

Delay by hearing loss patients in seeking professional advice.

Although hearing loss affects a high percentage of people globally, relatively few sufferers take steps to seek help. Research suggests that it may take 10 years or more for an individual with hearing impairment to actively seek help. Hearing loss affects a wide range of age groups. Research on the matter reveals shocking statistics suggesting, for example, that although hearing loss is a chronic health condition affecting 65-72% of people in the Western world over the age of 70, there is a reluctance to seek professional help (Meyer 2014).

Despite the fact that a lack of hearing has a negative impact on communication and psychosocial functions and the affects are noticeable and worsening over time, positive action to seek help is delayed. The affects are surely noticeable both to the person with the hearing loss and those around them so the obvious question is why the delay? Is this postponement simply a mind set of accepting the fact that with progressing age we simply cannot do what we used to? If hearing loss does develop and nothing is done about it what are the consequences? Is there a greater cost to the economy? Do health professionals understand the implications of untreated hearing loss? If change is required in the manner in which we approach the apparent reluctance to seek help for hearing loss, what changes need to be made?

Having dispensed hearing aids for many years, I have developed some insight into behaviour towards hearing loss and some reasons why people delay in help-seeking. There is a stigma around the use of hearing aids due to the fact that it is a sign of growing old in the eyes of many people. In the past many have had bad experiences with hearing aids and although modern technology is a far cry from the old analogue hearing aids, the perception is that there are more people that have had negative experiences with hearing aids than positive ones. The cost of hearing aids does, in some cases, deter people from purchasing aids however aids are available free of charge through the National Health Service. Cosmetics, size and shape of hearing aids has had some influence on acceptance nevertheless, as this assignment will reveal through the research undertaken, there are far more factors influencing the decision to seek help.

Over the years several clients of mine that presented with a moderate to severe hearing loss stated, "I went to my GP years ago when I thought I was having trouble with my hearing. He held up his watch to my ear and asked, 'Can you hear my watch ticking?' When I replied that I could he told me there was nothing wrong with my hearing." Others have commented that they mentioned having difficulty with their hearing and were told that it is simply a matter of growing old. Their reports have been common and suggest a greater problem and a challenge to change this mind set. Although GPs do a fine job in caring for the health of society as a whole, there is evidence to suggest that they need to work more closely with other health professionals to improve the quality of advice given to people developing hearing loss as a GP is most likely to be the first health care professional that a patient will seek for help on matters of hearing difficulty.

The evidence indicates that in a number of areas further research needs to be done in order to understand other factors causing delay in seeking help for hearing loss. It is evident that more effort needs to be put into understanding the bigger picture, and studies from within the UK as well as the rest of the world, have in some cases scratched the surface on reasons for delays in help-seeking, or highlighted interesting factors, and therefore require further analysis before credible statistics can be appropriately analysed.

This assignment will show further evidence as to why health professionals need to work together and think laterally in the treatment of hearing loss and other chronic health conditions. Hearing loss is prevalent in other long term chronic conditions such as sight loss, cardiovascular disease, strokes, diabetes, Parkinson's, Alzheimer's and dementia. In more detail we will consider the following questions:

- Why do clients/patients delay?
- What are the costs of delay to the patient and the economy?
- What can we do to positively influence current help-seeking behaviour?

Why do clients/patients delay?

An article in the International Journal of Audiology [Carley Meyer, Louise Hickson, Feb 2014, volume 53] addressed the question: *What factors influence help-seeking for hearing impairment and hearing aid adoption in older adults?* Based on research criteria of peer-reviewed studies published between 1990 and 2010, the article narrowed its analysis to focus on the twenty-two articles most relevant to the topic containing case studies and research material. The critique of the subject matter was conducted in a manner so as to understand why there is a delay in seeking help where a hearing impairment exists, and provide a basis for directing clinicians and hearing care professionals, related to providing increased understanding and support.

Although the article rightly acknowledged that help-seeking for hearing impairment is a complex process, it identified the following influential factors:

Functioning and Disability

Perception of impairment/activity limitations

Degree of loss: People with moderate to severe hearing loss are more likely to seek help however, their impairment and communication restrictions are analysed against areas of difficulty and willingness to accept change with regard to wearing hearing aids.

Screening Protocols

Although self assessment screening questionnaires can be used, statistically the most effective results appear to be from dual screening techniques, namely combining questionnaires where the subject can analyse their individual circumstances and verification of their thresholds through tone presentation screening.

Does Telephone screening work?

The first study of its kind to monitor behaviour and outcome measures of automated hearing assessment telephone screening was conducted in Australia. A study targeted 193 participants that took part in and failed a telephone hearing screening study. They were contacted to partake in a follow up telephone interview 4-5 months after the event. The study concluded that 'hearing screening via telephone has proved to change the lives of 5% of individuals who decided to seek professional help for hearing impairment at little cost to the other 95% of individuals. The low success rate does, however, motivate researches to better understand why people do not pursue amplification and what actions professionals can take to achieve a higher follow-up rate after hearing screening.'

Although the study was based on a wide age range of 24-93years and included only 193 participants in its design, the article highlighted several factors that influenced the participants' decision not to seek help, namely: 'personality, locus of control, coping style, finger dexterity, hearing aid self-efficacy and/or level of communication demand.'

(Meyer 2011)

An interesting study applied the trans-theoretical (stages of change) model from the University of Rhode Island Change Assessment (URICA) to a sample study of 153 hearing impaired individuals. The program assessed participants and through structured analysis used the model to determine their stage of change namely [1] pre-contemplation (problem denial) [2] contemplation (problem awareness) [3] action (healthy behaviour acquisition) [4] maintenance (sustaining healthy behaviour and relapse prevention). Although there was a relatively small target of participants used, the study linked the perceived disability to positive action. The study suggested that a more structured approach to analysis of help-seeking behaviour and seeing the stages of change as a state of continuum rather than a step by step process could help to identify and manage clients not just in screening but also throughout the patient journey and rehabilitation process. 'Audiologists can address the typical reluctance, rebellion, resignation, or rationalization pre-contemplators exhibit with active listening, which can raise problem awareness and encouragement to improve self-efficacy toward behaviour change' (Laplante-lévesque 2012).

Although this study relates more to those that took positive action in help-seeking, such analysis and management helps to ensure higher success rates with fittings, and will reduce negative experiences for hearing aid users, and in turn reduce the risk of negativity influencing the expectation for other hearing impaired individuals contemplating help-seeking.

Contextual Factors

Demographic Information

It has been suggested that race, age, gender, educational level, employment status and marital status may influence help-seeking behaviour however statistical analysis on current research is inconclusive and further research will need to be done.

Attitude and Expectation

There are four factors of attitude shaping behaviours: perceived susceptibility, perceived severity, perceived benefit, and perceived barriers – the latter three being most influential in help-seeking.

Severity: The worse the hearing loss, the more likelihood of help-seeking.

Benefit verses Barriers: Help-seeking can be affected by negative perception of hearing aid function, cost, stigma, comfort, effectiveness, a lack of trust in misleading advertising and a lack of trust in their GP and/or hearing care professional(s). Although these are important pre-fitting perceptions to bear in mind, further research is needed to quantify exactly what affects and how much of an affect they have in the decision making process to seek help.

In the UK in 2009 the leading reason given for purchasing a new hearing aid or hearing aids was because the client believed their 'hearing was getting worse'. 'The role of the GP/ENT seemed to be less dominant in the UK.'(Hougaard 2011).

Attitudinal environment

Positive or negative attitude towards hearing aids by friends, family, significant other, employer, colleagues, and General Practitioners/Ear Nose and Throat specialists/health professionals' can influence help-seeking and hearing aid adoption. Remarkable statistics from the Blue Mountains Hearing Study in Australia revealed that 35% of 742 adults acknowledged having difficulty with their hearing, however only 6% were offered some kind of support by their GP. According to the article, further studies carried out suggested that around 17% of GP's carry out hearing screening and issue referrals to ENT and audiologists. A GP is likely to be the first point of contact for general health issues including advice on hearing related problems. If a GP does not provide practical support and advice or refer where necessary, but simply brushes away the patients concerns, based on the advice given, or lack of it, they may simply conclude that their hearing difficulty is something they have to put up with and there is no need for further investigation. They may only readdress the issue many years later, once advancement of their hearing loss becomes more apparent.

Psychological factors

Hearing aid seekers in general seemed to score higher on measured calmness, confidence, trust, problem solving ability, agreeableness, and have greater problem solving ability however more in depth research is required to substantiate these findings.

Dexterity and technology use.

Advancing age has been linked to using less technology. Limitations with dexterity may account for some resistance to help-seeking and hearing aid adoption however more research is necessary to ascertain to what extent these factors influence the decision making process and age/dexterity in itself will be difficult to measure as a collective in view of the variables likely to be found in group case studies. It does however remain a factor that can influence the decision making process for help-seeking. Logically if dexterity limitations were not taken into account with others fitted with hearing aids and the individuals struggled to cope with fitting and use of the aid(s), they would be sure to talk about their negative experience and as mentioned previously, this is something influential in the attitudinal environment of potential help-seekers.

Article Summary

The article summarises that the evidence suggests individuals are more likely to seek help if [1] 'they have a moderate to severe hearing impairment.' [2] 'they are older, perceive their hearing to be poor, consider there to be more benefits than barriers to amplification and perceive their significant others as supportive of hearing rehabilitation.' With regard to influential barriers it concludes, 'A barrier to help-seeking for hearing impairment and hearing aid adoption appears to be general practitioners' management of age related impairment.' (Meyer 2014).

What are the costs of delay to the patient and the economy?

In the evaluation of the delay in help-seeking, from the hearing impaired individuals point of view, untreated hearing loss can lead to increasing isolation, social issues, conflict within the family, depression and deteriorating quality of life. What does research tell us as additional consequences of untreated hearing loss?

Action on Hearing Loss (AHL) is the new name for the Royal National Institute of the Deaf (RNID). The institute is devoted to:

- Research into a cure for deafness.
- Research and development into hearing loss prevention.
- Managing and understanding hearing loss and deafness.
- Understanding the social and economic impact of hearing loss and deafness.
- Research into improving hearing aid technology and services.
- Educating the public and health care providers on hearing related issues.
- Providing screening and early detection of hearing loss.
- Hearing impairment and deafness community support.
- Fund raising for hearing impairment and deafness community support services.

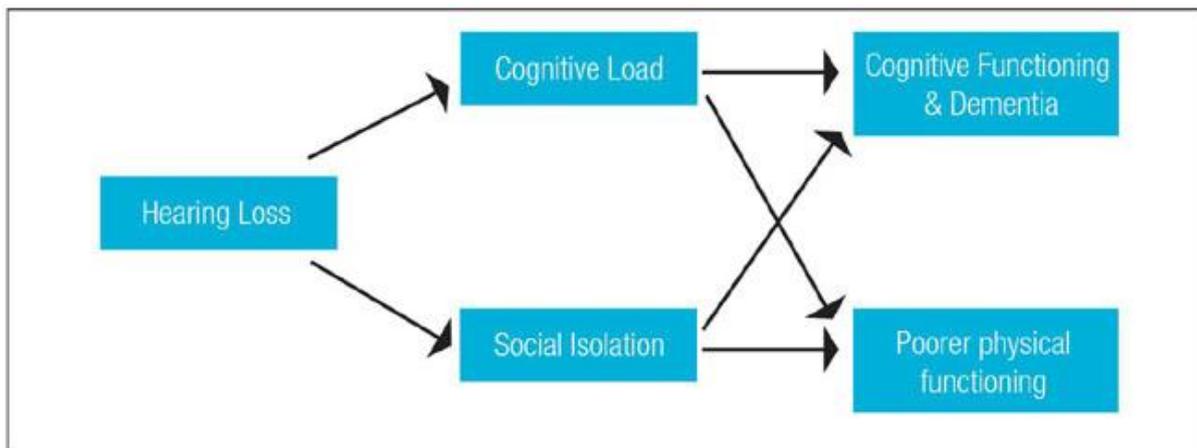
AHL teamed up with Deafness Cognition and Language (DCAL) and in 2013 the research centres' produced a combined report entitled: *Joining up – Why people with hearing loss would benefit from an integrated response to long term conditions.*

The report focussed on exploring integrated treatment of long term conditions incorporating hearing, dementia, cardiovascular disease, strokes, diabetes, Parkinson's, Alzheimer's and sight loss. The article explored connections between hearing impairment and the other listed long term conditions.

According to their report, hearing loss is a major public health issue in the UK effecting over 10 million people and it is estimated that by 2013 the number of people suffering from hearing loss or deafness is set to grow to 14.5 million (AHL 2011).

Hearing loss and Dementia

There may be a link between hearing loss and dementia. People with hearing loss are between two and five times more likely to develop dementia depending on the degree of hearing loss. The loss of cognitive function with dementia has been linked to the aging population and hearing loss (Lin 2012).



Conceptual model of hearing loss with cognitive and physical functioning in older adults.

(Lin 2012)

The loss of cognitive function with dementia makes individuals harder to care for and in most cases the consequent management plan is to place them in a residential home, but at what cost? Could a lack of hearing be misdiagnosed as dementia? Could the correct diagnosis and management of hearing loss in dementia patients delay their entry into costly residential homes? Apart from the benefits of enjoying social stimulation and interaction in the community, could delaying entry of dementia patients with hearing loss into residential homes provide savings for the economy?

Total annual cost per person with dementia

Type of support Cost	(£)
Community-based provision for people with mild dementia	14,500
Community-based provision for people with moderate dementia	20,300
Community-based provision for people with severe dementia	28,500
Residential care	31,300

(AHL 2013)

There is a risk that hearing loss is misdiagnosed as dementia as there is a shared pathology and demographic of elderly people, and the cognitive functions in the brain seem to be very closely linked between advancing hearing loss and dementia. Hearing loss and communication difficulties may deprive individuals of social stimulation and bring about social isolation which in itself can lead to dementia. Where both hearing loss and dementia are present, diagnosis and management are more difficult, and a misdiagnosis of hearing loss can lead to behavioural and psychological problems that could be avoided. It is important to take into account dementia when carrying out hearing assessments by simplifying the instructions to the client. Although further research needs to be undertaken to explore the link between dementia and hearing loss, the apparent association suggests that a joint specialist approach should be taken with diagnosis management and treatment of dementia and hearing loss.

In the UK 44% of over 70's have a moderate to severe hearing loss and there are around 720, 000 people over 70 with dementia. Ineffective management of hearing loss in dementia patients can not only make symptoms of dementia worse but also appear worse. Effective community based management could potentially save £28 million per annum.

Bearing in mind that hearing aids cost the NHS between £300 and £400 per patient journey, this is still a relatively small investment given the vast improvements the fitting of aids is likely to have on the quality of life of the aging population and the aging population that suffer with dementia.

Calculating estimated cost savings from better management of hearing loss in people with severe dementia in England

Cost savings are calculated by offsetting the cost of community-based provision for people with severe dementia against the cost of residential care.

In England **37,400** people with hearing loss and dementia go into a care home every year. A reduction of 28% means that **10,500** people would receive care in the community instead of residential care.

For 10,500 people, residential care would cost **£329 million** per year (10,500 people at £31,300 per year).

For 10,500 people with severe dementia, community-based provision would cost **£299 million** per year (10,500 people at £28,500 per year). Provision of two hearing aids and follow-up care for this group would cost around £1.4 million per year (10,500 at £130 per year). Therefore, the total cost for this group would be **£301 million** per year.

This represents a potential saving of around **£28 million** per year.

Assumptions:

1. This is based on the assumption that introducing services that are responsive to the needs of people with hearing loss can achieve the same level of reduction in care home placement as a programme of counselling and care support.
2. The cost of care is based on the [Alzheimer's Society Dementia UK report \(2007\)](#)
3. It has been assumed that hearing loss can be managed with the use of hearing aids and 'relevant support to use these appropriately.

Courtesy of Action on Hearing Loss

The Annual report of the Chief Medical officer in 2012 recognised a link between hearing loss and dementia and stated, '...it is clear that hearing and visual impairment generates a substantial and growing burden of ill health in the UK, particularly among older people. Given the pattern of multi-morbidity of those with sensory impairment, and the impact of sensory impairment on health-related quality of life, disability, unemployment, confidence in managing one's own health, and potential impact on dementia, an integrated approach to care is likely to be beneficial.'(Davies 2013).

The evidence suggests a change in the way health professionals work in order to address inter related health issues. Health professionals need to be mindful of the connections between hearing loss and dementia, hearing loss and other diseases, and hearing loss and other cognitive impairment. A greater awareness of identifying needs to be taken on board by GP's. Screening services need to be improved as well as referrals to ENT specialists, audiologists and hearing aid dispenses.

Over a decade ago, a research assignment into the cost of hearing impairment on the American economy revealed, 'Severe to profound hearing loss is expected to cost society \$297,000 over the lifetime of an individual. Most of these losses (67%) are due to reduced work productivity, although the use of special education resources among children contributes an additional 21%. Life time costs for those with prelingual onset exceed \$1 million. Results indicate that an additional \$4.6 billion will be spent over the lifetime of persons who acquired their impairment in 1998. The particularly high costs associated with prelingual onset of severe to profound hearing impairment suggest interventions aimed at children, as early identification and/or aggressive medical intervention, may have a substantial payback.' (Mohr 2001).

Hearing loss and other chronic long terms health conditions.

Cardiovascular diseases and strokes

One study suggested woman with a history of cardiovascular disease are twice as likely to have cochlea impairment. A stroke can cause the patient sudden onset hearing loss or the worsening of an existing condition. Some types of strokes have been isolated as the cause of damage to the inner ear.

Diabetes

Higher rates of hearing loss have been found in people with diabetes than those without. Since the cochlea has a rich nerve and blood supply there seems to be a link between angiopathy and neuropathy in diabetes and hearing loss.

Sight Loss

There is no direct link between hearing loss and sight loss in all patients, however the demographic is similar in that advancing age can present with a duel disability of sight and hearing. Studies have shown that elderly people with sight and hearing difficulties are more prone to injury and falls. This seems to be related to the fact that hearing loss can prevent reception of information about the environment that could compensate for visual impairment.

Sight loss can have a bearing on hearing aid fitting and management and can complicate the simple tasks of fitting, changing the battery and cleaning. It is an important consideration in hearing aid selection, and the hearing aids should be fitted taking into account the clients sight limitations and support from carers, family or significant other.

Private companies have explored the close association between sight and hearing and flourishing partnerships have been established. By utilising their client bases which consists of mostly elderly clients, a successful combination of services offering the convenience of having sight and hearing tested at the same location has been developed. There is however still room for improvement in creating greater awareness of hearing loss among clients seen for eye examinations and sight tests.

What can we do to positively influence current help-seeking behaviour?

The importance of early detection of hearing loss needs to be addressed with GP's since they are in most cases the first health professional that will be contacted by a patient with the onset of hearing loss.

If we are serious about reducing the time taken for help-seeking with hearing loss, action needs to be taken to make an introduction to the local GP's and other health care professionals in the area.

Working with GP's and other Health Care Professionals.

A key to establishing good working relationships with GP's and health professionals will include:

- Encouraging access to free screening. Telephone screening through www.actiononhearingloss.org.uk, screening through local GP surgeries where these facilities are available, or free screening through local referral and appointment system to private hearing aid dispenser operated practices.
- For failed screening results, it will be necessary to ensure the patients/clients have access to free and impartial advice on the route that can be taken for hearing assessments and hearing aid fittings carried out by the NHS and the private sector.
- Clarify protocols with each GP surgery on their preferred manner of handling referrals for wax removal by syringing and micro-suction. Review regularly the estimated waiting times and have as a back up to these services, details of private companies carrying out micro-suction and be clear on the cost and waiting times. Where possible ensure screening follows wax removal.

- Ascertain the waiting times for hearing assessments at local NHS centres and be aware of exactly what hearing aids are being fitted, and the management plan for the patient journey in respect of rehabilitation and aftercare.
- Demonstrate over time, consistent customer care, based on offering the clients referred the best possible advice and options available through the NHS and private care.
- Assess how the GP practises work in conjunction with other specialists in other areas of long term chronic health conditions where hearing loss has an association: dementia, Parkinson's, Alzheimer's, Cardiovascular diseases, strokes, diabetes and sight loss. Ensure that contact is established with the health professionals responsible for dealing with the diagnosis and treatment of these conditions, and open lines of communication to evaluate how these conditions can be affected by the presence of hearing loss. Working together will improve awareness of hearing loss that patients may have or develop, and the common association with other long term medical conditions. Adapting diagnostic assessments and the individual management plan to the needs of the patient could be a challenge in this regard.

Become involved with www.dementiafriends.org.uk, an initiative set up by the Alzheimer's Society to increase awareness of dementia and learn how to deal with and treat dementia patients, adapting management plans to incorporate best possible care and best practise. Acquire accurate information on who to contact for advice and referrals of clients and their support/families.

- Get to know local pharmacies and pharmacists and propose the dispensing of information on hearing loss and free screening services to be dispensed with medication to the over 60's and in particular to prescriptions for long term health issues such as dementia, Alzheimer's, Parkinson's, diabetes, cardiovascular disease, and strokes.

The Health and Care Professions Council

As revealed in the research articles analysed earlier, the negative experiences of others with hearing aids can influence potential help-seeking behaviour. If someone has the onset of hearing loss, they may delay in seeking help if they are aware that others have not got on with hearing aids or have had a bad experience. The way we carry out our duties as a health care professional influences the decision making process of others. If we are to have success in daily practise and if we hope to have a positive impact on reducing the time taken to seek help, we need to ensure we are consistently delivering our services to the very best of our ability. This is not simply a suggestion but it is also a requirement to practise.

The Health and Care Professions Council (HCPC) are responsible for governing the standards of proficiency for Hearing Aid Dispensers. Included in the expectations of a registrant it states, 'Registrant hearing aid dispensers must understand the need to respect, and as far as possible uphold, the rights, dignity, values and autonomy of every service user including their role in diagnostic and therapeutic process and in maintaining health and wellbeing.' With regard to Professional relationships it states that dispensers must 'understand the need to build and sustain professional relationships as both an independent practitioner and collaboratively as a member of a team.' (HCPC 2012).

The HCPC recognises that in the effective delivery of our services we need to work in conjunction with other health care professionals. Given the findings of research into links between hearing loss and other long term diseases and conditions, there is a tremendous scope for developing closer relationships with other health care professionals in the effective delivery of our services and in influencing help-seeking behaviour.

Specialised Professional Practise

Retaining our qualification as hearing aid dispensers requires taking an active role in our own development. It is a requirement to accrue and record our continuing professional development (CPD) for audit purposes. This is a traceable record of our activities devoted to keeping up to date with developments within the industry, medical sector, research and development of diagnostic equipment and hearing aid technology. Science and technology is evolving daily and we need to keep up to date with it and keep a record of our academic journey. It is important to keep up to date so that we are providing a professional practise and we are offering our clients the best possible advice. This will help to reduce resistance to help seeking. If we maintain a high level of service, our satisfied clients and their success stories will have a positive impact on their families' friends and colleagues.

Conclusion

Research suggests that it may take 10 years or more for an individual with hearing impairment to actively seek help. Unravelling the factors influencing the delay is a complex task given the variables of personality, employment status, demographic, degree of loss, sex, race and health. Research has confirmed in some cases what we already know to be the more obvious reasons such as stigma, cosmetics, and cost however, by taking a more analytical view, we can see that there are far more influential factors.

With regard to functioning disability, people with moderate to severe losses are more likely to seek help however their perception of the impact of their loss on their lifestyle will play a big part in their motivation. They are likely to weigh up perceived benefit versus cost and their own willingness to undertake hearing aid trial and adoption.

Contextual factors were assessed and although race, gender, education, employment and marital status could influence behaviour patterns, the results were inconclusive and further investigation is necessary. Hearing aid seekers in general scored higher with confidence, calmness, trust, problem solving and agreeableness however, further research needs to be done to quantify these findings.

Attitude and expectation has a more profound bearing on help-seeking. Help seeking can be affected by a negative perception of hearing aid function, cost, stigma, comfort, dexterity, effectiveness and a lack of trust in advertising. Further to this, the negative experiences and viewpoints of friend's family and colleagues can influence decisions to seek help. Research suggested that GP's can be very influential in help seeking and statistically a rather low percentage carry out regular screening and referrals for hearing assessments.

When analysing the prevalence of hearing loss and its association with other long term health conditions, the evidence suggested that health care professionals need to work together to adopt cooperative measures in diagnosing and managing patients. The suggested link between hearing loss and dementia needs further investigation. Challenges exist in exploring diagnostic solutions and patient management however substantial savings may be possible by addressing hearing loss present in dementia and delaying submission of dementia patients to care homes. The relatively low cost of hearing aids and the provision of community based care may enable dementia patients to enjoy a better quality of life and benefit from social stimulation and interaction in the community delaying the need for costly care home placement.

With the shared demographic of patients with sight loss and hearing loss, there are opportunities to further strengthen referrals between opticians and hearing care. There can be challenges in managing the dual disability of sight loss and hearing loss, and individual limitations need to be taken into account along with dexterity.

There is a need to work closer with GP's to ensure we are offering the public more consistent access to screening along with professional advice on hearing care solutions. There is scope and potential to work closer with other health care professionals dealing with chronic long term conditions, as well as pharmacies, in the promotion of access and advice on hearing issues. This thought process is consistent with the HCPC standards of proficiency.

Keeping up to date with research and development in the hearing care industry is necessary in terms of retaining our qualification, but also in managing the challenges of providing exceptional specialised professional practise to the public and successfully reducing current delays in help-seeking behaviour.

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