



Canadian
Hard of Hearing
Association
NEWFOUNDLAND & LABRADOR

CHHA-NL Position Paper

Cochlear Implants Availability and Issues with Support Services

Introduction:

When people with hearing loss can no longer benefit from the use of hearing aids, they are often implanted with what is known as a Cochlear Implant (CI), and, in the Province of Newfoundland and Labrador their use has increased significantly over the past decade.

A cochlear implant is a medical technology that bypasses the damaged part of the ear and sends signals directly to the auditory nerve. The internal component is implanted surgically behind and above the ear, and the external component is held in place with a magnet, while the processor portion is worn much like a Behind-the-Ear hearing aid, but is much larger.

The current **Provincial Cochlear Implant (CI) Programme** consists of two demographics as follows:

For children, the program provides for:

- Surgery and implant devices (internal and external components) for bilateral cochlear implants up to 18 years of age
- External replacement parts (i.e. batteries, microphones, headpieces) for children up to 18 years of age
- One processor upgrade for children up to 18 years of age

For adults, the program provides for:

- Surgery and one implant device (internal and external components)

Background:

While the CI is considered a last step in hearing assistive technology that has had tremendous success, and the Government of Newfoundland and Labrador is to be commended for its implementation, there are a number of significant issues related to full availability and servicing of various components. If these issues aren't addressed appropriately, then the time, effort and expense incurred to provide people with CIs will have been lost. More importantly, those with hearing loss who have had their quality of life significantly improved with CIs will retreat to a world with no sound and thus, a diminished ability to communicate, which means their quality of life will tragically regress.

These issues are outlined in detail below:

1. Lack of Availability of Bilateral Cochlear Implants (CIs)

In the province of NL, children up to 18 years of age have access to bilateral CIs if needed, while adults beyond 18 years of age do not. Research and clinical studies indicate the following improvements for adults who have bilateral implants:

- Improved speech perception in quiet and noisy environments
- Improved localization/lateralization of sound
- Improved sound quality and ease of listening

These improvements also contribute to a greatly enhanced quality of life and many people become more independent, more productive in work environments, more active and involved in family and community events. The potential gains made as a result of improved hearing are seen to greatly lessen the sense of isolation felt by individuals who cannot be active participants in their daily lives and the lives of those around them. **Thus, for people who are deemed to be eligible CI candidates, as determined by the professional CI implant team, bilateral coverage for adults should be mandated.**

Below are several links to studies that support the efficacy of bilateral cochlear implants:

Bilateral Cochlear Implants, Robert A. Battista, MD, F.A.C.S, Kathleen Highhouse, AuD, CCC-A, February 13, 2011

<http://www.audiologyonline.com/articles/bilateral-cochlear-implants-840>

Outcomes in Bilateral Cochlear Implementation, Bradford D. Bichey, MD, MPH, and Richard T. Miyamoto, MD, FAAP,; Otolaryngology Magazine – Head and Neck Surgery, Volume 138, Issue 5, May 2008, Pages 655-661

<http://www.sciencedirect.com/science/article/pii/S0194599807020244>

2. Replacement of Cochlear Implant Processors (Broken, Upgraded/Obsolete)

Cochlear implant manufacturers steadily seek to improve their products through research and development. It is a common occurrence for manufacturers to market new and improved components every few years. The external components of older models, after 10 years or so, are then declared obsolete and can no longer be repaired. CI clients are then forced into having to buy the new external components or revert to a silent world once the original processor breaks down.

The cost to upgrade a processor is about \$9000.00. Processors are usually serviced for about 10 years before manufacturers discontinue service and repair. During that 10 year period there are usually two, and sometimes three upgrades manufactured and promoted, all with improved technology based on new research and development.

Many provinces in Canada are currently recognizing the need for better client support by providing partial or full financial aid under these circumstances and have expanded, or are in the process of expanding, their provincial coverage to include processor upgrades for Cochlear Implant clients (*see Appendix A: Cochlear Implant Programs: Details from Across Canada*).

3. Replacement of Cochlear Implant (CI) Parts

When warranties expire on replacement parts, it is quite costly to replace some items. These external components usually last a few years but, nevertheless they are expensive to replace for people (especially seniors) on fixed incomes (*see Appendix B: Cost for CI Replacement Parts*).

CHHA-NL Position on Cochlear Implant (CI) Availability and Servicing Issues:

It is the position of CHHA-NL that the Government of Newfoundland and Labrador should introduce an enhanced Cochlear Implant program that provides wider availability of Bilateral Cochlear Implants and Servicing post-implant.

It is further recommended that the components of the Cochlear Implant (CI) Availability and Servicing strategy should include, but not necessarily be limited to:

1. Access to Equality of Service

CHHA-NL recommends expansion of the NL Provincial CI Program to ensure that all children and adults with severe to profound hearing loss have equal access to the best possible technology, which includes the following points:

a. **Availability of Bilateral Cochlear Implants (CIs)**

CHHA–NL believes that all individuals with profound to severe hearing loss should have the option to have bilateral cochlear implants when hearing aids give little or no benefit, subject to assessment for candidacy by the cochlear implement team.

b. **Replacement of Cochlear Implant (CI) Processors Upgrade)**

CHHA-NL believes that CI clients should be provided with a processor upgrade when the processor is discontinued, or when the CI recipient is not having the hearing success expected, and that the current **Provincial Cochlear Implant Program** in this province needs to be expanded to include this service to both children and adult clients regardless of age or status of educational placement.

c. **Replacement of Cochlear Implant (CI) Processors (Broken/Obsolete)**

CHHA-NL believes that CI clients should be provided with a processor upgrade when the processor cannot be repaired or is declared obsolete (as determined by the professional CI implant team), and that the current **Provincial Cochlear Implant Program** in this province needs to be expanded to include this service to both children and adult clients regardless of age or status of educational placement.

d. **Replacement of Cochlear Implant (CI) Parts**

CHHA-NL believes that other replacement parts (batteries, microphones headpieces / coils, etc.) for adult patients should be funded under the Provincial Cochlear Implant Programme as it currently is for children who are 18 years of age and under.

Conclusion:

Cochlear Implant technology provides access to the hearing world for people for whom Hearing Aids are of little or no benefit. The Provincial Cochlear Implant Programme covers the cost of the initial surgery and CI external and internal devices, however, the cost of maintaining and replacing processors can be extreme, especially for adult clients and those on fixed incomes. While the Government of Newfoundland and Labrador is to be commended for their financial support to date for the CI Program in this program, it is clear that more needs to be done to ensure people with hearing loss have all the services they need, including access to binaural implants.

The research literature clearly shows that bilateral implants have a number of benefits for users and includes:

Improved speech perception in quiet and noisy environments

Improved localization and lateralization of sound

Improved sound quality and ease of listening

All of these factors, in turn, contribute to a greatly enhanced quality of life.

CHHA-NL recognizes the need for the financial support of the Government of Newfoundland Labrador to ensure that all people with severe to profound hearing loss have equal access to the new technologies that they need to fully participate in a hearing world. This should also include upgrades, provision of replacement parts, and access to supports. Failure to do otherwise is unequal, unfair and discriminatory to persons with hearing loss and who are forced to rely on the use of Cochlear Implants to hear and communicate.

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Association Contact Information:

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Appendix A: Cochlear Implant Programmes: Details from across Canada

British Columbia

Pediatrics:

Sound processors can be upgraded every 6 to 7 years through the clinic

Cost shared - The client pays \$700 per ear

Limited funding; oldest processors are given priority

No coverage for repairs or essential parts outside of the manufacturer's warranty

Adult:

CI Programme is the same for adults

Alberta

Pediatrics:

Processors can be upgraded every 7 years through Alberta Aids to Daily Living (AADL)

Cost shared – The client pays \$500

Adult:

CI Programme is the same for adults

Saskatchewan

Pediatrics:

Processors can be upgraded every 3 to 5 years through Department of Education (Schools Division)

Replacement of equipment is funded by Department of Education; the decision to cover the cost of replacement is made by each individual School Division

Supplementary Health is available for low income families

Adult:

The implant programme requests a grant each year from Career and Employment to cover the cost of processor upgrades for **adults in post-secondary training or the workforce**. The number of upgrades is limited by the amount of the grants awarded.

Some adults (retirees and/or seniors?) can get coverage under Supplemental Health. Decisions are case by case and audiologists typically make the request when the current equipment is out of warranty, in need of repair and new technology is available.

Manitoba**Pediatric:**

Processors can be replaced every 5 years through the Manitoba Health and Communication Devices (MHCD Programme)

Cost shared – MHCD pays 80%

Repairs outside the warranty are not funded

Adults:

Processor upgrades/ repairs/ replacement parts are not funded for adults

Ontario**Pediatrics:**

Processors can be upgraded every 3 years through the Assistive Devices Programme (ADP)

ADP is accessible following expiration of the manufacturer's warranty

Cost shared – ADP covers 75% of the manufacturer's invoiced price, up to a maximum of \$5444 per ear

Equipment repairs, essential parts and/or purchase of an extended warranty are the responsibility of patients/families

Social Assistance clients receive 100% coverage

Adults:

CI coverage is the same as the pediatric programme

Quebec

Pediatrics:

Complete coverage for obsolete sound processor outside the manufacturer's warranty

Essential parts and repairs are also completely covered outside the warranty

Adults:

CI coverage is the same as the pediatric programme

Nova Scotia

Pediatrics:

May use CI funding when sound processor becomes obsolete

Repairs/replacements parts are not covered unless the client is covered under social services, DVA etc.

Adults:

Coverage is the same as for pediatric programme.

New Brunswick

Pediatrics:

Obsolete equipment can be replaced with new technology on a cost-shared basis based on household revenue (modeled on the NB pediatric diabetic insulin pump programme)

Financial assessment required to obtain coverage for essential parts/repairs

Adult:

Same coverage as for the pediatric programme

Newfoundland

Pediatrics:

Children receive one processor upgrade between birth and 18 years of age

Replacement parts and repairs are also covered by the CI programme

Adult:

No coverage for obsolete processors

No coverage for replacement parts and repairs

Prince Edward Island and The Territories

There is no Cochlear Implant Programme for these places.

Appendix B: Cost for CI Replacement Parts

2015 CHHA-NL Position Paper: Costs for CI Replacement Parts

The external components of a cochlear implant device, apart from the processor itself, often need to be replaced. Below is a list of the current costs for some of these components as sold by two manufacturers, Advanced Bionics and MedEl.

Prices may vary between adult-sized and child-sized devices. Different devices also have different configurations which makes it difficult to compare the 2 manufacturers. However, the intent of this list is to show the extreme cost to the consumer when parts need to be replaced after the warranties run out.

Advanced Bionics “The Naida” Processor (US Prices)

T-mic \$250	Power Cell Rechargeable Battery \$250
Battery Charger \$350	Power Supply \$49
Power Adapter \$300	Power Cables \$150
AAA Power Pack \$265	Headpiece / Coil \$540

MedEl “Opus 2” Processor (Current Canadian Prices)

Rechargeable Battery System Kit \$775 (Includes batteries and charger)

Standard Battery Pack \$275 Headpiece/ Coil/ magnet \$525

Cables \$50 to \$150 (Depending on their function)

General Information about CHHA-NL

The Canadian Hard of Hearing Association Newfoundland and Labrador (CHHA-NL) is a non-profit, charitable organization committed to advocacy, awareness, prevention and the provision of programs and services that promote a better quality of life for hard of hearing and late-deafened people of all ages and their families in Newfoundland and Labrador.

CHHA-NL was founded in 1984 under the name of the Newfoundland Hearing Association (NHA). In 1994, the NHA became the Canadian Hard of Hearing Association-Newfoundland Chapter (CHHA-NC) when it became part of the Canadian Hard of Hearing Association (CHHA). In 2002, when the province changed its official name to Newfoundland and Labrador, the association changed accordingly to its current name of the Canadian Hard of Hearing Association-Newfoundland and Labrador (CHHA-NL).

The association is run by and for hard of hearing people of the province. Its operations are guided and conducted through the efforts of a Board of Directors, seven full-time staff, and volunteers. While it has a paid membership of all ages, the association provides a diversified program of support services to its members and the public at large.

To obtain additional information about the association, or to request a copy of the association's Annual Report, including information related to the ongoing operations of the association (financial, fundraising, strategic plans, types and delivery of programs and services), please contact the Executive Director, Leon Mills, at (709) 753-3224 (voice), by fax (709) 753-5640, by cell (709) 689-8239 or by e-mail at lmills@chha-nl.ca.