

A PROFESSIONAL PRACTICE PROFILE FOR HEARING HEALTH PROFESSIONALS

The International Hearing Society has adopted the following practice profile as a comprehensive declaration of dispensing characteristics and expectations that define the unique role of the hearing instrument practitioner.

Hearing instrument dispensing includes several professions that overlap. There are traditional hearing aid dispensers, Board Certified hearing health professionals, hearing aid practitioners, hearing instrument specialists, audioprosthologists, audiologists, doctors of audiology, otolaryngologists and other doctors of medicine. This document summarizes the scope of dispenser services as defined by the 1999 NBC-HIS Role Delineation Study of Hearing Aid Dispensers (D'Costa, 1999). It does not replace or supersede current state and federal regulations governing the practice of hearing instrument dispensing, but is specific to the training and legitimate professional activities of those practitioners licensed in hearing instrument dispensing.

Simply put, the purposes of this document are twofold: to provide a model hearing instrument dispenser practice plan for state/provincial licensing boards and to provide consumers, government agencies and other interested parties official information about the specific services and understandings a patient has the right to expect from a competent hearing health professional.

The following guiding principles and assumptions were used in the development of this profile:

- Only those professionals who hold professional licenses which allow hearing aid dispensing and who have appropriate training and experience may provide specific procedures.
- Safety and health of the patient are the most important considerations in all practice decisions and actions.
- All dispensing procedures are performed in a manner as to prevent bodily injury and infection.
- Hearing aids may be only part of the answer for improved communication; therefore, it is important to recognize and to encourage the use of other assistive listening devices for patients.
- Hearing healthcare requires a team effort. Dispensers must work with other professionals, as needed, to maximize patient care and interprofessional collaboration.
- Dispensers form a partnership with each of their patients to help achieve total communication with their own world, thus enabling their development and participation in all aspects of their life.
- All equipment must be maintained according to the manufacturer's specifications and recommendations. Equipment must be properly calibrated and necessary records maintained.
- Decontamination, cleaning and disinfection of multiple-use equipment must be carried out according to facility-specific infection-control policies and manufacturer's guidelines.
- Ambient noise levels in the test environment must be appropriate to the practice setting.
- Documentation must be maintained in accordance with local regulations and in keeping with good professional practice.

The NBC-HIS 1999 Role Delineation Study analyzed the responses of survey responders to 100 tasks in terms of the frequency with which each task was performed, and in terms of the level of supervision occurring with each task performance. Sixteen broad procedures were identified using statistical clustering of the tasks and are listed below.

1. **Elicit patient/client case histories**, including medical, otological, pharmacological, previous amplification history and patient attitudes and expectations.
2. **Administer otoscopy** for the purpose of identifying possible otological conditions, including but not limited to the FDA red flag conditions that may indicate the need for medical referral or which may have a bearing on needed rehabilitative measures, outcomes and/or recommendations.
3. **Administer cerumen management** in the course of examining ears, taking ear impressions and/or fitting of hearing instruments.
4. **Administer and interpret tests of human hearing**, including appropriate objective and subjective methodology and measures.
5. **Determine candidacy for hearing instruments**, assistive devices or referral for cochlear implant evaluation or other clinical/rehabilitative/medical intervention.
6. **Prescribe, select and fit appropriate hearing instruments and assistive devices** including appropriate technology, electroacoustic targets, programming parameters and special applications as indicated.
7. **Assess hearing instrument efficacy** utilizing appropriate fitting verification methodology, including all available fitting validation methods.
8. **Take and prepare ear impressions for prosthetic adaptation** of hearing instruments, assistive devices, telecommunications applications, ear protection and other related applications.
9. **Design and modify earmolds and auditory equipment** requisite to meet individual patient needs.
10. **Provide rehabilitative advice and counseling** in the use and care of hearing instruments and assistive devices and in effectively utilizing communication coping strategies and other approaches to foster optimal patient rehabilitation.
11. **Counsel family member(s) and other interested parties relative to psychosocial and rehabilitative considerations** for optimal patient outcomes.
12. **Provide long-term patient care**, including periodic audiometric updates and recommendations for modifying rehabilitation programs to help meet patients' changing needs over time.
13. **Refer and cooperate with other allied professionals** in meeting the needs of the hearing impaired.
14. **Provide supervision and in-service training** of those entering the dispensing profession.
15. **Maintain and update knowledge and skills in current and future diagnostic and technological advancements** within the hearing industry.
16. **Consult with industry in the development of products and services** relating to aiding hearing impairment.

The sixteen procedures listed above were then grouped into six major areas as follows:

1. Assess patient presenting problem and needs
2. Test and analyze patient hearing
3. Prescribe and analyze hearing aid
4. Fit, adjust, program and service hearing aid
5. Counsel and help rehabilitate patient
6. Manage office and practice

The following section addresses the expected outcomes, indication for procedure and procedure methods for each of the six categories.

ASSESS PRESENTING PROBLEM AND NEEDS

Expected Outcomes:

- Identification of factors in the patient's background that may put him/her at risk for hearing problems.
- Identification of FDA red flags that would require a referral for medical evaluation.
- Identification of other medical problems that may have an impact on the methods used for procedures and/or expected outcomes of hearing aid fitting.
- Identification of family members' concerns regarding patient's hearing difficulties.
- Exploration of patient attitudes and expectations of amplification.
- Identification of problems with hearing and understanding.
- Identification of daily activities and impact of hearing loss on lifestyle.
- Identification of impact of hearing loss on family, friends and in the workplace.

Indication for Procedure:

- Individuals being seen for either hearing screening or hearing evaluation

Procedure Methods:

- Typically consists of a combination of written answers to a series of questions, elaboration of those answers by oral questioning and behavioral observation.
- Areas covered include but are not limited to: family history of hearing loss; incidence and duration of childhood hearing-related illnesses; information regarding dizziness, loss of balance or tinnitus; current medication/drug history; and history of noise exposure and acoustic trauma. In addition, it is critical to elicit family members' concerns about the patient's hearing difficulties, the patient's attitudes and expectations regarding amplification, and the patient's own assessment of their hearing difficulties.
- Additional areas that must be covered include but are not limited to questions regarding history of ear surgeries, diseases and treatments; information regarding past experiences with amplification; and questions and observations regarding ear deformity, pain, sudden hearing loss, ear infection, disease, drainage or blockage requiring medical referral.

TEST AND ANALYZE HEARING

Expected Outcomes:

- Basic hearing evaluation is conducted to quantify and qualify hearing loss on the basis of perceptual responses to acoustic stimuli and to describe any associated communication disorders.
- Results of the evaluation may result in recommendations for more advanced testing, medical referral, amplification consultation, assistive listening device consultation or follow-up recommendations.
- Speech discrimination tests are performed for additional information about a hearing loss.
- Evaluation may result in recommendation for a medical referral, amplification, aural rehabilitation and/or counseling.
- Determine need for medical referral based on audiometric air-bone gap results.
- Determine degree, type and configuration of hearing loss from test results.
- Hearing instrument efficacy will be determined by pre-post audiometric measures.

Indications for Procedure:

- Hearing evaluation may be done when a hearing screening is failed.
- Hearing evaluation is generally prompted by self-referral, family referral, failure of an occupational hearing test or referral from other professionals.

Procedure Methods:

- Hearing evaluation is preceded by eliciting the hearing history and assessing the hearing problem. This is followed by examination of the external ear canal and cerumen management if necessary.
- The standard audiometric tests consist of pure-tone air and bone conduction testing with appropriate masking using the TDH-39 standard. It is our recommendation that all providers move to the EAR-3 or equivalent insert earphones standard by July 1, 2005. Some professionals also choose to do loudness growth testing at this time.
- Speech testing includes speech awareness and/or speech reception threshold tests, speech discrimination tests and establishing MCL and UCL thresholds (appropriate masking used as required). In addition, further information can be gained by doing unaided and aided sound field discrimination tests and by testing binaurally as well as monaurally.
- Special audiometric tests are performed for additional information about a hearing loss.
- Evaluation may result in recommendation for a medical referral, amplification, aural rehabilitation and/or counseling.
- Procedures such as immittance audiometry (tympanometry and reflexes) are quite common.
- Procedures to assess cochlear versus retrocochlear (i.e., eighth cranial nerve, brainstem or cortical) auditory disorders include acoustic reflex threshold, tone decay testing and PiPb rollover testing.
- Special procedures for testing infants and children as appropriate to licensure or evaluating tinnitus are also sometimes called for.
- Evaluate the reliability and validity of the test results.
- Evaluate test results to determine the presence of collapsed ear canals.
- Evaluate aided sound field measures and/or real-ear aided performance measures or live speech mapping.

PRESCRIBE AND ANALYZE HEARING AID

Expected Outcomes:

- In consultation with the patient and family (taking into account their lifestyle, special needs, hearing aid style, technology and price category preferences), selecting the hearing aid that will best fit their needs.
- Provide measurable results of improved hearing thresholds and ease of communication.
- The appropriate specifications for the hearing aid will be selected.

Indication for Procedure:

- Individuals identified with hearing loss who have reached a level of acceptance regarding their loss and are ready to seek help from amplification.

Procedure Method:

- Determine hearing aid needed for severity, type and configuration of hearing loss, keeping in mind the patient's history, lifestyle and audiogram.
- Discuss with patient the various levels of technology and their different price categories to aid in determination of hearing aid prescription.
- Identify physical limitations affecting hearing instrument selection.
- Prior to dispensing the hearing aid, verification of hearing aid performance is conducted via a listening check to rule out excessive circuit noise, intermittency and/or poor sound quality.
- Perform electroacoustic analysis to determine if hearing aid is performing according to manufacturer's specifications.
- Confirm telecoil function.
- Programmable and digital hearing aids should be programmed prior to patient's arrival to ensure integrity of programming system and hearing aids.

FIT, ADJUST AND SERVICE HEARING AID

Expected Outcomes:

- Appropriate earmold/hearing aid shell configuration and material will be selected for maximum comfort and hearing aid performance.
- Alleviation of a problem with physical or acoustic comfort (i.e., occlusion, loudness, discomfort).
- Restore the aid to manufacturer's specifications.

Indications for Procedure:

- Patient is being fitted for new amplification.
- Patient or family reports a problem with the function, comfort or benefit being received from the hearing aid.

Procedure Methods:

- Assess ear canal for ear impression vis-à-vis size, length and direction.
- Perform proper ear impression procedures, e.g. otoblock placement.
- Determine earmold/hearing aid shell configuration and material.
- Examine surface of earmold and instrument for damage and sharp edges.
- Perform physical fitting of coupler and instrument.

- Appropriateness of physical fit should be assessed through ease of insertion and removal, cosmetic appeal, comfort, absence of feedback, placement of microphone port(s) and ease of volume control use when present.
- Program selected hearing aids to patient's baseline audiometric data.
- Adjust/modify hearing instrument electronics based on patient feedback.
- Make venting modifications as needed for reduction of occlusion effect and/or to control feedback. Modify shell or earmold for improved, more comfortable fit.
- In the event the patient returns with a malfunctioning hearing aid, conduct in-office internal inspection of earmold and instrument and take appropriate corrective action (suctioning wax and debris from receiver and microphone ports, cleaning corrosion from battery contacts, replacing earmold tubing, etc.). Conduct electric current drain measurement of hearing aid. If in-office repair is not possible, return aid to manufacturer for repair and offer the patient a loaner hearing aid to use while his/hers is being repaired.
- If the hearing aid needs to go to the factory for repair and it is out of warranty, inform the patient of the charges and repair warranty.
- Validation of fitting should be done with sound field testing using frequency specific thresholds and/or aided speech discrimination and speech reception thresholds or with real-ear aided measurements or with live speech mapping.
- Reprogram hearing aids based on patient feedback.

COUNSELING AND AURAL REHABILITATION

Expected Outcomes:

- Dispensers assist patients in coming to grips with the reality of their hearing loss and in the process of accepting amplification or other assistive listening devices.
- Dispensers educate the family and the patient in the ramifications of a hearing loss and what is a reasonable expectation for improved communication with amplification.
- To facilitate listening in various acoustic environments.
- To provide alerting systems to: augment the benefits of the hearing aids, establish procedures for follow-up and provide information to allied healthcare professionals.

Indications for Procedure:

- Individuals who have had their hearing evaluated.
- Individuals who are being fitted with amplification.
- Individuals who need more help than their hearing aids can provide in various situations.

Procedure Methods:

- Explain otoscopic examination and audiometric assessment to patient.
- Discuss patient's reactions to hearing instruments.
- Discuss with patient various treatment options, e.g., different levels of technology, different styles of hearing instruments.
- Provide patient with hearing rehabilitation exercises.
- Explain hearing instrument use in different listening environments.
- Instruct patient on proper instrument insertion and removal techniques.
- Counsel patient on cerumen management.
- Counsel patient regarding care and use of instrument.

- Counsel patient on battery life and insertion/removal techniques.
- Counsel patient on telephone usage with hearing instruments and assistive listening device coupling as necessary.
- Counsel patient on amplification expectations and limitations:
 - discussion of appropriate expectations for amplification include improved communication, freedom from unwanted feedback, minimization of the occlusion effect and more auditory benefit in quiet than in noise
 - patient is advised of their legal rights for hearing aid adjustment, replacement and return
 - self-assessment tools that measure degree of hearing handicap and/or pre- and post-fitting satisfaction are an appropriate tool for measuring patient satisfaction
 - instruct patient/family in effective listening techniques with hearing aids
 - counsel family members about patient's adjustment and use of hearing aids
 - provide patient with information concerning environmental modifications that can ease communication
 - may provide patient with information on speech reading or other aural rehabilitation classes
 - may include demonstration and information on devices to enhance telephone usage; listening to television; listening in church; listening in restaurants and other difficult listening environments; listening in the classroom or auditoriums; and telephone, doorbell and smoke alarm alerting systems
 - formulate long-term treatment program
 - establish methods for recording care from treatment to rehabilitation
 - counsel patient on importance of follow-up visits
 - provide physician, with patient's permission according to HIPAA standards, your audiometric evaluation and recommendations and communicate with other allied health professionals as appropriate.

OFFICE AND PRACTICE MANAGEMENT

Expected Outcomes:

- Equipment will be maintained according to sanitary guidelines and manufacturer's specifications.
- Records will be maintained in an organized and efficient manner.
- Clinical/professional knowledge and skills will be current.

Indications for Procedure:

- To standardize professional standards and practices.

Procedure Methods:

- Maintain equipment to standards of sanitation and cleanliness.
- Supervise sanitization and cleanliness of office personnel.
- Maintain equipment according to manufacturer's specifications.
- Conduct biologic check of audiometric equipment.
- Perform cerumen management procedures using standard techniques/equipment.
- Recruit, train and develop professional and administrative staff.

- Establish supervisory procedures to ensure quality care.
- Develop marketing and advertising plans.
- Provide certification to patient to receive amplified telephone systems where appropriate.
- Identify sources of patient referrals.
- Establish and maintain quality assurance procedures.
- Adopt and follow a professional code of ethics.
- Maintain adequate professional liability protection.
- Design, implement and monitor hearing care/conservation programs.
- Know governmental laws and guidelines affecting the dispensing profession.
- Update clinical/professional knowledge and skills.
- Attend professional seminars, conferences and association conventions.
- Maintain patient records in accordance with governmental regulations including HIPAA privacy standards.
- Develop and maintain effective patient/business information systems.
- Maintain and adhere to all HIPAA standards when billing electronically.
- Formulate short- and long-range business plans.
- Upgrade office computer systems (hardware and software).