



“
We need to empower the
patient with this information
(CI user)

THE LIVING GUIDELINES FOR ADULT COCHLEAR IMPLANTATION

SUMMARY OF THE RECOMMENDATIONS

Less than 1 in 10 of those who are deaf and could benefit from a cochlear implant (CI) have access globally. The goal of CIICA (CI International Community of Action) is to close the gap in Cochlear Implant provision and ensure lifelong support for all who could benefit. CIICA was delighted to provide the CI user and family voice to the Living Guidelines Project, which has developed evidence-based living practice guidelines after considering 13,000 studies. The guidelines can be adapted and adopted in different countries, in order to optimise the lifelong hearing care for adults eligible for CI.

This Briefing provides a summary of the Recommendations and Good Practice Statements:

- **Hearing Screening and Assessment**
- **Referral for CI**
- **Specialist Evaluation**
- **Surgery: intra and post operative care**
- **Rehabilitation**
- **Patient Outcomes and Measures**



Hearing Screening and Assessment

(see p12)

Although hearing loss is the most common sensory deficit in older persons, it is often under-recognized and poorly managed.

RECOMMENDATIONS 1 & 2:

- Hearing loss screening should be offered to adults every 1-3 years from the age of 50. The question: Do you feel you have a hearing loss? should be asked to begin an assessment and informed by sharing the most common signs and symptoms of hearing loss. See WHO guidelines for Screening: [Hearing screening: considerations for implementation \(who.int\)](#).

Six Good Practice statements support this.

Referral for CI

(see p15)

Primary healthcare practitioners play a crucial role in detecting hearing loss in adults and in referring on to specialists in ear and hearing care.

CONSENSUS BASED RECOMMENDATION 3:

For an adult who presents for the first time with any level of hearing loss, or in whom hearing difficulties are suspected, the primary health care professional should:

- Arrange a referral for full audiology assessment
- Check for factors such as infection or ear wax
- In case of sudden loss of hearing, refer immediately to ENT specialist or emergency dept.

Two Good Practice statements support this.

“

There's going to be differences within countries. But there should be some universalities, and one of them should be person-centredness

Audiologist

Specialist Evaluation

(see p17)

RECOMMENDATION 4:

An adult should be referred for to a CI specialist for complete CI evaluation if they record a three frequency (500, 1000, 2000 Hz) pure tone average in the better ear that is equal or greater than 60 dB HL (decibels hearing level) AND expresses difficulties with speech understanding in their everyday environment.

Good Practice Statements include recommendations for correctly fitting hearing aids and guidelines for reassessment and eligibility.

Three Good Practice statements support this.

CONSENSUS RECOMMENDATION 5:

If an adult with any level of hearing loss does not meet the cochlear implant referral criteria upon initial assessment, cochlear implant eligibility should be assessed every 1–3 years by an audiologist if available in your country (or equivalent).^{1,2,3,4} If upon reassessment the cochlear implant referral criteria is met, they should be referred to a cochlear implant specialist for a complete cochlear implant evaluation and preoperative assessment. However, if the person has sensorineural hearing loss (50 dB – 64 dB) or the adult experiences a significant change in their hearing ability, then they should be reassessed every 6–12 months by an audiologist if available in your country (or equivalent).

Three Good Practice statements support this.

Surgery: intra and post operative care

(see p23)

RECOMMENDATION:

This area is well served by existing guidelines. Those reviewed by CI Task Force are provided on page 23.



Rehabilitation

(see p24)

Following cochlear implant activation of the external processor, programming of the implant and rehabilitation sessions are essential to promote effective use of the CI. The recommendation for initial rehabilitation and activation was based on consensus:

CONSENSUS RECOMMENDATION 6:

- Initial activation should take place within the first 28 days after surgery
- There should be between 4-6 programming appointments within the first 12 months
- 2-3 appointments should be in the first three months.

Two Good Practice statements support this.

Good Practice Statement 2 recommends that additional appointments are arranged if changes in auditory behaviour or speech production occur.

CONSENSUS RECOMMENDATION 7

Initial rehabilitation should include a multi-professional team: ENT specialist in CI, Audiologist (or equivalent), Speech and language therapist. Other support could include Psychologist, Neurologist, Radiologist, Geriatrician, Social Worker and peer group support (individual or group).

The guidelines recommend lifelong rehabilitation is provided to ensure lifelong use of the CI and provides **Good Practice Statements** (see p29) which support:

- the inclusion of family and friends in any rehabilitation programme
- the importance of self-care using available resources
- counselling and psychological support to be considered
- multi professional monitoring of progress throughout the lifespan.

The rehabilitation programme should be tailored to the individual.

“

Peer to peer support is fundamental as is an approach which incorporates the entire family

CI user

Patient Measures and Outcomes

(see p31)

The Guidelines emphasise that patient-reported outcomes should be prioritised to ensure that the benefits experienced are those important to the individual.

Speech outcome measures have typically been used but user-reported outcomes such as social wellbeing and general quality of life may be more important to users. There does not appear to be a strong relationship between speech recognition ability and patient self-report.

The complex communication and social and emotional situations that cochlear implant users experience may not be fully represented by word or sentence recognition alone.

The manner in which cochlear implantation improves quality of life likely extends well beyond improvements in speech recognition.
(see p31)

CONSENSUS RECOMMENDATION 8:

Two outcomes were identified as most meaningful for adult CI users. Audiologists (or equivalent) should evaluate: (see p31)

- Hearing specific quality of life (including social-emotional functioning and wellbeing)
- Speech perception, (particularly in noise)

The recommendation was based on user experience captured via CIICA CONVERSATIONS ([see ciicanet.org/resources/living-guidelines-for-ci-for-adults/](https://www.ciicanet.org/resources/living-guidelines-for-ci-for-adults/)) and was informed by a consensus process with the CI Task Force.

CONSENSUS RECOMMENDATION 9:

Two measurement tools should be used to evaluate the most meaningful outcomes after cochlear implantation. Audiologists or equivalent should use before CI, and then at least once 6-12 months following: (see p33)

- The Nijmegen Cochlear Implant Questionnaire (NCIQ), to evaluate hearing-specific quality of life in adult CI users
- Validated speech perception test in the dominant language of the CI users using words and/or sentences in quiet and noise.

The **Good Practice Statements** add that:

- The two assessments should be used 3,6, 12 months after and then annually
- If the user is concerned, they should be used again
- The purposes of the tests should be explained and they should be used in the CI user's dominant language
- Data gathered should inform rehabilitation, including monitoring device functioning and programming
- Any decrease in outcomes, or concern should ensure that appointments are prioritised.

Seven Good Practice statements support this.

“

It's imperative that CI needs to be included on the hearing health continuum.

CI User

The full Living Guidelines Recommendations can be found – [click here](#)

This Summary can be downloaded at – [click here](#)



Email info@ciicanet.org or visit www.ciicanet.org