The Financing of Hearing Care: What We Can Learn from MarkeTrak 2022

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ABSTRACT

The “cost” of hearing aids has been a perceived key driver of the uptake, or lack thereof, of hearing aids. The MarkeTrak 2022 survey included questions that focused on the cost of the hearing test and amplification devices, out-of-pocket expenses, third-party coverage, and the perceived value of the devices. The hearing test itself was perceived as a barrier for some as the expense of the visit or the lack of third-party coverage was often cited as a reason for not following through on a recommendation to get a test. For those persons who received a hearing test, financial constraints were noted to be the most significant reason for not following through on a recommendation for a hearing aid, particularly for those over the age of 65 years. Higher income levels or some third-party coverage for devices was related to higher adoption rates. For persons who did choose to purchase amplification devices, financial considerations were not among the most important factors in reaching that decision. A clear majority of persons who made the decision to purchase amplification were satisfied with the out-of-pocket expenses associated with the purchase. The MarkeTrak 2022 Survey also included questions designed to assess the price sensitivity of individuals to various scenarios regarding the cost (e.g., $1000/pair, $2000/pair, or $4000/pair) or the amount of third-party coverage (e.g., $1000/pair, $2000/pair, or Total Cost). Results indicate increased amounts of third-party coverage were a bigger motivator than simply lowered cost. The MarkeTrak Survey indicates perceived cost factors continue to play a role in decisions to pursue hearing care and/or amplification devices.

KEYWORDS: cost, value, amplification

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MarkeTrak 2022: Insights into the Evolving Hearing Market; Guest Editors, Thomas A. Powers, Ph.D. and Jan Kihm, M.S.
The continued evolution of hearing aids and implantable hearing devices provides greater opportunity for improving the lives of persons with hearing loss. Contemporary amplification devices allow for more refined programming, expanding connections with other audio systems, and the incorporation of health-related algorithms such as falls detection and cardiovascular monitoring. Cochlear implants began as devices for persons with severe or profound hearing loss but are now capable of providing benefit to persons with lesser degrees of hearing loss, unilateral hearing loss, or unique forms of hearing loss such as auditory neuropathy. The most recent availability of osseointegrated implants and middle ear implants suggests even more opportunity to improve outcomes for persons with hearing loss.

Both cochlear implants and osseointegrated implants require surgical intervention and thus could be considered to exist within the medical framework of treatment options. Irrespective of the significant contribution of the audiologist on both the front and back end of the surgical procedures, the historical framework of implantable devices typically includes third-party reimbursement for the devices and associated procedures. The opposite is true for amplification devices. Irrespective of the contributions of physicians in recommending hearing aids, the assessment of hearing and the selection, fitting, verifying, and servicing of hearing aids are primarily conducted within a historical framework that does not necessarily include payment from third parties. Thus, this framework often requires a much more significant decision by the patient with respect to treatment of hearing loss, particularly as it is assumed to require greater out-of-pocket expenses than might be expected with implantable devices.

The “cost” of hearing aids has been a perceived key driver of the uptake, or lack thereof, of hearing aids. Indeed, the cost of hearing aids has been an often cited barrier to their acquisition. In 2015, the President’s Council of Science and Technology (PCAST) noted that cost was a barrier to greater utilization of hearing aids, and the next year the National Academies of Science, Engineering, and Medicine also identified cost as a barrier. In 2016–2017, Senators Elizabeth Warren (D-MA) and Charles Grassley (R-IA) began advocating for over-the-counter hearing aids for the express intent of addressing their belief that the high cost of traditionally dispensed devices was a primary reason for the low utilization of the devices. They then introduced legislation to require the FDA to develop rules for over-the-counter devices to address the issue of cost. (As of this writing, the FDA has not published the final rules on over-the-counter devices; and it will likely be several years before it can be determined whether the availability of these devices affects the overall cost of amplification.)

MARKETRAK DATABASE

MarkeTrak is a periodic survey of individuals and households in the United States that examines respondents understanding of, and experience with, hearing care services. While prior year surveys have focused mostly on hearing aids, MarkeTrak 2022 included more questions about personal sound amplification products (PSAPs) and implantable devices. (Further detail about the MarkeTrak survey process is available in other articles in this edition of Seminars in Hearing.) The results presented in this article were from a survey of 43,957 individuals in 2021, from which a subset of 3,218 persons with hearing loss provided in-depth information about their experiences.

Of these, 1,139 persons owned hearing aids and 2,079 had hearing loss but did not own hearing aids, hereafter referred to as “non-owners.” Within this article, the focus will be on hearing aids (not PSAPs or implantable devices) and various subsets of these two groups will be presented. Some respondents received follow-up questions, depending on how they might have answered a prior question, resulting in different size groups. The size of these groups is indicated where necessary.

MarkeTrak includes questions regarding the “cost” of hearing aids and other devices. These questions probe a variety of topics from respondents, including questions about out-of-pocket expenses, third-party coverage, and the perceived value of the devices. The “cost”
factor associated with hearing care or hearing aids can evoke varying perceptions depending on need, socioeconomic status, or perceived value. For example, a one-time out-of-pocket expense of $2,000 can be substantial for a senior with $20,000 in savings who is living on Social Security income. Conversely, a working person with an annual income of greater than $100,000 may not be as concerned about a similar out-of-pocket expense. Similarly, when one perceives the acquired product or service to be of high value, the cost of the product or service may not be as important. For example, the cost associated with a life-saving cancer treatment may be expensive but have a high value and therefore worth the cost. These perceptions of cost and value can also shift if there are supplemental means of paying for a service such as having health insurance that might cover a good portion of that life-saving cancer treatment.

According to the Survey of Consumer Finances by the Board of Governors of the Federal Reserve System, the median dollar amounts in retirement accounts for persons in the 65- to 74-age range is approximately $164,000, and for persons older than 75 years the median amount is $83,000. The median is used here to demonstrate that one-half of all persons older than 65 years have less than $16,400 saved for retirement. These numbers do not include income from Social Security or other pension funds, nor do they include assets such as equity in their homes or life insurance policies with a cash value. These numbers also do not reflect any outstanding debt such as existing home mortgages. It is also important to note that the retirement saving varies considerably by race and ethnicity with Black, non-Hispanic, and Hispanic groups having retirement accounts less than half of that of the White, non-Hispanic group. Cost and value, therefore, are complex factors that vary across socioeconomic status, race and ethnicity, and age groups. Interpreting the financial implications of MarkeTrak results should be considered in light of this complexity. So given this complexity, what does MarkeTrak tell us about the financing of hearing care in 2022, particularly with respect to whether cost is a barrier to acquisition of devices?

**PREPURCHASE FINANCIAL CONSIDERATIONS**

The initial hearing test is an important step in the hearing care process. Fig. 1 revealed the top reasons persons (n = 594) did not get a hearing test done even if they might be experiencing a hearing loss. (For further information on the responses displayed in this figure, please see other articles in this edition of Seminars in Hearing.)

**Figure 1** Top reasons for persons who did not get a hearing test done even if they might be experiencing a hearing loss. (For further information on the responses displayed in this figure, please see other articles in this edition of Seminars in Hearing.)

**PREPURCHASE FINANCIAL CONSIDERATIONS**

The initial hearing test is an important step in the hearing care process. Fig. 1 revealed the top reasons persons (n = 594) did not get a hearing test even though they were experiencing hearing difficulties. The most often cited reason was the belief that a person can hear well enough in most situations. The second most cited reason was the belief that a person can hear well enough in most situations. The second most cited reason was that the test was “Too expensive” (31%). “Did/do not have insurance coverage” (22%) and “Could not/cannot afford” (21%) were the sixth and seventh most cited reasons. In total, when taken together (expense, coverage, or affordability), about one-half (49%) of individuals believe that the hearing test itself is a financial barrier.

Once the decision was made to pursue hearing care, respondents were asked about their reasons for choosing a particular hearing care provider or practice. Respondents were given a series of choices, including personal motivators, reputation, desire to take action, convenience, financial reasons, and advertisements, and were allowed to choose as many factors that influenced their decisions about choosing a particular provider or practice. Respondents noted “financial reason” as one of the factors, particularly for persons who subsequently acquired hearing aids (71% vs. 50% for non-owners); however, personal motivators,
reputation/recommendation, desire to take action, and convenience were all more important reasons for choosing a particular practice or provider. Digging deeper into this factor, those persons who owned hearing aids were slightly more likely to choose a provider or practice than non-owners due to a third-party hearing aid benefit (29%–22%), and this group also indicated a greater ability to pay for the devices than non-owners (25%–10%).

Financial constraints were listed as the most significant reason for not following through on a recommendation for a hearing aid ($n = 194$), particularly for those older than 65 years. Table 1 shows the reasons respondents chose not to get a hearing aid when it was recommended. As can be seen the top-three reasons for persons between the age of 35 to 65 years and over 65 years old were financial constraints including (1) too expensive (55%), (2) could not/cannot afford (40%), and (3) did/do not have insurance coverage (31%). For those younger than 35 years, the degree of hearing loss and the access to a practice were more common reasons. In total, 75% of the respondents who were non-owners but for whom a hearing aid had been recommended listed a financial issue as one of the reasons for not getting a hearing aid.

These results suggest financial considerations continue to be important factors in making decisions to pursue hearing care. Even prior to an appointment for a hearing test, financial considerations enter into the decision process for persons with hearing loss. Once the decision has been made to pursue hearing care, financial issues become one of several factors in choosing where to receive care. Financial considerations are the
primary issue for those not following through on the recommendation for hearing aids.

**FINANCING THE PURCHASE**

As noted earlier, socioeconomic status has been considered a contributing factor to hearing care and/or the adoption of hearing aids. Perhaps not unexpectedly, MarkeTrak results indicate higher adoption rates of amplification for persons with higher income levels (Fig. 2). Persons in households with incomes less than $50,000 adopted hearing aids 25% of the time, while persons in households making between $50,000 and $100,000 adopted hearing aids at a 35% rate. Persons in households making greater than $100,000 reported a 42% adoption rate.

For those individuals who purchased a hearing aid \( n = 1,139 \), financial factors did play a role in the decision to purchase, although other factors had greater influence on the decision. When asked to list the reasons that influenced the decision to purchase the hearing aid, the primary influencer was “hearing test demonstrating a need for an aid” noted by 59% of respondents. Other important factors included trust in the hearing professional, recommendation from the hearing care provider, and the quality of service. The primary financial influencers were “having the resources to pay for the devices” or “had coverage/help paying” noted by about a quarter of the respondents (28% and 27%, respectively). Whether these were the same individuals or different is not discernable from the data. Another choice “price was right” was chosen by 21% of respondents. Taken together, just under half (45.6%) of hearing aid owners indicated financial considerations were among the reasons for choosing an aid. However, a majority of persons in the survey indicated reasons other than price or cost as more important to their decisions.

When asked if the office/practice charged one single price that covered the hearing aid and any/all services or did the office/practice charge for some services separately, 66% of respondents \( n = 1,139 \) indicated they were charged one price, 16% indicated they were charged at least some services separately from hearing aid, and 19% were not sure if the charges were bundled or unbundled. This suggests that bundled charges continue to be a dominant feature associated with the sale of hearing aids. For those services charged separately, nearly half (48%) were charged for the hearing test, or when the follow-up care exceeded a set number of visits (46%). Thirty percent indicated that all follow-up care was charged separately from the price of the device.

When asked the question “Was any part or all of your hearing aid(s) paid for by a ‘third-party’ (HMO/insurance, family member, friends, charity, etc.),” slightly more than half (54%) of hearing aid owners \( n = 1,139 \) had some assistance to cover the cost, while 41% indicated no assistance and 6% were unsure. For those persons who did have assistance, Medicare Advantage programs (36%) or other insurance programs (30%) were selected the most (Table 2). Other sources of assistance included the military/VA (25%), Medicaid (20%), union benefits (6%), and “other” (charity, family, etc.;
18%). When broken down by age, Medicare Advantage programs and the military/VA were the most common sources of assistance for persons older than 65 years, while HMO/insurance and Medicaid were more common sources for those younger than 65 years. The small number of respondents younger than 35 years suggests caution when interpreting the source of assistance for this group.

Among current hearing aid owners \( (n = 1,139) \), the majority (74%) became aware of the cost of the device and the portion covered by insurance prior to the order being placed. A small percentage (16%) indicated they did not become aware of the cost or coverage for their devices until after the order was placed, with the remainder (10%) being unable to recall when they became aware of the cost or coverage. Hearing aid owners who had some third-party coverage \( (n = 626) \) were asked which dollar amounts were shown to them when receiving the hearing aids. Only one in four (25%) indicated they were shown the total cost associated with the purchase, while the majority of respondents (64%) indicated they were shown the portion covered by the third-party payer.

The satisfaction with the out-of-pocket expense was survey using a 7-point Likert Scale ranging from “very dissatisfied” to “very satisfied.” For those persons acquiring a hearing aid over the past 5 years, a clear majority of respondents (74%) indicated positive satisfaction with the out-of-pocket expenses with 44% of the total being “very satisfied.” Only 13% of individuals indicated a “dissatisfied” response.

Persons who had purchased more than one set of hearing aids \( (n = 517) \) were asked whether cost was less important, no change, or more important when selecting their current hearing aids when compared to their last set. Only 6% indicated cost was less important, 49% indicated that the cost associated with the purchase of the current devices was the same as when purchasing their last set, and 45% indicated cost was more important. Interestingly the cost factor was more significant for persons younger than 65 years than persons older than 65 years. More than half of the respondents younger than 65 years thought that cost was a more important factor when purchasing subsequent sets of devices. Only a third (36%) of those older than 65 years had the same response. In general, those younger than 65 years were more likely to say everything was more important than the older age group, except for sound quality. When ranking the issues that were most often “more important,” the older segment had cost show up higher in the list, although the proportion was lower. While the percentage for the younger age is higher in an absolute sense, it ranks lower on the list relative to other items.

Persons who do not own hearing aids \( (n = 2,072) \) were asked if they were aware of any third-party assistance that they might be eligible for to cover some or all of the cost of the hearing aids. Only 30% of respondents indicated awareness of some third-party assistance. Only 30% of respondents indicated awareness of some third-party assistance. More than half (52%) indicated they were unaware of any assistance and 18% said they were not sure. It is assumed that being unaware of assistance indicates that no third-party coverage was available. For the 30% of respondents who were aware of coverage, the primary source of assistance was Medicare Advantage programs, particularly for those older than 65 years (Table 3). Medicaid and HMO/insurance were also frequently cited. For the pool of non-owners \( (n = 2,072) \) having insurance cover, some of the cost was the primary factor that would motivate them to purchase a hearing aid sooner (Fig. 3).

Not unexpectedly, having financial resources, either due to income level or third-party assistance, is a factor for hearing aid acquisition process. For persons who followed through on a

| Source of assistance                      | <35 y \( (n = 91) \) | 35–64 y \( (n = 177) \) | ≥65 y \( (n = 358) \) |
|------------------------------------------|-----------------------|-------------------------|---------------------|
| HMO/Insurance                            | 44.40%                | 42.00%                  | 18.10%              |
| Medicare Advantage                       | 40.80%                | 28.30%                  | 36.60%              |
| Medicaid (e.g., Medi-Cal, MassHealth)    | 44.10%                | 32.20%                  | 4.10%               |
| Military/Veteran’s Administration        | 20.40%                | 20.80%                  | 28.20%              |
| Union                                    | 13.80%                | 4.60%                   | 3.20%               |
recommendation for a hearing aid, the results of the hearing test became more important than the cost. The MarkeTrak results on out-of-pocket expense suggest the majority of patients who acquire hearing aids are satisfied with the “out-of-pocket” expense. However, the fact that nearly half thought the cost associated with the subsequent sets of hearing aids was “more important” suggests a need to be continually sensitive to the financials associated with replacement devices.

**PRICE SENSITIVITY**

MarkeTrak conducted an experiment to assess price sensitivity across a range of prices and third-party coverage levels for hearing aids. Non-owners of hearing aids ($n = 2,054$) were randomly assigned to one of seven groups (Table 4). Each respondent was asked about the likelihood of purchasing a hearing aid in the next 2 years based on a specific scenario and were asked to respond using a 5-point scale where 1 = “definitely would not” to 5 = “definitely would” with the midpoint (3) of “might or might not.” Four groups were asked the following question: “If hearing aids including service/support were priced at $X for a pair (or half that amount for a single hearing aid), how likely would you be to purchase hearing aids within the next 2 years?” The prices for “X” in the question were $1,000/pair ($n = 258$), $2,000/pair ($n = 259$), $3,000/pair ($n = 257$), and $4,000/pair ($n = 257$).

Other respondents were asked the following question: “If insurance would cover up to $X of the total cost of a pair of hearing aids with service/support (or half that amount for single hearing aid), how likely would you be to purchase hearing aid(s) within the next 2 years?” For this question, the options for coverage were $1,000/pair ($n = 343$), $2,000/pair ($n = 336$), and total cost ($n = 344$). Again, each respondent was asked only one question, with price or coverage level, and was not aware that others may have had a different value or question. Price sensitivity was measured by assessing the change in intention as the price for the devices or coverage level changes.

Results are shown in Table 5. With respect to cost, lowering the cost from $4,000/pair to $1,000/pair did increase the number of persons...
motivated to pursue amplification, but only for about one in six people, suggesting there is still sensitivity to price even though intentions to purchase are low across all prices. Insurance coverage, however, was a bigger motivator. Even for moderate coverage, one in three persons indicated the possibility of pursuing amplification. For total coverage, the number jumped to one in two (51%). For these questions, having insurance coverage is seen to be a bigger motivator than cost. The fact that only half feel there is a good chance they would purchase with full coverage demonstrates adoption is about more than just “affordability.”

THE VALUE PROPOSITION

Value is the ratio of expected outcomes to the cost of acquiring those outcomes. Within health care, the ratio of outcomes to cost varies depending on who is asking the question. For example, a third-party payer may deem an expensive single treatment option to have value if it reduces a long-term recurring cost of care. A patient, however, may see value if the improvement in function offsets the out-of-pocket cost. MarkeTrak asked persons with hearing aids to indicate their perception of the quality or performance of the device with the price paid on the same 7-point Likert scale (very dissatisfied to very satisfied) as noted previously. In this case, 85% of respondents indicated the overall value to be positive, with half (50%) being very satisfied with the overall value. Only 6% of respondents were dissatisfied with the value.

Too often the focus around hearing aids is on the cost—the price paid—of the devices. The PCAST report and the federal legislation that led to OTC hearing aids focused on the cost of devices, not the outcome or the associated value. The MarkeTrak results suggest that for those who do acquire hearing aids, the out-of-pocket expense and the associated values are positive for the majority of respondents.

CONCLUSIONS

These results should be considered in light of the broader perspective about health care, particularly for those older than 65 years. In a survey of Medicare beneficiaries, the propensity to seek care for a health condition was assessed. One in four (25%) persons avoids going to any doctor when they are ill and one

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**Table 4** Matrix for Assessing Price Sensitivity

| Price per pair of hearing aids | Coverage per pair of hearing aids |
|-------------------------------|----------------------------------|
| $1,000                        | $1,000                           |
| $2,000                        | $2,000                           |
| $3,000                        | Total cost                       |
| $4,000                        |                                  |

Notes: Each respondent was asked about only one scenario. For example, a respondent may have been asked about the likelihood of purchasing a pair of hearing aids if they cost $2,000 per pair, but would not have been asked about any of the other options.

**Table 5** The Likelihood of Purchasing a Hearing Aid Under Various Scenarios Associated with the Cost of the Devices or the Insurance Coverage for the Devices

| Cost               | n  | Likelihood |
|--------------------|----|------------|
| $1,000/pair        | 258| 7%         |
| $2,000/pair        | 259| 10%        |
| $3,000/pair        | 257| 14%        |
| $4,000/pair        | 257| 14%        |
| Coverage           |    |            |
| $1,000/pair        | 343| 34%        |
| $2,000/pair        | 336| 33%        |
| Total cost         | 344| 51%        |
in three (36%) does not share the fact that they are ill; thus, it is not unexpected that there would be those who choose not to pursue hearing care, regardless of financial constraints.

As older adults are often considered a primary demographic for amplification devices, the reimbursement framework is further exacerbated by the lack of coverage by Medicare, even though hearing loss is one of the top health of chronic conditions reported on the biannual survey of Medicare beneficiaries. As of 2020, there were nearly 60 million people in the United States older than 65 years, with half covered by the traditional fee-for-service Medicare program. Medicare, however, was not designed as a health insurance program, but rather as a health safety net for catastrophic illness and therefore was not designed to cover age-related changes such as presbyacusis. The Medicare beneficiary survey of 2020 indicated that only 43% of Medicare beneficiaries had an understanding of the Medicare system, which would explain the often heard question as to whether Medicare covers hearing aids.

Medicare Advantage plans are required to provide, at a minimum, the same coverage as the traditional fee-for-service Medicare plan, but they may also offer additional benefits such as coverage for vision, dental, and hearing care. Approximately 40% of Medicare-eligible persons are enrolled in Medicare Advantage programs, which may or may not provide hearing care and/or hearing aid benefits. Medicare Advantage plans often advertise their added benefits, which can further confound the typical Medicare beneficiary about coverage for hearing health. Medicare Advantage programs are on track to surpass the number of people enrolled in the traditional fee-for-service Medicare. Thus, it would be correct to assume that there will be more and more people older than 65 years with hearing care benefits, including partial or full coverage for hearing aids.

Based on the results of this MarkeTrak survey, cost factors continue to play a role in decisions to pursue hearing care. Though the value proposition for hearing care is seemingly positive, there are those who choose not to pursue this care due to constraints such as income levels, out-of-pocket expenses, or lack of assistance. While costs will likely continue to be a factor in any decisions to pursue amplification, this perspective should be kept in the context of health care in general. In this respect, out-of-pocket expenses, insurance coverage, or other means of financial assistance influence most health care decisions; so, it should not be unexpected that consideration of costs is in play in the hearing care realm.

CONFLICT OF INTEREST

None declared.

REFERENCES

1. Jilla AM, Johnson CE, Huntington-Klein N. Hearing aid affordability in the United States. Disabil Rehabil Assist Technol 2020:1–7. Doi: 10.1080/17483107.2020.1822449
2. Mahmoudi E, Zazove P, Meade M, McKee MM. Association between hearing aid use and health care use and cost among older adults with hearing loss. JAMA Otolaryngol Head Neck Surg 2018;144(06): 498–505
3. Lin FR. Time for a top-down approach to hearing aid affordability and accessibility. Am J Public Health 2018;108(02):166–168
4. President’s Council of Advisors on Science and Technology. Aging America and Hearing Loss: Imperative of Improved Hearing Technologies. 2015 Accessed October 16, 2022 at: https://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/pcast_hearing_tech_letterreport_final.pdf
5. National Academies of Sciences, Engineering, and Medicine. Hearing Health Care for Adults: Priorities for Improving Access and Affordability. Washington, DC The National Academies Press 2016
6. Warren E, Grassley C. Over-the-counter hearing aids: the path forward. JAMA Intern Med 2017;177 (05):609–610
7. Survey of Consumer Finances, Federal Reserve Board Accessed July 18, 2022 at: https://www.federalreserve.gov/econres/scfindex.htm
8. Medicare Current Beneficiary Survey (2019) Accessed July 8, 2022 at: https://www.cms.gov/research-statistics-data-and-systemsresearchcmsdata-tables/2019-medicare-current-beneficiary-survey-annual-chartbook-and-slides
9. Comparing the demographics of enrollees in Medicare Advantage and fee-for-service Medicare. Milliman Report. October 2020. Accessed July 6, 2022 at: https://www.bettermedicarealliance.org/wp-content/uploads/2020/10/Comparing-the-Demographics-of-Enrollees-in-Medicare-Advantage-and-Fee-for-Service-Medicare-202010141.pdf