

## WHAT IF THE COCHLEAR IMPLANT IS NOT DEEMED APPROPRIATE FOR AN INDIVIDUAL AT PRESENT?

We can advise on alternatives that may be of assistance. It is possible that hearing may deteriorate over time or technology may advance such that a Cochlear Implant may become appropriate. We can also continue to monitor hearing performance at regular intervals.

## HOW TO REFER

For an initial evaluation by one of our Audiologists, potential recipients may be referred by their GP, an Audiologist, a Hearing Aid Provider or they may self refer.

In order to access Medicare rebates for some services it will be necessary to obtain a referral from your GP to either:

Dr. Paul Varley or Dr. Robert Morrissey

We are happy to forward your G.P. any relevant information from your initial audiological assessment.

## CONTACT DETAILS:

South Australian Cochlear  
Implant Centre  
Unit 10  
202-208 Glen Osmond Road  
Fullarton SA 5063

Phone: (08) 8379 4500

Fax: (08) 8379 4600

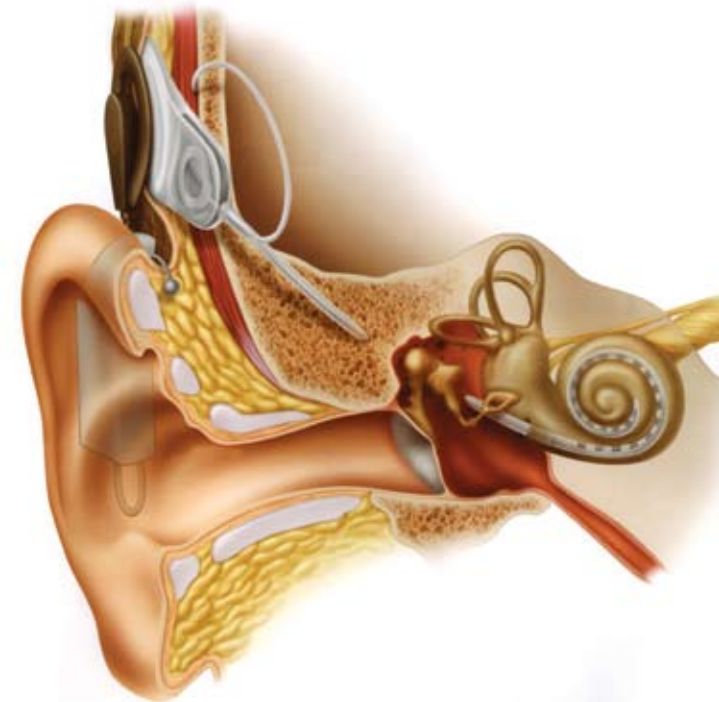
TTY: (08) 8379 9100

E-mail: [contact@sacic.com.au](mailto:contact@sacic.com.au)

If you have any questions or require further information please contact us at the above address or phone number



# SOUTH AUSTRALIAN COCHLEAR IMPLANT CENTRE



## WHO IS SACIC AND WHAT SERVICES DO WE PROVIDE

We are a private adult hearing implant centre. We provide a full range of services for people who may require or have an implanted hearing device. Services include preoperative medical and audiological evaluation, implant surgery and postoperative rehabilitation and maintenance.

We were established to provide a timely and more accessible adult cochlear implant service. There are a number of implantable hearing devices now available, including the full array Cochlear Implant, the Hybrid Cochlear Implant, the Bone Anchored Hearing Aid (BAHA) and the Vibrant Soundbridge (VSB). This brochure deals with Cochlear Implants.

### Team Structure

#### Ear Nose and Throat Surgeons

Dr. Robert Morrissey

Dr. Paul Varley

#### Audiologists

Keith Chiveralls

Nina Swiderski

Scott Eckert

Caren Sawers

#### Administrative Officer

Gail Drogemuller

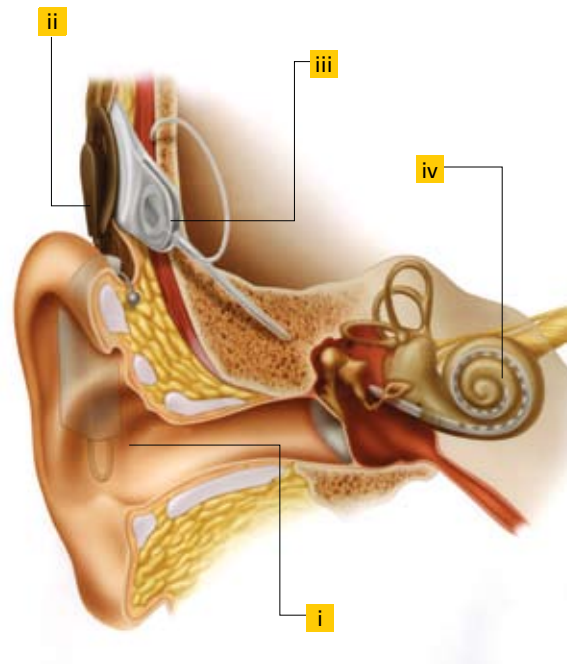
## WHAT IS A COCHLEAR IMPLANT?

A Cochlear Implant is an electrical device which helps people with moderate to profound sensori-neural hearing loss in at least the high frequencies. It is designed to produce a sensation of hearing by direct electrical stimulation of nerves inside the inner ear.

The function of a Cochlear Implant can be summarised as follows:

The Cochlear Implant consists of two main components;

1. The Speech Processor is the external part that sits behind the ear in much the same way as a standard behind-the-ear hearing aid.
2. The Cochlear Implant receiver/stimulator is the internal part placed under the skin behind the ear. An electrode array passes from the body of the implant to lie within the inner ear.



## HOW A COCHLEAR IMPLANT WORKS

1. Sound is picked up by a microphone in the speech processor (i)
2. Sound is then converted into electrical signals by the speech processor
3. The electrical signals are sent to a coil (ii) that overlies the implanted component and is held in place by a magnet.

4. The coil transmits the information to the internal component (iii) which relays it to the appropriate nerve fibres in the cochlea via an electrode array (iv). The nerves send this information to the brain resulting in hearing.
5. The Hybrid cochlear implant follows the same principles but also incorporates a standard hearing aid to stimulate any remaining natural hearing.

The external device (i.e. the speech processor) may be taken on and off as required.

## WHO WOULD BENEFIT FROM A COCHLEAR IMPLANT?

A number of medical and audiological assessments are required to determine if the Cochlear Implant is the device of choice for a person. The results of these tests allow the Clinicians to advise people of the benefit they may gain from the device.

Generally speaking the following criteria need to be met;

- The potential recipient must have a moderate to profound inner ear hearing loss in both ears in at least the high frequencies.
- The recipient must gain minimal benefit from optimally fitted hearing aids.
- The recipient needs to have developed verbal communication.
- The recipient must be medically suitable for the surgical procedure.
- The recipient and their family need to have realistic expectations for the implant.
- The recipient also needs to be aware of the impact of the device on themselves and their family.

In specific cases, the above criteria may be varied, and sometimes other considerations may apply. The decision as to whether the Cochlear Implant is the device of choice for a person is made on a case-by-case basis. The individual's own views are also very significant.