

How well do we understand hearing health? Insights from consumers and healthcare providers

Market Research Report

Background

In the United States today, over 40 million adults are estimated to have hearing loss. As the population grows and continues to live longer, age related hearing loss becomes an increasing concern. By 2060, this number is expected to increase to 73 million ¹. The prevalence of hearing loss rises from 3% in young adults under 30 years of age to 50% among seniors ².

One of the main impacts of hearing loss is on the person's ability to communicate with others. Exclusion from communication can have a significant impact on everyday life, causing feelings of loneliness, isolation, and frustration, particularly among older people with hearing loss ³. Further studies have found a decrease in cognition and increased risk of dementia per 10 dB increase in hearing loss ^{4, 5}.

The Lancet Commission report on dementia prevention, intervention and care found hearing loss to be the single most modifiable risk factors for dementia ⁶. Other studies included an association for an increased risk of other associated comorbidities including; falls⁷, depression⁷, diabetes ⁸ and a reduction of income ⁹. People with hearing loss benefit from early identification and the use of hearing devices. However, for individuals 50 years and older in the US with hearing loss, one in seven use hearing aids ¹⁰.

Why the gap?

This market research study was designed to assess consumer and general healthcare professionals understanding of hearing health. Specifically, we set out to learn:

- Do people understand what is healthy hearing?
- Do people take measures to monitor hearing health?
- Do people relate hearing health to overall health?

Methods

Researchers from Penn, Schoen and Berland executed a ten-minute, online quantitative survey from May 5th to May 13th, 2019 among 1656 respondents in the United States. Subjects included 1250 consumers aged 50-80 years; 750 without reported hearing loss and 500 with hearing loss. Consumer data have been weighted to reflect region, age, gender, and hearing loss among this demographic in the United States. An additional 406 professional subjects; 205 physicians and 201 nurse practitioners or physicians' assistants were also surveyed. All professionals were screened to remove those specializing in hearing health.

Audience	Sample Size	Margin of Error
Consumers	1250	+/- 2.77%
Hearing Loss Consumers: General Population respondents ages 50-80 who are diagnosed with at least moderate hearing loss and wear hearing aids	500	+/-4.38%
Non-Hearing Loss Consumers: General Population respondents ages 50-80 who have not been diagnosed with hearing loss and do not wear hearing aids	750	+/- 3.58%
Healthcare Professionals	406	+/- 4.86%
Physicians	205	+/- 6.84%
NPs/PAs	201	+/- 6.91%

Market Research Report

Consumer subject demographics are summarized in Table 1. For reported hearing loss, the following descriptions were used.

- Moderate – Without hearing aids, I can hear the conversation but need people to speak up so I can understand (41 to 55 dB HL)
- Moderately Severe – Without hearing aids, I struggle to understand the conversation especially if there is any background noise and/or when I'm on the phone I miss high pitched sounds and children's or women's voices are hard to understand (56 to 70 dB HL)
- Severe – Without hearing aids, I cannot understand someone who's talking to me unless I can see them, and I can't use the phone (71-90 dB HL)
- Profound – Without hearing aids, I can only hear very loud low-pitched sounds, cannot use the phone or hear conversations, and must depend on lip reading (90+ dB HL)

Based on the criteria, most reported moderate (40%) and moderately severe hearing loss (48%). While only 10% reported severe and 3% profound hearing loss.

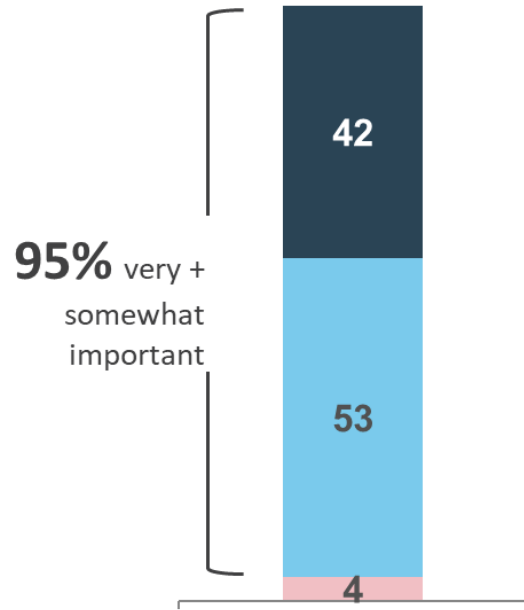
	All Consumers (n=1250)	Hearing Loss Consumers (n=500)	Non-Hearing Loss Consumers (n=750)
Gender Showing %			
Male	48	66	42
Female	52	34	58
Age Showing %			
50-54	22	14	25
55-60	22	18	23
61-65	19	15	21
66-70	17	20	16
71-75	11	16	9
76-80	8	16	5
Employment Showing %			
Employed, working outside of the home	28	24	29
Employed, working at home	4	3	5
Student	0	1	0
Not currently employed or retired	58	66	56
Other	8	7	9
Don't know / prefer not to say	1	0	1
Health Insurance Coverage Showing %			
Yes	95	99	94
No	5	1	6
Glasses/Contacts Wearing Showing %			
Glasses	71	74	70
Contacts	2	1	2
Both	6	7	6
Neither	21	17	22

Table 1: Summary of consumer demographics

Results

Healthcare Professionals say it is important to have a standard definition of normal hearing, primarily to have a benchmark to compare to and to better diagnose and treat patients.

How important would you say it is to have a standard definition for normal hearing and hearing loss?
All HCPs (n=406), Showing %



Very important Somewhat important Not very important Not at all important

You said you think it is (somewhat/very important) to have a standard definition for normal hearing and hearing loss. Why do you say that?

To have something to compare to

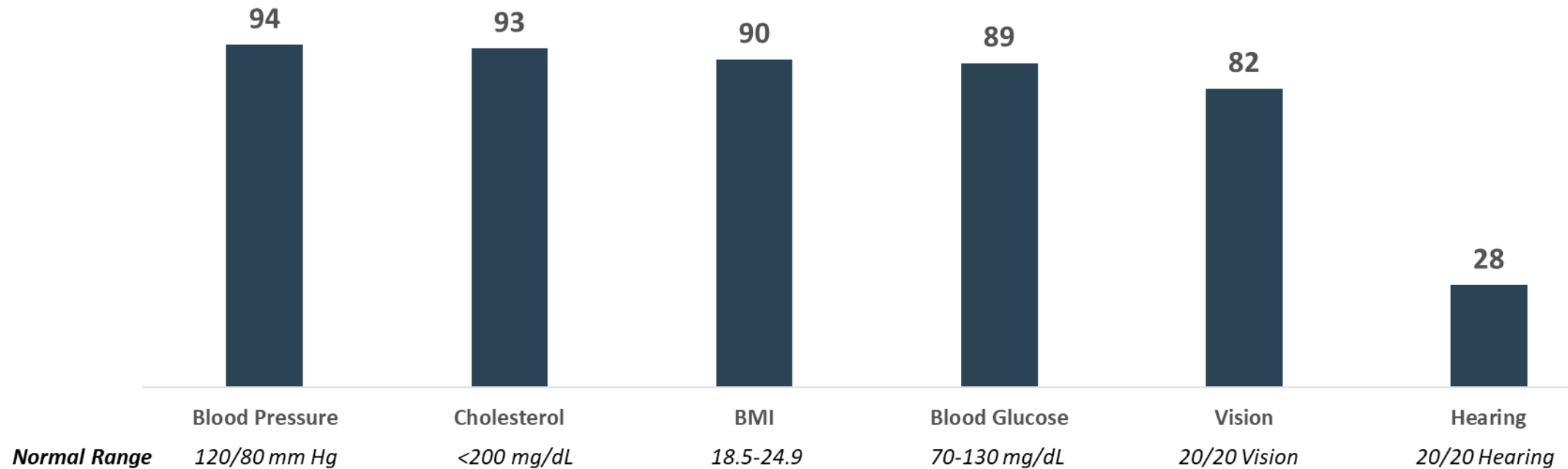
“ It is important to know *what is normal from not*.
I think all should be standardized to have a baseline to compare.
So you can differentiate between baseline and abnormal. ”

To better diagnose and treat

“ *t would be nice to have a screening test with expected values for patients to catch it earlier.*
We need a metric to define hearing loss in order to prove need for treatment.
Without improved methods of defining and treating such loss, we can't help patients who need our help. ”

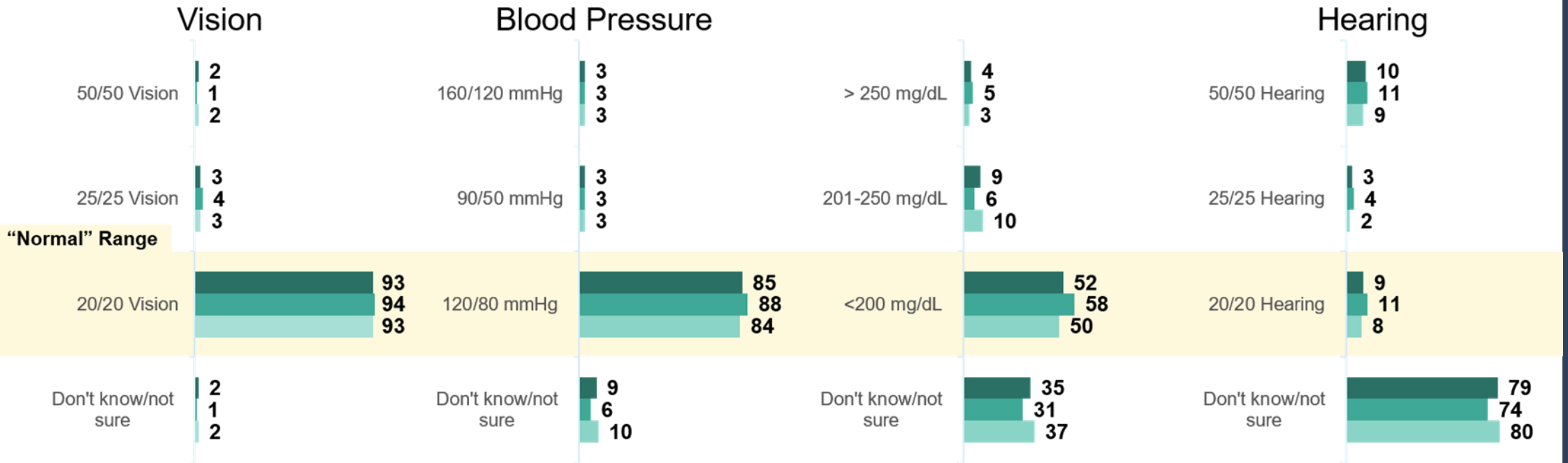
Far fewer than half of HCPs are *very familiar* with a metric for normal hearing

How familiar are you with the following “normal” or “average” health metrics?
All HCPs (n=406), Showing % Very familiar



Most consumers do not know a metric for normal hearing, but know the normal ranges for vision and blood pressure

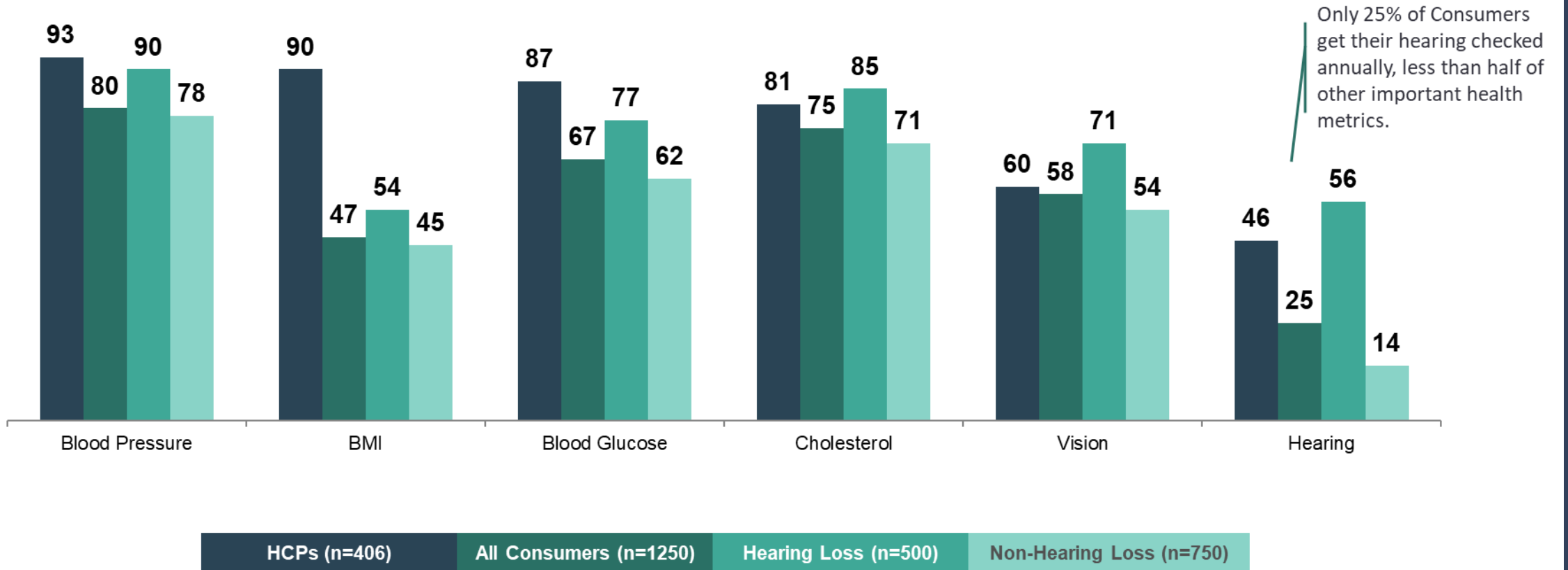
To the best of your knowledge, which of the following do you understand to be the “normal” or “average” range for...
Showing %



All Consumers (n=1250) Hearing Loss (n=500) Non-Hearing Loss (n=750)

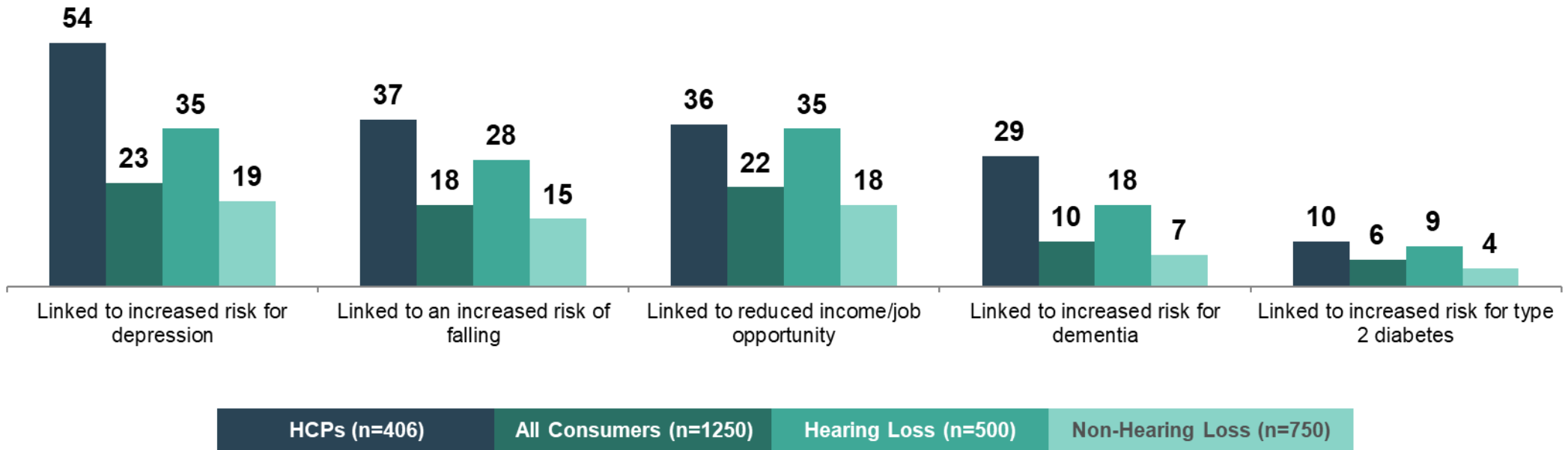
Both Consumers and HCPs evaluate other health metrics more frequently than hearing on an annual basis

How often does a doctor evaluate and discuss the results for each of the following with you / How often do you typically diagnostically evaluate/test and discuss the results for each of the following with your patients 50+?
Showing % evaluated at least once a year, Ranked by HCPs



Both Consumers and HCPs demonstrate limited awareness of the links between hearing loss and other health and social issues

How aware are you of the following as potential effects of hearing loss among older adults?
Showing % Very aware, Ranked by HCPs



Conclusion

This market research was conducted to determine how well consumers and healthcare professionals understood hearing health. From the subjects surveyed we can conclude the following:

- Lack of clear metric for normal hearing. Consumers do not understand, and healthcare professionals who do not specialize in hearing health are not familiar with the definition of normal hearing.
- Lack of monitoring for hearing health. Only 14% of consumers not already diagnosed with a hearing loss are getting their hearing checked on an annual basis.
- Lack of awareness of hearing as part of healthcare. Consumers and Healthcare Professionals demonstrate limited awareness of the links between hearing loss and other health and social issues

This research highlights the need for hearing healthcare professionals to act. It is imperative to educate the general public and healthcare community on hearing health. The findings underscore the importance for establishing a simple metric for what is normal hearing; such as 20 dB average pure tone threshold (PTA), to help guide consumers and HCPs in preventing, monitoring and treating hearing loss.

References

1. Gorman, A., Reed, N., and Lin, F (2017) Addressing estimated hearing loss in adults in 2060. *JAMA Otolaryngol Head Neck Surg* Jul 1;143(7):733-734
2. National Academies of Sciences, Engineering, and Medicine (2016). *Hearing health care for adults: Priorities for improving access and affordability*. Washington, DC: The National Academies Press. doi: 10.17226/23446.
3. Source: World Health Organization (2020); <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss>
4. Loughrey DG, Kelly ME, Kelley GA, Brennan S, Lawlor BA. (2018) Association of age-related hearing loss with cognitive function, cognitive impairment, and dementia: a systematic review and meta-analysis. *JAMA Otolaryngol Head Neck Surg* 2018; 144: 115–26.
5. Golub JS, Brickman AM, Ciarleglio AJ, Schupf N, Luchsinger JA. (2019). Association of subclinical hearing loss with cognitive performance. *JAMA Otolaryngol Head Neck Surg* 2019; 146: 57–67.
6. THE LANCET COMMISSIONS | VOLUME 396, ISSUE 10248, P413-446, AUGUST 08, 2020. PUBLISHED ONLINE. [https://doi.org/10.1016/S0140-6736\(20\)30367-6](https://doi.org/10.1016/S0140-6736(20)30367-6)
7. Deal JA, Reed NS, Kravetz AD, et al. Incident Hearing Loss and Comorbidity: A Longitudinal Administrative Claims Study. *JAMA Otolaryngol Head Neck Surg*. 2019;145(1):36-43. doi:10.1001/jamaoto.2018.2876
8. Konrad-Martin D, Reavis KM, Austin D, et al. Hearing Impairment in Relation to Severity of Diabetes in a Veteran Cohort. *Ear Hear*. 2015;36(4):381-394. doi:10.1097/AUD.000000000000137
9. Mohr PE, Feldman JJ, Dunbar JL, McConkey-Robbins A, Niparko JK, Rittenhouse RK, Skinner MW. The societal costs of severe to profound hearing loss in the United States. *Int J Technol Assess Health Care*. 2000 Autumn;16(4):1120-35. doi: 10.1017/s0266462300103162. PMID: 11155832.
10. Chein, W and Lin, FR (2012) *Arch Intern Med*. 2012 February 13; 172(3): 292–293. doi:10.1001/archinternmed.2011.1408