



### **Who will I see at my child's appointment?**

All children will be tested by a qualified Audiologist. A Community Paediatric Doctor will also be present at some appointments, depending on the needs of your child.

### **What can I expect to happen at my child's appointment?**

The appointment will begin by the Doctor or Audiologist asking you some questions about your child's hearing and general health, and giving you opportunity to tell them about any concerns you have.

Following this tests to assess your child's hearing and function of their middle-ear will be performed.

Once testing is complete the results will be explained to you, giving you opportunity to ask any questions. An appropriate management plan will also be discussed and agreed with you.

### **What tests will be performed?**

During the appointment we will complete one, or a combination of tests appropriate to the age of your child, in order to determine their hearing levels and identify any hearing difficulties. This may involve more than one visit to the clinic in order to build up a full set of results and/or to monitor your child's hearing.

### **Auditory Brainstem Response (ABR) testing**

ABR testing is usually performed for babies who are too young to show a physical response to quiet sounds. Whilst your baby is sleeping the Audiologist puts small sticky pads on your baby's forehead and neck. Small earphones are then placed into your baby's ears which play different clicking sounds. The response from your baby's ears is seen as a wave pattern on the computer screen and can be used to measure your baby's hearing levels.



### **Otoacoustic Emission (OAE) testing**

To perform this test a small soft-tipped earpiece is placed into your child's ear. This plays a quiet clicking sound and gives information about how well the inner organ of hearing (cochlea) is working.

### **Visual Reinforcement Audiometry**

Visual Reinforcement Audiometry (VRA) is used to measure hearing levels of children aged approximately six months to two and a half years. VRA requires the child to either sit in a special supportive chair or a parent's lap while a 'distracter' sits in front of them to keep the child's attention forward using simple toys. A second tester is positioned out of sight and presents sounds at different volumes through speakers or headphones. The child is rewarded for turning to the direction of the sound by activating a small light-up toy or animation positioned in line with the speaker.

Only rewarding the child for turning when a sound is presented helps to reinforce their response and allows us to measure the quietest level at which a child will respond at each pitch of sound in each ear.



### **Play Audiometry**

For children aged approximately 2-4 years Play Audiometry is used to assess the quietest sounds, at different pitches, a child is able to hear. Your child will be asked to perform a simple task such as dropping plastic counters into a bucket, or putting a peg into a board to indicate that they have heard a sound. Sounds may be presented through a loudspeaker or through headphones.



### **Pure Tone Audiometry (PTA)**

For older children and adults PTA is used to assess hearing. Sounds are played through different types of headphones and your child will be asked to press a button in response to sounds at different pitches and volumes. This enables us to assess the quietest sounds that they are able to hear.

**Otoscopy:**

The Doctor or Audiologist will attempt to examine your child's ear canals and ear drum using a special torch known as an otoscope.

**Tympanometry:**

This test involves putting a soft rubber tip into the entrance of your child's ear. The machine then gently puffs air into the ear to help it measure how well your child's eardrum is moving. This takes less than a minute to complete and is completely painless. The results can tell us if your child has any congestion behind the eardrums (known as glue ear), and tells us about your child's middle-ear function.

**What happens next?**

The Doctor or Audiologist will put the results of the different tests they have performed together to work out whether your child has any difficulty hearing, and if so what part of the ear and hearing system may be affected. This will help them to tell whether a hearing loss may be a temporary one e.g. due to congestion behind the eardrums (known as Glue Ear), or a more permanent hearing loss. They will explain the results to you and then discuss the options for what to do next. Depending on the type and degree of any hearing loss measured these options may include:

- Discharge from the Audiology service if results are within normal limits.
- Watchful waiting (e.g. in the case of Glue Ear, which often resolves by itself within 3-6 months).
- Trying hearing aids to help ensure your child has best possible access to quiet speech and environmental sounds.
- Referral to other specialties for their opinion e.g. Ear Nose and Throat Department, Speech and Language Therapy, Paediatricians or Teachers of the Hearing Impaired.