

ADULT HEARING SCREENING: WHY WAIT?

This report reviews evidence,
international guidelines, and policy changes.

www.ciicanet.org



SUMMARY

This paper reviews recent evidence, international guidelines, and policy changes, highlighting the consensus on the value of adult hearing screening and the urgent need for health systems to integrate screening into public health strategies. Without this, technological advances may outpace policy, leading to risks of inequitable provision and of missed opportunities to prevent avoidable health and social burdens.

- Adult hearing loss is one of the most prevalent and under-recognised health challenges worldwide, with impacts on communication, mental health, cognitive decline and dementia.
- Despite strong evidence for the effectiveness of the early fitting of today's hearing technologies, adult hearing screening is not available in most health systems.
- At the same time, rapid technological and regulatory developments—including over-the-counter (OTC) devices, self-fitting hearing aids, and app-based hearing tests—are disrupting traditional models of hearing care and making direct patient access to hearing technologies possible.

THE GROWING CHALLENGE OF HEARING LOSS

Currently, one in three people over the age of 65 and more than half of those over 85 live with disabling hearing loss. Globally, one in five people experience hearing loss (*World Report on Hearing 2021*). Nearly 30 million people have profound or complete hearing loss in both ears, (*WHO 2021*) growing to over 700 million people globally by 2050 (*WHO, 2025*).

Hearing loss impacts every aspect of life, yet its impact is often unrecognised and underestimated:

- Hearing Loss is the number one cause of Years Lost to Disability (YLD) among people over 70 in Western Europe (*Davis, 2016*), the fifth most common cause of YLD globally (*Hay, et al. 2024*). The most prevalent sensory disorder in the United States, the third leading cause of disability in Americans over 70, and the sixth leading cause of YLDs in America (*Haile et al., 2024*)
- Older adults with hearing loss are at greater risk of social isolation, reduced mental well-being and health outcomes (*Shulka et al., 2020; Shield, 2019; Pichora-Fuller, et al., 2015*)
- Associations exist between hearing loss and cognitive decline (*Lin 2011, 2013, Livingston, G, et al., 2024*) and premature death (*Friburg, et al., 2014; Contrera, et al., 2015*)
- Individuals with hearing loss experience higher rates of unemployment and underemployment (*Kochkin, 2007*) and greater chance of receiving a disability pension (*Jørgensen et al., 2022*)
- Older adults with hearing loss are two and half times more likely to experience depression than their peers without hearing loss (*Mathews, 2013*) and face increased risk of major depression (*Amieva et al., 2015; Davis, 2011*)

- Hearing loss is associated with greater use of medical and social services overall (*Xiao & O'Neill, 2018; O'Niell, et al., 2016*)
- Hearing loss is the most common potentially modifiable risk factor for dementia in older people (*Livingston, G. et al., 2024*).

ADDRESSING HEARING LOSS: THE EFFECTIVENESS OF HEARING TECHNOLOGIES

At the same time, highly effective hearing technologies exist to address these challenges:

- Hearing aids and cochlear implants significantly improve quality of life for those with hearing loss and have been shown to be cost-effective (*Ferguson et al., 2017; Lamb et al., 2015; Morris 2012; Bond 2009*)
- Their use is associated with reduced cognitive decline (*Deal et al., 2015; Amieva et al., 2015; Mahmoudi et al., 2018; Yeo et al., 2023; Dawes et al., 2024, Yu et al., 2024*)
- In adults, cochlear implants improve quality of life, reduce depression and enhance cognitive functioning (e.g. *Mosnier et al., 2014; Archbold et al., 2014; Ng et al., 2016*)
- The effective provision of hearing aids and implants is cost-effective and gives a Return on Investment of up to 16 to 1 (*WHO World Hearing Report 2021*), while a study of provision in France suggested a return of 10 to 1 if investment was made in hearing instruments (*Kervasdoué J, Hartmann L, 2016*)

- Hearing aids improve mental health, physical abilities, cognitive abilities, and employability. (*Amieva et al 2015 ; Contrera et al 2015 ; Kochkin 2010; Ferguson et al., 2017 ; Mahmoudi et al., 2018*)
- Their use reduces the cost associated with use of other health services such as primary care and inpatient stays by those with hearing loss (*Lamb et al., 2016 b; O'Neill et al., 2016; Xiao & O'Neill, 2018*).

ADDRESSING HEARING LOSS: GREATER SATISFACTION WITH THE TECHNOLOGY

Recent studies indicate increasing satisfaction and sustained use of hearing technology. While some studies in reviews showed high levels of non-use many of these reflect earlier studies which may “not accurately represent the current landscape of hearing aid use and associated variables” (*Marcos-Alonso et al., 2023*).

More recent evidence shows a markedly improved picture:

- **Improved adoption and duration of use:** Hearing aids are now more widely accepted and used for longer periods (*EHIMA, 2022, 2024a, 2024b*).
- **Enhanced technology and satisfaction:** Advances in the design and effectiveness of devices, combined with shifting attitudes, have supported greater adoption, with satisfaction rates around 80% overall (*Picou, 2022*).
- **Lower rates of non-use:** A UK study estimated that only 10% of those prescribed hearing aids did not use them (*Aazh et al., 2015*).
- **Cost-effectiveness supported by adherence:** Dillon et al. (2020) found that; “The full-time or part-time use of hearing aid by 82% of those who try them supports the cost-effectiveness of hearing aid provision” underscoring the value of provision hearing aids.
- **Increasingly positive perceptions among clinicians:** A US survey of primary care physicians found that 84% believed their patients saw hearing aids as a worthwhile investment, and most agreed (54%) or somewhat agreed (25%) that individuals with age-related hearing loss benefit from amplification (*Racine, 2020*).
- **High perceived value of cochlear implants:** Individuals with hearing loss place substantial economic value on the benefits of cochlear implants (*Ng et al., 2016*).

HEARING SCREENING CONSIDERATIONS FOR IMPLEMENTATION



[CLICK HERE](#)
for the WHO report on Hearing Screening

WHY HEARING SCREENING FOR ADULTS?

Given the growing high prevalence of hearing loss in an increasingly aging population, the unrecognised impact of hearing loss and the proven benefits of modern hearing technologies, the case for adult hearing screening has grown increasingly stronger. Screening ensures earlier access to effective interventions, maximizing benefits for individuals and society alike.

We already have the tools: screening methods are reliable, cost-effective, and hearing loss can be managed successfully. Yet, despite the scale of the issue, unmet need remains high (*WRH, 2021*). A large German population study reported a prevalence of (40.6%) with hearing loss where the authors recommended that “Regular hearing tests should be recommended for the general German population, starting at no later than 60 years of age.” (*Döge et al., 2023*), Research based on the Global Burden of Disease report estimates that there is an 83% unmet need for hearing aids globally. (*Orji, 2020; WRH, 2021*) while another study estimated that globally only 11% of those who could benefit had hearing aids (*Bisgaard et al., 2022*).



RAISING AWARENESS OF HEARING LOSS

Hearing screening also supports broader awareness of hearing loss, which is often underestimated or unnoticed:

- **Awareness gaps:** 25% of American adults with measurable hearing loss were unaware of their condition (Yulia et al., 2017).
- **Delayed action:** On average, individuals wait up to nine years between noticing functional hearing problems and taking action (Simpson et al., 2019).
- **Risk perception:** Research shows the public underestimates the risk of hearing loss while overestimating risks from cancer and heart disease (Armitage et al., 2021).

This is significant because early fitting of hearing technologies leads to better outcomes, making timely detection through screening even more important.

TOOLS FOR EFFECTIVE SCREENING

A growing body of evidence demonstrates that hearing screening is practical, effective, and promotes timely intervention:

- Opportunistic basic screening on elderly patients in care homes found that “The screening tool is an effective means of triggering further audiological assessment resulting in the administration of hearing aids to 22% of patient screened” (Ramdoo et al., 2014).
- A randomized controlled trial showed that screening with an objective measurement instrument almost doubled the 1-year uptake of hearing aids (Yueh, 2010).
- A study of internet screening found that “Internet-based hearing testing offers an efficient paradigm for identifying hearing loss” (Dawes, et al., 2021).
- Self-fitting hearing aids combined with telehealth screening has been shown to be viable in a number of studies (Keidser et al., 2016).

These findings confirm that hearing screening not only identifies hearing loss but also promotes action to address its consequences. Early intervention reduces the long-term costs to health and social care systems while enhancing economic productivity.

COST EFFECTIVENESS OF SCREENING

Evidence consistently shows that hearing screening is cost-effective:

- “WHO made a conservative estimation of return on investment from hearing screening for adults aged above 50 years. Results based on actual costs estimated a possible return of 1.62 International dollars for every 1 dollar invested in hearing screening among older adults in a high-income setting, and 0.28 International dollars in a middle-income setting. In addition, the lifetime value of DALYs averted for 10 000 individuals screened would be 77 785 International dollars. In the case of a high-income setting, the value of DALYs averted would be 788 604 dollars for a similar population.” (WRH 2001, p91-92).
- In the UK screening all adults at age 60, 65, and 70 years for bilateral hearing loss \geq 35 dB HL is cost effective as compared to no screening (Morris et al., 2012).
- In the Netherlands, internet-based and telephone screening was the most cost-effective approach for adults aged 50–70, leading to recommendations for a national rollout (Linssen et al., 2015).
- A recent review of screening programs found that hearing screening was cost effective compared to no screening; “Five studies met the inclusion criteria and all found hearing screening programs to be cost-effective compared to no hearing screening, regardless of screening method (i.e., instrument or strategy). The maximum number of repeated screenings, coupled with younger ages, was most cost-effective” (Hsu, A. K et al., 2021).
- Recent research in the US concluded that “Providing HS to older adults during their PC visit is cost-effective and accrues greater estimated benefits in terms of improved quality of life” (Dubno et al., 2022).
- Globally, investment in earlier and more effective use of hearing technologies, supported by screening, could yield a return of \$16 for every \$1 invested (WHO, 2021; Tordrup et al., 2022).

HEARING LOSS AND COGNITIVE DECLINE

The growing evidence linking hearing loss and dementia further strengthens the case for adult screening and early fitting of hearing technologies. The World Report on Hearing (WHO, 2021) argues that:

“**Adult Hearing Screening and Early Intervention have become even more relevant given the links between hearing loss and dementia in older adults.** (WRH, page 91)

Supporting research includes:

- The Lancet Commission on Dementia identified hearing loss as the most common modifiable risk factor for dementia in older adults, with up to 7% of dementia cases potentially avoidable through earlier intervention (Livingston et al., 2024).
- A meta-analysis concluded that both mild and moderate to severe hearing loss were associated with increased dementia risk. Use of hearing devices was associated with a 19% decrease in the effects of long-term cognitive decline such as incident dementia over a duration ranging from 2 to 25 years. Usage of these devices was also associated with a 3% improvement in cognitive test scores in the short term (Yeo et al., 2023).
- Another meta-analysis concluded that; “Adult-onset hearing loss is also potentially treatable, most often with hearing aids” (Yu et al., 2024).
- The greater the hearing loss the greater the risk of cognitive decline (every 10 decibel decrease in hearing was associated with 16% increase in dementia risk) in two studies examined (Yu et al., 2024).
- A large scale RCT found that in high-risk 70–84-year-olds with untreated hearing loss hearing aids reduced the risk of cognitive decline by 48 per cent (Lin et al., 2023).
- Evidence consistently supports the benefits of hearing aids and cochlear implants in mitigating cognitive decline (Yeo, et al., 2023; Dawes et al., 2024; Yu et al., 2024; Francis et al., 2025; Seo et al., 2025).

Overall, this evidence has raised the issue of whether hearing screening should therefore be made available to the population over the age of 50 as recommended by WHO (WHO 2021, Screening report) to help address dementia and cognitive decline.

While caution remains regarding causation (Dawes & Munroe, 2024), the overall benefits of hearing instruments are uncontested: they are safe, effective, and may help reduce dementia risk in addition to addressing the broader impacts of hearing loss. As one recent review concluded “no study showed any adverse effect of hearing intervention on cognitive health” (Stropahl, 2024).

While the WHO World Report on Hearing (2021) urges Member States to adopt evidence-based policies to prevent, identify, and rehabilitate hearing loss, with hearing screening highlighted as a key strategy, most countries still lack national adult hearing screening programs (WHO, 2021).

USERS OF HEARING INSTRUMENTS SUPPORT HEARING SCREENING

Patient perspectives strongly favour hearing screening. Davis et al. (2007) found that 90% of people with hearing loss considered screening acceptable, particularly in primary care. Patient perceptions are crucial and community-based screening would fit with an approach which conducted hearing screening as part of primary care services which might be acceptable to patients (Rolfe & Gardner, 2016).

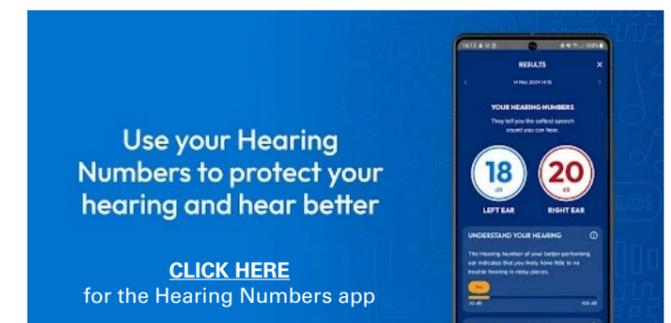
Similarly, a UK survey of hearing aid and cochlear implant users found that 76% supported the introduction of screening, stating that it would have enabled earlier action and helped reduce stigma (Lamb & Archbold, 2016 a).

“**If I'd known then how life-changing deafness would be, I would have acted sooner.”**

While another argued:

“**If this was picked up sooner, there would be such an improvement to people's quality of life. I know of so many people who clearly have got hearing loss but won't ask their GP for a referral to ENT services. If screening was available many of these people would attend, as it would be seen as something that everyone is offered. Hearing loss at any level causes such upset and depression in people and their families.**

Once diagnosed it gives a person a chance to come to terms with wearing aids and meeting others in a similar situation. I found it takes a long time to admit deafness and be open about it. Quoted in Lamb & Archbold 2016 a).





THE CRUCIAL ROLE OF PRIMARY CARE

One of the biggest influences on public response to hearing loss is the attitude of primary care physicians but hearing loss is often treated as a low priority.

- A U.S. survey ranked hearing loss the least important condition to address in adults over 50 — below Alzheimer’s disease, diabetes, obesity, and vision loss (Sydlowski et al., 2022).
- Only 46% of providers reported routinely recommending hearing screening, compared with 60% for vision screening (Sydlowski et al., 2022).
- Racine (2020) found that while most primary care physicians acknowledged the benefits of hearing aids, few proactively discussed hearing problems.

This lack of attention has consequences. As Dillard et al. (2024) argue, better education is needed to “reduce misperceptions towards individuals with hearing loss, and ultimately, encourage individuals with hearing loss to seek hearing care in a timely and appropriate manner.” Carlson et al. (2022) further note that while adults generally understand “normal” vision, blood pressure, and cholesterol levels, most lack even basic literacy around normal hearing levels and available treatment options. This reflects a serious gap in public health knowledge related to hearing loss.

“Most adults believe that few treatment options exist for the management of hearing loss. Underlying the uniformly limited literacy surrounding hearing loss and its treatment options is the adult population’s lack of appreciation for the long-term health sequelae of untreated hearing loss” (Carlson et al., 2022).

WHY HAS ADULT HEARING SCREENING STILL NOT BEEN IMPLEMENTED?

The traditional approach to the implementation of screening provision is through screening committees reviewing evidence and recommending or rejecting national screening programmes. Given the importance of early detection and action on hearing loss, the effectiveness of hearing technologies and the long time between people beginning to lose their hearing and taking action, it is disappointing that routine national hearing screening has been rejected for adults in systems which have public provision and those with private provision of hearing technology.

SCREENING DECISIONS

- UK (NSC, 2021): Rejected adult hearing screening, citing insufficient evidence.
- U.S. (USPSTF, 2021): Similar conclusion, though acknowledging reliable methods for identifying hearing loss (Feltner et al., 2021).

These decisions have been criticized for relying heavily on randomized controlled trials (RCTs) while disregarding large-scale patient and industry surveys (“grey literature”), which consistently show rising acceptance and usage of hearing aids (Lamb and Archbold 2016 a; EHIMA, 2022, 2024a&b; Dillon et al., 2020). A review of the screening committee’s arguments noted while the committee did not think there was sufficient evidence to support hearing screening this did not “mean insufficient benefit.” from hearing instruments (Yueh et al., 2021). There is also significant additional evidence of the benefits of hearing aids in addressing some of the specific health issues and improving quality of life since the decisions and further consideration should be given considering the new evidence and changing context explored below.

THE CHANGING CONTEXT OF HEARING CARE

In addition to increased evidence, there has been a revolution in hearing care and technology.

Since the 2021 reviews, the hearing health landscape has shifted dramatically:

- Over-the-counter (OTC) hearing devices are now permitted in the USA, UK, Australia and many other jurisdictions, improving accessibility and affordability with regulatory approval and medical-grade claims (Apple, 2024,25)
- Consumer technology integration: Hearing screening apps, including those integrated into smartphones, and other hearing enhanced devices
- Direct-to-consumer options: Individuals can now self-test and access amplification devices without needing specialist referral.

Direct access to consumers opens up new ways for people to address their hearing loss. This includes increasing integration and development of consumer products that have multiple functions including addressing hearing loss and improved hearing technology.

Multiple applications now enable people to check their hearing without the intervention of an audiologist (Yueh et al, 2021). Since the UK’s negative assessment of app-based screening tests there have been further developments of internet-based apps which have been evaluated as being successful by the American screening review and by Dawes et al., (2021).

In the context of paying systems such as the USA, the development of more affordable solutions with opportunistic screening and the use of new hearing technology will open up more accessible and affordable options. It will help answer the question if people are given the option for easier access, will they take it? As “Only now that hearing care is poised to be more accessible and affordable for US adults can we realistically begin to answer this question” (Deal, J et al., 2021).

Public bodies which commit significant resources to public health programmes clearly require that there should be evidence of effectiveness. However, the development of markets for hearing products changes the context for testing hearing and provision of hearing instruments, questioning the whole approach of screening committees as decision makers. Even where there is public provision such as the UK, the government has allowed access to private provision for those who could afford it through registered providers. A review of the American decision rejecting screening suggested, “Only in the context of these fundamental changes to hearing health care can the question of screening programs be addressed” (Deal & Lin, 2021).

LOOKING AHEAD

The central question is no longer whether adult hearing screening is valuable — the evidence of benefit is clear — but how screening should be implemented. Which populations should be targeted, and what role primary care and technology should play in delivery?

Opening Up Access Through OTC Devices

The introduction of over-the-counter (OTC) hearing devices has opened up the potential for mass trialling of patient-selected hearing aids and similar technologies. This shift, occurring in countries that have implemented such policies, raises important questions about the broader impact on hearing health strategies.

What are OTCs?

In the US purchasing hearing devices “over the counter” without a professional audiologist has been approved since 2022, and there are a wide variety of devices to choose from. They range from self-fitting hearing devices that you buy specifically to improve hearing, to mainstream audio devices like AirPods with specialist hearing features.

Since Deal and Lin’s early observations on the proposed liberalisation of the hearing aid market, significant policy changes have occurred. In addition to the US legislation, the UK Government recently relaxed its guidelines to allow OTC devices, provided no advice is given about their suitability (UK Government, 2025). Australia has adopted a similar position (Australian Government, 2024), and many other countries have also begun licensing these devices. Innovative combinations are also emerging, such as instruments that integrate hearing technology into spectacles, providing situational hearing enhancement (Optometry Today, 2025).

Despite these developments, affordability remains a major barrier in private provider markets for hearing aids and more traditional hearing solutions. In the United States, for example, “Obtaining hearing aids costs a mean of \$4700, requires multiple clinic-based appointments with a specialist, and is not covered by Medicare or by most insurers. Therefore, for many US adults, this out-of-pocket cost for a pair of hearing aids could represent their third-largest material purchase in life, after a house and car. Unsurprisingly, rates of hearing aid use among adults are low, with less than 20% of adults with a hearing loss reporting hearing aid use.” (Deal & Lin, 2021). In systems with greater state provision, such as Denmark, uptake rates for traditional hearing aids are significantly higher and associated with cost savings for health and social care (O’Neil et al., 2016).

The introduction of OTC products makes it possible for consumers to access lower-cost hearing solutions without undergoing traditional audiological testing. These developments leverage advances in hearing-related technologies to create mass-market options priced below conventional private-market hearing aids. In countries where private markets dominate, such innovations expand access and choice.

THE IMPACT OF EXPANDED ACCESS

Advances in hearing technology are reshaping traditional assumptions about medical regulation and screening. The integration of “clinical grade” features (Apple 2024, 2025) into popular consumer devices such as earbuds allows testing and amplification options that have led to the extension of established regulatory frameworks to enable them to be used. This shift is particularly significant in countries where patients must pay for devices, as lower-cost alternatives offer easier access to hearing care.

The widespread availability of self-testing options—including those provided by voluntary organisations and initiatives such as the Hearing Numbers campaign (John Hopkins University, 2025)—is further raising public awareness and encouraging earlier action. These changes create new models of provision that challenge established medical systems.

The new models of provision and choice for consumers open up challenges to established medical regulations around hearing loss instruments and how health systems are organised. National hearing screening programmes stringent tests and criteria are in danger of being superseded by what the market and reorganised health systems offer with multiple routes to managing hearing loss.

However, the danger is a less regulated space for patients/consumers requiring checks and balances to ensure people continue to access “gold standard” audiology services (RNID, 2025). Screening committees and health regulators therefore face a dual responsibility: to evaluate the effectiveness of interventions and to consider consistency, safety, and standards in this evolving space. This includes promoting accurate patient information, establishing clear referral pathways, and safeguarding access to professional assessment and support.

WHO SHOULD BE SCREENED AND HOW?

In the absence of national government approved and support screening programmes there are standards for setting up screening programmes nationally, locally and for more opportunistic screening programmes which can be promoted as part of good healthcare and more general health screening for those over 50 years of age.

WHO PRINCIPLES

The World Health Organization recommends hearing screening for older adults in their recent implementation handbook for hearing screening and in the World Report on Hearing 2021 (WHO, 2021).

Who recommends that;

“**All adults, from the age of 50 years should be screened regularly for hearing loss. Screening may be conducted at 5-yearly intervals until the age of 64 years. From 65 years of age, the frequency of screening should be increased to every 1–3 years. Wherever possible, hearing screening schedules should align with other health checks.**

P37 (WHO, Hearing Screening Implications, 2021)

WHO identifies the principles underpinning hearing screening programmes for older people including the following:

- Diagnostic audiology services must be developed in parallel with screening programmes and should be available to those referred through screening programmes.
- Interventions, including hearing technology and rehabilitation services, must be made available and recommended based on a person-centred approach; they must support the individual’s listening needs and preferences, and not be based solely on the audiological test results.
- The care pathways and follow-up should be outlined at the time of intervention planning and integrated in the comprehensive care pathway. This is essential so that people identified with hearing loss can benefit from options for person-centred care following the screening.
- Integration with other health checks; hearing screening should be part of routine health checks or combined with other health interventions (e.g. general physical check-up, eye screening, dental care etc.).
- Screen hearing capacity in conjunction with other domains of intrinsic capacity (malnutrition, cognition, mobility, mood, vision) as well as underlying diseases. It can also be included in evaluation of people with comorbidities such as those with diabetes and cognitive impairments.
- Professional accountability, risk management, quality assurance, and programme evaluation must be developed prior to implementation of any screening programme (WHO, 2021).

WHO’s guidance provides a detailed framework for countries seeking to establish or improve screening programmes across both child and adult populations.



CLINICAL PRACTICE GUIDELINES IN THE US

Recent US Clinical Practice Guidelines, developed from a review of the literature and clinician consensus, recommended offering screening to all adults from the age of 50 regardless of whether they present with hearing loss at the time of a health care encounter.

The recommendations include:

- Educate patients about the seriousness of hearing loss
- Counsel on communication strategies and assistive listening devices
- Refer for appropriate provision of amplification where applicable
- Recheck within a year
- If hearing loss is reported or concern about hearing is expressed, reassess hearing at least every three years
- Clinicians should refer patients for an evaluation of CI candidacy when patients have appropriately fit amplification and persistent hearing difficulty with poor speech understanding.

They also concluded that:

“**Any time and place that a patient interacts with the health care system is an opportunity for preventative health care, such as hearing screening, to occur. The perception that only audiologists and otolaryngologists should screen for hearing loss can perpetuate the limited access and utilization of hearing health care and the adverse effects of untreated hearing loss.**

(Betty S. et al., 2024).

LIVING GUIDELINES GUIDANCE ON SCREENING

An international consensus process, involving both audiology professionals and patient groups, reviewed best practice in hearing screening. The evidence strongly supported opportunistic screening in primary care:

“**Primary healthcare practitioners play a crucial role in detecting hearing loss in adults. As the first point of contact for many patients, they are in a unique position to identify hearing loss early on and make a referral for a full audiological assessment by a hearing healthcare specialist.**

(Adult Hearing, 2021)

Taken together, these examples—spanning consensus statements and practice guidelines—demonstrate a high degree of professional alignment around the value of adult hearing screening. They also provide clear, evidence-based recommendations that could be readily implemented by health systems, even those without current screening programmes.

“**A screening programme would be helpful because when you have a hearing loss at first you just put up with it and tend to say that it is not a problem whereas to others it can be!**

(An adult with hearing loss)

SUMMARY

THE FUTURE OF HEARING SCREENING

Adult Hearing screening is clearly at a critical juncture. Despite the absence of support from national screening committees, new technologies—including screening apps, internet-based tools, and self-fitting OTC devices—are fundamentally altering the way the public relates to access hearing testing, taking it out of the hands of primary care providers and audiologists. Self-fitting hearing aids, OTCs, and cheaper high street provision in some countries is also increasing both awareness and uptake. These approaches are welcomed by some health systems, such as in England (*Dept of Health, 2025*), as ways of addressing the pressures on overstretched services.

While national committees continue to apply strict “gold standard” criteria of proof, the broader context and practice has evolved. The public now has multiple routes to identify and manage hearing loss, often outside traditional medical frameworks. Ensuring that people can access high-quality tests, appropriate interventions, and timely referral to audiology services remains a central challenge. While these changes present real opportunities to improve hearing health, we need to ensure that patients and consumers are able to access high quality testing, audiology services and solutions which meet their needs and ensure that complex needs are not overlooked (*BAA, 2025*).

If screening committees and health systems fail to adapt, they risk becoming irrelevant as consumer behaviour overtakes policy guidance. Such a gap would not necessarily support patient safety or address the needs of the most vulnerable populations.

The urgency is underscored by the rising prevalence of adult hearing loss, which brings additional risks for individuals and significant demands on health and social care. Without stronger public health strategies, these challenges may escalate into a wider crisis with consequences for health and social care services. While new technologies offer enormous potential, they may remain underutilised unless embedded within coherent public health frameworks that highlight the importance of early action to address hearing loss.

“

They are the shop and I am the customer...

(*CIICA, Foundation document*)



RECOMMENDATIONS FOR HEALTH FUNDERS AND PLANNERS

To address this evolving context, health systems should;

- Implement adult screening programmes in line with WHO and other international guidelines
- Acknowledge links to cognitive health, including the potential for early detection to mitigate risks of dementia and cognitive decline
- Recognise cost-effectiveness, as evidence shows screening delivers significant savings even in older populations, and integrate hearing care into strategic health planning
- Promote earlier intervention, including the timely fitting of hearing aids and cochlear implants, both evidenced to be more effective when adopted earlier
- Embed patient perspectives, ensuring individuals have access to up-to-date information, resources, and support to take action on their hearing loss.

Hearing technology is advancing at a dramatic pace, offering new ways for individuals to address hearing loss and increasing public awareness. Adult hearing screening provides a vital opportunity to harness these developments—raising awareness among both the general public and health professionals, enabling earlier intervention for the growing numbers of people who need hearing care and support, proven to be effective and cost-effective.

REFERENCES

- Adult Hearing, (2021). <https://adultheating.com/living-guidelines/>
- Aazh, H, et al., (2015). Hearing-aid use and its determinants in the UK National Health Service: A cross-sectional study at the Royal Surrey County Hospital. *Int. J. Audiol.* 2015;54:152–161. doi: 10.3109/14992027.2014.967367
- Amieva H, et al., (2015). Self-reported hearing loss, hearing aids, and cognitive decline in elderly adults: A 25-year study. *Journal of American Geriatrics Society*, 63(10), 2099–2014.
- Archbold, S, Lamb, B, et al., (2014). The Real Cost of Adult Hearing Loss: reducing its impact by increasing access to the latest hearing technologies.
- Armitage, C. J., Munro, K. J., et al., (2021). What health policy makers need to know about mismatches between public perceptions of disease risk, prevalence and severity: a national survey. *International Journal of Audiology*, 60(12), 979–984. <https://doi.org/10.1080/14992027.2021.1881175>
- Apple, (2025). <https://www.apple.com/uk/airpods-pro/hearing-health/>
- Apple, (2024). Using AirPods Pro 2 with iPhone and iPad to Help Protect, Assess, and Assist Hearing www.apple.com/health/pdf/Hearing_Health_Features_on_AirPods_Pro_2_October_2024.pdf
- Australian Government, (2025). <https://www.theguardian.com/australia-news/2025/mar/26/apple-airpods-pro-2-hearing-aids-use-australia-tga>
- BAA, (2025). UK Audiology Sector Guidance on OTC Hearing Aids <https://baaudiology.org.uk/audiology-sector-issues-guidance-on-otc-hearing-aids/>
- Betty, S. et al, (2024). Clinical Practice Guideline: Age-Related Hearing Loss. *Otolaryngology–Head and Neck Surgery* Volume 170, Issue S2 May 2024 Pages S1–S54
- Bisgaard N, Zimmer, S, Laureyns, M, et al., (2022). A model for estimating hearing aid coverage worldwide using historical data on hearing aid sales. *Int J Audiol.* 2022;61:841–9.
- Bond, M. et al., (2009). The effectiveness and cost effectiveness of cochlear implants for severe and profound deafness in children and adults: A systematic review and economic model. *Health Technology Assessment*, 13(44), 1–330
- Carlson, ML, et al., (2022). Hearing Health Collaborative. Awareness, Perceptions, and Literacy Surrounding Hearing Loss and Hearing Rehabilitation Among the Adult Population in the United States. *Otol Neurotol.* 2022 Mar 1;43(3):e323–e330. doi: 10.1097/MAO.0000000000003473. PMID: 35061637; PMCID: PMC8843398
- CIICA, Foundation document <https://ciicanet.org/about-us/why-ciica/>
- Contrera, K et al., (2015). Association of hearing impairment and mortality in the National Health and Nutrition Examination Survey. *JAMA Otolaryngol Head Neck Surg.* 141(10), 944–946.
- Davis, A, et al., (2007). Acceptability, benefit and costs of early screening for hearing disability: A study of potential screening tests and models. *Health Technol Assess*, 11, 1–294.
- Davis, A, (2011). National survey of hearing and communication.
- Davis, A, et al., (2016). Aging and hearing health: The life-course approach. *Gerontologist*, 56, Suppl2, S256–S267.
- Dawes, P, Munro, KJ, et al., (2021): Uptake of internet delivered UK adult hearing assessment, *International Journal of Audiology*, DOI:10.1080/14992027.2021.1886353
- Dawes P, Munro KJ, (2024). Hearing Loss and Dementia: Where to From Here? *Ear Hear.* 2024 May-Jun 01;45(3):529–536. doi: 10.1097/AUD.0000000000001494. Epub 2024 Feb 21. Erratum in: *Ear Hear.* 2024 Sep-Oct 01;45(5):1088. doi: 10.1097/AUD.0000000000001521. PMID: 38379156; PMCID: PMC11008448.
- Dawes, P, et al., (2024). Do people with cognitive impairment benefit from cochlear implants? A scoping review. *European Archives of Oto-Rhino-Laryngology* <https://doi.org/10.1007/s00405-024-08719-5>
- Deal J et al., (2015). Hearing impairment and cognitive decline: A pilot study conducted within the atherosclerosis risk in communities' neurocognitive study. *Am J Epidemiol*, 181(9), 680–690.
- Deal, JA, Lin FR. (2021). USPSTF Recommendations for Hearing Loss Screening in Asymptomatic Older Adults—A Case of Missing Evidence and Missing Treatment Options. *JAMA Netw Open.* 2021;4(3): e210274. doi:10.1001/jamanetworkopen.2021.0274.
- Department of Health (2025). <https://www.gov.uk/government/news/green-light-for-groundbreaking-hearing-aids>
- Dillard LK, Mishra P, Der CM, Chadha S. (2024). Perceptions of hearing loss and hearing technology among the general public and healthcare providers: a scoping review. *BMJ Public Health.* 2024 Oct 15;2(2):e001187. doi: 10.1136/bmjph-2024-001187. PMID: 40018640; PMCID: PMC11816092.
- Dillon, H., Day, John., et al., (2020): Adoption, use and non-use of hearing aids: a robust estimate based on Welsh national survey statistics. *International Journal of Audiology*, DOI: 10.1080/14992027.2020.1773550
- Döge J, et al., (2023). The Prevalence of Hearing Loss and Provision With Hearing Aids in the Gutenberg Health Study. *Dtsch Arztebl Int.* 2023 Feb 17;120 99–106. doi: 10.3238/arztebl.m2022.0385. PMID: 36519221; PMCID: PMC10132285.
- Dubno et al., (2022). A pragmatic clinical trial of hearing screening in primary care clinics: cost-effectiveness of hearing screening. *Cost Effectiveness and Resource Allocation* (2022) 20:26 <https://doi.org/10.1186/s12962-022-00360-5>
- EHIMA, (2022). Marke Trak Survey.
- EHIMA, (2024a). Getting the numbers right on Hearing Loss
- EHIMA, (2024b). Hearing Care and Hearing Aid Use in Europe Joint AEA, EFHOH, EHIMA report.
- Feltner, C, et al., (2021). Hearing loss in older adults: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA.* 2021;325(12):1–6. doi:10.1001/jama.2020.24855
- Ferguson M.A., et al., (2017). Hearing aids for mild to moderate hearing loss in adults. *Cochrane Database Syst. Rev.* 2017; 2017: CD012023. doi: 10.1002/14651858.CD012023.pub2.
- Francis L, Seshadri S, et al., (2025). Self-Reported Hearing Aid Use and Risk of Incident Dementia. *JAMA Neurol.* Published online August 18, 2025. doi:10.1001/jamaneurol.2025.2713
- Friberg, E, et al., (2014). Sickness absence and disability pension due to otoaudiological diagnoses: Risk of premature death – a nationwide prospective cohort study. *BMC Public Health*, 14, 137.
- Hay, Simon I et al. (2024) Burden of 375 diseases and injuries, risk-attributable burden of 88 risk factors, and healthy life expectancy in 204 countries and territories, including 660 subnational locations, 1990–2023: a systematic analysis for the Global Burden of Disease Study 2023 *The Lancet*, Volume 406, Issue 10513, 1873 – 1922
- Haile, LM, et al., USA Hearing Loss Collaborators Global Burden of Disease Collaborators; (2024). Hearing Loss Prevalence, Years Lived with Disability, and Hearing Aid Use in the United States From 1990 to 2019: Findings from the Global Burden of Disease Study. *Ear Hear.* 2024 Jan-Feb 01;45(1):257–267. doi: 10.1097/AUD.0000000000001420.
- Hopkins, John, (2025). <https://hearingnumber.org/for-health-professionals/>
- Hsu, A. K., Bassett, S. M., et al., (2021). Cost-Effectiveness of Hearing Screening in Older Adults: A Scoping Review. *Research on Aging*, 44(2), 186–204. <https://doi.org/10.1177/01640275211008583>
- Jørgensen et al., (2022). Hearing loss, sick leave, and disability pension: findings from the HUNT follow-up study. *BMC Public Health* (2022) 22:1340. <https://doi.org/10.1186/s12889-022-13760-2>
- Keidser G, Convery E. (2016). Self-Fitting Hearing Aids: Status Quo and Future Predictions. *Trends in Hearing.* 2016;20. doi:10.1177/2331216516643284
- Kervasdoué, J, & Hartmann, L. (2016). Economic impact of hearing loss in France and developed countries: A survey of academic literature 2005–2015. Available: <https://www.ehima.com/wpcontent/uploads/2016/05/FinalReportHearingLossV5.pdf>
- Kochkin, S, (2007). The impact of untreated hearing loss on household income. *Better Hearing Institute.*
- Kochkin, S, (2010). The efficacy of hearing aids in achieving compensation equity in the workplace. *The Hearing Journal*, 63(10), 19–28.
- Lamb, B, Archbold, S, O'Neill, C, (2015). Bending the spend: Expanding technology to improve health, wellbeing and save public money. Nottingham, England: The Ear Foundation.
- Lamb, B, Archbold, S, (2016 a). Adult Hearing Screening. Can we afford to wait any longer? Ear Foundation.
- Lamb, B, Archbold, S and O'Neill, C, (2016 b). Spend to save: Investing in hearing technology improves lives and saves society money. A Europe Wide Strategy.
- Lin, FR, et al., (2011). Hearing loss and incident dementia. *ArchNeurol*, 68(2), 214–220
- 4 Lin, FR, et al., (2023); ACHIEVE Collaborative Research Group. Hearing intervention versus health education control to reduce cognitive decline in older adults with hearing loss in the USA (ACHIEVE): a multicentre, randomised controlled trial. *Lancet.* 2023 Sep 2;402(10404):786–797. doi: 10.1016/S0140-6736(23)01406-X.

- Livingston, G. et al., (2024). Dementia prevention, intervention, and care: 2024 report of the Lancet standing Commission. *The Lancet*, Vol. 404, No. 10452. Published: July 31, 2024
- Linssen, Anouk M, et al., (2015). The Cost-Effectiveness of Different Hearing Screening Strategies for 50- to 70-Year-Old Adults: A Markov Model. *Value in Health*, Volume 18, Issue 5, 560 – 569, 2015
- Mahmoudi, E. et al., (2018). Association between hearing aid use and health care use and cost among older adults with hearing loss. *JAMA Otolaryngol Head Neck Surg*, 144(6), 498-505.
- Marcos-Alonso S, et al., (2023). Factors Impacting the Use or Rejection of Hearing Aids-A Systematic Review and Meta-Analysis. *J Clin Med*. 2023 Jun 13;12(12):4030. doi: 10.3390/jcm12124030. PMID: 37373724; PMCID: PMC10299666.
- Matthews, L, (2013). Hearing loss, tinnitus and mental health: A literature review. *Action on Hearing Loss*.
- Morris, A et al., (2012). An economic evaluation of screening 60- to 70-year-old adults for hearing loss. *Journal of Public Health*, 49(1), 139-146.
- Mosnier, I, et al., (2014). Predictive factors of cochlear implant outcomes in the elderly. *Audiol Neurootol*, 19 Suppl 1, 15-20.
- Ng, Z, et al., (2016). Perspectives of adults with cochlear implants on current CI services and daily life. *Cochlear Implants International*, 17 Supp 1, 89-93.
- National Screening Committee (2021) Screening for hearing loss in adults External review against programme appraisal criteria for the UK National Screening Committee.
- O'Neill, C, Lamb, B, Archbold, S, (2016). Cost implications for changing candidacy or access to service within a publicly funded healthcare system? *Cochlear Implants International*, 17 Suppl 1, 31-35.
- Optometry Today March 2025 (<https://www.aop.org.uk/ot/100-percent-optical/2025/03/31/combining-fashionable-eyewear-with-an-invisible-hearing-solution>)
- Orji A, Kamenov K, (2020). Global and regional need, unmet needs and access to hearing aids. *Int J Audiol*. 2020;59:166–172
- Pichora-Fuller, MK, et al., (2015). Hearing, cognition, and healthy aging: Social and public health implications of the links between age-related declines in hearing and cognition. *Semin Hear*, 36(3), 122-139.
- Picou EM, (2022). Hearing Aid Benefit and Satisfaction Results from the MarkeTrak 2022 Survey: Importance of Features and Hearing Care Professionals. *Semin Hear*. 2022 Dec 1;43(4):301-316. doi: 10.1055/s-0042-1758375. PMID: 36466566; PMCID: PMC9715311.
- Racine S. City University of New York; (2020). Primary care physician perceptions of hearing loss and amplification: a survey.
- Ramdoo K, Bowen J, (2014). Opportunistic hearing screening in elderly inpatients. *SAGE Open Medicine*. 2014;2. doi:10.1177/2050312114528171)
- RNID, (2025). <https://rnid.org.uk/2025/01/government-gives-go-ahead-to-selling-over-the-counter-hearing-aids/>
- Rolfe, C., & Gardner, B, (2016). Experiences of hearing loss and views towards interventions to promote uptake of rehabilitation support among UK adults. *International Journal of Audiology*, 55(11), 666–673.
- Seo, Hee Won; Ryu, Soorack; et al., (2025) Cochlear Implantation Is Associated With Reduced Incidence of Dementia in Severe Hearing Loss. *Ear & Hearing* 46(5):p 1189-1196, September/October 2025. | DOI: 10.1097/AUD.0000000000001660
- Simpson, Annie; Matthews, Lois J, (2019). Time from Hearing Aid Candidacy to Hearing Aid Adoption: A Longitudinal Cohort Study. *Ear and Hearing* 40(3):p 468-476, May/June 2019. | DOI: 10.1097/AUD.0000000000000641
- Shield, B. (2019). Hearing Loss – Numbers and Costs-evaluation of the social and economic costs of hearing impairment. A report for Hear-It AISBL. 2019
- Shukla, A, et al., (2020). Hearing Loss, Loneliness, and Social Isolation: A Systematic Review. *Otolaryngol Head Neck Surg*. (2020). May;162(5):622-633. doi: 10.1177/0194599820910377. Epub 2020 Mar 10. PMID: 32151193; PMCID: PMC8292986
- Stropahl, M, Scherpiet, S and Launer, S (2024). Viewpoint on the Benefit of Hearing Care on Cognitive Health. *American Journal of Audiology*. Volume 33, Number 2. Pages 606-610 https://doi.org/10.1044/2024_AJA-23-00176
- Sydłowski SA, Marinelli JP, et al., (2022). Hearing health perceptions and literacy among primary healthcare providers in the United States: a national cross-sectional survey. *Otol Neurotol*. 2022;43:894–9. doi: 10.1097/MAO.0000000000003616.
- Tordrup D, Smith R, et al., (2022). Global return on investment and cost-effectiveness of WHO's HEAR interventions for hearing loss: a modelling study. *Lancet Glob Health* 2022; 10: e52–62.
- UK Government, (2025). Hearing aids in the UK - policy statement <https://www.gov.uk/government/publications/hearing-aids-in-the-uk/hearing-aids-in-the-uk-policy-statement>
- USPSTF (2021) US Preventive Services Task Force. Screening for Hearing Loss in Older Adults: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2021;325(12):1196–1201. doi:10.1001/jama.2021.2566
- WHO, World report on Hearing (2021).
- WHO, (2021). Health Organization. Hearing Screening: considerations for implementation. 2021. <https://www.who.int/publications/i/item/9789240032767>
- WHO, (2025). <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss>
- Xiao, M., & O'Neill, C. (2018). A comparative examination of healthcare use related to hearing impairment in Europe. *Global and Regional Health Technology Assessment*, 5(1). <https://doi.org/10.33393/grhta.2018.450>
- Yeo BSY, Song HJJ, et al., (2023). Association of Hearing Aids and Cochlear Implants with Cognitive Decline and Dementia: A Systematic Review and Meta-analysis. *JAMA Neurol*. 2023;80(2):134–141. doi:10.1001/jamaneurol.2022.4427
- Yu, Ruan-Ching, et al., (2024). Adult-onset hearing loss and incident cognitive impairment and dementia – A systematic review and meta-analysis of cohort studies, *Ageing Research Reviews*, Volume 98, 2024, 102346, ISSN 1568-1637, <https://doi.org/10.1016/j.arr.2024.102346>
- Yueh B, Collins MP, Souza PE, et al., (2010). Long-term effectiveness of screening for hearing loss: the Screening for Auditory Impairment – Which Hearing Assessment Test (SAI-WHAT) randomized trial. *J Am Geriatr Soc* 2010; 58:427–34.)
- Yueh B, Piccirillo JF, (2021). Screening for Hearing Loss in Older Adults: Insufficient Evidence Does Not Mean Insufficient Benefit. *JAMA*. 2021;325(12):1162–1163.
- Yulia I Carroll; John Eichwald; et al., (2017). Vital Signs: Noise-Induced Hearing Loss Among Adults — United States 2011–2012 *Weekly / February 10, 2017 / 66(5);139–144* On February 7, 2017)

Brian Lamb MSc, Sue Archbold PhD. 2026.

Supported by a grant from Fundación AICE, Spain, and Advanced Bionics. The work is that of the authors.

JOIN CIICA

Join CIICA to make change happen and to share resources and activities

Email info@ciicanet.org



www.ciicanet.org

