Michael J. Manos, PhD

Clinical Director, ADHD Center for Evaluation and Treatment (ACFT), Cleveland Clinic, Cleveland OH: Associate Professor, Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, Cleveland, OH

Elizabeth J. Short, PhD

Professor of Psychology, Director of the Developmental Masters and Early Intervention Program, Department of Psychological Sciences, Case Western Reserve University. Cleveland. OH

A new paradigm for adult ADHD: A focused strategy to monitor treatment

MEDICAL PROFESSIONALS face a significant challenge when treating adults with attention deficit hyperactivity disorder (ADHD). Although adult ADHD bears similarities to its childhood expression, the distinct features are associated with ADHD across the life span, with particular attention focused on the ADHD symptom-generated task incompletion as the single, primary dysfunction in adults with ADHD.

Shifting the paradigm of treatment from reducing symptoms to one of effectively increasing task completions allows for the physician and patient to quickly determine treatment effectiveness that accrues from pharmacotherapy. Rather than review changes in their patients' symptoms checked off on an ADHD behavior scale, the physician can review the patient's report on the status of incompletions (no change, increase, or decrease) and thereby play a prominent role in management of adult ADHD. This shift in the paradigm of treatment effectiveness allows the physician to reinterpret task incompletions, encourage the patient to form collaborative partnerships to enlist assistance of others to improve work completion (an effective strategy called "social scaffolding"), and objectify and name problematic effortful attention to tasks.

Further, this transforms the ADHD problem from a perspective of mental health disorder existing inside the skin to a single, functional condition occurring outside the skin, ie, in the world of manageable action and behavior. Adopting this new paradigm in the context of medical management allows a necessary step in effective treatment plans for adults diagnosed with ADHD. We suggest herein that the medical model paradigm of reducing multiple dysfunctional symptoms be changed to the evaluation of the single doi:10.3949/ccjm.90a.22080

behavior of task completions to address this shift in thinking.

DIAGNOSING ADHD

The estimated prevalence of current adult ADHD in the United States is 1% to 6%, lower than the 11% childhood prevalence identified by the US Centers for Disease Control and Prevention.² ADHD dysfunction changes over time,³ with numerous factors impacting the age of diagnosis, including intelligence, symptom severity, environmental support, and changes in task demands. Because of increased awareness of ADHD in the adult population, physicians are likely to see more adults seeking treatment.

ADHD diagnosis requires the presence of dysfunctional symptoms of inattention, hyperactive/impulsive behavior, or both, as noted in Table 1,4,5 with clinicians examining the presence of reported symptoms in context. A person's highly reactive, impulsive behavior may be effective on the college football field but dysfunctional in a classroom lecture. Thus, ADHD behavior must meet the following criteria:

- Problematic in 2 or more settings
- Interfere with daily life functioning
- Not be due to another mental health disorder
- Be present (but not necessarily impairing) in childhood prior to age 12.5

The clinician must confirm the presence and intrusiveness of at least 5 behaviors for inattention, hyperactivity/impulsivity, or both, as outlined in Table 1.4,5 It is not enough that the patient engages in the behaviors associated with ADHD sometimes, as everyone exhibits them from time to time. It is critical to determine that the behaviors present a problem in daily functioning. As noted above, adult ADHD

TABLE 1

Diagnostic and Statistical Manual of Mental Disorders diagnostic criteria for attention deficit hyperactivity disorder in adults^{4,5}

Symptom criteria (minimum 5/9) for inattention

- Makes careless mistakes when working on boring or difficult tasks
- Difficulty sustaining attention while working on boring or repetitive tasks
- Difficulty concentrating on what people say even when spoken to directly
- Difficulty wrapping-up final details; fails to complete tasks
- Difficulty with organization and getting tasks in order
- · Avoids or delays tasks requiring sustained mental effort
- Loses or misplaces personal possessions; difficulty finding things
- Easily distracted by surrounding activity or noise
- Forgetful; difficulty remembering appointments or obligations

Symptom criteria (minimum 5/9) for hyperactivity/impulsivity

- Fidgets or squirms with hands or feet
- Leaves the seat in meetings or situations where sitting is expected
- Feels restless or needs to be chronically active
- Difficulty unwinding, relaxing, or engaging in leisure activities quietly
- Feels compelled to stay active ("on the go" or "driven by a motor")
- Talks excessively in social situations
- Blurts out or finishes sentences of others who are talking
- Difficulty awaiting turn; has to have demands met immediately
- Interrupts or intrudes on others when they are busy

dysfunction is primarily associated with task incompletion or actions a person said they would complete (ie, said to themselves or to another) but did not. The behaviors are not deliberate attempts by an individual to be lazy but rather involve avoidance behaviors associated with an inability to easily use a faculty of the brain referred to as directed attention (discussed below). Directed attention is effortful and difficult for a person with ADHD to exercise, thus conferring the appearance of deliberate task avoidance.

UNIQUE CONSIDERATIONS IN DIAGNOSING AND TREATING ADHD IN ADULTS

The expression of ADHD across the life span is variable. Thus, it is important for physicians to consider the following 3 factors when treating adults with ADHD:

- Subthreshold ADHD. Adult patients may not meet all Diagnostic and Statistical Manual of Mental Disorders-5 symptom criteria for the disorder, nevertheless subsyndromal presentation may still result in significant functional impairment that necessitates treatment.⁶
- Childhood ADHD diagnosis is not required. Enduring presentation of symptoms is necessary, though childhood dysfunction may not have been observed. The absence of the diagnosis of child-

- hood ADHD does not preclude an adult diagnosis, as intellectual strengths and social scaffolding (ie, structured daily activity like a well-ordered school day with persistent parent and teacher oversight) may have allowed for academic success in child-hood but masked ADHD symptom presentation.⁷
- Pharmacotherapy combined with focused behavioral strategies is the ADHD gold standard for treatment. We underscore that behavioral intervention plus stimulant pharmacotherapy is the gold standard for treatment. We suggest here that when physicians monitor a single behavior—change in incompletions—during adult pharmacotherapy, outcome of therapy may be readily discerned. It is best to conduct an inquiry of previously attempted behavioral strategies and pharmacotherapy (ie, licit and illicit) to assist in treatment. The efficacy of stimulant treatment in adults has been demonstrated consistently.8 Over 80% of adults respond favorably to stimulants (commonly methylphenidate or amphetamine, or both) with few if any intrusive side effects. Behavioral interventions are also helpful to address shortcomings associated with ADHD.

It should be noted that the best assessment practice involves 3 steps. First, confirm the presence of symptom criteria reported by multiple informants (ie, to address the possibility of reporter bias). Second,

TABLE 2	
Stimulants to treat attention	deficit hyperactivity disorder

Immediate-release ^a	Extended-release ^a
Methylphenidate	
Methylphenidate HCl chewable, 3–4 hrs Methylin liquid, 3–4 hrs Ritalin, 3–4 hrs	Adhansia XR, > 12 hrs (discontinued) Aptensio XR, 12 hrs Concerta, 12 hrs Cotempla XRODT, 12–13 hrs ^b Daytrana (patch), 9 hrs wear-time Jornay PM (night before), 12–14 hrs Metadate CD, 8–10 hrs Methylphenidate HCl, 6–8 hrs Quillichew ER, 8 hrs Quillivant XR (suspension), 12 hrs Ritalin LA, 8–12 hrs Ritalin SR, 8 hrs
Serdexmethylphenidate and dexmethylphenidate	Azstarys, 13 hrs
Dexmethylphenidate	
Focalin, 4–6 hrs	Focalin XR, 8–12 hrs
Amphetamine	
	Adzenys ER, 10–12 hrs Adzenys XR-ODT, 10–12 hrs Dyanavel XR (suspension), 13 hrs
Dextroamphetamine	
Dexedrine, 3–4 hrs Procentra (suspension), 3–6 hrs Zenzedi, 4–6 hrs	Dexedrine ER, 5–10 hrs Xelstrym (patch), 9 hrs
Methamphetamine	
Dexosyn, 4–6 hrs	
Mixed amphetamine salts	
Adderall, 4–6 hrs	Adderall XR, 10–12 hrs Mydayis, 14–16 hrs
Amphetamine sulfate	
Evekeo, 4–6 hrs	
Lisdexamfetamine	
	Vyvanse, 10–13 hrs Vyvanse (chewable), 10–13 hrs

^aNumbers following drug name represent approximate upper limit of duration of action in hours.

CD = controlled delivery; ER = extended release; HCl =hydrochloride; LA = long-acting; ODT = orally disintegrating; SR = sustained release; XR = extended release

Adapted from references 10 and 12

rule out alternative causes (eg, poor sleep hygiene, depression) for why the symptoms are present. Third, identify comorbid conditions (eg, depression, anxiety) that may affect the presentation of attentional dysfunction. Both alternative causes and comorbid conditions often have a more complex expression in adults and therefore require scrutiny. Because disorder cannot occur without dysfunction, it is imperative for physicians to understand how ADHD behaviors interfere with daily activity.

^bExtended-release orally disintegrating tablet.

Pharmacotherapy

A thorough review of US Food and Drug Administration-approved pharmacotherapy can be found in published reviews, ^{10,11} and we refer the physician elsewhere for alternative counsel on pharmacologic methods to treat adults (**Table 2**). ^{10,12–14}

CHANGE IN EXPRESSION OF ADHD FROM CHILDHOOD TO ADULTHOOD

Automatic vs directed attention

In adults as well as children, ADHD attentional impairment stems from differential facility with 2 distinct types of attention: automatic attention and directed attention.^{15,16}

- Automatic attention, also referred to as "bottomup" attention, functions in the brain's *default-mode* network and is largely associated with motivation and reward. It is self-activating and is called up automatically when tasks are of high interest or they avoid aversive consequences (eg, submitting taxes on time to avoid penalties).
- Directed attention, also referred to as "top-down" attention, functions in the brain's executive *task* positive mode network, and is associated with concentration and effort for difficult or low-interest tasks (eg, doing taxes, cleaning bathrooms, finishing dull homework). Rather than called up automatically, executive functions are generated with concerted effort through the medium of language to force completion of necessary and often distasteful tasks (eg, copying sentences, memorizing math facts, doing chores, paying bills).

Task management

Adult task management differs from task demands in childhood.¹⁷ Children mostly face externally generated demands and use effortful, directed attention when they complete tasks that parents and teachers assign (eg, homework, chores). When children fail to complete tasks directed or assigned by adults ("other-directed tasks"), parents may assign proactive consequences to facilitate task execution (eg, parental reminders). This is in striking contrast to what happens when adults fail to complete other-directed tasks (ie, assignments at work, home chores). Rather than the supportive consequences received in childhood, adults more often experience negative consequences (eg, loss of a job, criticism from a spouse, traffic violation fines). While firm and supportive consequences for children help manage ADHD symptoms, adults often react to adverse consequences with guilt, shame, and anger.

Expectations levied on adults often necessitate that adults ignore distractions, however novel or exciting the distractions may be. Adults must often complete socially mandated though mundane requirements of daily living (eg, scrubbing bathrooms, paying bills) that compete with more appealing activities. At this juncture, adults with ADHD struggle more than children for one important reason: the childhood safeguards (ie, parental or teacher support) used to redirect attention to tedious but necessary tasks are no longer available. Effortful task completion is problematic in adulthood because of the self-agency necessitated by adult status. Others may assist but do not typically hold themselves responsible for the task's completion. Thus, unlike in childhood, task completion in adulthood is less a group project as it is an individual responsibility.

Adults with ADHD must self-select, self-prioritize, and self-activate their behavior. Children engage in self-assigned activities (eg, hobbies and play) that largely rely on automatic attention. In contrast, competent adults must decide what task to do and then do it. The successful execution of directed-attention tasks is both a testimony to and a requirement of adult status. Self-agency is the code of conduct that defines an adult as "response-able." This expectation for self-agency is the very thing that challenges the adult with ADHD and physicians' efforts to medically manage it. Pharmacotherapy significantly improves executive functions associated with the directedattention network to improve self-agency and task completion. Thus, agreement-keeping (doing what one says they will do) is an excellent measure of treatment effectiveness.

Aversive consequences are often absent from self-assigned tasks in adulthood but often are endemic to other-assigned tasks. Incompletion of a hobby (self-assigned) is generally inconsequential, whereas incompletion of a work assignment is consequential (eg, a supervisor's critique). Despite this fact, adults with ADHD often postpone essential tasks stating, "I'll do it later," with the risk of task incompletion justifiably certain.

THE CORE DYSFUNCTION IN ADULT ADHD

In 1890, William James aptly identified the issue of incomplete tasking. Although he did not directly reference the condition now known as ADHD, he wrote, "Nothing is so fatiguing as the eternal hanging on of an uncompleted task." ¹⁹

We posit that task incompletion is the single most challenging problem for adults with ADHD. This functional impairment results in job changes, latency to task completion (ie, low productivity), chronic procrastination, treatment noncompliance, and disrupted relationships owing to unfulfilled expectations, among others. Physicians, for example, likely experience a higher incidence of missed appointments (broken agreements) with respect to patients with ADHD.

The nature of incompletions

Broken agreements are the outcome of inaction. ADHD pharmacotherapy medication often addresses this by enhancing directed attention. The adage "pills don't teach skills" is applicable here. Medicine does not tell a person what to do but does enhance the person's capacity to use skills that are already in their behavioral repertoire. Latent skills of time management improve with pharmacotherapy and thereby have the power to reduce task incompletion. Skills deficits emerge because of ineffective directed attention, and they improve when directed attention itself is improved through pharmacotherapy.

The current trend of multitasking—doing multiple tasks at once—deemed essential in today's world does not occur without inefficiency. The brain can be activated to address only 1 task at a time. Though a person may start several tasks and have several tasks in progress simultaneously (eg, washing the dishes while the wet clothes are in the dryer), each task is completed individually, they are not acted on at the same time unless another agent is acting on it. Parents and teachers externally manage ADHD executive dysfunction in childhood with gentle (or forceful) reminders that monitor and reinforce desirable behaviors. Adults with ADHD, often do not have the external management of a spouse or a boss. They are expected to complete the tasks they agreed to do on their own.

Integrity and ADHD

In a study of integrity in business, Erhard and Jensen²¹ noted that task incompletion is a broken agreement and that out-of-integrity behavior leads to damaging consequences. This applies even to tasks that individuals assign to themselves (eg, folding their clothes before bed). Essentially, when individuals do not keep their word, bosses, coworkers, friends, treating physicians, and partners are disappointed in, angry with, and even dismissive of the adult diagnosed with ADHD when they fail to do what they said they would.

To an adult with ADHD, the sheer act of having to use directed attention is itself aversive and effortful, so that the person often fails to task-initiate (ie, they procrastinate) or they do not discriminate which strategies to use for completion (ie, difficulty prioritizing). Even when motivation to achieve is present, attentional lapses, poor time management, and other executive dysfunctions make successful execution unlikely. Though an adult agrees to complete a task (ie, wash dishes before bed, finish a report for work) and wholeheartedly intends to do so, without intervention they may still become sidetracked and not carry out the agreement.

Anxiety and depression

When a person breaks an agreement and leaves a task incomplete, anxiety and depression tend to emerge, impacting daily self-expression.²² As a backpack metaphor, consider that each incompletion is a large rock. When a person abandons a task before completion, they deposit the rock in their backpack. The person continues to walk around, not aware of the added weight. The more incompletions accumulated, the heavier the backpack. The weight of incompletions depletes the person's energy and joy in living.

The adult becomes disappointed in his or her own behavior, becoming self-critical. Often adults with ADHD feel disempowered because they do not exercise the flexibility²³ to keep their commitments to others or themselves. As a result, they become demoralized, feel guilty, or get angry when they do not complete tasks or meet goals. Thus, the simple behavior of breaking agreements becomes a largely debilitating factor.

Such scenarios conflate "skill" with "will." Friends and family may consider the adult with ADHD as lazy or unmotivated—a problem of "will"—that implies subjective intentionality. As such, in the presence of broken agreements, people construe the adult with ADHD as incompetent, or even worse, that they did not care about doing what they said they would. This significantly exacerbates the ADHD burden and the emotional impact it places on relationships.

RECOMMENDATIONS TO MANAGE ADHD IN ADULTHOOD

Broken agreements—the central dysfunction for adults with ADHD—result from executive dysfunction and may be ameliorated via social scaffolding, wherein people establish partnerships with others to maximize agreement-keeping. Clinicians can assist their patients in a broad way to encourage and design systems that track keeping agreements.²¹

The question for both patients and the coaching physician is how to "clean up" broken agreements. Four simple strategies can support the patient to manage broken agreements:

- Name broken agreements
- Complete the named agreements
- Make new, adjusted agreements
- Cancel the original agreement.

The physician encourages the patient to write them down, clearly name them, and bring them into the physical world. Then the person selects specific broken agreements and *completes* them. The patient may also select specific broken agreements and *change* them to make them manageable (eg, reduce the scope, enroll someone else to do them) or cancel the broken agreement with all parties agreeing to disregard it. This strategy may be difficult to execute because of the emotional ramifications of abandoning a necessary agreement.

All 4 scenarios are actionable plans that exist in the physical world. One major reason humans fail to resolve broken agreements is that their strategies for resolution are not actionable, devolving instead into self-talk that resides only in the mind (eg, "I'll do it later"). Successful resolution is unlikely without expressed, actionable strategies. We recommend that physicians encourage patients to take a notebook to a comfortable, familiar place (eg, favorite coffee shop, easy chair) and follow the steps noted above.

The first action for each broken agreement is to schedule a by-when contingency, that is, a day and time of completion. The person transfers the agreement from the internal world of self-talk to the expressed world of collaborative-talk to make tasks actionable and accountable (ie, an expressed agreement, telling someone when the agreement will be fulfilled). The important point here is if the event is "not mentionable, it is not manageable." We recommend the patient take the agreement out of the invisible world of the mind and place it in the physical world where two or more people can base future actions on it. Also helpful here is to share the list with a spouse or trusted friend who can add to accountability.

The following are strategies for cleaning up broken agreements:

Complete agreements. Identify the "by when" of completion, then act on it. Patients can now do what they said they would do. For example, a man promised his wife that he would put up paneling in the basement (ie, the agreement). He purchased the paneling—demonstrating intention to complete the task—and stacked it in the basement, where it remained for 18

months (ie, the stacked paneling became a constant reminder of his broken agreement). He promised his wife repeatedly that he would complete the paneling the next weekend (ie, he created an actionable expectation to complete his agreement). Not surprisingly and despite his best intentions, he did things other than paneling the basement. He offered excuses as consolation while the broken agreement persisted and festered. The couple argued bitterly over his incompletion, while his excuses undermined his credibility. Finally, the man took 2 days off work, called a friend to assist, and put up the paneling to fulfill the agreement. The satisfied agreement brought relief to the couple's relationship, although completing longoverdue agreements, while a necessary step to resolve broken ones, may be insufficient to rebuild trust. Thus, encouraging patients to list their agreements and specify a completion time for them may resolve the emotional sequelae associated with a history of broken promises.

Make a new agreement. Sometimes, the originally designed plan to complete an agreement is no longer feasible for a variety of reasons, and the original agreement can be changed to a more actionable course. In our scenario above, instead of the husband relying on his own effort to panel the basement, he could request that a contractor complete the task. The agreement would be completed though changed—he is not doing it, and another person is. This new agreement still completes the husband's original agreement. Keeping agreements by changing them can ultimately resolve a chronic pattern of behavior destructive to a relationship.

Cancel the agreement. Another strategy to manage broken agreements is simply to take back the promise of action, that is, cancel the agreement. Cancelling agreements may be a reasonable option but not without detriment. In the example above, by cancelling the agreement, the spouse would report to his wife that he is not going to put up the paneling in the basement, that he will return the paneling to recoup the purchase price, and that the couple will terminate the task expectation. In such cases, it is imperative that there is clear and transparent communication about the agreement, and that the spouse accepts the cancelled agreement. If acceptance is not forthcoming, the couple's relationship is likely strained, and trust further eroded. Physicians may inquire about broken agreements in a few targeted questions (Table 3).

We note here that a brain with ADHD tends to be highly attuned to the physical world.²⁴ This accentuates the practice for people with ADHD to take action in the physical world. Placing cues (eg, notes, lists, reminders)

TABLE 3 Questions to support patients with attention deficit hyperactivity disorder regarding agreements and task completions

Physician/patient query	Agreement with home/office/family/friends/self
What did you say you would do in the past week that you <i>did</i> do? (label frequency of occurrence)	Agreements made and kept; monitor frequency
Whom did you say that to? (eg, spouse, family member, colleague)	Agreements made and kept
What is your experience of actually doing what you said you would do? (especially the effect on relationships, eg, spouse, family member, colleague)	Agreements made and kept
What did you say you would do in the past week that you <i>did</i> not do? (label frequency of occurrence)	Broken agreement; monitor frequency
Whom did you say that to?	Broken agreements with whom—spouse, family member, colleague
What is your experience of actually not doing what you said you would do? (especially the effect on relationships, eg, spouse, family member, colleague)	Empowering/disempowering
How might you clean up the things you said you would do that you didn't do?	 Complete the thing you said you would do Change the thing you said you would do (eg, make a new agreement Cancel the thing you said you would do

in the physical world is quite helpful for everyone, but especially for individuals with ADHD. Nevertheless, for individuals with ADHD, just knowing what to do does not ensure task execution (ie, doing it).

AGREEMENT-KEEPING MAY RELY ON **ENVIRONMENTAL SUPPORT TO ENSURE COMPLETION**

To facilitate agreement-keeping, physicians can encourage patients to establish a realistic plan (ie, time of completion noted). Becoming proficient in assigning a time of completion—a by-when statement—is often a difficult task for patients with ADHD and may require managed practice. An agreement without a by-when cannot be broken because it does not exist in time and may remain unfulfilled indefinitely. For example, if a woman tells her spouse that she will paint the molding in the living room "soon," this agreement is insufficient (ie, without a set timeframe for completion). It cannot be broken because "soon" is always ahead. Many people are intentionally ambiguous about the by-when clause because without it, a person can avoid responsibility for the agreement—and the soon never comes.

The most important function of being specific

about the timing of a task is that this determines clarity of results (ie, whether the agreement is kept or broken). The statement "the task will be completed by noon next Saturday" places the task in the world of recognizable behavior. When noon on Saturday comes and goes, the agreement is either kept or broken.

UNDERSTANDING TASK COMPLETION AND THE NECESSITY OF CLEANUP STRATEGIES

Incompletions with ADHD occur for a variety of reasons. First, weak activation of executive functions impairs task engagement as the person does not identify what to do, and therefore does not do it. Second, the emotional consequences associated with task incompletions (ie, angry spouse, upset boss, self-shame) cause distress and result in a negative sense-of-self that perpetuates task avoidance and more incompletions. Over time, as task demands increase in both number and complexity, incompletions mount, and a tangled web of worries and self-doubt follows. Thus, it is no surprise that people with ADHD may orient away from accepting new tasks in the complex demands of daily life. This may include tasks that are assigned by their treating physician (eg, pharmacotherapy), though they are designed to optimize health and well-being.

TABLE 4

Resources for patients with attention deficit hyperactivity disorder (ADHD)

ADHD Coaches Organization (ACO): https://www.adhdcoaches.org/

Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD): https://chadd.org/

The American Professional Society of ADHD and Related Disorder (APSARD): https://apsard.org/

ADHD World Federation: From Child to Adult Disorder: https://www.adhd-federation.org/

ADHD Success Network Coaching: https://www.adhd-coach-asn.com/

ADDITUDE ADHD Experts Podcast: https://www.additudemag.com/adhd-expert-webinars-index/

One way to improve agreement-keeping across many professional settings is to use social scaffolding, a strategy often invoked in daily activity, though it is not necessarily well-researched. In business, chief executive officers often have administrative associates whose primary job is to orient the executive toward task completion, with the assistant being tasked to orchestrate the chief's daily to-do list. Physicians themselves often work with assistants and electronic scribes to attend to the higher-order and lower-order details necessary to efficiently attend to patient needs.

These successful professionals are not chastised or berated for their failure to attend to organizational details. Rather, they rely on others who facilitate the transfer of new information to archived records. Instead of viewing social scaffolding as an unnecessary burden required by an incompetent individual, it can be recognized as an effective strategy designed to ensure task efficiency and task efficacy. Considerable research further supports behavioral coaching to decrease functional impairment of adults with ADHD.^{25,26}

IMPEDIMENTS TO SOCIAL SCAFFOLDING

Adults with ADHD tend to avoid the contribution of friends and family in managing daily life (ie, social scaffolding) despite its simplicity. Resistance often stems from resentment over infantilizing, interpreting collaborative partners' assistance as criticism, poor communication skills, unclear agreements (eg, private agreements with no consequences), and ambiguity about the roles of others in the home-work relationship.

Because little is accomplished by one person acting alone in the world today, it is critically and clinically important to encourage teamwork. Collaboration to address performance inconsistencies can reduce frustrations and character-blaming associated with incompletions. For some, social scaffolding is the optimal tool to manage ADHD behavioral shortcomings and reflects a simple addition for treatment when combined with pharmacotherapy. Table 4 outlines coaching resources for individuals with ADHD.

GUIDANCE FOR THE PHYSICIAN

Shifting the view of treatment for the adult with ADHD as a problem with the brain to a problem with behavior—breaking agreements—empowers people to view their actions differently. This shift from mental-based dysfunction to action-based dysfunction may strengthen results of treatment and make treatment simpler for the physician by making a difference in patient outcomes. Emphasizing that breaking and keeping agreements is a clinically significant side effect of ADHD and its treatment can impact the effect of pharmacotherapy.

While ADHD is a lifelong condition, it does not need to result in a demoralizing path to failure when management techniques are properly implemented.

DISCLOSURES

Dr. Manos has disclosed consulting for Supernus. The other author reports no relevant financial relationships which, in the context of her contributions, could be perceived as a potential conflict of interest.

REFERENCES

- 1. Knight TK, Kawatkar A, Hodgkins P, et al. Prevalence and incidence of adult attention deficit/hyperactivity disorder in a large managed care population. Curr Med Res Opin 2014; 30(7):1291-1299. doi:10.1185/03007995.2014.901940
- 2. Visser SN, Danielson ML, Bitsko RH, et al. Trends in the parentreport of health care provider-diagnosed and medicated attentiondeficit/hyperactivity disorder: United States, 2003-2011. J Am Acad Child Adolesc Psychiatry 2014; 53(1):34-46.e2. doi:10.1016/j.jaac.2013.09.001
- 3. Sibley MH, Swanson JM, Arnold LE, et al. Defining ADHD symptom persistence in adulthood: optimizing sensitivity and specificity. J Child Psychol Psychiatry 2017; 58(6):655–662. doi:10.1111/jcpp.12620
- 4. Eng AG, Bansal PS, Goh PK, Nirjar U, Petersen MK, Martel MM. Evidence-based assessment for attention-deficit/hyperactivity disorder [published online ahead of print, 2023 Jan 12]. Assessment 2023; 10731911221149957. doi:10.1177/10731911221149957
- 5. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Washington, DC: American Psychiatric Publishing; 2013.
- 6. Adler LA. Clinical presentations of adult patients with ADHD. J Clin Psychiatry 2004; 65(suppl 3):8-11. pmid:15046529
- 7. Adler LA, Farahbakhshian S, Romero B, Flood E, Doll H. Healthcare provider perspectives on diagnosing and treating adults with attention-deficit/hyperactivity disorder. Postgrad Med 2019; 131(7):461-472. doi:10.1080/00325481.2019.1647080
- 8. Surman CB, Hammerness PG, Pion K, Faraone SV. Do stimulants improve functioning in adults with ADHD? A review of the literature. Eur Neuropsychopharmacol 2013; 23(6):528-533. doi:10.1016/j.euroneuro.2012.02.010
- 9. Cornforth C, Sonuga-Barke E, Coghill D. Stimulant drug effects on attention deficit/hyperactivity disorder: a review of the effects of age and sex of patients. Curr Pharm Des 2010; 16(22):2424-2433. doi:10.2174/138161210791959827
- 10. FDA-approved drugs to treat ADHD. J Psychosoc Nurs Ment Health Serv 2023; 61(3):5-6. doi:10.3928/02793695-20230118-79
- 11. Jensen PS. Clinical considerations for the diagnosis and treatment of ADHD in the managed care setting. Am J Manag Care 2009; 15(5 suppl):S129-S140. pmid:19601688
- 12. ADDitude editors. Complete ADHD medication list: comparing popular meds. Updated May 10, 2023. https://www.additudemag. com/adhd-medications-list-chart-stimulants-nonstimulants/. Accessed June 2, 2023.

- 13. Cortese S. Evidence-based prescribing of medications for ADHD: where are we in 2023? Expert Opin Pharmacother 2023; 24(4): 425-434. doi:10.1080/14656566.2023.2169604
- 14. Sjöström D, Rask O, Welin L, et al. The winding road to equal care: attitudes and experiences of prescribing ADHD medication among pediatric psychiatrists: a qualitative study. Int J Environ Res Public Health 2022; 20(1):221. doi:10.3390/ijerph20010221
- 15. Cummings JL. Frontal-subcortical circuits and human behavior. Arch Neurol 1993; 50(8):873-880. doi:10.1001/archneur.1993.00540080076020
- 16. Pinto Y, van der Leij AR, Sligte IG, Lamme VAF, Scholte HS. Bottomup and top-down attention are independent. J Vision 2013; 13(3):1-14. doi:10.1167/13.3.16
- 17. Ilario C, Alt A, Bader M, Sentissi O. Can ADHD have an adulthood onset? Encephale 2019; 45(4):357-362. French. doi:10.1016/j.encep.2019.05.004
- 18. Hayes SC. Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies republished article. Behav Ther 2016; 47(6):869-885. doi:10.1016/j.beth.2016.11.006
- Seldon TH. It has been said. Perspect Biol Med 1978; 21(3):445-446. doi:10.1353/pbm.1978.0022
- 20. Hamilton JD. Pills don't teach skills. Scotts Valley, CA: CreateSpace; 2010.
- 21. Erhard W, Jensen MC. Putting integrity into finance: a purely positive approach. Capitalism and Society 2017; 12(1):1–91.
- 22. Breiner SJ. The adolescent who does not finish anything. Adolescence 1985; 20(79):646-653. pmid:4083126
- 23. Hayes SC, Barnes-Holmes D, Roche, B. Relational frame theory: a post-Skinnerian account of human language and cognition. New York, NY: Kluwer Academic/Plenum Publishers; 2001.
- 24. Esteller-Cucala P, Maceda I, Børglum AD, et al. Genomic analysis of the natural history of attention-deficit/hyperactivity disorder using Neanderthal and ancient Homo sapiens samples. Sci Rep 2020; 10(1):8622. doi:10.1038/s41598-020-65322-4
- 25. Bjerrum MB, Pedersen PU, Larsen P. Living with symptoms of attention deficit hyperactivity disorder in adulthood: a systematic review of qualitative evidence. JBI Database System Rev Implement Rep 2017; 15(4):1080-1153. doi:10.11124/JBISRIR-2017-003357
- 26. Sarkis E. Addressing attention-deficit/hyperactivity disorder in the workplace. Postgrad Med 2014; 126(5):25-30. doi:10.3810/pgm.2014.09.2797

Address: Michael J. Manos, PhD, Clinical Director, ADHD Center for Evaluation and Treatment (ACET), CR11, Cleveland Clinic, 9500 Euclid Avenue, Cleveland, OH 44195; manosm@ccf.org