



Response to U.S. Preventive Services Task Force's Draft Recommendation Statement and Draft Evidence Review: Screening for Hearing Loss in Older Adults

Developed by the American Academy of Audiology Scientific Advisory and Research Council (Nick Reed, AuD, Chair), and the Research Initiatives Committee (Ryan McCreery, PhD, Chair)

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The American Academy of Audiology acknowledges the draft recommendation statement "Hearing Loss in Older Adults: Screening" by the United States Preventive Services Task Force (USPSTF) (2020) and agrees with the ultimate conclusion that the current evidence is insufficient to assess the balance of benefits and harms of screening for hearing loss in older adults. While it is disappointing that the USPSTF reaffirms that the necessity of hearing screening in older adults is inconclusive, the American Academy of Audiology understands that this conclusion is drawn from a strict review of the state of the current science.

Nonetheless, the Academy would like to call attention to the following points:

- 1. Recent literature offers evidence of the absence of and need for effective adult hearing screening. Specifically, Mormer et al (2020) noted a lack of hospital-based hearing screening programs and found a high prevalence of hearing loss in hospital-admitted adults that led to communication breakdowns that could impact patients' adherence to treatment plans. In another study, Tsimpida et al (2020) used data from the English Longitudinal Study of Aging and found that self-report measures of hearing had limited efficacy and underscored the importance of establishing an effective and sustained strategy for hearing screening.
- 2. Hearing loss is common among older adults and impacts nearly half of all adults older than age 60 (Lin et al, 2016). Moreover, older adults tend to underestimate their hearing loss (Kamil et al, 2015). However, even more mild hearing losses are associated with increased risk for cognitive decline and dementia. While it remains unknown that screening for hearing loss results in action to address hearing loss and whether said action mitigates the association of hearing loss and cognitive decline and/or dementia, it may be important to screen accurately for hearing loss for physicians to assess patient risk of poor health outcomes such as cognitive decline and dementia.

- 3. Untreated hearing loss can negatively impact scores on orally administered tests of cognition (Fullgrabe, 2020; Saunders et al, 2018; Guerreiro and Van Gerven, 2017; Qian et al, 2017; Jorgensen et al, 2016; and Dupuis et al, 2015). Without hearing screening, individuals are not identified and cognitive scores may be inaccurate leading to inappropriate recommendations.
- 4. It is the Academy's position that, based on a systematic review by Chisholm et al (2007) of within-subject design studies pre- and post-hearing-aid fitting, hearing aid use improves health-related quality of life by reducing the psychological, social, and emotional impact of sensorineural hearing loss. The USPSTF should acknowledge that there is emerging evidence in the literature of benefit to hearing aid use.
- 5. There appears to be a discordance between the goal of the statement (i.e., the effectiveness of screening) and the desired outcome as the effectiveness of hearing treatment. Screening can only lead to treatment; the assessment of the effectiveness of treatment through trials is a different question. Even more complex is the question of the relationship between screening, treatment, and health outcomes.
- 6. To that extent, the report should acknowledge its role as a barrier to understanding the impact of hearing screening in the United States. An "inconclusive" recommendation on adults hearing screening by the USPSTF reduces the likelihood of physician-led screening of older adults and results in less opportunities to study the effectiveness (i.e., realworld) outcomes from hearing screening. Importantly, a paucity of observational data limits the ability to study the complex relationship between screening, action on hearing care, and effectiveness of said hearing care impacting health outcomes. By nature, clinical trials lack generalizability to the health care system due to their rigid methods that limit inclusion/exclusion criteria and attract participants that may be different from the general population by design.

Importantly, the American Academy of Audiology feels that, as a leading organization that supports professionals in the field of hearing health care, an important goal of our members is to support closing the knowledge gaps that contributed to the current "inconclusive" findings of the USPSTF's evidence review. It is important to the mission of the American Academy of Audiology that the USPSTF has the information necessary to make a conclusive statement on hearing screening for older adults in the future. It is incumbent upon the profession to produce the documentation, or sufficient evidence to meet the stringent criteria of the USPSTF, to validate our extensive clinical findings of the benefits of screening. To advance this endeavor, the Academy will take the following actions:

1. The Academy will elevate adult hearing screening as a research priority and specifically will seek to engage appropriate research funders in these efforts.

- 2. The Academy will increase its outreach efforts to physicians, public health officials, and other stakeholders to facilitate inclusion of hearing screening as part of a standard of care and promote our position on the value of adult hearing screening. In addition to our priority of public hearing health, the goal of this action is to establish potential observational datasets to assess the complex relationship between hearing screening, hearing care, and effectiveness of hearing care on health outcomes.
- 3. Lastly, the Academy will advance a task force with the following goals:
 - a. A review of literature and clinical practice to produce a recommendation of best practice hearing screening in adults.
 - b. Given that most hearing screening research fails to include "benefit" and "harm" measures beyond "hearing aid adoption," drafting of guidance on these important measures, in alignment with previous USPSTF reports, for inclusion in future research within the audiologic and hearing science communities.
 - c. Exploration of partnerships with the organizations identified in action #2 for pragmatic research on hearing screening.

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