. appears to exert a great deal of effort when trying to sit still.	0	1	2	3
47. has unpredictable moods.	0	1	2	3
48. doesn't like academic studies/work projects where effort at thinking a lot is required.	0	1	2	3
49. is absent-minded in daily activities.	0	1	2	3
50. is restless or overactive.	0	1	2	3
51. depends on others to keep life in order and attend to the details.	0	1	2	3
52. unintentionally annoys other people.	0	1	2	3
53. sometimes overfocuses on details, at other times appears distracted by everything going on around him/her.	0	1	2	3
54. tends to squirm or fidget.	0	1	2	3
55. can't keep his/her mind on something unless it's really interesting.	0	1	2	3
56. expresses lack of confidence in his/her abilities.	0	1	2	3
57. can't sit still for very long.	0	1	2	3
58. gives answers to questions before the questions have been completed.	0	1	2	3
59. likes to be up and on the go rather than being in one place.	0	1	2	3
60. has trouble finishing job tasks or schoolwork.	0	1	2	3
61. is irritable.	0	1	2	3
62. interrupts others when they are working or busy.	0	1	2	3
63. expresses lack of confidence in self because of past failures.	0	1	2	3
64. appears distracted when things are going on around him/her.	0	1	2	3
65. has problems organizing tasks and activities.	0	1	2	3
66. misjudges how long it takes to do something or go somewhere.	0	1	2	3

Screening Adults for ADHD

- The first 6 questions from the Adult ADHD Self-Report Scale (ASRS) correlate highly with diagnosis of ADHD.
- Individuals who note 4 or more of these symptoms at the shaded frequency levels should undergo a comprehensive assessment for ADHD

Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist

Patient Name		Today's Date	

Please answer the questions below, rating yourself on each of the criteria shown using the scale on the right side of the page. As you answer each question, place an X in the box that best describes how you have felt and conducted yourself over the past 6 months. Please give this completed checklist to your healthcare professional to discuss during today's appointment.	Never	Rarely	Sometimes	Often	Very Often
1. How often do you have trouble wrapping up the final details of a project, once the challenging parts have been done?					
2. How often do you have difficulty getting things in order when you have to do a task that requires organization?					
3. How often do you have problems remembering appointments or obligations?					
4. When you have a task that requires a lot of thought, how often do you avoid or delay getting started?					
5. How often do you fidget or squirm with your hands or feet when you have to sit down for a long time?					
6. How often do you feel overly active and compelled to do things, like you were driven by a motor?					

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The complete ASRS can be used to identify other ADHD symptoms during diagnosis and treatment. It can be found at www.med.nyu.edu/psych/psychiatrist/adhd.html.

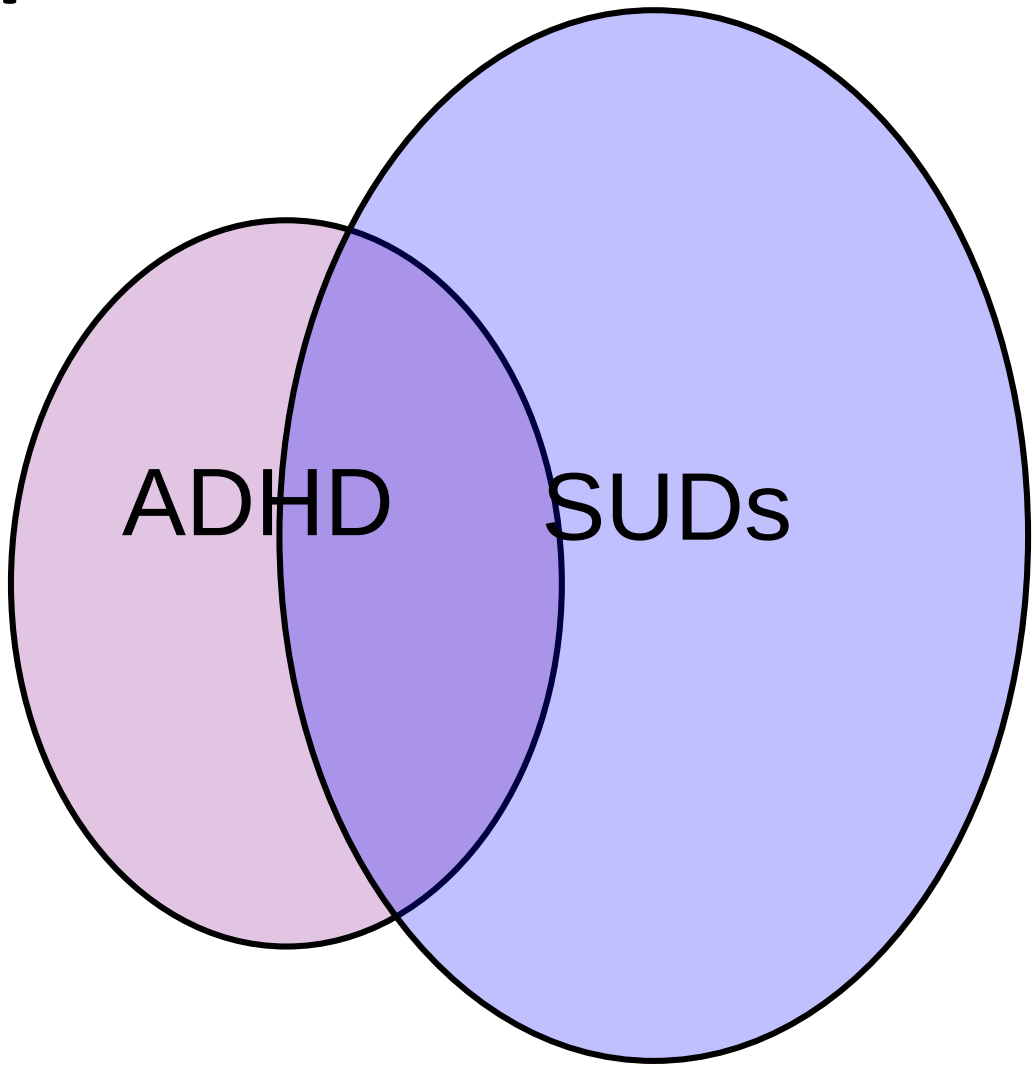
Adult ADHD:
Symptom Assessment Scales

Scale	Description/ Features/ Comments	Scale available from:
Brown ADD Scale	**Rates inattention/executive dysfunction; items extend beyond DSM definition of ADHD; good for high functioning adults with inattentive subtype**	***The Psychological Corporation***
Conners Adult ADHD Rating Scale (CAARS)	**Large item set of developmentally relevant items; DSM subscale maps onto diagnosis; self- and other-report forms**	***Multi Health Systems, Inc.***
Wender-Reimherr Adult Attention Deficit Disorder Scale	**Retrospective symptom scales provide age of onset data; less clearly tied to DSM-IV ADHD.**	***Fred W. Reimherr, MD, Department of Psychiatry, University of Utah Health Science Center, Salt Lake City, Utah***
Barkley's Current Symptoms Scale	**Dimensional scale; uses actual DSM items but not re-worked for adults; rates behavior in the past 6 months; self and other informant reports.**	***Barkley RA, Murphy KR. Attention-Deficit Hyperactivity Disorder: A Clinical Workbook. Second Edition.***
Adult Self-Report Scale v1.1 (18-item symptom assessment and 6-item screener)	**ADHD DSM items made developmentally relevant for adult manifestations of symptoms; rates frequency, not severity, on a 0 - 4 scale**	***www.med.nyu.edu/Psych/training/adhd.html and the WHO website***
Adult Investigator Symptom Report Scale (AISRS)	**Interviewer administered scale; 18 DSM-IV-TR ADHD criteria re-worked for adults; employs adult ADHD prompts to ensure adequate probing of breadth of adult symptoms.**	***Lenard Adler, MD, Adult ADHD Program NYU School of Medicine adultADHD@med.nyu.edu***

Indications for psychological or neuropsychological testing

- Learning Disorder (Reading Disability, Coordination Disorder)
  - College students, accommodations
- Cognitive deterioration in older adults
- Appropriate expectations, career planning
- Not indicated for diagnosis of ADHD

Overlap between ADHD and SUDs



Wilens TE. *Psychiatr Clin North Am*. 2004;27(2):283-301. van Emmerik-van Oortmerssen K, et al. *Drug Alcohol Depend*. 2012;122(1-2):11-19.

Marijuana (MJ) and ADHD

- Most common “drug” used/misused in ADHD
- Second most common comorbidity in cannabis use disorder
- Associated with neuropsychological impairment
  - Acute effects
  - Chronic - persistent executive dysfunction if initiated early

Wilens et al., J Am Acad Chld Adoles Psych: 2011; Am J Addict 2010: 16:14-23
Cooper et al. Eur Neuropsychopharm 2017: 27:795-808

Marijuana (MJ) and ADHD

- No evidence of more self medication versus non-ADHD
- Treatment of ADHD with MJ
  - Largely case reports
  - RCT of 30 adults with ADHD. Use of oromucosal THC:CBD
    - Primary outcome: No cognitive or activity improvement;
    - Secondary outcomes: Negative to trends to improvement

Wilens et al., J Am Acad Chld Adoles Psych: 2011; Am J Addict 2010: 16:14-23
Cooper et al. Eur Neuropsychopharm 2017: 27:795-808

ADHD Medication and SUD

- **Largest database examining ADHD medication treatment and later SUD**
  - **Almost 3 million in the United States with ADHD**
- **Comparison of periods of medicated vs unmedicated ADHD individuals (*primary outcome*)**
  - **Males 35% lower risk: Treated periods < untreated periods for SUD risk (OR=0.65, CI 0.64–0.67)**
  - **Females 31% lower risk: Treated periods < untreated periods for SUD risk (OR=0.69, CI 0.67–0.71)**
  - **For first-only SUD incidents, medication was associated with 55% and 43% lower SUD events in males and females, respectively**

Quinn PD, et al. *Am J Psychiatry*. 2017;174(9):877-885.

Strategies for ADHD and SUD

- In context to SUD, ADHD treatment should be considered.
  - If less severe SUD, treat ADHD concomitantly
  - More severe SUD --> address SUD
  - If unable to address or recalcitrant SUD ->use CBT, nonstimulants, extended-release stimulants (may need higher dose)
  - Stay tuned for guidelines regarding lower abuse liable stimulants and nonstimulants

Wilens and Morrison, ADHD & SUD In *ADHD in Children and Adults*, Cambridge Press, 2015
Kaminski and Wilens, Overlap of ADHD and SUD, in Textbook of SUD, 2019 in press

CoCM for Adult ADHD?

- No studies have looked at using CoCM for Adult ADHD
  - 2 studies support its use in child and adolescent population (Meyers K et al, 2010; Silverstein M et al, 2015)

- Still worth considering
  - Often co-occurring with other MHDs
  - Will impair treatment efforts
  - Significant need
    - 2.58% prevalence of persistent symptoms
    - 6.76% symptomatic

    Song P et al 2021

CC Principles & ADHD

Patient Centered Team

- Helps provide evaluation and treatment

Population Based Care

- Use of Registry. Helps identify trends. Avoid losing track of patients.

Measurement-Based Treatment to Target

- ???

Evidence-Based Treatment

- Evidence based therapy and Medication Assisted Treatment support.

Accountable Care

- How are things going? System QI.

Principles icons used with permission from University of Washington AIMS Center, 2016.

Good Fit for CoCM?

Evidence Based Treatment

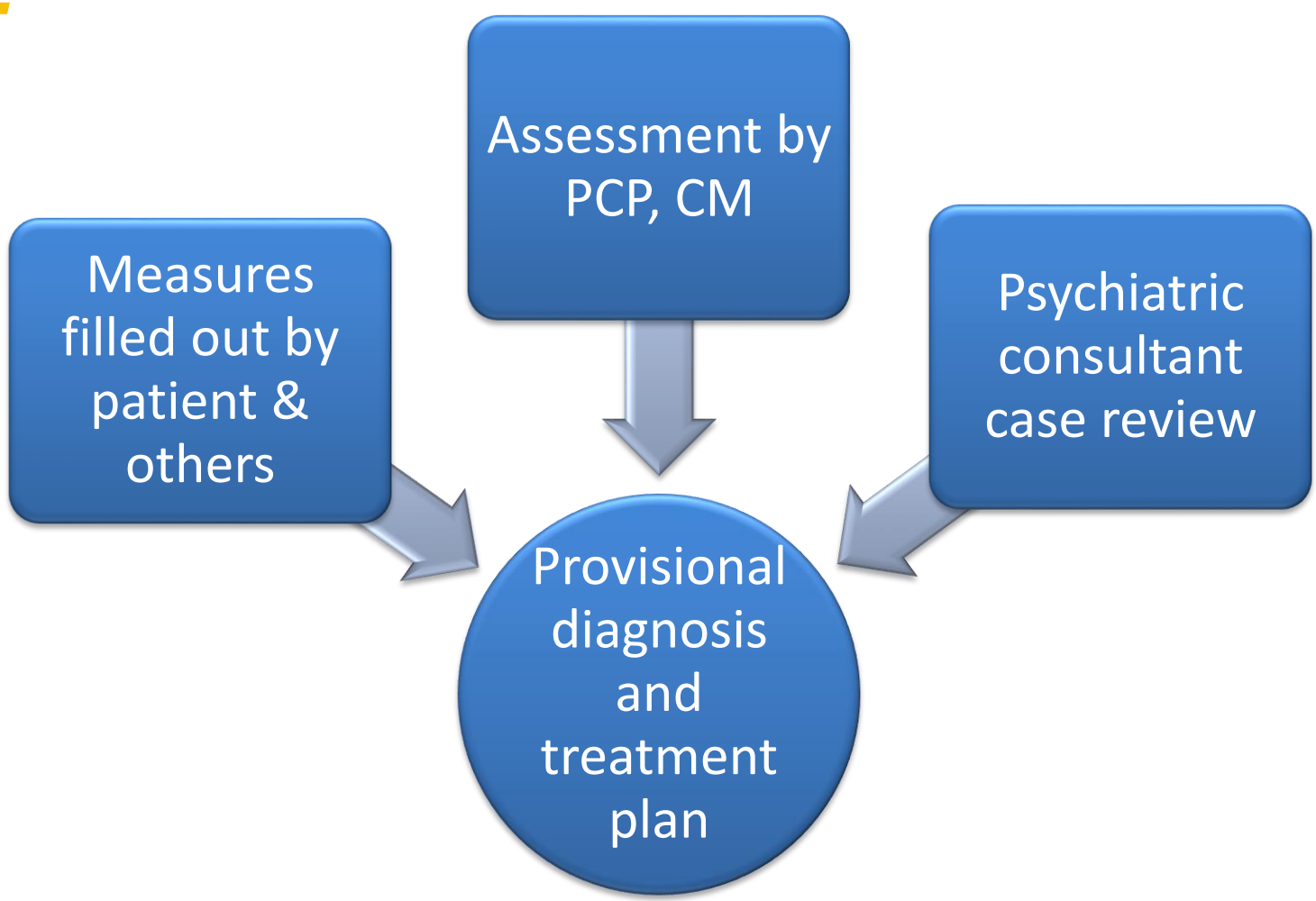
- Pharmacotherapy
  - May need to support PCPs use of stimulants

- CBT for ADHD

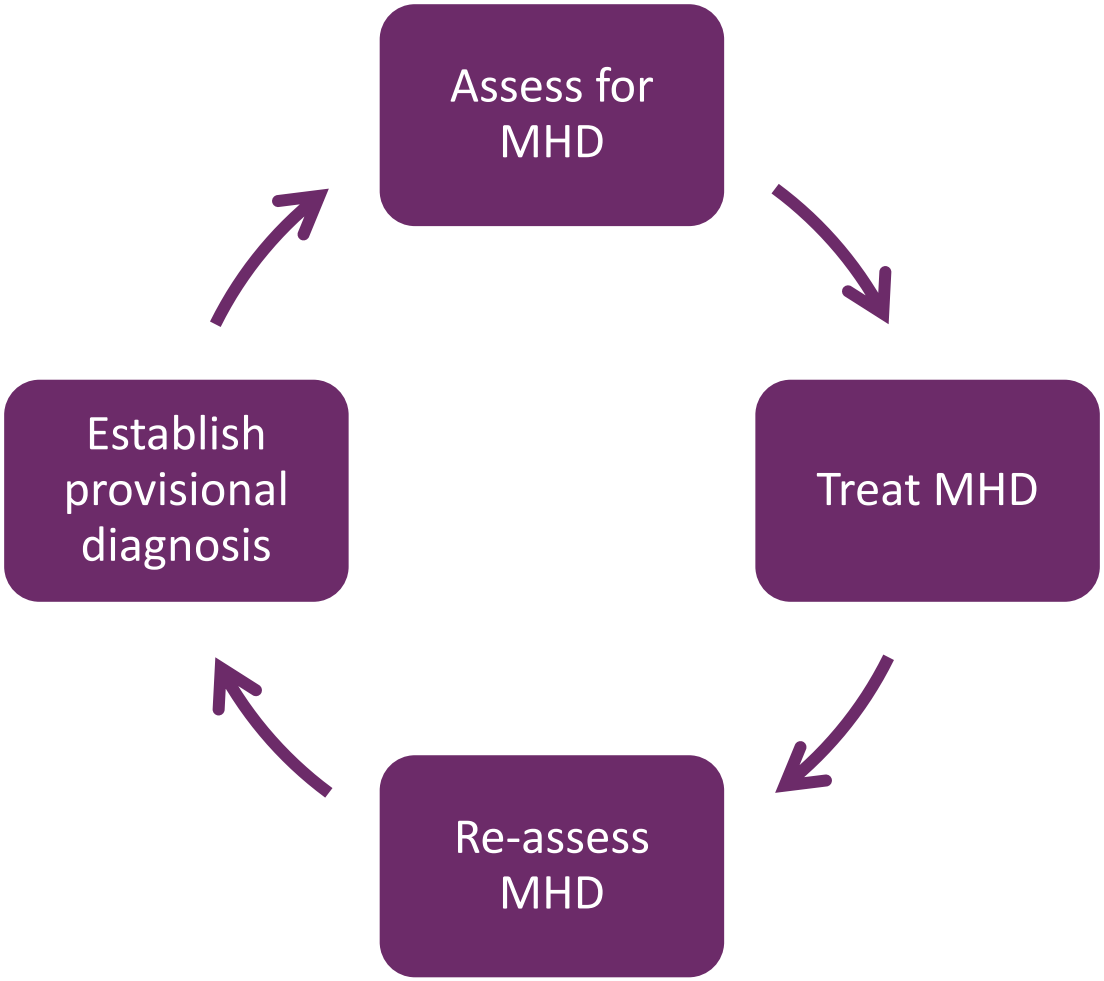
Challenges & Opportunities?

- Diagnostic evaluation
  - Not quick
  - Part of program?
- Who to include?
    - Scare resource
    - Not everyone needs team-based care
      - Stepped care?
      - Co-occurring disorders?
- Measurement based care
  - No clear PHQ9

Provisional Diagnosis
A Team Approach



Establishing a Diagnosis in Collaborative Care
An Iterative Process



Summary

- CoCM has clear potential
- ADHD is an important diagnosis to treat
- Primary care needs help
- Limited resource