

Neuropsychology FAQs

frequently asked questions from families with Noonan syndrome

What is a neuropsychologist?

- A neuropsychologist is a psychologist who specializes in **how the brain affects thinking, emotions, and behavior**. They are knowledgeable of how medical conditions can impact physical health, mental health, and daily functioning.
- They assess brain functions such as attention, language, problem-solving, learning, memory, and processing speed. They can also evaluate mental health and how a person functions across different environments.



- A neuropsychologist can help identify a person's **specific strengths and unique challenges**, and recommend strategies or supports as needed.
- A **neuropsychologist's** job differs from that of a **psychiatrist**, who prescribes psychiatric medication, and a **therapist**, who provides interventions such as teaching coping skills or facilitating therapy. However, neuropsychologists can help identify which other mental health providers may be most helpful, assist in connecting you with them, and collaborate with those providers to recommend specific interventions.

Why is a neuropsychological evaluation recommended for Noonan syndrome?

- Families often pursue an evaluation because of questions about an individual's thinking skills or behavior. Other times, the goal is to track developmental progress over time or establish a baseline before a medical intervention.
- Individuals with Noonan syndrome can **vary significantly** in how the condition presents, even among those with the same genetic variant. This makes it difficult to predict a person's need for support without conducting an evaluation.
- People with Noonan syndrome often experience **health complications** that can affect brain function and mental well-being, including cardiac conditions, hearing loss, seizures, and chronic pain, among others.
- Neurodevelopmental and mental health conditions, such as learning disabilities, attention deficit hyperactivity disorder (ADHD), autism, and anxiety, are also **more common** in people with Noonan syndrome than in the general population.
- A neuropsychological evaluation can provide detailed information about a person's specific abilities, provide diagnoses when appropriate, and share guidance for treatment and behavioral strategies. Identifying relevant diagnoses may be useful to determine eligibility for medical or rehabilitative treatments, county and state services, and educational service plans.



How can I prepare for this visit?

- To get the most out of your evaluation, it helps to **think ahead about any questions, concerns, or goals for the visit**. This might include identifying specific school accommodations or ways to modify ongoing therapy.
- There's no need to study in advance. Getting enough sleep, eating a healthy meal, and packing snacks can help you (or your child) perform at your best.
- The clinic will likely have activities available during breaks, but you're welcome to bring your own as well. Feel free to let your neuropsychologist know what kinds of activities you or your child enjoy, so these can be incorporated into breaks.
- It helps to know (or let children know) in advance that **tasks may start out easy and gradually become more challenging**. Even when activities feel difficult, examinees are encouraged to give their best guess. The neuropsychologist wants to see the full range of what someone is able to do, so trying one's best throughout the appointment is important.
- Children should be told that they may spend part of the appointment away from their parents, working one-on-one with the provider on activities like answering questions or solving puzzles. There will be no brain scans or blood tests.
- These appointments tend to be longer than typical clinic visits and can be mentally tiring. Plan for a relaxed day afterward, with light activities or nothing scheduled.



What can I expect during the evaluation?

Every neuropsychology clinic is different, but you can expect the appointment to last around 3–6 hours, with breaks as needed. Some clinics complete all activities in one day, while others spread them across multiple visits. You will receive the results sometime between the same day to a few weeks later.

Clinical Interview

- The neuropsychologist will ask about your (or your child's) **medical, developmental, social, behavioral, and educational history**. This may include questions about past medical experiences, developmental milestones, and how things are going at school or work.
- This is the time to share any **concerns or symptoms** that led you to the clinic, as well as anything you're hoping to get out of the evaluation.
- If this is a pediatric visit, the interview will likely include time for the neuropsychologist to talk to the child and caregiver together. The child and caregiver may also be interviewed separately.

Activities to Assess Brain Functioning

- A neuropsychological evaluation includes tasks and **activities to assess thinking skills** such as problem solving, memory, attention, language, and motor skills.
- There may be a mix of paper-pencil tasks or computer-based assessments. Some may seem like games and others may feel more like school. The examinee may be asked to remember things, draw pictures, or complete puzzles.

- It can be helpful to mention any factors that could affect testing, such as poor sleep the night before, or recovering from an illness.
- These activities will range from easy to challenging. The examiner will eventually end a task when things get too hard.
- Parents/caregivers or other family members typically remain at the clinic during these activities, but they will usually be asked to wait in a separate room from where the activities are being performed.
- Activities will occur at the individual's own pace, and breaks will be taken when needed. Often short bathroom or snack breaks, or a brief walk around the clinic, can help an examinee recharge after challenging activities. Appointments that span over the lunch hour may offer time to get something eat as well. Consult with the location you are going to for more information.
- There might be additional **survey forms** to complete that evaluate behaviors, mood, and other psychological factors that affect thinking skills. These might be given to the examinee as well as to their caregivers or teachers.



Results and Feedback

- The neuropsychologist will analyze the data collected and evaluate the patterns.
- They will have a **feedback discussion** with you where they will share any diagnoses (or lack of diagnoses), strategies to compensate for any areas of challenge, and other recommended next steps.

Who is the information shared with?

- An evaluation report will be written that discusses the findings and the recommendations.
Reports are confidential and only shared with your care team and those you have given explicit permission to see it.
- Sharing the reports with other **medical professionals** can help the team plan for treatment or monitor progress over time.
 - ▶ Some professionals who frequently use these reports include neurologists, psychiatrists, primary care providers, speech-language pathologists, and other specialists managing your care.



- For children and adult students, the reports can be shared with **schools**, if written permission is provided.
 - ▶ They can be used to help develop Individualized Educational Programs (IEPs) or other support plans that formalize educational services, accommodations, and modifications to the learning environment.
 - ▶ Reports may help educators understand how a student thinks so they can use teaching strategies most appropriate to them.
 - ▶ If there are health-related, sensory, behavioral, or emotional needs impacting academic performance, the report can further explain that.
 - ▶ This type of report bridges the gap between the medical and educational professionals to support a student's unique needs.