

# What is Attention Deficit Hyperactivity Disorder (ADHD)?

ADHD is a disorder that is characterized by inattention and distractibility. These symptoms can be accompanied by hyperactivity in some individuals but not in others.

The difference is specified by subtype. This is a commonly occurring disorder in childhood, but more than half of patients may continue to have symptoms that persist into adulthood. While the cause of ADHD is not known, science has identified some possible things that may play a role in the development of ADHD.

These include genetic predisposition, alterations in brain activation during task engagement, neurotransmitter activity, prenatal factors, and environmental factors.

#### Consequences of Untreated ADHD:

- ADHD can cause impairment in School & Work Achievement
- Relationship & Social Problems
- Low Self-Esteem
- Accidents, Poor Driving Record, Poor Decision Making (Inability to stop and think through risks)

## ADHD is commonly associated with other illnesses:

- Patient are at higher risk for nicotine dependence
- Anxiety
- Behavioral disturbances in teens and children
- Substance Use Disorders
- Depression

### How do you test, assess or monitor for ADHD?

The most important part of developing an effective treatment plan is getting an accurate diagnosis. While this may be straight-forward in some people, for others it may be challenging. In younger patients, those with developing mood disorders can have symptoms very similar to those with ADHD.

Those with predominately inattentive type ADHD may seek help for depression and low self-esteem having never recognized the underlying disorder. Patients who have sleep disorders can present with inattention and problems with concentration. It will be important for you and your provider to work together to better understand your symptoms. In addition to the diagnostic interview your provider may ask you to undergo additional testing.



#### Standard Assessments for ADHD

- ✓ Physical Exam: If you have not seen your PCP within the last year, your provider will likely encourage you to have a physical. If you do not have a PCP, you may schedule with one of the Salience Health providers.
- ✓ Lab Work: Your provider may need to get some information about your health status so that they can safely prescribe medications, if needed.
- Allergy Testing: Allergy testing may be appropriate for some individuals.
- ✓ ECG: An electrocardiogram (ECG) may be needed prior to the use of some medications.

### Innovative Testing Available at Salience

CNS Vital Signs Neurocognitive Testing: A Computerized Neurocognitive Screening (CNS) is an assessment that tells us how well your brain is managing tasks, such as working memory, concentration, processing speed, and executive functioning. These results can provide insight into how you may perform in your daily life at work and at home, and help your provider identify levels of impairment. The overall duration takes about one hour to complete.

**Brainview:** We know that behavioral health and physical health go hand-in-hand, and this assessment helps us see how they are impacting each other. The Brainview test is a cognitive assessment that provides information on your brain's functionality related to stress, memory, and cognition, while also tracking physical functions such as heart rate and metabolic rates. This test will help your provider develop a more informed treatment plan for you and better coordinate your overall care.



### **Monitoring ADHD**

Clinical scales are collected at assessment and at every visit. This information is important to your provider who will use these results to track your symptoms. In addition to scales for ADHD, the clinic will check on depression and anxiety symptoms as these are common for those with ADHD.

## **Treatment Options for ADHD**

Treatment will likely require more than one type of intervention to achieve the best results. Some individuals may need to try a combination of treatments. These may include:



#### **Exercise**

- Exercise can be beneficial for individuals with ADHD.
- Additionally, exercise is a healthy option to use as a stress management tool. Salience Health Clinics endorse the commitment to improving overall health and support the adoption of a healthy lifestyle.



#### Diet

- There have been limited and mixed results in studies of dietary changes to improve ADHD.
- If your child suffers from food sensitivities, the elimination of these foods will be important in establishing better health.
- Some medications used to treat ADHD may diminish appetite. Children and teens will need to be monitored to ensure proper growth and development.





### Therapy

- Several different types of therapy have been identified as beneficial for those with ADHD.
- In children and teens with behavioral problems, therapy will be essential to help the child learn new coping strategies and self-regulation skills.
- Social skills may lag behind in youth with ADHD and therapy may assist in the acquisition of needed skills.
- Family therapy may be recommended when conflicts within the family are significant or when the family feels overwhelmed and needs help learning to manage their child's behavioral problems.
- When untreated ADHD has resulted in long-standing impairments in work or social life, therapy may be needed to address the consequences to self-esteem.

## **Treatment Options for ADHD**



- Stimulant medications are commonly used. However, these drugs do have abuse potential and are not prescribed to individuals who have Substance Use Disorders. These medications are closely monitored and are not refilled if appointments are missed.
- Some ongoing lab testing such as a urine drug screen will be required. Other testing may become
  necessary if other medical problems arise, other medications are prescribed, or complications of
  these medications occur.
- Stimulant medications may cause a decreased appetite, cause anxiety, interfere with sleep, cause
  weight loss, and do carry a small risk for psychosis in younger patients. You may experience an
  increased heart rate. For patients with cardiovascular disease, such as uncontrolled hypertension
  or arrythmias, testing such as an ECG may be

required, and at times, may prohibit the use of these medications.

- Other medications may be used including Strattera (atomoxetine), antidepressant medications, or modafinil. A class of medications called alpha 2 agonists may be used in children. These can cause sedation and can have impact on blood pressure.
- Medications alone will not manage all the symptoms. Stimulant medications have short time periods during which they remain active in the body. Other interventions will be needed to manage symptoms including: increased structure and routine, use of planners or calendars, having an organized work space, as well as the recommendations listed above.





## Innovative Therapy - Neurofeedback

• By providing feedback during trial and error, and using repetition, neurofeedback is employed to change neural patterning. It has had studies demonstrating effectiveness in improving symptoms associated with ADHD. For those who cannot tolerate medications or prefer to not take medications, neurofeedback can be an option.

### **Better Outcomes for ADHD**

#### Things to Avoid:

- Do not use drugs or alcohol to cope with your symptoms. Having ADHD puts you at greater risk of developing substance use problems.
- Do not misuse your medication or adjust your dosage without consulting your provider.
   No early refills are available on controlled prescriptions.
- Be careful when driving. Do not use cell phones or loud radios that might further disrupt your attention



#### Things to Do:

- Educate Yourself. Learn about ADHD. You may find information on the NIMH and NAMI websites.
- Support groups are available for parents who are caring for children with ADHD.
- Organize your environment and set yourself up for better performance. Place your papers and
  equipment in identified spots every time. Use a scheduling tool such as your phone or a planner.
  Use lists and review it daily. Set up a list for tomorrow each night and plan your day. When you have
  projects to complete, create a timeline for due dates, a list of materials you will need, and estimate
  how long it will take to get to your goal.
- When driving, plan your route ahead. Give yourself extra time that way you do not have to speed to get to your destination.
- Pay attention to refill needs. You might consider placing a week's worth of medication in a separate bottle and call for a refill when you open it.
- Set reasonable goals and expectations: be certain you have adequate time and resources to accomplish what you set out for yourself.
- Keep every appointment.
- Be certain that you keep your provider informed about any new stresses or life events and about any physical illnesses or medications that are new.
- It may be necessary for the provider to have information on how your child with ADHD is doing in school, therefore, you may be asked to give the teacher some clinical scales to fill out.
- For parents of children with ADHD, your child may benefit from consistent rules (bedtimes, homework times, chores). These children may have difficulty in environments that are unstructured.
- Parents with children who have ADHD may need to work with the school to get your child
  necessary accommodations to meet their educational needs. This may require that your provider
  fill out forms for the school. The clinic will support your needs but please be aware of the time
  frames for completion. If you need rapid turn-around, consider scheduling an appointment with the
  provider to complete the forms together.