The aim of audiological re/habilitation is to effect an improvement in the client’s quality of life through optimising hearing function and communication in his or her life context. Unlike diagnostic audiology, which has the dual drivers of client-centred management and the imperative of pathology to shape test batteries and clinical processes, audiological re/habilitation is shaped solely by the requirements of the client – his or her needs, abilities, social and physical contexts, and preferences. A diverse range of personal factors and auditory contexts may drive the need for audiological re/habilitation for individual clients. For this reason, it is unlikely that focus on a single re/habilitation practice will achieve optimal outcomes, and multiple practices will often need to be considered, modified and brought together in a tailored approach to meet client requirements.

For the purposes of developing workforce tools, the following could be defined as “standard” re/habilitation practices

- Assessment of needs
- Counselling
- Amplification strategies – hearing aids
- Amplification strategies – ALDs
- Professional liaison
- Outcomes measures and evaluation

These practices are required by the vast majority of hearing impaired clients to minimise the activity limitations and participation restrictions imposed by hearing deficits and enable them to maintain a high level of function within their personal physical and social contexts using auditory-verbal communication as their primary communication mode.

“Advanced” re/habilitation practices are generally considered as methods to improve outcomes for those clients whose hearing deficit contributes significantly to a risk of being unable to develop and/or maintain auditory-verbal communication sufficient to participate effectively in most mainstream environments (home/family, workplace, social/recreational). These include

- Communication training
- Multidisciplinary management
- Amplification strategies – implantable devices
- Amplification strategies – sensory devices

These practices may involve collaboration with other professionals, including psychologists, counsellors, speech/language pathologists, education personnel and medical professionals, but the role of the audiologist in enacting these practices is specific and unique.

Notwithstanding the need to tailor re/habilitation to the individual client need, clients within specific populations often have similar needs due to the nature of their personal and environmental circumstances or because of the nature of their auditory disorder and its effects. Therefore “re/habilitation practices for specific populations” are listed to provide extra guidance in developing re/habilitation for individuals within these groups. These re/habilitation practices would generally be considered “advanced” as they include other “advanced” re/habilitation practices, and in some
instances, other specialised procedures that are not relevant to clients whose auditory disorder is purely related to hearing.

### 12. Assessment of Needs

**Practice Operations Standards 1.1.6 Collaborative Goal Setting**

#### Purpose and Aim

- To identify the personal factors that prompt audiological rehabilitation
- To define, with the client and Significant Other/s, priorities for re/habilitation
- To determine re/habilitation strategies to meet the hearing and communication needs of the client

#### Expected Outcomes

- Identified personal factors that prompted audiological rehabilitation
- Description of the communication needs of the individual with hearing impairment
- Description of the communication skills of the individual with hearing impairment
- Determination of priorities for re/habilitation
- Determination of modification to management based on individual client and Significant Other/s needs.

#### Clinical Indicators

- Individuals of all ages with hearing impairment or identified auditory and/or communication need

#### Clinical Processes

*Assessment of needs may be part of an interdisciplinary process.*

*Assessment of needs is a continuous process.*

*Assessment of needs is a collaborative process.*

- Detailed case history
  - Client and/or Significant Other/s identified hearing and/or communication goals
  - Typical client environments (including language and culture)
  - Client attitude and motivation for re/habilitation
  - Client personal and practical support
  - Frequent communication partners of client
  - Client and Significant Other/s expectations of re/habilitation
  - Limitations on client participation in re/habilitation
- Review of audiological assessment
- Review of current amplification strategies used
- Assessment of awareness of environmental sounds
  - Detection
  - Recognition
- Communication assessment (formal and/or informal)
  - Communication ability
    - Clinical environment
- Everyday environments
  - Oral, signed, or written modalities
  - Perception of speech and non-speech stimuli in multiple modalities
  - Listening/auditory skills
  - Speech reading
  - Communication strategies used by client
  - Communication skills of the client's frequent communication partners

- May include listening behaviour checklists/communication self-report measures/administered questionnaires
- Interpretation of result
- Discussion with client and/or Significant Other/s, counselling and health promotion
- Recommendations for further management
  - No further action
  - Periodic review/monitoring
  - Continue with current audiological re/habilitation
  - Supplement current audiological re/habilitation
  - Change direction of current re/habilitation
  - Referral
    - Further assessment
    - Audiological re/habilitation
    - Medical
    - Allied health
    - Educational/workplace support
    - Support and mentoring groups

Documentation

Client Health Record Practice Operations Standard 2.1.2 Health Record Compliance
- Identifying information relating to client
- Pertinent background information
  - Type of amplification strategies used
  - Communication modality/strategies used
  - Assessment results
  - Specific hearing and/or communication goals
  - Ongoing communication needs
  - Other factors relevant to re/habilitation
- Results of evaluation of current amplification strategies
- Results of checklists/self-report measures/questionnaires
- Specific recommendations for further management
- Summary of discussion with client and/or Significant Other/s
- Information provided regarding agreed auditory re/habilitation program
  - Frequency of service
  - Estimated duration of program
  - Type of service (e.g., individual, group, home program)
  - The proposed strategies used
  - Estimate of costs involved

Correspondence Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
- Identifying information in relation to client
- Written to the level of knowledge and practicality required by the receiving professional
Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)

- May include
  - Identified goals and/or needs of client
  - Strategies identified for rehabilitation
  - Effectiveness of rehabilitation strategies
  - Continuing concerns
  - Action requested of recipient
  - Written information/documentation to support recipient in acting on request

**Settings**

- Ambient noise meets ANSI standards for hearing assessment [Practice Operations Standard Criterion 3.1.2 Compliance of Facilities](#)
- Provides confidentiality for client assessment and counselling [Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy](#)
  - [Privacy Legislation](#)
  - [http://infostore.saiglobal.com/store/](#)

**Safety**

- Testing environment has been audited for occupational health and safety [Practice Operations Standard Criterion 3.1.1 Workplace Environment](#), and [Practice Operations Standard 4.1.3 Clinical Risk Management](#)
  - Precautions are taken to ensure prevention of bodily injury
- Electrical equipment is regularly tagged and tested
  - [AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment](#)
  - [http://infostore.saiglobal.com/store/](#)
- Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions [Practice Operations Standard 2.4.2 Infection Prevention and Control](#)
  - [Guidelines for Infection Prevention & Control - Summary & Audiological Perspective](#)
  - [Guidelines_for_Infection_Prevention_and_Control_-_Audiology](#)
  - [Australia_Abridged_Version](#)

**Equipment Specifications**

- Assessments are conducted with acoustic stimuli calibrated to ANSI standards.
- Equipment is used in accordance with manufacturer’s instructions
- Assessments are conducted using recognised test procedures
  - [AS 60118.0-2007 Hearing aids - Measurement of electroacoustical characteristics](#)
  - [http://infostore.saiglobal.com/store/](#)
  - [AS 60118.7-2007 Hearing aids - Measurement of the performance characteristics of hearing aids for production, supply and delivery quality assurance purposes](#)
  - [http://infostore.saiglobal.com/store/](#)
  - [AS 60118.8-2007 Hearing aids - Methods of measurement of performance characteristics of hearing aids under simulated in situ working conditions](#)


**Related References**


### 13. Counselling

**Purpose and Aim**

- To improve the quality of life for individuals with auditory disorders and/or communication needs through enhancement of physical and psychosocial well-being
- To improve the client's knowledge of his/her auditory disorders and/or communication needs
- To provide coping strategies to help enable the client's adjustment to his/her auditory disorder and/or communication needs
- To facilitate the client's ability to self-manage his/her auditory disorder and/or communication needs on a day-to-day basis

**Expected Outcomes**

- Improved quality of life and well-being of individuals with auditory disorders and/or communication needs
- Improved client knowledge of his/her auditory disorder and/or communication need
- Improved client coping/personal adjustment to the effects of auditory disorder and/or communication difficulties associated with auditory disorder
- Improved client ability to self-manage his/her auditory disorder and/or communication needs

**Clinical Indicators**

- Integral to any and all audiological services
- Counselling may involve
  - Individuals with concerns about hearing or auditory function
  - Individuals with auditory difficulties and/or communication needs
Family members/Significant Others of individuals with auditory disorders and/or communication needs

Clinical Processes

- Assessment of needs helps to determine
  - Perceptions and reactions to hearing/auditory disorder
  - Psychosocial impacts of hearing/auditory disorder
  - Coping strategies already in use by individual with auditory disorder
  - Strategies to address individual counselling goals and re/habilitation decisions
    - Motivation
    - Self-efficacy
    - Knowledge of hearing/auditory disorders
    - Coping strategies
    - Engagement with treatment/management
    - Focus of counselling:
      - Psychosocial impacts of hearing/auditory disorders
      - Assessment procedures and results
      - Treatment/management options for
        - Auditory disorder
        - Communication needs
    - Grief and loss
    - Hearing conservation
  - Client counselling needs beyond the expertise of the current clinician

- Counselling
  - Tailored to individual client needs
  - May be conducted
    - Individually
    - In groups
  - Multimodal
    - Oral
    - Sign
    - Written
    - Pictorial
    - Demonstrative
  - Approaches may include, but are not limited to
    - Cognitive
    - Affective
    - Behavioural
    - Eclectic
  - Techniques may be taken from, but are not limited to
    - Person-Centred Therapy
      - Clinician-client relationship/equality
      - Active listening
      - Empathy
      - Unconditional positive regard
    - Behaviour Therapy
      - Conditioning
      - Reinforcement
      - Relaxation training
      - Systematic desensitisation
• Observational learning/modelling
• Assertion training
• Goal-setting
• Self-management strategies
• Skills training
  ▪ Cognitive Behavioural Therapy
    • Homework
    • Problem Solving
    • Risk-taking
    • Role playing
    • Explanation
    • Teaching
    • Rehearsal
  ▪ Behaviour Change
    • Attitude and behaviour style
    • Motivation
    • Self-efficacy
    • Pros and Cons of action

❖ Evaluation of re/habilitation/counselling effectiveness
  o Client adjustment to auditory disorder/communication need
  o Client management of auditory disorder/communication need
  o Client satisfaction with re/habilitation

❖ Recommendations for further management
  o No further action
  o Periodic reassessment/monitoring
  o Continue with current audiological re/habilitation
  o Supplement current audiological re/habilitation
  o Change direction of current re/habilitation
  o Referral
    ▪ Further assessment
    ▪ Audiological re/habilitation
    ▪ Medical
    ▪ Allied health
      ▪ psychology
      ▪ social worker
    ▪ Educational/workplace support
    ▪ Support and mentoring groups

Documentation

Client Health Record Practice Operations Standard 2.1.2 Health Record Compliance
❖ Identifying information relating to client
❖ Pertinent background information
  o Type of amplification strategies used
  o Communication modality/strategies used
  o Assessment results
  o Prognosis for auditory disorder
❖ Client needs
❖ Agreed re/habilitation goals
Counselling methods and strategies used to address client needs and goals
Participants in counselling session/s
Evaluation of re/habilitation
Specific recommendations for further management
Summary of discussion with client and/or Significant Other/s
Information on recommended re/habilitation
Copies of correspondence
Informed consent to release medical information Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
Receipts/contracts

Correspondence Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
Identifying information in relation to client
Written to the level of knowledge and practicality required by the receiving professional
Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
May include
- Presenting needs of client
- Strategies identified for re/habilitation
- Effectiveness of re/habilitation strategies
- Continuing concerns
- Action requested of recipient
- Written information/documentation to support recipient in acting on request

Settings Practice Operations Standard 3.1 Physical Environment and Facilities
Provides confidentiality for client assessment and counselling Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy

Safety Practice Operations Standard 2.4.1 Occupational Health and Safety
Testing environment has been audited for occupational health and safety Practice Operations Standard Criterion 3.1.1 Workplace Environment and Practice Operations Standard 4.1.3 Clinical Risk Management
Precautions are taken to ensure prevention of bodily injury
Electrical equipment is regularly tagged and tested
AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment http://infostore.saiglobal.com/store/
Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions. Practice Operations Standard 2.4.2 Infection Prevention and Control

Equipment Specifications Practice Operations Standard 3.2 Equipment
Equipment is used in accordance with manufacturer’s instructions

Related References

- http://idainstitute.com/

14. Amplification Strategies - Hearing Aids

Purpose and Aim

- To improve functional hearing and communication through use of hearing aid/s fitted to optimally compensate the individual's hearing impairment

Expected Outcomes

- Demonstrated improvement in client hearing and communication function with use of the hearing aid/s
- Demonstrated improvement in client self-management/client and Significant Other/s management of the hearing impairment and its effects through use of the hearing aid/s

Clinical Indicators

- Individuals of all ages with a hearing loss

Clinical Processes

- Assessment of need
  - Determines likelihood of benefit from using hearing aid/s in regular environments
  - Determines attitude and motivation to use hearing aid/s
  - Identifies client limitations which may impact on hearing aid/s
    - Management
    - Usage
    - Benefit
  - Individuals suspected of having active medical pathologies of the auditory system are referred for medical evaluation prior to hearing aid assessment and fitting
Counselling
- Establish realistic expectations of re/habilitation
- Establish realistic expectations of hearing aid/s
- Provide information on course of re/habilitation
- Define relevance of re/habilitation strategies to client goals
- Provide information on strategies to habituate/acclimatise to changed sound quality and volume with hearing aid/s
- Explain communication strategies for general use
- Explain communication strategies to be employed with hearing aid/s for specific contexts

Selection of hearing aid/s based on
- Client agreement
- Client communication needs and goals
- Audiological and/or electrophysiological test outcomes
- Prognosis
  - Hearing
  - Medical conditions that may impact on hearing aid/s effectiveness
- Electroacoustic characteristics of hearing aid/s, chosen using
  - A recognised and validated prescriptive approach
  - Knowledge of features of hearing aid/s that could be beneficial in client-identified problem situations (e.g., directional microphones, noise reduction algorithms, multiple program access, feedback control)
  - Knowledge regarding acoustic modifications and ear mould technology
- Provision of information sufficient for client to make informed choice
- Style and preference of hearing aid/s
- Client need for control of hearing aid/s
- Ability of client/Significant Other/s to handle the hearing aid/s (e.g., switches, insertion, battery)
- Probability of need for compatibility with other devices (e.g., telecoil for induction-looped phone, FM system)
- Other client preferences (e.g., colour, cost)

Hearing aid fitting may include
- Earmould impression and modification
- Tubing modification
- Real ear verification and/or coupler measurements
- Electroacoustic adjustment of hearing aid/s
- Demonstration of physical management techniques
- Practice of physical management techniques by client
- Modification of physical characteristics of hearing aid/s
- Modification of electroacoustic settings of hearing aid/s
- Developing a hearing aid use and communication plan

Evaluation of hearing aid fitting may involve
- Feedback from client and/or Significant Other/s
  - Benefit
  - Limitations
  - Satisfaction
  - Physical management
- Observation/informal assessment of client’s auditory-verbal interaction
- Assessment of physical fit
  - Comfort
  - Security
  - Cosmetic acceptability
Microphone port orientation
• Ease of insertion
• Acoustic feedback

Assessment of client/Significant Other/s management of hearing aid/s
• Insertion
• Change of batteries
• Manipulation of switches
• Knowledge of multiple programs

Establishment of use of hearing aid/s
• Amount
• Contexts
• Settings

Functional assessments
• Review of client goals
• Validation of hearing aid fitting (e.g., comparative speech assessments such as aided versus unaided)

Live Speech Mapping
• Aided Threshold assessment
• Aided Cortical Auditory Evoked Potentials

Maintenance of hearing aid may include
• Adjustment of physical fit
• Identification of faults in electroacoustic characteristics
• Identification and remediation of faults in physical condition of hearing aid/s
• Identification and remediation of issues with client/Significant Other/s management of aid
• Repair or modification of hearing aid/s
  • By clinician
  • By technical support services

Feedback to client/Significant Other/s, counselling and health promotion

Recommendations for further management
• No further action
• Periodic reassessment/monitoring
• Continue with current audiological re/habilitation
• Supplement current audiological re/habilitation
• Change direction of current re/habilitation
• Referral
  • Further assessment
  • Audiological re/habilitation
  • medical
  • Allied health
    • Speech/language
    • Psychology/social worker
  • Educational/workplace support
  • Support and mentoring groups

Documentation

Client Health Record Practice Operations Standard 2.1.2 Health Record Compliance

Identifying information relating to client
• Pertinent background information
• Type of amplification strategies used
• Communication modality/strategies used
- Results of auditory function assessments
- Prognosis
- Results from assessment of needs
- Recommendations from assessment of needs
- Agreed plan of action for hearing aid re/habilitation
- Information provided concerning hearing aid re/habilitation strategy
  - Frequency of service
  - Estimated duration of program
  - Type of service (e.g., individual, group, home program)
  - Estimate of costs involved
- Decisions regarding the hearing aid/s
  - Rationale for choice of hearing aid/s
  - Parties involved
  - Primary decision-maker
  - Consensus on decision
  - Departures from audiological advice
- Activities and procedures undertaken in fitting process
- Evaluation of target achievement for fitting activities
- Justification for deliberate departures from target for fitting activities
- Summary of verbal and written information provided to client/Significant Other/s
- Copy of hearing aid use/communication plans
- Results of evaluation of hearing aid/s fitting
- Specific Recommendations for further management
- Copies of correspondence Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
- Receipts/contracts

**Correspondence** Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
- Identifying information in relation to client
- Written to the level of knowledge and practicality required by the receiving professional
- Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
- May include
  - Presenting needs of client
  - Hearing aid/s fitted
  - Needs met by amplification strategies
  - Needs met by other strategies
  - Continuing concerns
  - Action requested of recipient
  - Written information/documentation to support recipient in acting on request

**Settings** Practice Operations Standard 3.1 Physical Environments and Facilities
- Provides confidentiality for client assessment and counselling Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy
http://infostore.saiglobal.com/store/

Safety Practice Operations Standard 2.4.1 Occupational Health and Safety

- Testing environment has been audited for occupational health and safety Practice Operations Standard Criterion 3.1.1 Workplace Environment, and Practice Operations Standard 4.1.3 Clinical Risk Management
- Precautions are taken to ensure prevention of bodily injury
  - Electrical equipment is regularly tagged and tested
  - AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment
    http://infostore.saiglobal.com/store/
  - Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions Practice Operations Standard 2.4.2 Infection Prevention and Control
    Guidelines for Infection Prevention & Control - Summary & Audiological Perspective
    Guidelines for Infection Prevention and Control - Audiology
    Australia_Abridged_Version

Equipment Specifications Practice Operations Standard 3.2 Equipment

- Assessments are conducted with acoustic stimuli calibrated to ANSI standards.
  - AS ISO 389.7-2003 Acoustics - Reference zero for the calibration of audiometric equipment - Reference threshold of hearing under free-field and diffuse-field listening conditions
    http://infostore.saiglobal.com/store/
  - AS IEC 60645.3-2002 Electroacoustics - Audiological equipment - Auditory test signals of short duration for audiometric and neuro-otological purposes
    http://infostore.saiglobal.com/store/
- Equipment is used in accordance with manufacturer’s instructions
- Assessments are conducted using recognised test procedures
- Devices fitted meet defined standards for hearing aids
  - AS 60118.0-2007 Hearing aids - Measurement of electroacoustical characteristics
    http://infostore.saiglobal.com/store/
  - AS 60118.1-2007 Hearing aids - Hearing aids with induction pick-up coil input
    http://infostore.saiglobal.com/store/
  - AS 60118.2-2007 Hearing aids - Hearing aids with automatic gain control circuits
    http://infostore.saiglobal.com/store/
  - AS 60118.6-2007 Hearing aids - Characteristics of electrical input circuits for hearing aids
    http://infostore.saiglobal.com/store/
15. Amplification Strategies - Assistive Listening Devices (ALDs)

Purpose and Aim

- To improve functional hearing and communication through use of devices designed to support hearing in specific situations and environments
- To improve functional hearing and communication for individuals who are unable to manage a personal hearing aid

Expected Outcomes

- Demonstrated improvement in client hearing and communication function with the assistive listening device (ALD)
- Demonstrated improvement in client self-management/client and Significant Other/s management of the hearing impairment and its effects through use of the ALD

Clinical Indicators

- Individuals of all ages with hearing impairment
 **ALDs may include**
  - Personal FM systems
  - Personal communicators
  - TV devices
  - Telephone devices and applications
  - Induction loops
  - Soundfield systems
  - PC-based communications

 **Assessment of needs identifies**
  - Situations in which client experiences hearing challenges
  - Client attitude and motivation to use an ALD to improve functional hearing in challenging auditory environments
  - Current use of hearing aids or other devices for hearing support
  - Potential compatibility issues between ALDs and other devices in use in, or encroaching on, the challenging auditory environment
  - Limitations intrinsic to the client or to the auditory environment that are likely to impact on ALD usage, management or benefit
  - Parties other than the client who will be involved with or impacted by use of the ALD
    - Spouse/Significant Other/s/family
    - Education staff
    - Classmates and other hearing impaired students
    - Workplace personnel
    - Aged care staff
    - Fellow aged care residents

 **Counselling**
  - Establish realistic expectations of re/habilitation
  - Establish realistic expectations of ALD
  - Define relevance of re/habilitation strategies to client goals
    - Explain logistics of using ALD
    - Explain communication strategies to be employed with device
    - Define safe usage of ALD
    - Explain costs involved with procurement, installation and usage of device

 **Device fitting may include**
  - Electroacoustic adjustment of ALD/ALD and other device combination
  - Recommendations for ALD/ALD and other device settings for optimal safe use
  - Demonstration of physical management techniques
  - Practice of physical management techniques by client
  - Modification of physical characteristics of device
  - Modification of electroacoustic settings of aid
  - Developing a device use and communication plan

 **Evaluation of device fitting may involve**
  - Both clinical evaluation and evaluation in the client’s real world environment
  - Feedback from client and/or Significant Other/s
    - Benefit
    - Limitations
    - Satisfaction
  - Formal or informal assessment of individual’s comparative hearing function with and without ALD
  - Assessment of physical fit (personal devices)
    - Comfort
    - Security
• Cosmetic acceptability
• Microphone position
• Acoustic feedback
  o Assessment of positioning (e.g., for infra-red, flashing light, vibrating devices)
  o Assessment of client/Significant Other/s management of device
  o Establishment of ALD use
    ▪ Amount
    ▪ Contexts
    ▪ Settings
  o Communication inventories, and/or other recognised questionnaires or surveys used for measuring outcomes
❖ Maintenance of ALD may include
  o Identification of faults in electroacoustic characteristics of device
  o Identification of faults in physical condition of device
  o Identification of issues with client/Significant Other/s management of device
  o Repair or modification of aid
    ▪ By clinician
    ▪ By technical support services
❖ Feedback to client/Significant Other/s, counselling and health promotion
❖ Recommendations for further management
  o No further action
  o Periodic reassessment/monitoring
  o Continue with current audiological re/habilitation
  o Supplement current audiological re/habilitation
  o Change direction of current re/habilitation
  o Referral
    ▪ Further assessment
    ▪ Audiological re/habilitation
    ▪ Medical
    ▪ Allied health
      o Speech/language
      o Psychology/social worker
    ▪ Educational/workplace support
    ▪ Support and mentoring groups

Documentation

Client Health Record Practice Operations Standard 2.1.2 Health Record Compliance
❖ Identifying information relating to client
❖ Pertinent background information
  o Type of amplification strategies used
  o Communication modality/strategies used
  o Results of auditory function assessments
  o Prognosis
  o Results from assessment of needs
  o Specific recommendations from assessment of needs
❖ Agreed plan of action for re/habilitation
❖ Information provided concerning auditory re/habilitation program
  o Frequency of service
  o Estimated duration of program
  o Type of service (e.g., individual, group, home program)
  o Estimate of costs involved
Decisions regarding the ALD(s)
  - Rationale for choice of ALD
  - Parties involved
  - Primary decision-maker
  - Consensus on decision
  - Departures from audiological advice

Activities and procedures undertaken in fitting process
Summary of verbal and written information provided to client/Significant Other/s
Copy of device use/communication plans
Results of evaluation of device fitting
Specific recommendations for further management
Copies of correspondence
Informed consent to release medical information Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
Receipts/contracts

Correspondence Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
  - Identifying information in relation to client
  - Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
  - May include
    - Presenting needs of client
    - ALD fitted
    - Needs met by ALD amplification strategies
    - Needs met by other strategies
    - Continuing concerns
    - Action requested of recipient
    - Written information/documentation to support recipient in acting on request

Settings Practice Operations Standard 3.1 Physical Environment and Facilities

Safety Practice Operations Standard 2.4.1 Occupational Health and Safety
  - Testing environment has been audited for occupational health and Practice Operations Standard Criterion 3.1.1 Workplace Environment, and Practice Operations Standard 4.1.3 Clinical Risk Management
  - Precautions are taken to ensure prevention of bodily injury
  - Electrical equipment is regularly tagged and tested
In-service safety inspection and testing of electrical equipment

- Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions. Practice Operations Standard 2.4.2 Infection Prevention and Control Guidelines for Infection Prevention & Control - Summary & Audiological Perspective
- Guidelines for Infection Prevention and Control - Audiology Australia Abridged Version

Equipment Specifications Practice Operations Standard 3.2 Equipment

- Assessments are conducted with acoustic stimuli calibrated to ANSI standards.
- Equipment is used in accordance with manufacturer’s instructions
- Assessments are conducted using recognised test procedures
  - AS 60118.2-2007 Hearing aids - Hearing aids with automatic gain control circuits [link]
  - AS 60118.4-2007 Hearing aids - Magnetic field strength in audio-frequency induction loops for hearing aid purposes [link]
  - AS 60118.12-2007 Hearing aids - Dimensions of electrical connector systems [link]
  - AS/NZS 1088.9:1995 Hearing aids - Immunity requirements and methods of measurement for hearing aids exposed to radiofrequency fields in the frequency range 300 MHz to 3 GHz [link]
  - AS 1088.3-1987 Hearing aids - Hearing aid equipment not entirely worn on the listener [link]
  - ANSI C63.19-2011 Methods Of Measurement Of Compatibility Between Wireless Communications Devices And Hearing Aids [link]
  - AS 1603.11-2010 Automatic fire detection and alarm systems - Visual warning devices [link]
  - AS 1428.5-2010 Design for access and mobility - Communication for people who are deaf or hearing impaired [link]

Related References

- American Academy of Audiology Clinical Practice Guidelines, Remote Microphone Hearing Assistance Technologies for Children and Youth from Birth to 21 Years, 22 April 2008 [link]
- Supplement A. Fitting and Verification Procedures for Ear-level FM [link]
- Supplement B: Classroom Audio Distribution Systems—Selection and Verification. July 2011 [link]
16. Amplification Strategies - Sensory Devices

Purpose and Aim

❖ To improve functional hearing and communication using a device which inputs to an alternate sense to compensate the hearing impairment
❖ To improve environmental awareness using a device which inputs to an alternate sense to compensate the hearing impairment

Expected Outcomes

❖ Improvement in client communication when using the sensory device.
❖ Improvement in client environmental awareness when using the sensory device
❖ Improvement in client self-management/client and Significant Other/s management of the hearing impairment and its effects through use of the device.

Clinical Indicators

❖ Individuals of all ages with hearing impairment for whom
  o Hearing function with conventional amplification has been maximised without achieving functional communication
  o Hearing function with conventional amplification has been maximised without achieving useable awareness of the auditory environment
  o Implantation is contraindicated or otherwise discounted as an option

Clinical Processes

❖ Assessment of needs identifies
  o Situations in which client experiences hearing challenges
  o Client attitude and motivation to use a sensory device
  o Current use of hearing aids or other devices for hearing support
  o Potential compatibility issues between sensory device and other devices in use in, or encroaching on, the challenging auditory environment
  o Limitations intrinsic to the client or to the auditory environment that are likely to impact on sensory device usage, management or benefit
  o Parties other than the client who will be involved with or impacted by use of the sensory device
    ▪ Family/Significant Other/s
    ▪ Education staff
    ▪ Classmates and other hearing impaired students
    ▪ Workplace personnel
    ▪ Aged care staff
    ▪ Fellow aged care residents
❖ Counselling
  o Establish realistic expectations of re/habilitation
  o Establish realistic expectations of sensory device/s
  o Provide information on course of re/habilitation
  o Define relevance of re/habilitation strategies to client goals
  o Provide information on strategies and training required to learn to use alternate sensory input from device in conjunction with residual hearing
- Explain communication strategies for general use
- Explain communication strategies to be employed with device for specific contexts

- Sensory device selection based on
  - Client agreement
  - Client communication needs and goals
  - Audiological and/or electrophysiological test outcomes
  - Prognosis
    - Hearing
    - Medical conditions that may affect management
  - Acuity and function of individual's other sensory systems
  - Provision of information sufficient for client to make informed choice
  - Style and preference of individual device
  - Individual's need for control of device
  - Ability of individual/Significant Other/s to handle the hearing device (e.g., switches, insertion, battery)
  - Probability of need for compatibility with other devices
  - Other individual preferences (e.g., colour, cost)

- Device Fitting may include
  - Assessment of device comfort and wearability
  - Assessment of individual's sensitivity to alternate sensory stimuli through device
  - Electroacoustic adjustment of device
  - Demonstration of physical management techniques
  - Practice of physical management techniques by individual
  - Modification of physical characteristics of device
  - Modification of electroacoustic settings of device
  - Developing a communication plan for device use

- Communication Training

- Evaluation of Device Fitting may involve
  - Feedback from client and/or Significant Other/s
    - Benefit
    - Limitations
    - Satisfaction
  - Observation/informal assessment of client's communicative interaction
  - Assessment of physical fit
    - Comfort
    - Security
    - Cosmetic acceptability
    - Microphone port orientation
  - Assessment of client/Significant Other/s management of device
  - Establishment of use of sensory device
    - Amount
    - Contexts
    - Settings
  - Communication inventories, and/or other recognised questionnaires or surveys for measuring outcomes
  - Validation of fitting (e.g., comparative speech assessments such as aided versus unaided)

- Maintenance of Sensory Device may include
  - Adjustment of physical fit/positioning
  - Identification of faults in electroacoustic characteristics
  - Identification of faults in physical condition of aid
  - Identification of issues with client/Significant Other/s management of aid
Repair or modification of aid
- By clinician
- By technical support services

Counselling/feedback to individual/Significant Other/s

Recommendations for further management
- No further action
- Periodic reassessment/monitoring
- Continue with current audiological re/habilitation
- Supplement current audiological re/habilitation
- Change direction of current re/habilitation
- Referral
  - Further assessment
  - Medical
  - Allied health
  - Educational/workplace support
  - Support and mentoring groups

Documentation

**Client Health Record** Practice Operations Standard 2.1.2 Health Record Compliance

- Identifying information relating to client
- Pertinent background information
  - Type of amplification strategies used
  - Communication modality/strategies used
  - Results of auditory function assessments
  - Prognosis
  - Results from assessment of needs
  - Specific recommendations from assessment of needs
- Agreed plan of action for re/habilitation
- Information provided concerning auditory re/habilitation program
  - Frequency of service
  - Estimated duration of program
  - Type of service (e.g., individual, group, home program)
  - Estimate of costs involved
- Decisions regarding sensory device
  - Rationale for choice of device
  - Parties involved
  - Primary decision-maker
  - Consensus on decision
  - Departures from audiological advice
- Activities and procedures undertaken in fitting process
- Summary of verbal and written information provided to client/Significant Other/s
- Copy of device use/communication plans
- Communication training and strategies used to meet client needs and goals
- Results of evaluation of device fitting
- Specific recommendations for further management
- Copies of correspondence
- Informed Consent to release medical information Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
- Receipts/contracts

**Correspondence** Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
Identifying information in relation to client
Written to the level of knowledge and practicality required by the receiving professional
Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
May include
- Presenting needs of client
- Sensory device fitted
- Needs met by device strategy
- Needs met by other strategies
- Continuing concerns
- Action requested of recipient
- Written information/documentation to support recipient in acting on request

Settings
Practice Operations Standard 3.1 Physical Environment and Facilities

- Ambient noise meets ANSI standards for hearing assessment. Practice Operations Standard Criterion 3.1.2 Compliance of Facilities
- Provides confidentiality for client assessment and counselling. Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy
  Privacy Legislation [http://www.oaic.gov.au/]
  [http://infostore.saiglobal.com/store/]

Safety
Practice Operations Standard 2.4.1 Occupational Health and Safety

- Testing environment has been audited for occupational health and safety. Practice Operations Standard Criterion 3.1.1 Workplace Environment, and Practice Operations Standard 4.1.3 Clinical Risk Management
- Precautions are taken to ensure prevention of bodily injury
- Electrical equipment is regularly tagged and tested
  AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment
  [http://infostore.saiglobal.com/store/]
- Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer's instructions. Practice Operations Standard 2.4.2 Infection Prevention and Control
  Guidelines for Infection Prevention & Control - Summary & Audiological Perspective
  Guidelines_for_Infection_Prevention_and_Control_-_Audiology_Australia_Abridged_Version

Equipment Specifications
Practice Operations Standard 3.2 Equipment

- Assessments are conducted with acoustic stimuli calibrated to ANSI standards.
- Equipment is used in accordance with manufacturer's instructions
- Assessments are conducted using recognised test procedures
  AS 1603.11-2010 Automatic fire detection and alarm systems - Visual warning devices
  [http://infostore.saiglobal.com/store/]
  AS 1428.5-2010 Design for access and mobility - Communication for people who are deaf or hearing impaired
  [http://infostore.saiglobal.com/store/]
17. Amplification Strategies - Implantable Devices

Purpose and Aim

❖ To improve functional hearing and communication through use of an implantable device fitted to optimally compensate the individual’s hearing impairment

Expected Outcomes

❖ Improvement in client hearing and communication function with the implanted device
❖ Improvement in client self-management/client and Significant Other/s management of the hearing impairment and its effects through use of the implanted device

Clinical Indicators

❖ Individuals of all ages with hearing impairment for whom
  o Surgical coupling with the auditory system is credibly expected to be significantly more effective in improving hearing function than conventional amplification
  o Medical and audiological contra-indications to implantation do not exist

Clinical Processes

❖ Assessment of need occurs within a multidisciplinary setting
  o Audiologist
    ▪ Client/Significant Other/s identified hearing needs
    ▪ Recent advanced audiological diagnostic assessment results
    ▪ Prognosis for hearing
    ▪ Review of current amplification strategies
    ▪ Optimisation of current amplification strategies
    ▪ Communication assessment
    ▪ Professional liaison (education staff, school counsellor, aged care/community care staff, workplace rehabilitation officers) to verify the individual's functional hearing ability in everyday environments
  o Medical/ENT team
    ▪ Contraindications to surgery

Related References

Radiological assessment
Assessment of integrity of surgical sites

Social worker/psychologist
- Assessment of social support dynamics
- Assessment of cognitive function
- Counselling
  - Ensuring and maintaining realistic expectations of device and re/habilitation
  - Ascertaining understanding, motivation and commitment to full implantation and re/habilitation program

Speech/language pathologist
- Speech and language assessment (if required)

Post-surgical activities include
- Fitting of external components of implantable device
- Adjustment of electrophysiological (mapping)/electroacoustic settings of device
- Demonstration of physical management techniques
- Practice of physical management techniques by client
- Modification of physical characteristics of device
- Developing a device use and communication plan
- Developing a device maintenance plan
- Teaching of troubleshooting methods to identify device faults
- Provision of information about support services

Evaluation of device fitting may involve
- Feedback from client and/or Significant Other/s
  - Benefit
  - Limitations
  - Satisfaction
- Observation/informal assessment of client’s auditory-verbal interaction
- Assessment of physical fit
  - Comfort
  - Security
  - Cosmetic acceptability
  - Microphone port orientation
  - Ease of management
  - Acoustic feedback
- Assessment of client/Significant Other/s management of device
- Establishment of use of device
  - Amount
  - Contexts
  - Settings
- Communication inventories, and/or other recognised questionnaires or surveys for measuring outcomes measures
- Validation of fitting (e.g., comparative speech perception assessments such as aided vs unaided)
- Live Speech Mapping
- Aided Threshold assessment

Maintenance of implantable device may include
- Monitoring of device optimal functioning
- Adjustment of physical fit
- Identification of faults in physical condition of device
- Identification of issues with client/Significant Other/s management of device
- Repair or modification of device by technical support services
Feedback to client/Significant Other/s, counselling and health promotion

Recommendations for further management
- No further action
- Periodic reassessment/monitoring
- Continue with current audiological re/habilitation
- Supplement current audiological re/habilitation
- Change direction of current re/habilitation
- Referral
  - Further assessment
  - Medical
  - Allied health
  - Educational/workplace support
  - Support and mentoring groups

Documentation

Client Health Record Practice Operations Standard 2.1.2 Health Record Compliance
- Identifying information relating to client
- Pertinent background information
  - Type of amplification strategies used
  - Communication modality/strategies used
  - Results of auditory function assessments
  - Prognosis
  - Results from assessment of needs
  - Specific recommendations from assessment of needs
- Results of implantable device candidacy assessments
- Agreed plan of action for re/habilitation
- Information provided concerning auditory re/habilitation program
  - Frequency of service
  - Estimated duration of program
  - Type of service (e.g., individual, group, home program)
  - Estimate of costs involved
- Decisions regarding the implantable device
  - Rationale for choice of implantable device
  - Rationale for choice of ear for implantation
  - Parties involved in decision
  - Primary decision-maker
  - Consensus on decision
  - Departures from audiological advice
- Activities and procedures undertaken in mapping process
- Evaluation of target achievement for mapping activities
- Justification for deliberate departures from defaults or fitting activities
- Summary of verbal and written information provided to client/Significant Other/s
- Copy of device use/communication plans
- Results of evaluation of device fitting
- Specific recommendations for further management
- Copies of correspondence
- Informed consent to release medical information Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
- Receipts/contracts

Correspondence Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
Identifying information in relation to client
- Written to the level of knowledge and practicality required by the receiving professional
- Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
- May include
  - Presenting needs of client
  - Implantable device fitted
  - Needs met by sound processing strategy
  - Needs met by other strategies
  - Continuing concerns
  - Action requested of recipient
  - Written information/documentation to support recipient acting on request

Settings **Practice Operations Standard 3.1 Physical Environments and Facilities**
- Ambient noise meets ANSI standards for hearing assessment [Practice Operations Standard Criterion 3.1.2 Compliance of Facilities](http://webstore.ansi.org/)
  - ANSI S3.1-1999 (R2008) Maximum Permissible Ambient Noise Levels for Audiometric Test Rooms
- Provides confidentiality for client assessment and counselling [Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy](http://www.oaic.gov.au/)

Safety **Practice Operations Standard 2.4.1 Occupational Health and Safety**
- Testing environment has been audited for occupational health and safety [Practice Operations Standard Criterion 3.1.1 Workplace Environment](http://infostore.saiglobal.com/store/), and [Practice Operations Standard 4.1.3 Clinical Risk Management](http://infostore.saiglobal.com/store/)
- Precautions are taken to ensure prevention of bodily injury
- Electrical equipment is regularly tagged and tested
  - AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment
- Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions. [Practice Operations Standard 2.4.2 Infection Prevention and Control Guidelines for Infection Prevention & Control - Summary & Audiological Perspective Guidelines for Infection Prevention and Control - Audiology Australia Abridged Version](http://infostore.saiglobal.com/store/)

Equipment Specifications **Practice Operations Standard 3.2 Equipment**
- Assessments are conducted with acoustic stimuli calibrated to ANSI standards.
- Equipment is used in accordance with manufacturer's instructions
- Assessments are conducted using recognised test procedures
- Devices fitted meet defined standards for implantable devices
  - AS ISO 14708.1-2003 Implants for surgery - Active implantable medical devices - General requirements for safety, marking and for information to be provided by the manufacturer
ISO/DIS 14708-7 Implants for surgery - Active implantable medical devices - Part 7: Particular requirements for cochlear implant systems [http://infostore.saiglobal.com/store/]

Related References


18. Professional Liaison Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers

Purpose and Aim

- To provide comprehensive ear and hearing care to the client
- To foster holistic health care through the client’s professional healthcare network
- To respond to the need of a referring professional for client-related hearing/auditory information to assist in management

Expected Outcomes

- Recognition of a request by another professional for information or action
- Provision of information that can support holistic management of client health and well-being
- Action on client health and support needs that fall beyond the expertise/scope of practice of the treating clinician

Clinical Indicators
Individuals of all ages with hearing impairment for whom
  - Report and/or advice has been sought by other professionals
  - Audiological information and/or results may have an impact on the care, management, treatment and/or well-being of individuals
  - Identified medical risk factors exist
    - Sudden hearing loss
    - Asymmetrical hearing loss
    - Middle ear dysfunction
    - Unilateral tinnitus
    - Vertigo
    - Family history of progressive hearing loss
    - Unexplained speech discrimination difficulties
    - Exposure to ototoxic agents
    - Pain, discomfort or tenderness of the ear
    - Facial numbness, weakness or asymmetrical facial movements
    - Fluctuating hearing loss
  - Identified psychosocial risk factors exist
    - Developmental
    - Educational
    - Emotional
    - Disabilities in addition to hearing loss

**Clinical Processes**

- Liaison is used to
  - Develop networks among professionals
  - Educate other professionals to support ear and hearing outcomes for improved client well-being
  - Learn from other professionals to support ear and hearing outcomes for improved client well-being
  - Ensure auditory-related, communication or coping concerns that fall outside the scope of practice of the clinician are assessed by a professional with the required skill set
- Confidentiality and informed consent requirements are complied with in full
- Communication may involve
  - Face to face verbal reporting
  - Written reporting
  - Telecommunications (e.g., phone, fax, video/teleconference, email)
- Professionals involved may include
  - GPs, paediatricians, ENTs or other medical personnel
  - Geneticists
  - Speech/language pathologists, social workers, psychologists and other allied health personnel
  - Childcare workers, teachers, school counsellors and other early learning and education personnel
  - Occupational Health & Safety officers, workplace rehabilitation workers, rehabilitation counsellors

**Documentation**

*Client Health Record* Practice Operations Standard 2.1.2 Health Record Compliance
Identifying information relating to client
Reasons for liaison
Professionals identified for liaison
Informed consent to release medical Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
Copies of correspondence
Receipts/contracts

**Correspondence** Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers

- Identifying information in relation to client
- Written to the level of knowledge and practicality required by the receiving professional
- Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
- May include
  - Presenting needs of client
  - Audiometric results conforming to Audiology Australia symbols
  - Strategies identified for re/habilitation
  - Effectiveness of re/habilitation strategies
  - Continuing concerns
  - Action requested of recipient
  - Written information/documentation to support recipient acting on request

**Settings** Practice Operations Standard 3.1 Physical Environments and Facilities

- Provides confidentiality for client assessment and counselling Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy
- Provides confidentiality for divulging sensitive client information to client approved parties

**Safety** Practice Operations Standard 2.4.1 Occupational Health and Safety

- Precautions are taken to ensure prevention of bodily injury
- Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer's instructions. Practice Operations Standard 2.4.2 Infection Prevention and Control
  - Guidelines for Infection Prevention & Control - Summary & Audiological Perspective
  - Guidelines for Infection Prevention and Control - Audiology Australia Abridged Version

**Equipment** Practice Operations Standard 3.2 Equipment

- Equipment is used in accordance with manufacturer's instructions

**Related References**
19. Multidisciplinary Management

Purpose and Aim

- To meet a specific client need/s or goal/s through active collaboration with other professionals

Expected Outcomes

- Effective and holistic management of individual need/s and goal/s
- Reduced psychosocial effects of treatment on client and/or Significant Other/s due to clear management priorities and realistic expectations
- Maximised attainment of primary goals within the bounds of the individual’s capacity

Clinical Indicators

- Individuals of all ages with multiple or complex needs which include auditory disorders
- May include
  - Children
  - People with multiple disabilities
  - Clients requiring surgical re/habilitation for auditory disorders
  - Clients with (central) auditory processing disorders
  - People with mental health issues
  - Aboriginal & Torres Strait Islander clients

Clinical Processes

- Multidisciplinary management is used to
  - Streamline and simplify management for individuals with complex or multiple needs through
    - Holistic management of the client
    - Improved communication between professionals
    - Shared prioritisation of client needs and management activities
    - Improved co-ordination of care across services
- Confidentiality and informed consent requirements are complied with in full
- Communication may involve
  - Face to face verbal reporting
  - Written reporting
  - Telecommunications (e.g., phone, fax, email, video/teleconference)
- Professionals involved may include
  - Medical (GPs, paediatricians, ENTs)
  - Geneticists
o Allied Health (e.g., speech/language pathologists, social workers, psychologists, physiotherapists, other audiologists)
o Education (classroom teachers, special needs teachers, teacher aides, early intervention)
o Childcare workers
o Aged care workers
o Occupational Health & Safety officers, workplace rehabilitation workers
o Interpreters

Family/Significant Other/s remain integral and central to the clinical processes

Documentation

Client Health Record Practice Operations Standard 2.1.2 Health Record Compliance
- Identifying information relating to client
- Reasons for multidisciplinary management
- Professionals and services involved in multidisciplinary management
- Specific re/habilitation goals agreed with client/Significant Other/s
- Agreed prioritisation of goals
- Record of interactions with other parties involved in management, including
  - When and how communication occurred
  - Who was present/involved in the communication
  - Summary of discussion
  - Decisions and actions arising from communication
  - Responsibilities and timeframes for actions arising from communication

Informed Consent to release medical information Practice Operations Standards Criterion 1.1.3 Informed Consent and Practice Operations Standard 2.2.1 Referrals
- Copies of correspondence
- Receipts/contracts

Correspondence Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
- Identifying information in relation to client
- Written to the level of knowledge and practicality required by the receiving professional
- Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
- May include
  - Presenting needs of client
  - Audiometric results conforming to Audiology Australia symbols
  - Strategies identified for re/habilitation
  - Effectiveness of re/habilitation strategies
  - Continuing concerns
  - Action requested of recipient
  - Written information/documentation to support recipient acting on request

Settings Practice Operations Standard 3.1 Physical Environment and Facilities
- Provides confidentiality for client assessment and counselling Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy
- Provides confidentiality for divulging sensitive client information to client approved parties
http://infostore.saiglobal.com/store/

Safety Practice Operations Standard 2.4.1 Occupational Health and Safety

- Precautions are taken to ensure prevention of bodily injury
- Electrical equipment is regularly tagged and tested
  AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment
  http://infostore.saiglobal.com/store/
- Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions. Practice Operations Standard 2.4.2 Infection Prevention and Control
  Guidelines for Infection Prevention & Control - Summary & Audiological Perspective
  Guidelines_for_Infection_Prevention_and_Control_-_Audiology_Australia_Abridged_Version

Equipment

- Equipment is used in accordance with manufacturer’s instructions

Related References


20. Outcomes Measures & Evaluation
Practice Operations Standard Criterion 4.1.2 Outcome Measures

Purpose and Aim

- To determine the amount of change in auditory and communication function after re/habilitation activities
- To monitor progress during an individual’s re/habilitation program
- To determine the effectiveness of specific re/habilitation tasks and strategies for an individual
- To identify short- and long-term adherence to clients’ chosen form of re/habilitation
- To validate goals and expectations
- To guide changes in re/habilitation strategies and activities if required
- To identify the need for further re/habilitation
- To identify the need for further assessment or referral
Expected Outcomes

- Amount of change in auditory and communication function after re/habilitation activities is determined
- The progress of individual re/habilitation programs are monitored
- Effectiveness of specific re/habilitation tasks and strategies is determined
- Specific and realistic goals for re/habilitation are evaluated
- Realistic expectations of re/habilitation are attained

Clinical Indicators

- Integral to all audiological services
- Individuals of all ages with hearing/auditory disorders

Clinical Processes

- Outcomes measures should be
  - Relevant
  - Reliable
  - Valid
  - Sensitive
  - Accurate
  - Comparable to existing population data
  - Timely
- Outcomes measures/evaluation may involve
  - Standardised and/or non-standardised methodologies
    - Observation
    - Discussion
    - Questionnaires
      - Client rated
      - Peer/Significant Other/s rated
    - Pre and post–intervention assessments
    - Formal assessments of function
      - Aided vs unaided speech assessments
      - Listening in noise tests
      - Signal audibility assessment
        - Real ear measures
        - Aided thresholds
      - Balance Tests
  - Measures pertaining to
    - Goal achievement
    - Client satisfaction
    - Client/family engagement with intervention
    - Improvement in function
    - Use of identified re/habilitation strategies
  - Choice of evaluation materials and methods dependent on
    - Age of individual
    - Developmental level
    - Education and literacy level
    - Physical limitations
    - Client goals
    - Type of hearing/auditory disorder
- Degree of hearing disorder
  - Responses which may be
    - Oral
    - Written
    - Gestural
    - Sign
    - Interpreted by another
  - Responses obtained via
    - Face to face
    - Telecommunications (e.g., phone, SMS, fax, video/teleconference, email, via NRS)
    - Questionnaires and self-assessment tools
  - Multiple parties including
    - Individual with the hearing/auditory disorder
    - Parents/Significant Other/s
    - Partners/family
    - Workplace rehabilitation officers
    - Aged care personnel
    - Medical personnel
    - Allied health personnel
    - Education/childcare/early intervention staff
  - Evaluation may be performed
    - Before re/habilitation commences (baseline)
    - During re/habilitation (progress)
    - At completion of re/habilitation (short term outcomes)
    - Some months after completion of re/habilitation (long term outcomes/maintenance)
  - Recommendations for further management
    - No further action
    - Periodic reassessment/monitoring
    - Continue with planned re/habilitation
    - Change direction of re/habilitation
    - Supplement current re/habilitation
    - Refer for further management by other professional services

Documentation

*Client Health Record* Practice Operations Standard 2.1.2 Health Record Compliance
- Identifying information relating to client
- Pertinent background information
  - type of amplification strategies used
  - communication modality/strategies used
  - assessment results
  - prognosis
  - specific recommendations for management
- Conditions under which evaluation occurred which could impact results including
  - Client mental and physical state
  - Behaviours of other parties present
  - Environmental conditions
  - Clinician state
- Results of evaluation
- Results of checklists/self-report measures/questionnaires
- Interpretation of evaluation
- Specific recommendations arising from evaluation
Summary of feedback of results/counselling to client/Significant Other/s and/or other parties

Informed consent to release medical information Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals

Copies of correspondence

Receipts/contracts

Correspondence Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers

- Identifying information in relation to client
- Written to the level of knowledge and practicality required by the receiving professional
- Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
- May include
  - Presenting needs of client
  - Audiometric results conforming to Audiology Australia symbols
  - Strategies identified for re/habilitation
  - Effectiveness of re/habilitation strategies
  - Continuing concerns
  - Action requested of recipient
  - Written information/documentation to support recipient in acting on request

Settings Practice Operations Standard 3.1 Physical Environments and Facilities

- Ambient noise meets ANSI standards for hearing assessment Practice Operations Standard Criterion 3.1.2 Compliance of Facilities
- Provides confidentiality for client assessment and counselling Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy

Safety Practice Operations Standard 2.4.1 Occupational Health and Safety

- Testing environment has been audited for occupational health and safety Practice Operations Standard Criterion 3.1.1 Workplace Environment, and Practice Operations Standard 4.1.3 Clinical Risk Management
- Precautions are taken to ensure prevention of bodily injury
- Electrical equipment is regularly tagged and tested
  AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment http://infostore.saiglobal.com/store/
- Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions. Practice Operations Standard 2.4.2 Infection Prevention and Control
  +40 Guidelines for Infection Prevention & Control - Summary & Audiological Perspective Guidelines_for_Infection_Prevention_and_Control_-_Audiology_Australia_Abridged_Version

Equipment Specifications Practice Operations Standard 3.2 Equipment

- Assessments are conducted with acoustic stimuli calibrated to ANSI standards
Equipment is used in accordance with manufacturer’s instructions

- Assessments are conducted using recognised test procedures
  - **AS 60118.0-2007** Hearing aids - Measurement of electroacoustical characteristics

**Related References**


### 21. Communication Training

**Purpose and Aim**

- To optimise the communication abilities of an individual with a significant auditory impairment through use of tactics based on residual hearing and/or other sensory modalities.

**Expected Outcomes**

- Improved communication for hearing impaired/Deaf individuals and their communication partners

**Clinical Indicators**

- Individuals of all ages with hearing impairment
Communication partners of hearing impaired/Deaf people

Clinical Processes

Assessment of needs
- Short and long term communication goals
- Ascertained communicative partners who would be involved in re/habilitation programme
- Baseline for comparative evaluation pre and post communication training
- Ensure that amplification strategies in use are optimal and optimally fitted

Communication training may be an interdisciplinary process, involving
- Client
- Audiologist
- Family/Significant Other/s
- Education personnel
- Speech/language pathologist
- Aged care personnel
- Others

Communication training may focus on:
- Comprehension of language in oral, signed, or written modalities
- Speech and voice production
- Auditory training
- Speechreading
- Multimodal (e.g., auditory and visual, visual and tactile) training communication strategies
- Conversation analysis and repair strategies
- Education
- Counselling
- Communication partner/s training and counselling

Evaluation
- Goals are reviewed periodically to ensure continued relevance
- Performance in both clinical and everyday environments is considered
- May be performed at intervals during the re/habilitation programme to monitor progress
- Formal and informal assessment of client communication
- Assessment of generalisation of communication behaviours/strategies into everyday interactions
- Feedback from client and/or Significant Other/s
  - Benefit
  - Limitations
  - Satisfaction

Recommendations for further management
- No further action
Periodic reassessment/monitoring
Continue with current audiological re/habilitation
Supplement current audiological re/habilitation
Change direction of current re/habilitation

Referral
- Further assessment
- Audiological re/habilitation
- Medical
- Allied health
  - Speech/language
  - Psychology/social work
  - Physiotherapy/occupational therapy
- Educational/workplace support
- Support and mentoring groups

Documentation

Client Health Record Practice Operations Standard 2.1.2 Health Record Compliance
- Identifying information relating to client
- Pertinent background information
  - Type of amplification system/sensory aid used
  - Communication modality/strategies used
  - Assessment results
  - Prognosis
- Client needs and agreed goals
- Information on recommended re/habilitation
  - Frequency of service
  - Estimated duration of program
  - Type of service (e.g., individual, group, home program)
  - Estimate of costs involved
- Communication training and strategies used to meet client needs and goals
- Participants in re/habilitation session/s
- Evaluation of re/habilitation
- Specific recommendations for further management
- Summary of discussion with client and/or Significant Other/s
- Copies of correspondence
- Informed consent to release medical information Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
- Receipts/contracts

Correspondence Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
- Identifying information in relation to client
- Written to the level of knowledge and practicality required by the receiving professional
- Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational, etc.)
- May include
  - Presenting needs of client
  - Strategies identified for re/habilitation
  - Effectiveness of re/habilitation strategies
  - Continuing concerns
  - Action requested of recipient
  - Written information/documentation to support recipient in acting on request
Settings Practice Operations Standard 3.1 Physical Environment and Facilities

- Ambient noise meets ANSI standards for hearing assessment Practice Operations Standard Criterion 3.1.2 Compliance of Facilities
- Provides confidentiality for client assessment and counselling Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy

Safety Practice Operations Standard 2.4.1 Occupational Health and Safety

- Testing environment has been audited for occupational health and safety Practice Operations Standard Criterion 3.1.1 Workplace Environment, and Practice Operations Standard 4.1.3 Clinical Risk Management
- Precautions are taken to ensure prevention of bodily injury
- Electrical equipment is regularly tagged and tested
  AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment
  http://infostore.saiglobal.com/store/
- Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions. Practice Operations Standard 2.4.2 Infection Prevention and Control
  Guidelines for Infection Prevention & Control - Summary & Audiological Perspective
  Guidelines_for_Infection_Prevention_and_Control_-_Audiology_Australia_Abridged_Version

Equipment Specifications Practice Operations Standard 3.2 Equipment

- Equipment is used in accordance with manufacturer’s instructions

Related References

22. Rehabilitation for Aboriginal & Torres Strait Islander (A&TSI) People

Practice Operations Standard 1.1.5 Operations Culturally Appropriate Care

Purpose and Aim

- To effectively cross culture and language barriers to provide audiological re/habilitation that meets the needs of individual Aboriginal and Torres Strait Islander clients and their families.

Expected Outcomes

- Increased uptake of ear health and hearing services by Aboriginal and Torres Strait Islander people
- Raised awareness of the factors that contribute to the high incidence of otitis media in Aboriginal and Torres Strait Islander communities
- Raised awareness of evidence-based strategies for reducing risk of developing otitis media.
- Reduction of psychosocial and developmental impacts of conductive hearing loss

Clinical Indicators

- Aboriginal and Torres Strait Islander people of all ages

Clinical Processes

- Adhere to cultural awareness and cultural safety protocols
- Assessment of needs
  - Identifying information including different names used by the client and different spellings of those names
  - Identify the individuals within the client’s circle who are culturally allowed to hold and provide health information about the client
  - Engage an interpreter to facilitate exploration of the client’s needs if required
  - Needs will include personal needs and social/cultural role requirements
  - Needs may relate to activities that are unfamiliar to the clinician – the clinician uses techniques that enable these to enter the discussion
  - Determine the client/family’s level of ear and hearing health literacy and use this as the foundation upon which to build new knowledge
  - Identify strategies already in place to support client
- Counselling
  - Use plain language and avoid jargon.
  - With informed consent, include all parties likely to have a role in decision-making about re/habilitation
  - Health promotion/education
    - Role of hearing in health and well-being
    - De-normalisation of hearing impairment
    - Strategies to reduce ear and hearing health problems
  - Options regarding re/habilitation for current hearing difficulty
- Access/advocacy
  - Person-centred
  - Population-centred
Infrastructure
  - Housing
  - Classrooms meeting acoustic standards
  - Consistently clean water
  - Employment opportunities

Services
  - Access to fresh food
  - Transport
  - Waste management systems
  - Health
  - Recreation

Amplification strategies
  - ALDs (15. Amplification Strategies - Assistive Listening Devices (ALDs))
  - Implantable device (17. Amplification Strategies - Implantable Devices)
  - Sensory device (16. Amplification Strategies - Sensory Devices)

Educational support strategies
  - Soundfield amplification
  - Acoustically improved classrooms
  - Teaching and communication strategies

Multidisciplinary management
  - Professionals involved in collaborative care for ear and hearing health may include:
    - Aboriginal and Torres Strait Islander health workers
    - Audiometrists
    - Nurse audiometrists
    - Newborn-hearing screeners
    - Hearing health care co-ordinators
    - Medical officers and GPs
    - Ear-Nose-Throat (ENT) specialists and otologists
    - Paediatricians
    - Nurses including remote area nurses, general practice nurses, maternal and child health nurses
    - ENT surgical care co-ordinators
    - Speech pathologists
    - Psychologists
    - Occupational therapists
    - Social workers
    - Mental health workers
    - Teachers
    - Special needs teachers
    - Early childhood teachers
    - Teachers of the deaf
    - School counsellors
    - Principals and co-ordinators

Evaluation/outcomes measures

Feedback to client/Significant Other/s, counselling and health promotion

Recommendations for further management
  - No further action
  - Periodic reassessment/monitoring
  - Access hearing support strategies already in use in community

10 Chronic Otitis Media & Hearing Loss Practice (COMHeLP) pg 20
- Soundfield amplification
- Acoustically improved classrooms
- Teaching and communication strategies
- Volume control phone, captioned TV, and other ALDs.
  - Proceed with individual re/habilitation strategies identified through assessment
  - Continue with current individual audiological re/habilitation
  - Supplement current audiological reh/habilitation
  - Refer for
    - Medical
    - Further audiological assessment
    - Speech/language therapy
    - Early intervention
    - Educational support
    - Employment support
    - Support and mentoring groups

### Documentation

**Client Health Record** [Practice Operations Standard 2.1.2 Health Record Compliance]

- Identifying information relating to client
  - Pertinent background information
  - Type of amplification strategies used
  - Communication modality/strategies used
  - Results of auditory function assessments
  - Prognosis
  - Results from assessment of needs
  - Specific recommendations from assessment of needs

- Professionals and services involved in multidisciplinary management

- Record of interactions with other parties involved in management, including
  - When and how communication occurred
  - Who was present/involved in the communication
  - Summary of discussion
  - Decisions and actions arising from communication
  - Responsibilities and timeframes for actions arising from communication

- Agreed plan of action for re/habilitation

- Information provided concerning auditory re/habilitation program
  - Frequency of service
  - Estimated duration of program
  - Type of service (e.g., individual, group, home program)
  - Estimate of costs involved

- Decisions regarding amplification strategies
  - Rationale for choice of device/s
  - Parties involved
  - Primary decision-maker
  - Consensus on decision
  - Departures from audiological advice

- Activities and procedures undertaken in fitting process
- Results of evaluation of device fitting
- Justification for deliberate departures from target for fitting activities
- Summary of verbal and written information provided to client/Significant Other/s
- Copy of device use/communication plans
- Specific recommendations for further management
Copies of correspondence
Informed consent to release medical information Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
Receipts/contracts

**Correspondence** Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers#
- Identifying information in relation to client
- Written to the level of knowledge and practicality required by the receiving professional
- Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
- May include
  - Presenting needs of client
  - Device fitted
  - Needs met by amplification strategies
  - Needs met by other strategies
  - Continuing concerns
  - Action requested of recipient
  - Written information/documentation to support recipient in acting on request

**Settings** Practice Operations Standard 3.1 Physical Environment and Facilities

**Safety** Practice Operations Standard 2.4.1 Occupational Health and Safety
- Testing environment has been audited for occupational health and safety Practice Operations Standard Criterion 3.1.1 Workplace Environment, and Practice Operations Standard 4.1.3 Clinical Risk Management
- Precautions are taken to ensure prevention of bodily injury
- Electrical equipment is regularly tagged and tested
- Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions. Practice Operations Standard 2.4.2 Infection Prevention and Control
  **Guidelines for Infection Prevention & Control - Summary & Audiological Perspective**
  **Guidelines for Infection Prevention and Control - Audiology Australia Abridged Version**

**Equipment Specifications** Practice Operations Standard 3.2 Equipment
Assessments are conducted with acoustic stimuli calibrated to ANSI standards.
- Equipment is used in accordance with manufacturer’s instructions
- Assessments are conducted using recognised test procedures

Related References

- **Chronic Otitis Media and Hearing Loss Practice (COMHeLP): A Manual for Audiological Practice with Aboriginal and Torres Strait Islander Australians.** March 2012. Audiology Australia. [http://www.audiology.asn.au/members/content/COMHeLP/COMHELP_online.pdf](http://www.audiology.asn.au/members/content/COMHeLP/COMHELP_online.pdf)
- The Australian Indigenous HealthInfoNet [www.healthinfonet.ecu.edu.au](http://www.healthinfonet.ecu.edu.au)

### 23. Paediatric Re/habilitation

#### Purpose and Aim

- To enhance quality of life for children with hearing impairment through optimisation of functional hearing
- To minimise the negative psychosocial impacts of hearing impairment on the child
- To enhance well-being and quality of life for families/caregivers of children with hearing impairment

#### Expected Outcomes

- Optimisation of the hearing impaired child’s functional hearing
- Minimisation of hearing loss impacts on psychosocial function including
  - Cognition
  - Social function
  - Emotion
  - Communication
  - Education
  - Employment
- Promotion of family adjustment to child hearing impairment

**Clinical Indicators**
Children with hearing impairment and their families/caregivers

Clinical Processes

Assessment of needs
- Continuous process as child grows and needs change
- Child and/or family reaction to diagnosis of hearing impairment
- Child and/or family knowledge of and attitude to hearing impairment/Deafness
- Readiness of family to proceed with re/habilitation
- Child and/or family re/habilitation priorities
- For infants and young children
  - Needs may be anticipated from audiological data before they are recognised by family
  - Initial need may be for counselling for family
    - Grief and loss
    - Education to enable family to make informed choices for child

Counselling
- For younger children will be primarily focussed on parents/caregiver
- For older children focus moves to include the child, and then primarily involve child
- Will involve both informational and personal adjustment counselling
- Continuous process covering
  - Likely effects of child’s hearing impairment on
    - Communication
    - Cognition
    - Social development
    - Emotional well-being
    - Education
    - Employment opportunities
  - Options for re/habilitation
  - Expected outcomes from re/habilitation options
  - Training in chosen re/habilitation strategies
  - Grief and loss
  - Support services
    - For the child
    - For the parents and other family

Amplification strategies
- May include
  - ALDs (15. Amplification Strategies - Assistive Listening Devices (ALDs))
  - Implantable device (17. Amplification Strategies - Implantable Devices)
  - Sensory device (16. Amplification Strategies - Sensory Devices)

Communication Training may be undertaken by
- Audiologist
- Education personnel
- Speech/language pathologist

Professional liaison and multidisciplinary management subjects may include
- Determination of cause of hearing impairment
- Medical aspects of hearing impairment management
- Client communication mode and requirements
- Personal support needs of client and/or family
Establishing optimal device usage, particularly where there are issues associated with device use or acceptance

- Equipment requirements for optimal hearing function in social, educational, recreational or vocational settings
- Environment modifications to support hearing function in social, educational, recreational or vocational settings

Outcomes measures
- Chosen with respect to developmental, cognitive and communication levels of child
- Guide recommendations for further management

Recommendations for further management
- Periodic reassessment/monitoring
- Continue with current audiological re/habilitation
- Supplement current audiological re/habilitation
- Change direction of current re/habilitation
- Referral
  - Further assessment
  - Medical
  - Allied health
    - Speech/language
    - Psychology
    - Social work/counselling
  - Early intervention
  - Educational support
  - Support and mentoring groups

Documentation

Clinical Record Practice Operations Standard 2.1.2 Health Record Compliance

- Identifying information relating to client
- Pertinent background information
  - Type of amplification strategies used
  - Communication modality/strategies used
  - Results of auditory function assessments
  - Prognosis
  - Results from assessment of needs
  - Specific recommendations from assessment of needs
- Professionals and services involved in multidisciplinary management
- Record of interactions with other parties involved in management, including
  - When and how communication occurred
  - Who was present/involved in the communication
  - Summary of discussion
  - Decisions and actions arising from communication
  - Responsibilities and timeframes for actions arising from communication
- Agreed plan of action for re/habilitation
- Information provided concerning auditory re/habilitation program
  - Frequency of service
  - Estimated duration of program
  - Type of service (e.g., individual, group, home program)
  - Estimate of costs involved
- Decisions regarding amplification strategies
  - Rationale for choice of devices
  - Parties involved
Primary decision-maker
Consensus on decision
Departures from audiological advice

- Activities and procedures undertaken in fitting process
- Results of evaluation of device fitting
- Justification for deliberate departures from target for fitting activities
- Summary of verbal and written information provided to client/caregiver
- Copy of device use/communication plans
- Specific recommendations for further management
- Copies of correspondence
- Informed consent to release medical information Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
- Receipts/contracts

Correspondence Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers

- Identifying information in relation to client
- Written to the level of knowledge and practicality required by the receiving professional
- Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)

May include
- Presenting needs of client
- Device/s fitted
- Needs met by amplification strategies
- Needs met by other strategies
- Continuing concerns
- Action requested of recipient
- Written information/documentation to support recipient in acting on request

Parent/Caregiver provided copies of all reports

Settings Practice Operations Standard 3.1 Physical Environment and Facilities

- Provides confidentiality for client assessment and counselling Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy

Safety Practice Operations Standard 2.4.1 Occupational Health and Safety

- Testing environment has been audited for occupational health and safety Practice Operations Standard Criterion 3.1.1 Workplace Environment, and Practice Operations Standard 4.1.3 Clinical Risk Management
- Precautions are taken to ensure prevention of bodily injury
- Electrical equipment is regularly tagged and tested AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment http://infostore.saiglobal.com/store/
Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions. Practice Operations Standard 2.4.2 Infection Prevention and Control Guidelines for Infection Prevention & Control - Summary & Audiological Perspective Guidelines for Infection Prevention and Control - Audiology Australia Abridged Version

Equipment Specifications Practice Operations Standard 3.2 Equipment

- Assessments are conducted with acoustic stimuli calibrated to ANSI standards.
- Equipment is used in accordance with manufacturer’s instructions
- Assessments are conducted using recognised test procedures

Related References


24. Acoustic Shock, TTTS and Hyperacusis Rehabilitation

Purpose and Aim

- To improve an individual’s quality of life by reducing the negative impacts of acoustic shock
- To increase an individual’s tolerance for naturally occurring loud, sudden or unexpected sounds

Expected Outcomes

- Reduction of negative physical and psychological reactions to acoustic shock
- Desensitisation to naturally occurring, non-damaging sounds which are perceived as intolerable

Clinical Indicators

- Individuals of all ages who
  - Have suffered acoustic shock and/or
  - Demonstrate reduced tolerance to everyday sounds
Clinical Processes

- Assessment of needs
  - Impacts of acoustic shock/hyperacusis on everyday function including
    - Physical effects consistent with Tonic Tensor Tympani Syndrome (TTTS)
      - Muffled hearing
      - ‘Fullness’ of ear
      - Pain in ear/temporomandibular joint/face
      - Balance problems
    - Activity limitations attributed to hyperacusis/acoustic shock
    - Sleep
    - Stress levels
  - Time of onset
  - Trigger for onset
  - Presence of tinnitus
  - Meaning attributed to intolerable sounds/tinnitus
  - Coping strategies used
  - Client motivation/commitment to rehabilitation
  - Client goals for rehabilitation
  - Use of checklists/self-report measures/questionnaires
  - Medical referral to identify and treat any suspected medical pathology

- Counselling
  - Establish realistic expectations of rehabilitation
  - Demystification
    - Peripheral and central auditory pathways
    - TTTS
    - Central mediation of tensor tympani reflex threshold
    - Central contribution to tinnitus reaction
    - Hyperacusis development
    - Conditioned responses
  - Reducing negative reactions to loud sound
    - Sound enrichment to reduce intolerable sound perception and contrast effect of sudden sound
    - Stress management techniques
    - Anger, anxiety, depression and/or post-traumatic stress disorder management
    - Coping techniques
    - May involve
      - Cognitive-behavioural techniques
        - Identify, challenge and reframe irrational/destructive thoughts
        - Auditory hypervigilance distraction strategies
        - Risk-taking
      - Behavioural techniques
        - Reinforcement
        - Relaxation training
        - Systematic desensitisation
        - Assertion training

- Device fitting
  - Hyperacusis desensitisation takes priority over management of a hearing loss/tinnitus
  - Client needs and preferences
  - Choice of device
- Sound generator/MP3 player for sound enrichment
- Hearing aid
  - If hyperacusis is mild
  - May be set as an electronic sound filter in some cases
  - Client readiness for re/habilitation
  - Client ability to manage device

**Evaluation**
- Ability to function in both clinical and natural environments is considered
- May be performed at intervals during the re/habilitation program to monitor progress
- Tracking a reduction in TTTS symptoms.
- Informal assessment of client management of hyperacusis/tinnitus
- Generalisation of management strategies into everyday interactions
- Assessment of client management of device
- Assessment of client usage of device
- Feedback from client and/or Significant Other/s
  - Benefit
  - Limitations
  - Satisfaction

- Recommendations for further management
  - Nil required
  - Periodic reassessment/monitoring
  - Continue with current audiological re/habilitation
  - Change direction of current re/habilitation
  - Refer for other services
    - Medical
    - Psychology
    - Social worker
    - Support and mentoring groups

**Documentation**

*Client Health Record* *Practice Operations Standard 2.1.2 Health Record Compliance*
- Identifying information relating to client
- Pertinent background information
  - History of hyperacusis/acoustic shock
  - Communication modality/strategies used
  - Results of auditory function assessments
  - Prognosis
  - Results from assessment of needs
  - Specific recommendations from assessment of needs
- Agreed plan of action for re/habilitation
- Information provided concerning re/habilitation program
  - Frequency of service
  - Estimated duration of program
  - Type of service (e.g., individual, group, home program)
  - Estimate of costs involved
- Summary of topics covered in counselling including
  - Client understanding of concepts
  - Client acceptance of concepts
- Copy of specific tasks and strategies given to client to try in home or other non-clinical environments
- Summary of client's feedback on tasks performed in everyday environments
Decisions regarding device choice
- Rationale for choice of device/s
- Parties involved
- Primary decision-maker
- Consensus on decision
- Departures from audiological advice

Explanation of parameters and settings chosen for fitting
Summary of verbal and written information about device provided to client/Significant Other/s
Copy of device use plans
Results of checklists/self-report measures/questionnaires
Specific recommendations for further management
Copies of correspondence
Informed consent to release medical Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
Receipts/contracts

Correspondence Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
- Identifying information in relation to client
- Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
- May include
  - Presenting needs of client
  - Device fitted
  - Needs met by device usage
  - Needs met by other strategies
  - Continuing concerns
  - Action requested of recipient
  - Written information/documentation to support recipient in acting on request

Setting Practice Operations Standard 3.1 Physical Environment and Facilities

Safety Practice Operations Standard 2.4.1 Occupational Health and Safety
- Environment has been audited for occupational health and safety Practice Operations Standard Criterion 3.1.1 Workplace Environment, and Practice Operations Standard 4.1.3 Clinical Risk Management
- Precautions are taken to ensure prevention of bodily injury
- Electrical equipment is regularly tagged and tested AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment http://infostore.saiglobal.com/store/
Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions. 

Practice Operations Standard 2.4.2 Infection Prevention and Control

Guidelines for Infection Prevention & Control - Summary & Audiological Perspective

Guidelines for Infection Prevention and Control - Audiology

Australia_Abridged_Version

Equipment Specifications Practice Operations Standard 3.2 Equipment

- Fittings and evaluations are conducted with acoustic stimuli calibrated to ANSI standards.
- Equipment is used in accordance with manufacturer’s instructions
- Evaluations are conducted using recognised test procedures

Related References


25. (Central) Auditory Processing Disorder Re/habilitation

Purpose and Aim

- To promote development of auditory processing abilities in individuals demonstrating symptoms of (Central) Auditory Processing Disorder ((C)APD)
- To equip individuals who have a (C)APD with environmental modifications and compensation strategies to optimise their auditory function
- To provide individuals who have a (C)APD with direct intervention/auditory training
- To minimise the negative psychosocial impacts of (C)APD on the individual

Expected Outcomes

- Improved auditory processing function for the individual
- Improved ability of the individual to self-manage (C)APD
- Minimisation of (C)APD impacts on psychosocial function including
  - Cognition
  - Social function
  - Emotion
Clinical Indicators

- Individuals of all ages with an identified (C)APD

Clinical Processes

- Assessment of needs
  - Specific areas of deficit as identified on (C)APD assessment results
  - Impacts of (C)APD on activities of daily living
  - Identify re/habilitation goals

- Counselling
  - Establish realistic expectations of re/habilitation
  - Education about individual's specific processing strengths and weaknesses and how these relate to difficulties experienced
  - Relate treatment strategies to client goals
  - Person-centred therapy techniques
  - Problem solving
  - Relaxation

- Professional liaison/ multidisciplinary management
  - Audiologist
    - Identifies strategies to meet re/habilitation goals
    - Environmental modifications
    - Some compensatory strategies
    - Direct interventions
    - Monitoring progress and outcomes measures
  - Speech-language pathologist
    - Compensatory strategies
    - Intervention for associated language problems
  - Education
    - Classroom and teaching strategies for supporting auditory processing
    - Some environmental modifications
    - Some compensatory strategies
    - May provide support for compensatory strategies and direct interventions
  - Psychology/social work
    - Client/family support
    - Compensatory strategies
    - Address associated psychological and cognitive concerns (e.g., attention, memory) and/or psychosocial concerns
  - Support and mentoring groups

- Environmental modifications
  - Improving the listening environment to improve signal-to-noise ratios
    - Amplification systems for support in specific situations
    - Classroom acoustics
    - Preferential seating
  - Visual cues
Compensatory strategies
- Improving the individual’s ability to compensate for his or her (C)APD through
  - Active listening (e.g., attribution training, whole body listening techniques)
  - Metacognitive strategies (e.g., self-regulation and cognitive problem solving)
  - Meta-linguistic strategies (e.g., discourse cohesion devices, schema)

Direct interventions
- Improving the individual’s (central) auditory processing abilities through auditory
  training (e.g., frequency, intensity, temporal, spatial listening tasks). May be monotic,
  diotic and/or dichotic and may involve speech and/or non speech stimuli

Recommendations for further management
- No further action
- Periodic reassessment/monitoring
- Continue with current audiological re/habilitation
- Supplement current audiological re/habilitation
- Change direction of current re/habilitation
- Referral
  - Further assessment
  - Medical
  - Allied health
  - Educational/workplace support
  - Support and mentoring groups

Documentation

Client Health Record Practice Operations Standard 2.1.2 Health Record Compliance
- Identifying information relating to client
- Pertinent background information
  - Case history
  - Communication modality/strategies used
  - Results of previous assessments
  - Prognosis
  - Results of current audiological assessment
- Client needs and agreed goals
- Professionals and services involved in multidisciplinary management
- Record of interactions with other parties involved in management, including
  - When and how communication occurred
  - Who was present/involved in the communication
  - Summary of discussion
  - Decisions and actions arising from communication
  - Responsibilities and timeframes for actions arising from communication
- Information provided concerning auditory re/habilitation program
  - Summary of environmental modifications, compensatory strategies and direct
    interventions used to meet client needs and goals
  - Frequency of service
  - Estimated duration of program
  - Type of service (e.g., individual, group, home program)
- Estimate of costs involved
- Participants in re/habilitation session/s
- Evaluation of re/habilitation
- Decisions regarding ALD(s)
  - Rationale for choice of ALD
  - Parties involved
Primary decision-maker
- Consensus on decision
- Departures from audiological advice

Activities and procedures undertaken in device fitting process
- Results of evaluation of device fitting
- Summary of verbal and written information provided to client/Significant Other/s
- Specific recommendations for further management
- Summary of discussion with client and/or Significant Other/s
- Copies of correspondence
- Informed consent to release medical information: Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals

Correspondence: Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
- Identifying information in relation to client
- Written to the level of knowledge and practicality required by the receiving professional
- Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
- May include
  - Presenting needs of client
  - Strategies identified for re/habilitation
  - Effectiveness of re/habilitation strategies
  - Continuing concerns
  - Action requested of recipient
  - Written information/documentation to support recipient in acting on request

Settings: Practice Operations Standard 3.1 Physical Environment and Facilities
- Ambient noise meets ANSI standards for hearing: Practice Operations Standard Criterion 3.1.2 Compliance of Facilities
- Provides confidentiality for client assessment and counselling: Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy

Safety: Practice Operations Standard 2.4.1 Occupational Health and Safety
- Testing environment has been audited for occupational health and safety: Practice Operations Standard Criterion 3.1.1 Workplace Environment, and Practice Operations Standard 4.1.3 Clinical Risk Management
- Precautions are taken to ensure prevention of bodily injury
- Electrical equipment is regularly tagged and tested
  AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment: http://infostore.saiglobal.com/store/
- Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions: Practice Operations Standard 2.4.2 Infection Prevention and Control Guidelines for Infection Prevention & Control - Summary & Audiological Perspective
Equipment Specifications Practice Operations Standard 3.2 Equipment

- Equipment is used in accordance with manufacturer’s instructions.

Related References


26. Tinnitus Management

Purpose and Aim

- To improve an individual’s quality of life by reducing the negative impacts of tinnitus perception

Expected Outcomes

- Minimisation of the client’s perception of tinnitus
- Reduction of negative physical and psychological reactions to tinnitus

Clinical Indicators

- Individuals of all ages with tinnitus which
  - Is of concern to the individual
  - Cannot be resolved through medical intervention

Clinical Processes

- Assessment of needs
  - Impact of tinnitus on everyday function including
    - Activity limitations attributed to tinnitus
- Sleep
- Stress levels
  - Meaning attributed to tinnitus
  - Coping strategies used
  - Client motivation/commitment to re/habilitation
  - Client goals for re/habilitation
  - Use of checklists/self-report measures/questionnaires

- Counselling
  - Establish realistic expectations of re/habilitation
  - Demystification
    - Peripheral and central auditory pathways
    - Central contribution to tinnitus reaction
  - Reducing reaction to tinnitus
    - Reducing tinnitus perception by use of enhanced auditory environment
    - Use of hearing protection in environments likely to cause noise injury or exacerbate tinnitus
    - Stress/anger/anxiety/depression management techniques
    - Coping techniques
    - May involve
      - Cognitive-behavioural techniques
        - Identify, challenge and reframe irrational/destructive thoughts
        - Tinnitus distraction strategies
        - Risk-taking
      - Behavioural techniques
        - Reinforcement
        - Relaxation training
        - Systematic desensitisation
        - Assertion training
        - Goal-setting

- Device fitting
  - Individual's adjustment to tinnitus and hearing loss
  - Client needs and preferences
  - Choice of device
    - Hearing aid
    - Masking device
    - Sound generator/MP3 player for sound enrichment
    - ALD
  - Client readiness for re/habilitation
  - Client ability to manage device

- Evaluation
  - Goals are reviewed periodically to ensure continued relevance
  - Performance in both clinical and natural environments is considered
  - May be performed at intervals during the re/habilitation programme to monitor progress
  - Formal and informal assessment of client management of tinnitus
  - Generalisation of management strategies into everyday interactions
  - Assessment of client management of device
  - Assessment of client usage of device
  - Feedback from client and/or Significant Other/s
    - Benefit
    - Limitations
    - Satisfaction
Recommendations for further management
- No further action
- Periodic reassessment/monitoring
- Continue with current audiological re/habilitation
- Supplement current audiological re/habilitation
- Change direction of current re/habilitation
- Referral
  - Medical
  - Allied health
    - Psychology
    - Social work
  - Educational/workplace support
  - Support and mentoring groups

Documentation

Clinical Record (Practice Operations Standard 2.1.2 Health Record Compliance)
- Identifying information relating to client
- Pertinent background information
  - Type of amplification strategies used
  - Communication modality/strategies used
  - Results of auditory function assessments
  - Prognosis
  - Results from assessment of needs
  - Results of checklists/self-report measures/questionnaires
  - Specific recommendations from assessment of needs
- Agreed plan of action for re/habilitation
- Information provided concerning re/habilitation program
  - Frequency of service
  - Estimated duration of program
  - Type of service (e.g., individual, group, home program)
  - Estimate of costs involved
- Decisions regarding device choice
  - Rationale for choice of device/s
  - Parties involved
  - Primary decision-maker
  - Consensus on decision
  - Departures from audiological advice
- Activities and procedures undertaken in fitting process
- Evaluation of target achievement for fitting activities
- Justification for deliberate departures from target for fitting activities
- Summary of verbal and written information provided to client/Significant Other/s
- Copy of device use plans
- Results of evaluation of device fitting
- Specific recommendations for further management
- Copies of correspondence
- Informed consent to release medical information Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
- Receipts/contracts

Correspondence Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
- Identifying information in relation to client
Written to the level of knowledge and practicality required by the receiving party
Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
  - May include
    - Presenting needs of client
    - Device fitted
    - Needs met by device usage
    - Needs met by other strategies
    - Continuing concerns
    - Action requested of recipient
    - Written information/documentation to support recipient in acting on request

Related References

- Noble, W. *Evidence About the Effectiveness of Treatments Related to Tinnitus*. In Wong, L.L. & Hickson, L (Eds.) (2012). *Evidence-Based Practice in Audiology: Evaluating Interventions for Children and Adults with Hearing Impairment*. San Diego: Plural

### 27. Advanced Scope of Practice - Vestibular Rehabilitation

**Purpose and Aim**

- To improve quality of life for clients through reducing the physical and psychosocial impacts of balance disorder

**Expected Outcomes**

- Improved physical compensation for balance disorder

**Clinical Indicators**

- Individuals experiencing balance disorder which is
  - Related to vestibular dysfunction
  - Not alleviated to capacity by medical management
Clinical Processes

- **Assessment of needs**
  - Involves Multidisciplinary working (medical and allied health)
  - Impacts of balance disorder on everyday function including
    - Physical effects
    - Activity limitations
    - Stress levels
  - Triggers for onset
  - Coping strategies used including
    - Medical treatment
    - Environmental adaptations
  - Client motivation/commitment to re/habilitation
  - Client goals for re/habilitation

- **Counselling**
  - Establish realistic expectations of re/habilitation
  - Explain recommended vestibular re/habilitation
    - Reasons for recommendation
    - Requirements of re/habilitation
    - Requirements for caregiver/family support in program
    - Potential side effects
    - Frequency of service
    - Estimated duration of program
    - Costs involved
    - May involve
      - Cognitive-behavioural techniques
        - Homework
        - Risk-taking
      - Behavioural techniques
        - Reinforcement
        - Relaxation training
        - Systematic desensitisation
        - Assertion training
        - Goal-setting

- **Multidisciplinary management may involve**
  - Medical
  - Allied health
    - Audiologists
    - Physiotherapists
    - Occupational therapists
    - Counselling
  - Workplace rehabilitation officers

- **Vestibular re/habilitation**
  - Dependent client experience of vestibular disorder including
    - Type of vestibular disorder
      - Unilateral vs bilateral
      - Central vs peripheral
    - Degree of residual function
    - Strengths of client compensation strategies
  - Re/habilitation strategies may include
    - Adaptation strategies (e.g., gaze stabilisation)
 Habituation (desensitisation) strategies
 Substitution (postural stabilisation) strategies

o Re/habilitation activities may involve
 Visual tracking exercises
 Visual fixation exercises
 Positioning exercises
 Balance retraining

❖ Outcomes Measures
  o May be a multidisciplinary process
  o Feedback from client and/or significant others
    ▪ Benefit
    ▪ Limitations
    ▪ Satisfaction
  o Formal or informal behavioural assessments
  o Recommendations for further management
    ▪ No further action
    ▪ Periodic reassessment/monitoring
    ▪ Continue with current audiological re/habilitation
    ▪ Supplement current audiological re/habilitation
    ▪ Change direction of current re/habilitation
    ▪ Referral
      • Further assessment
      • Medical
      • Allied health
        ▪ Psychology/social work
      • Educational/workplace support
      • Support and mentoring groups

Documentation

Client Health Record Practice Operations Standard 2.1.2 Health Record Compliance
❖ Identifying information relating to client
❖ Pertinent background information
  o History of balance disorder
  o Results of balance function assessments
  o Prognosis
  o Results from assessment of needs
  o Specific recommendations from assessment of needs
❖ Professionals and services involved in multidisciplinary management
❖ Record of interactions with other parties involved in management, including
  o When and how communication occurred
  o Who was present/involved in the communication
  o Summary of discussion
  o Decisions and actions arising from communication
  o Responsibilities and timeframes for actions arising from communication
❖ Agreed plan of action for re/habilitation
❖ Information provided concerning re/habilitation program
  o Frequency of service
  o Estimated duration of program
  o Type of service (e.g., individual, group, home program)
  o Estimate of costs involved
❖ Summary of topics covered in counselling
Activities and procedures undertaken in re/habilitation
Summary of verbal and written information about re/habilitation provided to client/Significant Other/s
Copy of specific tasks and strategies given to client to try in home or other non-clinical environments
Summary of client’s feedback on tasks performed in everyday environments
Results of post-re/habilitation evaluation
Specific recommendations for further management
Copies of correspondence
Informed consent to release medical Practice Operations Standards Criterion 1.1.3 Informed Consent, and Practice Operations Standard 2.2.1 Referrals
Receipts/contracts

Correspondence Practice Operations Standard 2.2 Co-ordination of Care with Other Health Providers
- Identifying information in relation to client
- Written to the level of knowledge and practicality required by the receiving party
- Purpose of correspondence is clear (e.g., requesting action, requesting further information, feedback from referral, informational)
- May include
  - Presenting needs of client
  - Balance re/habilitation activities undertaken
  - Continuing concerns
  - Action requested of recipient
  - Written information/documentation to support recipient in acting on request

Setting Practice Operations Standard 3.1 Physical Environments and Facilities
- Provides confidentiality for client assessment and counselling Practice Operations Standards Criterion 1.1.2 Confidentiality and Privacy
  http://infostore.saiglobal.com/store/

Safety Practice Operations Standard 2.4.1 Occupational Health and Safety
- Environment has been audited for occupational health and safety Practice Operations Standard Criterion 3.1.1 Workplace Environment, and Practice Operations Standard 4.1.3 Clinical Risk Management
- Precautions are taken to ensure prevention of bodily injury
- Electrical equipment is regularly tagged and tested
  AS/NZS 3760:2010 In-service safety inspection and testing of electrical equipment
  http://infostore.saiglobal.com/store/
- Infection control guidelines in regard to equipment and interpersonal transmission are followed. These may be facility-specific protocols and/or manufacturer’s instructions. Practice Operations Standard 2.4.2 Infection Prevention and Control Guidelines for Infection Prevention & Control - Summary & Audiological Perspective Guidelines for Infection Prevention and Control - Audiology Australia Abridged Version

Equipment Specifications Practice Operations Standard 3.2 Equipment.
 Equipment is used in accordance with manufacturer’s instructions
 Evaluations are conducted using recognised test procedures

Related References

 Vestibular Disorders Association (VEDA). http://www.vestibular.org/