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Operational Guidelines for Financial Assistance for Cochlear Implantation in Children with Hearing Impairment

1. Introduction

Technological advancements have made it possible to identify hearing loss early on in life, i.e. soon after birth. The early identification and intervention procedures initiated within six months of age should be the golden standard for the holistic development of a child with hearing loss.

One of the most dramatic developments in hearing and deafness has been the invention of cochlear implant. Over the past 35 years, the idea of restoring hearing to profoundly deaf patients by artificially stimulating the sensory system has become a reality. Children with pre-lingual deafness do exceptionally well with cochlear implants and progress to acquire spoken language and produce intelligible speech.

In order to ensure optimum benefit hearing loss will need to be detected early and intervention started without loss of time. Lack of awareness at all levels about the overriding need for early detection of hearing impairment and early intervention leads to late referral, thereby reducing the benefits of intervention.

A successful cochlear implant program involves many steps from hearing screening to post-operative rehabilitation. A coordinated multi-disciplinary approach is essential to ensure optimal outcomes. A successful cochlear implant program cannot occur without a well-resourced neonatal hearing screening program, coordinated assessment programs by audiology, speech pathology, educational and medical services and a dedicated auditory verbal therapy team for rehabilitation.

2. Objective

The objective of the project is to provide financial assistance for cochlear implantation among children of 0-3 years, with hearing impairment.

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3. Eligibility

Cochlear implantation is expensive and in addition to the cost of implant material there would be the expenses of surgery, post operative care, audiological mapping, trouble shooting and post implant habilitation.

There are a number of factors that determine the degree of success to expect from the operation and the device itself. Cochlear implant centres determine implant candidacy on an individual basis and take into account a person's hearing history, cause of hearing loss, amount of residual hearing, speech recognition ability, health status, and family commitment to aural habilitation/rehabilitation. It is on taking all this into account that the eligibility criteria have been laid down.

The eligibility criteria under the scheme are given below:

- The child should be in the age group of 0-3 years. However the Screening Committee would be empowered to make exceptions on a case to case basis; where the committee feel that a high possibility of success exists or if there are other compelling technical reasons warranting or making an exception.
- ii) The annual family income of the applicant shall be below Rs.2 lakh.
- iii) The applicant/parent shall be a permanent resident of Kerala.
- iv) The child should be certified by a competent authority (under the scheme) regarding need for cochlear implantation surgery. There should not be any medical contraindications to surgery and/or implantation
- v) The parents of the child should be prepared to undergo a mandatory training on speech therapy and post operative care.

vi) The parents should give an undertaking for one year mandatory post operative rehabilitation programme.

4. Identification of candidates for cochlear implantation

- a) Institutions and specific doctors would be empanelled by Health & FW Department for screening/ detection of children with hearing impairment. On empanelment the concerned centre would be 'competent authority' to certify the need of the child for Cochlear implantation surgery.
- b) The rates/ charges for anthological test to determine extent of hearing loss will be notified by Health & FW Department with a view to ensuring uniformity.
- c) The Child Development Centre (CDC) will develop and rollout a community based programme model for early detection of hearing disability among children below the age of 3 years through the Anganwadi network. At risk children would be referred to nearby audiological centre for screening.
- d) The costs of audiological tests for detection would have to be borne by the applicants.
- e) The parents/ guardian of the children detected of hearing impairment may apply for financial assistance for cochlear implantation, to Kerala Social Security Mission (KSSM), in the prescribed format (Annex-I)
- f) The Health & FW Department will set up 3 Regional Screening Committees for technical screening of eligible patients. The K.S.S.M will forward applications to the Regional Technical Committee concerned for screening.

5. Empanelment of Institutions and doctors

Health & FW Department will empanel institutions and specific doctors for detection, for surgery, for rehabilitation or for all the three. Empanelment would be reviewed every year and in the event of the empanelled doctor not remianing in the institution.

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6. State Level Technical Committee

The State Level Technical Committee constituted by the Health and Family Welfare Department for (a) shall finalize the selection of implants (b) develop TOR for empanelment of institutions and doctors (c) give technical advice to Govt. in the implementation of the scheme, (d) recommend standards and specifications, suppliers, rates and terms and conditions of procurement of cochlear implant devices (e) laying down strict protocol for diagnosis and detection, intervention and rehabilitation.

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7. Regional Technical Committees

There shall be 3 Regional Technical Committees for the north, south and central regions, the constitution, location and responsibilities of which shall be notified by the Health and Family Welfare Department. The concerned DMO shall be the convenor of the regional committee. The Regional Technical Committee will be responsible for scrutiny of application for suitability for Cochlear Implantation on the basis of the preoperative assessments and the protocol laid down by the State Level Technical Committee. The sanctioned cases will be forwarded to the institution of choice of the applicant under intimation to the KSSM. The Regional Technical Committee will forward monthly report on applications received, scrutinised, sanctioned and rejected to the KSSM.

8. Family counseling

Candidates for cochlear implantation need to be informed of the potential risks and benefits of cochlear implantation and the impact it may have on their life. The surgical procedure and its risks should be described along with a physical description and, preferably demonstration, of the internal and external portions of the device. The post surgical programming and rehabilitation procedures should be charted out and informed to the parents. The most important aspect here should be giving a realistic expectation regarding performance outcome with the implant.

9 Preoperative assessment:

The preoperative assessment should include the following:

- Audiological Evaluation
- Speech pathology assessment
- Otological Evaluation
- Initial family counselling
- Radiological Investigations-CT Scanning and MRI

10. Surgery

Every cochlear implant performed must be reported to K.S.S.M with surgical notes, post operative events, reports of complications, recording of surgical video and post operative electrophysiological measurements.

The choice of institution for surgery would be left to the applicant. However, it would be binding on the applicant to undergo rehabilitation is association with the same centre that performed the surgery.

The K.S.S.M will make payment to the institution on completion of surgery.

11. Rehabilitation

There would be a two year long rehabilitation and speech therapy programme.

12. Funding

The expenses of cochlear implantation will be shared on the following basis.

- i) Chief Minister's Distress Relief Fund Rs. 2 lakh
- ii) Kerala Social Security Mission Fund Rs.1 Lakh
- iii) KSSM payment Gateway sponsorship Rs.2 Lakh

13. Capacity Building

All key agencies and institutions will need to be trained in discharging their responsibilities under the scheme. DMOs, DSWOs and other stakeholders will be oriented about the scheme and its conditionality, NISH, CRC (Composite Regional Centre) and CDC will take lead role in the capacitating of key players.

14. Social mobilisation

Social mobilisation is focused on getting children to early detection and screening for optimum results and for mobilizing sponsorship through the payment gateway of K.S.S.M. A range of communication media will be used for social mobilization.

15. Implementation

The scheme will be jointly implemented by Social Welfare and Health & FW Depts. Secretary (Social Welfare) will be the Nodal Officer and K.S.S.M will be the nodal agency.

There will be an Empowered Committee with the following composition

• Minister (P& Social Welfare) - Chairperson

Minister(Health&FW)
Co Chairperson

Shri.Benny Behanan, MLA
Member

Additional Chief Secretary (Revenue) Member

Pr.Secretary Finance - Member

Pr. Secretary (H & FW)
Member

• Secretary (Social Welfare) - Member

• Shri.G.Vijayaraghavan - Member

Member, State Plg. Board.

Director of Social Welfare - Member

• Director of Health Services - Member

Director of M. Education - Member

• Benny Joseph - Member

Hridayathalam

land.

• Dr.P.M.Namboodiri. - Member

Dr.John Panicker - Member

Santwana Hospital

• Dr.M.P.Manoj, ENT Hospital, Calicut - Member

• Dr.Naushad,ENT Hospital,Kochi - Member

• Dr.Ravi, MIMS - Member

• Dr.M.K.C. Nair - Member

Dr.A.Sharafudeen, Al-Shifa Hospital,

Perinthalmanna - Member

• Executive Director, KSSM - Member, Convenor

16. State Level Monitoring Committee

There will be a State Level Committee for (a) monitoring and review of implementation and (b) grievance redressal. The composition of the committee will be as below:

Addl. C.S (Revenue)

Prl. Secretary (Health & Family Welfare)

Secretary (Social Welfare)

DME

DHS

Exe.Dir., NISH

ED, K.S.SM.- Convenor

17. Transparency

Hearing loss can now be detected at birth and children can develop fluent spoken language with the help of audition when intervened with appropriate intervention strategies like cochlear implantation and auditory verbal practice. This will enable the child's holistic development and successful integration into mainstream society and have better quality of life.

There will be complete transparency in the process of detection, implantation and rehabilitation of children with hearing impairment. The K.S.S.M will suo moto give the public full access to all relevant information

കേരള സാമൂഹ്യ സുരക്ഷാ മിഷൻ

സോഷ്യൽ വെൽഫയർ ഇൻസ്റ്റിറ്റ്യൂഷൻ കോംപ്ലക്സ് പൂജപ്പുര, തിരുവനന്തപുരം-12

കോക്ലിയാർ ഇംപ്ലാന്റേഷൻ സർജറി പദ്ധതി

കേരനമാര്

താലൂക്ക്

പിൻകോഡ്

രോഗിയുടെ പാസ്

			•	പോർട്ട് വലിപ്പത്തി ലുളള ഫോട്ടോ (ഇ.എൻ.റ്റിസർജൻ അറ്റസ്റ്റ് ചെയ്തത്)
	അപേക	ഷാഫ	<u>1300</u>	
1.	സർജറി ആവശ്യമുള്ള രോഗിയുടെ പേര്	;		***************************************
2.	വയസും ജനനത്തീയതിയും	:		••••••
3.	ലിംഗം	:	ആൺകുട്ടി / പെൺകുട്ടി	
4.	രോഗിയുടെ രക്ഷകർത്താവിന്റെ വിവരങ്ങൾ			
	പേര്	:		•••••••••••••••••••••••••••••••••••••••
	വീട്ടുപേര്	:		
	വാർഡ്	:		••••••
	പഞ്ചായത്ത് / മുനിസിപ്പാലിറ്റി	:		***************************************
	കോർപ്പറേഷൻ			

5. 6 5	ലഹോൺ നമ്പരുകൾ						
	1. ലാന്റ് ഫോൺ (എസ്.റ്റി.ഡി	കോഡ്	സഹിതം)	:		***************************************	***********
	2. മൊബൈൽ ഫോൺ			:			****************
(@	ടുംബത്തിന്റെ മൊത്ത വാർഷിക റഷൻ കാർഡ് പ്രകാരം) ുടുംബാംഗങ്ങളെ സംബന്ധ്				***************************************		രൂപ
ക്രമ നമ്പ ർ	" "	വയ സ്	വിദ്യാ ഭ്യാസ യോഗ്യ ത	തൊഴി ൽ	പ്രതി മാസ വരു മാനം	ഏതെങ്കിലും ശാരീരിക വൈകല്യം ബാധിച്ചിട്ടു ണ്ടോ (ഉണ്ട്/ ഇല്ല)	മറ്റ് പ്രത്യേകിച്ച് ഉള്ള വിവര ങ്ങൾ എന്തെങ്കി ലും ഉണ്ടെങ്കി ൽ എഴുതുക
1.	രോഗിയുടെ അച്ഛൻ						
2.	രോഗിയുടെ അമ്മ						
3.	രോഗിയുടെ സഹോദരൻ 1						
4.	രോഗിയുടെ സഹോദരൻ 2						
5.	രോഗിയുടെ സഹോദരി 1						
6.	രോഗിയുടെ സഹോദരി 2						
7.	മറ്റ് കുടുംബാംഗങ്ങൾ (ആരെന്ന് വ്യക്തമാക്കുക)						
9.	രോഗിക്ക് ശ്രവണവൈകല്യം ഉള കണ്ടുപിടിച്ചത് ഏത് പ്രായത്തില ശ്രവണവൈകല്യം ഏതു തരത്ന	ലാണ് തിൽപ്പെ	ട്ട താണ്	:		വയസ്	മാസം
10.	ശ്രവണ വൈകല്യത്തിന്റെ അള	വ്എശ്ര	യ ശ്വസ്വ	:	********		

11.	രോഗിക്ക് ചുവടെപ്പറയുന്നവയിൽ ബാധകമായ ($\sqrt{\ }$) അടയാളം രേഖപ്പെടുത്തുക.	ത്	
	(എ). പതിവായി സ്പീച്ച് തെറാപ്പി നൽകുന്നു.	(•
	(ബി). പ്രീസ്കൂൾ പരിശീലനം നൽകുന്നു.	() .
	(സി). സ്പെഷ്യൽ സ്കൂളിൽ പോകുന്നു.	(· ·
	(ഡി). സാധാരണ സ്കൂളിൽ പോകുന്നു.	()
	(ഇ). മേൽപ്പറഞ്ഞവ കൂടാതെ മറ്റെന്തെങ്കിലും ചെയ്യുന്നുണ്ടോ ?	:	***************************************
12.	സർക്കാർ ധനസഹായമുപയോഗിച്ച് രോഗിക്ക്	:	(1)
13.	കോക്ലിയാർ ഇംപ്ലാന്റേഷൻ സർജറി നടത്തുന്ന	തിന്	
	ഏത് ആശുപത്രിയാണ് തെരഞ്ഞെടുക്കാൻ		(2)
	ഉദ്ദേശിക്കുന്നത്.		
	(ആശുപത്രിയുടെ പേര് മുൻഗണനാക്രമത്തിൽ എഴുതുക)	i	(3)
14.	സർജറിക്കുശേഷം ഓഡിറ്ററി വെർബൽ തെറാം	പ്പി :	(1)
	തുടർന്നു നടത്തുന്നതിന് തെരെഞ്ഞെടുക്കാൻ		
	ഉദ്ദേശിക്കുന്ന കേന്ദ്രം.		(2)
	(ആശുപത്രിയുടെ / സ്ഥാപനത്തിന്റെ പേര്		(2)
1	മുൻഗണനാക്രമത്തിൽ എഴുതുക)		(3)
	<u>പ</u> ്രവ	<u>സ്താവര</u>	<u>n</u>
	ഞാൻ (പേര്) മേര വിശ്വാസത്തിലും ശരിയും സത്യവുമാടെ		
	സ്ഥലം : ദേ	രാഗിയുടെ	ട രക്ഷകർത്താവിന്റെ
	തീയതി :	പരും	***************************************
	8	പ്പും	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

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അനുബന്ധം – 1

(Appendix - 1)

വരുമാന സർട്ടിഫിക്കറ്റ്

കേരു	ള സാമൂഹൃ സു	രക്ഷാ മിഷൻ വഴി സർക്കാര	ർ നടപ്പിലാക	ുന്ന കോക്ലിയാർ	ഇംപ്ലാന്റേഷന്
സർജറിക്ക്	ധനസഹായം	ലഭ്യമാക്കുന്നതിനുവേണ്ടി	അപേക്ഷ	സമർപ്പിച്ചിട്ടുള്ള	ശ്രീ/ശ്രീമത്
രൂപയാണെന	ന് ഇതിനാൽ സ	യുടെ കുട ാക്ഷ്യപ്പെടുത്തികൊള്ളുന്നു.		ക വരുമാനം	••••••
തീയതി	വില്ലേ	ജ് ഓഫീസ് മുദ്ര	G @	ധില്ലേജ് ഓഫീസറു ഹെസീൽദാറുടെ ചേ	ടെ/ ദപരും ഒപ്പും

അനുബന്ധം - 2

(Appendix - 2)

ഓഡിയോളജിസ്റ്റ് ആന്റ് സ്പീച്ച് ലാംഗോജ് പാത്തോളജിസ്റ്റ് സാക്ഷ്യപ്പെടുത്തി നൽകേണ്ടത്

1. Details on Hearing Aid usage of Patient.

Place:

Sl. No.	Name of the Hearing Aid	Body level/ Behind the Ear	Analog / Digital	Duration of Use
1.				
2.				
3.				
4.				

2.	Recommendation by Audiologist and Speech – Language Pathologist (SLP)					
	I hereby recommended that the patie	nt\$/o				
	***************************************	has been diagnosed as				
	••••••	and has limited				
	benefit from suitable hearing aids. H	e has been advised to undergo Cochlear				
	Implantation and therapy as early as po	ssible. The necessary documents have been				
	provided as mentioned at the end of this	application.				
		4				
Date:	(Office Seal)	Name and signature of the Audiologist				

RCI Reg. No.

Name and signature of the Audiologist

and Speech - Language Pathologist:

Name of the hospital / centre:

അനുബന്ധം – 3

(Appendix - 3)

ഇ.എൻ.റ്റി സർജൻ സാക്ഷ്യപ്പെടുത്തി നൽകേണ്ടത്

1. Health issues of the Patient.

Sl. No.	Issues	Status (put (v) if present)
1.	History of Meningitis	
2.	Any congenital anomaly	
3.	Jaundice requiring exchange transfusion	
4.	Vision Problems	
5.	Mental sub normality	

2. Recommendation by ENT Surgeon

I hereby certify that I have personally examined	the patient
S/o	OP No
and his/her test results. He/she has been advise	
at the earliest to improve hearing and com	nmunication ability. The necessary
documents have been provided as required at the	he end of this application.
·	• •

Date:

(Office Seal)

Name of the ENT Surgeon:

Place:

MCI Reg. No.

Name of the hospital / centre:

അനുബന്ധം – 4

(Appendix - 4)

ഇ.എൻ.റ്റി സർജനും ആഡിയോളജിസ്റ്റ് ആന്റ് സ്പീച്ച് ലാംഗോജ് പാത്തോളജിസ്റ്റും ചേർന്ന് സാക്ഷ്യപ്പെടുത്തി നൽകേണ്ടത്.

ചെക്ക് ലിസ്റ്റ്

(എല്ലാറ്റിന്റേയും ഓരോ കോപ്പി വീതം വയ്ക്കേണ്ടതാണ്)

Sl. No.	Tests	Status (Yes/No)	Date of Evaluation
1.	BERA / Audiogram		
2.	ASSR		
3.	OAE		
4.	Tympanogram		
5.	Aided thresholds (BOA / Audiogram) with Rtaid		
6.	Speech – Language test		· · · · · · · · · · · · · · · · · · ·
7.	HRCT of the temporal bones		
8.	MRI of head and inner ear		
9.	Audiological test report		

Seal and Signature of Audiologist and Speech Language Pathologist

Seal and Signature of ENT surgeon