Guidelines to prescribe BTE hearing aids under National Program on Prevention and Control of Deafness (NPPCD), Government of India.

These guidelines shall be followed by the ENT Surgeons who will be prescribing the hearing aids to the beneficiaries

General information:

- 1. Hearing Aid will be provided as per terms and conditions of ADIP Scheme (Divyangjan) of Ministry of Social Justice & Empowerment.
- 2. The Hearing Aids will be provided only to the Hearing Impaired children (upto the age of 14 years)
- 3. Hearing aids are to be given only after an ENT clearance and not to be given in case there is active ear discharge or any external ear infection
- 4. A person is a candidate for hearing aid if he has a sensorineural hearing loss or a hearing loss with a conductive component which cannot be treated medically or surgically
- 5. Separate guidelines are provided to fit the adults, children who cannot be conditioned to respond, and children who have limited or no speech
- 6. All the cases who have been prescribed and issued a hearing aid have to be counselled regarding the following
 - a. Optimum use, care and maintenance of the hearing aid including the ear mould
 - b. Working on acceptance of amplification
 - c. Expectations from the device
 - d. Trouble shooting of the device.
 - e. Utilizing the monthly service provision by the manufacturer of the hearing aid as made under NPPCD
 - f. Reporting back to the Audiologist / ENT surgeon in case of any problems with the hearing aid.
- 7. Replacement / reissue of a hearing aid will be done only after 3 years of usage.

The hearing aid/s selected for the patient should be prescribed and certified only in the format I and II respectively given in Appendix I to facilitate procurement and certification of the dispensed hearing aid. The aided score should show an improvement of 30% over the unaided score

Audiological information:

- 1. Testing is done to obtain the following using an audiometer
 - Audiogram: Air conduction, bone conduction thresholds. Masked thresholds when indicated
 - Speech identification scores (SIS)
 - Uncomfortable levels (UCL) for speech
- 2. Hearing aids are to be given only if the person has hearing loss of more than 40 dB HL in both ears.
- 3. A person can be given separate hearing aids for both the ears.
- 4. The utility of the hearing aid should be checked in each ear separately and then together.
- 5. Appropriate procedures should be used for children and adults.
- 6. Each child with binaural hearing loss will be given two hearing aids.

I. Procedure for hearing aid prescription for adults (cases who can speak):

1. Unaided testing

- Seat the case at a distance of 5 feet (~ 1.5 meters)
- Using a normal conversational voice level, present the following test items: i. /a/, /i/, /u/, /m/, /s/, /sh/

(Note: If any speech sound is not present in a particular language, then it need not be presented; Vowels should not be produced along with the consonants)

- The case is asked to repeat the speech sounds
- The number speech sounds correctly repeated is noted down as the 'Unaided score'
- The speech sounds should be randomly produced and not in the same order.
- ii. Ask the person to answer five questions (Eg: How many brothers do you have? Where do you live? What did you eat for lunch? What is your father's name? Do you drink coffee or tea?)

Avoid using questions having 'yes'/ 'no' answers. Note the number of questions answered correctly.

iii. Ask them to repeat five two syllabic words (Eg: toothbrush, sunset, armchair or idhar-udhar, ek-do, aas-paas)

Note the number of words repeated correctly.

2. Aided testing:

Aided testing involves pre-selection and selection of hearing aids. Details of how these are to be done are given below.

a. Pre-selection of hearing aids

Based on the air conduction thresholds or the degree of hearing loss, pre-select the following hearing aids and do the aided testing:

Sl. No.	Hearing Aid Model	Fitting range	
1	Model A	PTA ranging from 41 to 69 dB HL	
2	Model B	DTA ranging from 41 to 69 dB HL	
3	Model C	PTA ranging from 70 to 89 dB HL	
		PTA ranging from > 90 dB HL	

b. Selection of hearing aids

Aided testing for selection of hearing aids involves the following steps:

- The case is made to wear one of the three pre-selected hearing aids using a appropriately fitting ear tips or stock ear moulds
- Ensure that the hearing aid is switched off and the volume control is turned down while placing the hearing aid in the ear
- Switch the hearing aid 'on'. Gradually increase the volume control setting to approximately 1/3rd of the total range (or set it at 2, if the numbers range from 1 to 4).
- Follow the same procedure as given in the unaided testing condition.
- This testing is done in 'Hear only' mode.
- The number of speech sounds and words correctly identified, and the number of questions answered correctly is considered as the 'Aided score'.
- If the case has very poor speech identification ability (SIS of <50 %), then test only for awareness of these speech sounds. Test if the case is aware of most of the speech sounds (i.e., 4 to 5 out of 6 in the Ling's sound test) at normal conversation levels. If not, repeat the test using a higher gain hearing aid
- Before prescribing any hearing aid, ensure that the case can tolerate loud sounds, such as banging on a table, loud claps, banging on a door, hitting a drum (~80 to 90 dB HL).

II. Procedure for hearing aid prescription for children who have limited or no speech:

1. Unaided testing for children who cannot be conditioned

- Seat the child at a distance of 5 feet (1.5 meters)
- Present the following sounds, starting from a softer level and going up to a louder level:
 - o Drum
 - o Bell
 - o Speech (Papa / Paapa / child's name / sounds /a/, /i/, /u/, /m/, /s/, /sh/)
- Look for behavioural responses to the presented sound such as eye widening, eyeball movement, head turn, cessation of activity.
- Note down the level for each stimulus at which the response was observed in the unaided condition.

2. Aided testing:

Aided testing involves pre-selection and selection of hearing aids. Details of how these are to be done are given below.

a. Pre-selection of hearing aids

Based on the air conduction thresholds or the degree of hearing loss, pre-select the following hearing aids and do the aided testing:

Sl No.	Hearing aid model	Fitting range	
1	Model A	PTA ranging from 41 to 69 dB HL	
2	Model B	PTA ranging from 70 to 89 dB HL	
3	Model C	PTA ranging from > 90 dB HL	

. Selection of hearing aids

Aided testing for selection of hearing aids involves the following steps:

- The child is made to wear one of the three pre-selected hearing aids using a appropriately fitting ear tips or stock ear moulds
- Ensure that the hearing aid is switched off and the volume control is turned down while placing the hearing aid in the ear
- Switch the hearing aid 'on'. Gradually increase the volume control setting to approximately 1/3rd of the total range (or set it at 2, if the numbers range from 1 to 4).
- Follow the procedure as given in the unaided testing condition.
- This testing is done in audio only mode.
- The hearing aid with which the child can respond at the lowest level is the one that can be selected
- (If more than one hearing aid is available in a category, test with at least two to select the more suitable hearing aid)
- Before prescribing any hearing aid, ensure that the child can tolerate loud sounds, such as banging on a table, loud claps, banging on a door, hitting a drum (~80 to 90 dB HL).

III. Procedure for hearing aid prescription for children who have limited or no speech:

1. Unaided testing for children who can be conditioned

- Seat the child at a distance of 5 feet (1.5 meters)
- Present the following sounds, starting from a louder level and going to a softer level:
 - o Drum
 - o Bell
 - o Speech (Papa / Paapa / child's name / sounds /a/, /i/, /u/, /m/, /s/, /sh/)
- Condition by asking the child to drop a block or raise his/her finger, to indicate that he/she has heard the sound.
- Note down the level for each stimulus at which the child responded in the unaided condition.

2. Aided testing:

Aided testing involves pre-selection and selection of hearing aids. Details of how these are to be done are given below.

a. Pre-selection of hearing aids

Based on the air conduction thresholds or the degree of hearing loss, pre-select the following hearing aids and do the aided testing:

Sl No. Hearing aid model		Fitting range	
1	Model A	PTA ranging from 41 to 69 dB HL	
2	Model B	PTA ranging from 70 to 89 dB HL	
3	Model C	PTA ranging from > 90 dB HL	

b. Selection of hearing aids

Aided testing for selection of hearing aids involves the following steps:

- The child is made to wear one of the three pre-selected hearing aids using a appropriately fitting ear tips or stock ear moulds
- Ensure that the hearing aid is switched off and the volume control is turned down while placing the hearing aid in the ear
- Switch the hearing aid 'on'. Gradually increase the volume control setting to approximately 1/3rd of the total range (or set it at 2, if the numbers range from 1 to 4).
- Follow the procedure as given in the unaided testing condition.
- This testing is done in audio only mode.
- The hearing aid with which the child can respond at the lowest level is the one that can be selected
- (If more than one hearing aid is available in a category, test with at least two to select the more suitable hearing aid)
- Before prescribing any hearing aid, ensure that the child can tolerate loud sounds, such as banging on a table, loud claps, banging on a door, hitting a drum (~80 to 90 dB HL).

Format I

*FORMAT OF PRESCRIBING HEARING AID BY ENT SURGEON OF DISTRICT HOSPITALS UNDER NPPCD PROGRAMME

Name of Patient		Case Number	
Age		Sex	
Hearing Aid Make			
Ticaring Aid Wake			
Hearing Aid Model			
For Right Ear		Vol:	
		Other Settings	
For Left Ear		Vol:	
Earmould Right		Other Settings	
Earmould Left			
Usefulness for Shell / Skeleton /Canal	Any other (Specify)		
Shell / Skeleton /Canal	Any other (Specify) Awareness		
	Speech identification		(Audio mode / Audio Visual Mode)
	Ease of listening		
DATE:			
	Signatu	re of Audiologist/ Au	diometric Assistant/Technician with seal

Signature of ENT surgeon with seal

*This prescription shall be treated as supply order to the vendor Copy to:

- 1. Patient
- 2. State Nodal Officer
- 3. Distt. ENT Surgeon (office copy)

NAME OF THE HOSPITAL / CENTRE:

FORMAT-II

FORMAT OF CERTIFICATE TO BE GIVEN BY ENT SURGEON / AUDIOLOGIST OF DISTRICT HOSPITALS UNDER NPPCD PROGRAM FOR PAYMENT.

This is to certify that		
a. The hearing ainumbers	prescribed in favour of	with serial
(Name of patient) was /were rece	ived in good condition, tested and found as I	per prescription.
b. The earmould/s is /are suitab	le to the client	
The bill for the above hearing aid	l/s and earmould/s may be admitted and pass	sed for payment.
DATE		
DATE:	Signature of Audiologist/ Audiometric Assi	istant/Technician with Seal
	Signature	e of ENT surgeon with seal
Certified that I,	also certify that I have not received any had	eve hearing aid/s and ear aring aid in the last 3 years
Date:	Signature or Thumb Impres	sion of patient / Guardian
	Name	e of the patient / Guardian:
Copy to:	Full Address w	vith TelephoneNo. (if any)
 State Nodal Officer Distt. ENT Surgeon (off 	2. Directorate General He	alth Services

TERMS AND CONDITIONS FOR SUPPLYING AND FIITING BTE TYPE HEARING AIDS UNDER NPPCD PROGRAM

- 01. The rate contract will be valid for a period of one year from the date of award of the contract or finalization of the next contract whichever is later
- 02. Hearing aids supplied under rate contract will be provided with the suitable battery.
- 03. The prices are inclusive of all taxes and F.O.R on packed basis. Quoted price includes cost of ear mold and cost of visiting district level hospitals every month for taking ear impression, fitting and maintenance of the hearing aids.
- 04. Prescriptions for hearing aid to patients shall be prescribed by the ENT Surgeon of District hospitals after being assessed by Audiologist/ Audiometric Assistant/Technician as listed in the format I and shall be treated as supply order for the vendor. It shall be collected by the vendor for supplying the hearing aid according to the specifications after taking ear mould impression
- 05. Certificate to the effect that the prescribed hearing aid has been delivered at the District level Hospital as per the specification and fitted to the patient, given by the District Level Hospital authorities in the prescribed format II shall be collected from them and submitted to the State Nodal Officer for getting authorization of payment.
- 06. One year guarantee will be given to the beneficiaries against manufacturing defects. The contractor should undertake and have facilities for repair / replacement of Hearing Aids, including giving free service during the period of guarantee. The District Hospital / indentor shall monitor this on behalf of the beneficiaries.
- 07. At least one piece of each category of hearing aids shall be supplied at free of cost to the District Hospital / indentor for hearing aid trial purposes.
- 08. Time is the essence of the contract. The BTE hearing aids should be supplied and fitted to the patient within one month from the date of prescription of the hearing aid and no extension shall be given. Contractor has to maintain adequate stock of the three categories of BTE hearing aids so as to execute the supply within the stipulated time. In case the BTE hearing aids are not delivered within the stipulated date, the Director, AIISH, Mysore reserves the right to impose penalty at Rs. 100/- per day for each day of delay.
- 09. The Contractor has to accept the fall clause i.e., if the price of the produce falls during the period of the contract, and will pass on the benefit to the purchaser for supplies made from the date of such a fall.
- 10. The Contractor has to give undertaking that during the pendency of the rate contract he is not supplying three categories of BTE hearing aids at a cheaper rate to any other organization in any open tender system.
- 11. The Contractor shall submit district wise monthly report of hearing aids supplied category wise to the district hospitals and the number of visits made for taking ear impression, fitting and maintenance of the hearing aids verified by Distt. Authorities and the copy of which is to sent to the Dte. General of Health Services.

- 12. The Director, AIISH, Mysore, reserves the right to inspect and check the hearing aids for operation before acceptance and payment.
 - 13. All the hearing aids will bear an indelible stamp marked "Issued under NPPCD Programme of Ministry of Health and Family Welfare Government of India Not for Sale".
 - 14. With regard to any other conditions of the contract not specifically covered in the foregoing paragraph such as delays in supplier's performance, liquidated damage, termination for default etc., the contractor will be governed by the terms and conditions mentioned in the tender document.
 - 15. The Director AIISH reserves the right to amend, add new terms and conditions or delete the existing terms and conditions on the basis of need and requirement which will be binding on the contractor.
 - 16. If the child/adult who needs BTE hearing aid belongs to a family whose monthly income is more than Rs. 6500 and cannot be supplied BTE hearing aid under NPPCD, The contractor is to provide these hearing aids at the quoted rate and collect payment directly from the patient.

IV. Guidelines for the payment to the vendor under NPPCD

District ENT surgeon will place the orders for the hearing aid with the Vendor in the prescribed $\underline{\text{format I}}$ in quadruplicate and issue it to Vendor with copy to

- 1. Patient
- 2. State Nodal Officers
- 3. Office copy (District ENT surgeon)

The certificate in the prescribed <u>format II</u> will be issued in quadruplicate after Hearing Aid has been properly fitted as per HA guidelines and issue it to Vendor with copy to

- 1. State Nodal Officers
- 2. Directorate General Health Services
- 3. Office copy (District ENT surgeon)

The state nodal officer will then release the funds /payment to the vendor on quarterly basis depending upon bill raised by the supplier accompanied by certificates issued by the district ENT surgeon as per Format II.

After releasing the money State Nodal Officer will send a quarterly report to the Director, AIISH, Mysore