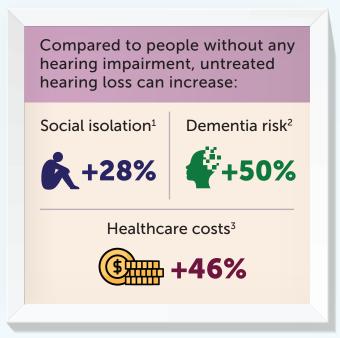
Economics of Hearing Health





The Brainomics® team subscribes to the concept of doing the best things first⁴ – for us that means advancing the simplest interventions that offer the greatest return on brain health. Today, we turn our attention toward the frequently-overlooked impact of untreated hearing loss.

No one waits to go blind before getting glasses, yet only 1 in 7 individuals with hearing loss wears hearing aids.⁵ So we ask, why are so many Americans neglecting their hearing health?

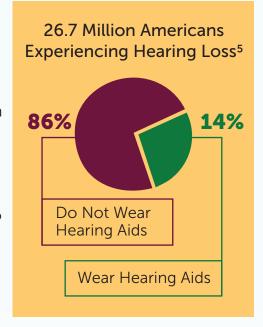
The Case for Urgency

Perhaps what's missing is awareness of the intimate connection between an individual's hearing ability and lifestyle factors that help to maintain and strengthening brain performance over time. According to a systematic review of recent related research conducted by the Lancet Commission, maintaining the ability to hear could prevent nearly 7% of all dementia cases.⁶

Simply put, when hearing health is compromised, so is the richness of human interaction – an important aspect of promoting, protecting and preserving brain health across the lifespan.

Untreated hearing loss causes an individual's cognitive batteries to wear down more quickly, a result of struggling to catch every word and decipher meaning. The cognitive strain of this effort to stay engaged imposes a significant tax on one's health, often contributing to feelings of marginalization, confusion and a desire to further withdraw from social events as a means of coping with the problem.

Unfortunately, the combination of mental fatigue, diminished social interactions and disconnection from environmental stimuli (like bird song, ambient chatter and traffic noise) makes hearing loss one of the top risk factors for dementia.⁶





The Good News

Prevention and early action make a difference. Taking action is not only economically feasible – but remarkably efficient. According to the World Health Organization (WHO), scaling up global ear and hearing care services would require investing less than \$1.40 USD per person annually.⁷ Looking forward over 10 years, WHO predicts an ROI of 16:1 on this modest investment.

At Brainomics, we wonder if an effective way to catch hearing loss early is to provide economic incentives. What if we paid

patients, or provided insurance discounts for each hearing screening and/or hearing aid adoption? What other ideas might be out there?

Let's make it easy for people to say yes to taking proactive care of their hearing health, because in the long-run, these steps will also protect their most valuable economic asset – their brain.

Deafness ≠ poor brain health

Members of the deaf community are highly expressive communicators who demonstrate remarkable neural adaptation for nonverbal communication.8 The risks covered in this bulletin concern individuals who rely soley on spoken communication and do not address progressive hearing loss.



Hearing health is brain health, and a quick screening could be one of the smartest ways to protect both. Untreated hearing loss doesn't just cost money; it costs connection, clarity and quality of life. Investing in hearing care is good for our wallets, our relationships and our minds.

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⁸Kumar U, et al. (2024). Mapping the unique neural engagement in deaf individuals during picture, word, and sign language processing: fMRI study. Brain Imaging and Behavior



¹Huang A, et al. Hearing and Vision Impairment and Social Isolation Over 8 Years in Community-Dwelling Older Adults. BMC Public Health.

²Deal J, et al. (2019). Incident Hearing Loss and Comorbidity: A Longitudinal Administrative Claims Study. *JAMA Otolaryngology Head & Neck Surgery*.

³Reed N, et al. (2019). Trends in Health Care Costs and Utilization Associated with Untreated Hearing Loss Over 10 Years. *JAMA Otolaryngology Head & Neck Surgery.*

⁴Lomborg B. (2023). Best Things First. Copenhagen Consensus Center.

⁵Chien W & Lin F. (2012). Prevalence of Hearing Aid Use Among Older Adults in the United States. *Archives of Internal Medicine*.

⁶Livingston G, et al. (2024). Dementia Prevention, Intervention, and Care: 2024 Report of the Lancet Standing Commission. *Lancet*.

⁷Deafness and Hearing Loss. (2025). World Health Organization.