Good Practice Guidance for Adult Hearing Aid Fittings and Services – Background to the Document and Consultation

The International Society of Audiology (ISA) is developing a generic template of principles and practises for adult hearing aid fittings and services. Via the International Collegium of Rehabilitative Audiology (ICRA), ISA has commissioned Stuart Gatehouse and William Noble to convert a document generated under the auspices of United Kingdom National Health Service into one which is not constrained by any particular mode and funding of health care delivery system.

The ISA has agreed a two stage consultation process. The first of these allows all parties to make more general comments about the form and content of such a document, whilst the second will concentrate on the detailed content and coverage. Although the document is developed under auspices of ISA, input is not limited to ISA members or affiliated organisations. The final document though will be submitted to, considered by and eventually ratified by the ISA council.

The first stage consultation will take place up to 1st March 2005, and a first draft of the document is provided on this website as part of the process to receive input regarding the general content and coverage. The document is available as a Word for Windows file and the mechanism for feedback is via Stuart Gatehouse. His contact details are: MRC Institute of Hearing Research, Scottish Section, Queen Elizabeth Building, Glasgow Royal Infirmary, 16 Alexandra Parade, Glasgow, G31 2ER, Telephone No. +44 141 211 4695, Fax No. 44 141 552 8411, e-mail stuart@ihr.gla.ac.uk. Input in any form is welcome, though electronic rather than fax or regular mail is of course preferable.

As indicated in the preliminary paragraphs of the document, the content concentrates in the first instance on services for patients and clients accessing systems for the first time rather than maintenance or re-assessment of people already undergoing management. The document is intended to provide a generic template which can be endorsed internationally and tailored to suit the constraints of individual services



The document attempts to establish good practice from a published evidence base and international consensus regarding good practice, making the assumption that good practice should not be constrained in the first instance by the availability of resources.

It is hoped that a wide range of parties and perspectives can feed into the two-stage consultation process, with the second phase running from 1st April 2005 till 1 June 2005. The documents to be submitted to the International Society of Audiology and considered by the ISA Executive Board in July 2005.

Any difficulties in downloading the document either at this website or elsewhere (the documents are to be lodged at <u>www.ISA-audiology.org</u>, <u>www.icra.nu</u>, <u>www.ihr.gla.ac.uk</u> and <u>www.une.edu.au/psychology/staff/noble.htm</u>.) should be addressed to Stuart Gatehouse using the above contact details.

SEE DOCUMENT ON FOLLOWING PAGES

GOOD PRACTICE GUIDANCE FOR ADULT HEARING AID FITTINGS AND SERVICES

Prepared for the International Society of Audiology, November 2004, by the Good Practice Working Group of the International Collegium of Rehabilitative Audiology

1. Background

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- 1.1. This document contains a set of statements and recommendations for good practice in hearing aid fittings and services. It attempts to distil the results of current evidence and consensus practice into a series of statements which can be used to frame service provision. It addresses technical aspects of hearing aid fittings and rehabilitative support, but does not address in any detail the resource requirements (e.g. accommodation, staff and hardware) for service delivery.
- 1.2. The guidance is framed in the context of adults with mild, moderate and severe hearing impairment who are accessing a service for the first time. Profound impairments may require separate processes. In addition the guidance does not cover specialist services such as cochlear implants or bone anchored hearing aids. For existing hearing aid fittings procedures will differ, though probably will contain a sub-set of the recommendations.
- 1.3. The document is written as though the whole process is delivered by a single integrated service. Where different professionals or agencies are responsible for different elements, local documents should acknowledge the local structure and hand-over between agencies. Systems should be in place to ensure that all elements are included, and that information flow and cross-referral occurs in a seamless manner.
- 1.4. The guidance concentrates on good practice. Where local circumstances place constraints (e.g. in cash-limited State or insurance schemes or individual income in the private market), the guidance should be amended accordingly. Similarly, where in a private-pay environment individual financial resources limit access, there should be explicit local variations on the guidance.
- 1.5. The document makes the assumption that management of hearing impairments, disabilities and handicaps (activity limitation and participation restriction in ICIDH-2) is a comprehensive process involving rehabilitative support, provision of personal amplification and assistive listening device options. It is not a simple technical matter of hearing aid provision alone.
- 1.6. The guidance concentrates on the signal processing and fitting features associated with hearing aid management. It makes no assumptions regarding the mode of technological implementation (e.g. analogue or digital).

2. Infrastructure

- 2.1. All facilities, test rooms and equipment for the assessment, fitting and evaluation of hearing and hearing aids should conform to the appropriate international and national standards and recommendations.
- 2.2.All materials and methods used in assessment and management should conform to the appropriate recommended procedures.
- 2.3. All procedures should be undertaken by staff with appropriate professional qualifications and training All staff should have an agreed structure and process for Continued Professional Development.
- 2.4. All equipment used for testing and evaluation should be calibrated to the appropriate national and international standards on at least an annual basis.
- 2.5. Service providers should have in place appropriate referral routes and information flow between the various agencies and professions responsible for service delivery.

3. Assessment

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- 3.1. Necessary assessment of auditory impairment will take place prior to any decision that appropriate management includes the provision of personal amplification. This decision will require at least pure-tone air and bone conduction thresholds, though further assessment of impaired auditory function may be appropriate prior to any decisions concerning the details of hearing aid management and rehabilitation.
- 3.2. The decision-making process regarding appropriate hearing aid management (as opposed, for example, to surgical or medical management) will be dependent upon local service and professional arrangements, but should be explicitly stated in local protocols and policies.

4. Integration and Goal setting

4.1.As an initial first stage of any intervention, a comprehensive assessment of needs should be conducted to formulate an Individual Management Plan. A formal self-report instrument with recognised properties such as the Client-Orientated Scale of Improvement (COSI) or the Glasgow Hearing Aid Benefit Profile (GHABP) should be used. The above are illustrative only and the choice of instrument is for each individual service provider, though it should be an explicit element of policy and employed throughout. The same instrument may be re-administered to assess outcome at subsequent follow-up.

- 4.2. The Individual Management Plan should address all issues including hearing aid fitting, rehabilitative support, and environmental modification (e.g. assistive listening devices). There will be hearing-impaired patients for whom a hearing aid is not an appropriate element of the Individual Management Plan.
- 4.3. The Individual Management Plan should contain input from family members and significant others as appropriate. This involvement is particularly important in devising management plans for patients who do not appear to acknowledge hearing difficulties.
- 4.4. All aspects of the Individual Management Plan should be informed by both the needs and goals of the hearing-impaired person, and the informed advice of the professional responsible for configuring and delivering the intervention.

5. Fitting

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- 5.1. The <u>minimum</u> technical characteristics of an individual hearing aid fitting should consist of a linear hearing aid with low-distortion output compression limiting. Profound losses might require different policies. Note that this minimum standard does not imply a norm or default, but a true service baseline. Each fitting of the minimum standard should conform to a recognised rationale (e.g. NAL-RP) with established validity and performance in the scientific and clinical literature. The choice of rationale is for each individual service provider, though it should be an explicit element of policy and applied throughout.
- 5.2. Current research evidence suggests that at least 75% of patients will gain clinically relevant additional benefit from hearing aid fittings with features over and above the minimum standard. Examples of such features include amplitude compression, directional microphones and feedback suppression. These additional features should be available to all patients as required. The fitting of devices above the minimum standard should conform to a recognised generic (eg NAL-NL1 or DSL_[i-0]) or product-specific rationale and be documented as part of the clinical record.
- 5.3. Where a fitting rationale contains an acoustical target, each hearing aid fitting should be verified by real ear measurement using an input stimulus appropriate for the hearing aid under test prior to any fine-tuning. Tolerances to the prescription rationale of ± 5dB at frequencies of 250 Hz, 500 Hz, 1000 Hz and 2000 Hz and of ± 8dB at 3000 and 4000 Hz should be achieved in all cases. In addition the slope in each octave should be within ± 5dB/octave of the target. Where it is not desirable or possible to achieve a prescriptive target (e.g. because of feedback issues) or where the measurement is not technically feasible, the clinical record should contain an explicit statement to this effect. Note that some losses can only be fitted to the appropriate target using the flexibility that accompanies digital implementation. Note also that some fitting rationales do not contain an acoustical target : in such cases this step is not required.

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