SCOTTISH EXECUTIVE

Health Department

2nd March 2001

Dear Colleague

GOOD PRACTICE GUIDANCE FOR ADULT HEARING AID FITTING AND SERVICES

Summary

1. Good Practice Guidance for Adult Hearing Aid Fitting and Services is enclosed. The Guidance has been commissioned from the Medical Research Council - Institute of Hearing Research (Scottish Section).

2. The Guidance contains a set of statements and recommendations for good practice in hearing aid fittings and services. It distils the results of current research and practice into a series of statements which might be used to frame service provision. It also addresses technical aspects of hearing aid fittings and rehabilitative support.

3. Service providers are expected to consider how best to implement the Guidance from within their current resources. I would, however, refer you to the letter the Department issued to NHS Board Chief Executives on 22 February 2001 which announced additional resources of £10M for use this year or in 2001-02.

Action

4. Chief Executives are requested to ensure that this letter and Guidance is brought to the attention of all clinical staff working in audiology departments/units, ENT departments and any other staff involved in the rehabilitative care of hearing aid users in their area. Twenty-five copies of the Guidance are enclosed for each Health Board and NHS Trust.

5. Primary Care Trust Chief Executives should also arrange for this letter and Guidance to be available to all GP practices in their area.

Addresses

For action
Chief Executives,
NHS Trusts

Chief Executives,
Health Boards

Chief Executive,
Common Services Agency

Chief Executive,
Scottish Healthcare Supplies

General Manager,
State Hospitals Board for Scotland

For information
General Manager,
Health Education Board for Scotland

Executive Director,
SCPMDE

Directors of Social Work,
Council Social Work Departments

Enquiries and requests for further copies of the Guidelines to:

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6. The Chief Executive of Scottish Healthcare Supplies, in conjunction with the Commodity Advisory Panel, should consider which hearing aids need to be removed from the central contract to ensure compliance with the minimal technical standards contained in the Guidance.

Background and Additional Information

7. Health Department officials wrote to Health Boards and Trusts on 23 May 2000 about audiology department policy on the provision of equipment and support services for deaf and hard of hearing patients. Responses revealed a lack of consistency in approach and highlighted the inequitable nature of service provision across Scotland.

8. Some Boards and Trusts said that they would welcome guidance from the Scottish Executive, and this line was endorsed by the Scottish Healthcare Supplies Commodity Advisory Panel on hearing aids.

9. As a result, a working group was established to look at hearing aid fitting and services. The group invited the Medical Research Council - Institute of Hearing (Scottish Section) to prepare guidance for the benefit of NHSScotland, and this is enclosed. The working group has warmly welcomed the guidance and we commend it to you.

10. Looking ahead, it is our intention to conduct a wide-ranging review of audiology services to address the wider issues of hearing service provision. A working group is currently considering the possible terms of reference and scope for this review and a further HDL will be issued to inform NHSScotland of the range and timescale of the review.

Yours sincerely

GERRY MARR
Director of Planning and Performance Management

GOOD PRACTICE GUIDANCE FOR

ADULT HEARING AID FITTINGS AND SERVICES

26th January 2001

Professor S Gatehouse, MRC Institute of Hearing Research (Scottish Section)

Professor S D G Stephens, Welsh Hearing Institute, Cardiff

Professor A C Davis, MRC Institute of Hearing Research, Nottingham

Professor J Bamford, University of Manchester

1. This document contains a set of statements and recommendations for good practice in hearing aid fittings and services for the NHS in Scotland. 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 (eg infrastructure, staff and hardware) for service delivery. The guidance does not cover specialist services such as cochlear implants or bone anchored hearing aids.

2. Management of hearing impairments, disabilities and handicaps 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.

3. All facilities, test rooms and equipment for the assessment, fitting and evaluation of hearing and hearing aids should conform to the appropriate national standards and recommendations.

4. All materials and methods used in assessment and management should conform to the appropriate British Society of Audiology recommended procedures. All procedures should be undertaken by staff with appropriate professional qualifications and training.

5. All equipment used for testing and evaluation should be calibrated to the appropriate national and international standards on at least an annual basis.

6. Service providers should have in place appropriate referral routes and criteria from ENT consultants, audiological physicians, consultants in other hospital departments and GPs (direct referral) . Where appropriate, these should adhere to national guidelines.

7. The management of hearing-impaired patients will include sessions covering assessment, fitting and at least one follow-up session. The timing, time-allocation and content of each session should be explicit elements of local policy and should be sufficient for the application of each element of good practice. Aspects of these elements may depend on the hearing aid functionality employed and requirements for rehabilitative support.

8. Prior to intervention, a comprehensive needs assessment 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 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. The Individual Management Plan should address all issues including hearing aid fitting, rehabilitative support, and assistive listening devices. There will be hearing-impaired patients for whom a hearing aid is not an appropriate element of the Individual Management Plan. 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.

9. The service should offer to patients the choice of post-aural (behind-the-ear, BTE) and in-the-ear (ITE/ITC) fittings where these are compatible with the patient's needs and capabilities. The process leading to a decision of BTE or ITE/ITC should be an explicit element of the clinical record. A small number of patients will be best served by body-worn devices.

10. The minimum technical characteristics of an individual hearing aid fitting should consist of a linear hearing aid with low-distortion output compression limiting. This minimum specification exceeds current practice for substantial numbers of fittings by the NHS in Scotland. Profound losses might require different policies. Note that this minimum standard does not imply a norm or default, but a true service baseline.

11. 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.

12. Current research evidence suggests that ~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 issue is not whether these features are incorporated in digital, analogue or digitally programmable packages, but rather matching the features of the fittings to the needs of the patient. Where a patient requires, and can benefit from, a feature which is only available in digital instruments, these should be available to meet clinical needs. The fitting of devices above the minimum standard should conform to a recognised generic (eg NAL-NL1 or DSL[i-o]) or product-specific (eg ASA) rationale and be documented as part of the clinical record.

13. Evidence suggests that the norm for provision (in the sense of encompassing the majority of fittings) will contain some element of wide dynamic range compression with fast and/or slow time-constants, rather than the linear baseline. A linear rationale will however be the most appropriate provision for a substantial minority of patients.

14. 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. 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.

15. The maximum power output of each hearing aid fitting should be adjusted according to a recognised prescription rationale (e.g. based on prediction from hearing thresholds as in NAL-SSPL and/or loudness judgements for appropriate stimuli). This choice should be an explicit element of local policy.

16. At the fitting session, the hearing aid frequency response and maximum power output (and other characteristics where appropriate) should be fine-tuned to achieve patient acceptability according to an explicitly laid-down local protocol.

17. The default for all hearing aid provision should be to offer bilateral fittings. Unilateral fittings should only be offered where a) one ear is not sufficiently impaired to merit amplification, b) one ear is so impaired that amplification would not be beneficial, or c) a specific audiological or other rationale. There will be a material proportion of patients for whom bilateral provision is not appropriate for audiological and other (e.g. manipulative ability, otological or age-related) reasons. Where unilateral provision is offered, this and the reasoning should be an explicit element of the clinical record.

18. Where the patient declines a bilateral fitting, bilateral provision should be re-offered at a later stage of the rehabilitative process once the patient has experienced the benefits of unilateral amplification. Because of the perceptions raised by current policy of only offering bilateral fittings to severely and profoundly hearing impaired patients, a material proportion of users will decline bilateral fittings ("I'm not that deaf doctor"), but will accept and benefit from bilateral fittings following unilateral experience.

19. Hearing aid provision should include appropriate information about hearing, listening skills, hearing aid technology and earmoulds. There should exist local protocols for the assessment of and instruction in manipulation skills with regard to hearing aids and earmoulds

both at the hearing aid fitting session and at follow-up.

20. All patients should have a review visit between three and six weeks after hearing aid fitting. At this review visit, a measure of outcome in the self-report disability and handicap (activity limitation and participation restriction in ICIDH-2) domains should be administered to assess benefit and guide ongoing management. This process may be deferred to a subsequent review visit if immediate remedial action is required to ensure acceptability of the fitting. This assessment will be directly linked to the needs assessment outlined above and often may employ the same measurement instrument. Alternatively an additional measure aimed solely at outcome assessment such as the Abbreviated Profile of Hearing Aid Benefit (APHAB) or the International Outcomes Inventory for Hearing Aids (IOI-HA) may be used. The data from the needs assessment and the outcome measure allow intra-departmental assessment of the effectiveness and cost effectiveness of local protocols and services as a whole and for patient sub-groups. Adoption of common protocols for services in Scotland would allow pooling of data and inter-service comparisons.

21. Structured fine-tuning at follow-up after real-world aided listening experience is the essential second stage of any provision strategy and should include formal assessment of a range of listening circumstances relevant to the individual patient. This will include ratings (either absolute or paired-comparisons) of intelligibility and listening comfort for everyday signals (often speech) at a variety of levels in-quiet and in-noise. There should be an explicit local policy for fine-tuning.

22. On the basis of either the initial Individual Management Plan, or the assessment of benefit and residual disability at follow-up (eg shortcomings in initial provision), hearing aid fittings with the appropriate features (e.g. single or multi-channel amplitude compression, directional microphone, feedback management, multi-programme etc.) should be available to all patients. Hearing aid provision should match technological features to listeners' disabilities and lifestyle.

23. The methods and criteria for the matching of hearing aid technology, earmould characteristics, rehabilitative support and assistive listening devices to the Individual Management Plan should be laid down in a local protocol. The detailed decisions should be an explicit component of the clinical record.

24. Further fine-tuning of fittings and changes in provision should take place at subsequent follow-up visits as required. Each of the follow-up visits should detail the actions taken and the success or otherwise of those actions by repeat administration of the outcome measure of choice.

25. Rehabilitative counselling and support services should be available to meet the needs of each Individual Management Plan, and to ensure optimum benefit from hearing aid fittings. All hearing impaired patients should be counselled with regard to hearing tactics and listening skills. The necessary staff skills and resources should be available in each service setting.

26. Services for assistive listening devices are administered by local authority social service departments. Each audiology service provider should establish effective liaison with local authority services to meet the needs of each Individual Management Plan. Integration of these responsibilities and funding streams into a comprehensive care system should be achieved whenever possible.

27. Patients should only exit the cycle of follow-up visits when all available steps have been taken to satisfy the needs assessment or when they decline further support. All patients should be reviewed at least every three years as part of a process of continuing care. There should be an "open access" system in place for review before the due date if required by hearing aid users.

28. Ongoing support for hearing aid users should be provided via repair clinics for routine service and "open access" clinics for emergency care.

29. Each service should implement an information management system which allows ready access to process, activity and outcome data to facilitate audit and clinical governance as an ongoing monitoring of clinical effectiveness and cost-effectiveness of policy and protocols.

30. This guidance refers repeatedly to local policies and protocols to implement good practice. Each service provider should prepare and publish a set of overall documentation, whose clinical-effectiveness and cost-effectiveness should be reviewed on an annual basis. Service providers may find it helpful to form consortia for the development of policies and protocols. There should be an annual audit of process (e.g. waiting times for appointments) and outcome (using the outcome measure of choice laid down in local policy).

31. We acknowledge that there are significant resource implications in the implementation of the above.

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