

## VIEWPOINT

## Policy Solutions for Better Hearing

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**Most US residents** can expect to live longer than those in previous generations, but they are also vulnerable to age-related impairments that are serious barriers to independence, productivity, and quality of life. One of these impairments is hearing loss, which affects more than 40% of people older than 60 years, more than 60% of those older than 70 years, and **nearly 80% of people older than 80 years.**<sup>1</sup> Untreated hearing loss can negatively affect quality of life for older persons by preventing them from engaging with others, thereby leading to social isolation and limiting ability to work. Beyond those adverse effects, hearing loss also has been associated with depression, dementia, cognitive decline, poorer physical functioning, and falls with injury. **Thus, hearing loss represents a substantial problem, affecting more than 30 million people.**<sup>1</sup>

Effective treatment is available in the form of acoustic technology or hearing aids, but only 1 in 5 people with hearing loss uses hearing aids. Among adults with mild hearing loss, hearing aid use is especially low (2%-3%) with usage generally increasing for older age groups and for those with moderate or severe hearing loss.<sup>2</sup> The President's Council of Advisors on Science and Technology (PCAST) recently released a report focusing on how to reduce costs and spur innovation in hearing technologies and recommended several policy actions to meet those goals.<sup>3</sup>

**One barrier to progress has been lack of interest from most of the medical profession in this area. Assessment of hearing is rarely included in routine primary care evaluations, and physicians often view hearing impairment in patients as a difficulty in communication (which it is) and not a medical problem that needs attention.** One reason for this lack of attention is that hearing loss has been considered a normal aspect of aging and therefore not amenable to medical treatment. Another challenge, as noted by the US Preventive Services Task Force, is that there is **limited evidence about screening (such as the most effective screening tools) for asymptomatic adults older than 50 years.**<sup>4</sup> It is time for the health care system to make hearing a priority, a key part of healthy aging, and to increase the availability of hearing technology to the millions of people who could benefit from it.

Untreated hearing loss is associated with physical and mental health issues. For example, Lin and Ferrucci<sup>5</sup> have shown that even mild declines in hearing were associated with a 3-fold increase in falls. In another study, Lin et al<sup>6</sup> reported that the risk of dementia doubled for mild hearing loss, tripled for moderate hearing loss, and was 5 times higher for severe hearing loss. Delaying treatment for hearing impairment makes it more difficult, if not impossible, to gain back a level of hearing close to the previous level. This is due to losses in the brain's auditory processing capabilities, with some studies sug-

gesting that those parts of the brain have been recruited to assist with other cognitive functions such as visual processing.

Hearing loss also affects the ability of older individuals to remain productive and independent. Older people, their families, and also some policy makers want to reduce frailty and dependency because of the threats to dignity and quality of life. In addition, policy makers want to reduce frailty and dependency because most of the related costs of care are paid by public programs. Many older people have inadequate savings, and few have pensions, so many will want or need to stay in the workforce.

**Another barrier that prevents older adults from receiving treatment for hearing loss is lack of insurance coverage. The justification used in 1965 to exclude hearing aids from Medicare coverage was that hearing technologies were routine and low cost and therefore should be paid for by consumers.**<sup>7</sup> Medicare coverage for hearing loss has not changed since its inception, and Medicare continues not to cover hearing aids and associated hearing assessments. Many insurance plans follow the lead of Medicare and also do not offer coverage of hearing technologies for older enrollees.

**The PCAST report indicated that cost is the major impediment to seeking and obtaining care for hearing loss, especially because many people would have to pay the full cost out of pocket due to lack of insurance coverage, and many live on fixed incomes. The average price for a hearing aid is \$2400, and most people need 2.** Unlike other technologies in the consumer and medical electronics arena, advances in electronics have not reduced the price charged to consumers. The high cost of hearing aids is also a barrier for Medicare coverage as the combination of the large numbers of people who need help for impaired hearing and the current market prices could result in significant expenditures in the Medicare budget at a time of increasing concern about health care costs.

**In contrast, the Veterans Administration (VA) offers first-dollar coverage to eligible veterans for hearing aids.** The VA pays much less for the same technology, with the **negotiated price for hearing aids from major manufacturers averaging \$400 per device,**<sup>8</sup> and also reduces costs through innovative delivery models for hearing health care. Some other countries including the United Kingdom, Denmark, and Switzerland offer hearing aids as part of basic health coverage, and they also pay less for the same technology from these 6 global companies that dominate the market for hearing aids. Considering that the electronic components that make up modern hearing aids cost between \$100 and \$200,<sup>9</sup> why have consumer pressures not driven the price down as would be the case in any other market environment?

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To create a more competitive market, PCAST recommends that the US Food and Drug Administration (FDA) classify a certain category of basic hearing aids that could be sold over the counter at drug stores for the treatment of mild to moderate, age-related hearing loss (presbycusis)—similar to what is now possible with reading glasses for mild to moderate presbyopia. Currently, the FDA requires a medical examination before a patient can be evaluated by a hearing professional.<sup>10</sup> This requirement stems from the concern that a hearing aid might mask other causes of hearing loss (unusual ones such as acoustic neuroma or more common but easily treatable cerumen impaction), which should be identified and treated separately. Yet the majority of patients who seek hearing help waive the medical requirement, and because only around 20% who have hearing loss actually seek treatment, this approach to identifying treatable ear disorders clearly is not working. PCAST suggests that creating greater access to hearing aids by making the process more patient friendly also would increase awareness about hearing health and could provide a mechanism more effective for identifying these other causes.

The FDA appropriately regulates medical devices to protect consumers from harm, but it should reconsider these regulations (which have not been updated since 1977) in light of the potential risks of untreated hearing impairment, the increasing availability

of online information for patients, and the opportunities for an innovative market in acoustic technology. There has been innovation in a range of consumer acoustic devices called personal sound amplification products, which generally are available for less than a few hundred dollars and can be helpful in situations in which amplification and noise cancellation are all that is needed. If this technology does not provide the needed result, the patient is urged to seek an audiologist's assessment. Moreover, PCAST recommends that hearing assessments produce more standardized prescriptions that patients can use to compare products and determine the best value online, in drug stores, or in professional settings.

The FDA announced in January 2016 that it is taking action in response to the PCAST report, and it is specifically examining how to streamline the manufacturing quality assurance process to encourage innovation and inviting public input about regulation of personal sound amplification products and hearing aids.

In summary, patients should be more empowered in their options for hearing health care, and innovation should enhance those options and reduce cost. These recommended changes could help promote greater adoption of hearing aids, normalize the use of such technology, and improve the hearing and communication of millions of older adults.

#### ARTICLE INFORMATION

**Published Online:** January 21, 2016.  
doi:10.1001/jama.2016.0044.

**Conflict of Interest Disclosures:** The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Drs Cassel and Penhoet report being members of the President's Council of Advisors on Science and Technology (PCAST) and serving as cochairs of the PCAST Working Group, which produced the letter report on hearing technologies. Dr Saunders reported serving as the science writer for the PCAST letter report on hearing technologies.

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