

Phonak Insight



The moment of truth: How great first fit acceptance can be achieved

We know that on average hearing aid users wait over 10 years after realizing they have a hearing loss before being fitted with their first set of hearing aids.¹ When finally an appointment with a hearing care professional (HCP) is made it clearly indicates that the process towards acceptance of hearing aids has started. It is therefore important for the hearing care professional to be able to offer a service and products that ensure satisfaction and prevent dropout. Dropout rates of up to 16% at 12 months post hearing aid fitting have been reported² and the MarkeTrak V report states that 5% of hearing aids after the first year ended up in the drawer.³

What are the elements that lead to satisfaction and high acceptance of hearing aids?

There is more to acceptance and success with hearing aids than just a good quality product. But without it success is not likely. Key-product-related factors are sound quality, comfort and the number of visits needed to achieve a desirable outcome. Other factors are the attributes related to the hearing care professional (HCP) such as the clinic premises, counseling, and the number of appointments needed.⁴

The factors listed that are directly related to fitting success and satisfaction can be met by first offering the hearing care professional a wide range of products in a variety of styles and

colors, with different levels of technology, available at different price points to choose from. The most important part of this process is to ensure that the clients first experience of amplified sound is a good one. This is where the Phonak Quest pre-calculation comes in.

Being able to tailor an offering to a potential client and achieve a sound quality with a precalculation that is instantly accepted has its advantages. It shows the client that the HCP is listening to their wishes and fitting the hearing aid that best suits their hearing needs.

Spontaneous acceptance and Phonak Quest

The definition of the word "spontaneous" is "performed or occurring as a result of a sudden inner impulse or inclination and without premeditation or external stimulus".

When the HCP wants to measure spontaneous acceptance this is exactly what they need the client to provide – their initial reaction to the hearing aid in terms of cosmetic appeal, comfort and most importantly sound quality.

With the launch of Phonak Quest products a new precalculation was introduced with the aim to provide listeners with the best initial experience in terms of sound quality. An additional bonus is that the fine-tuning effort required should be kept to a minimum. The precalculation needs to not only provide improved speech intelligibility but should also offer a comfortable sound experience.

The first measurements made with Phonak Quest were conducted internally with the product validation team based in our research center in Switzerland. A series of objective and subjective tests were performed that looked at spontaneous satisfaction with the hearing aids. These included subjective ratings of the overall sound quality, the loudness and how much more the test subject could understand compared to either their own hearing aids, another generation of Phonak hearing aids or a competitor product. These subjective ratings are done in combination with objective speech in quiet and speech in noise tests.

Subjective spontaneous acceptance/satisfaction with Phonak Quest hearing aids has been found to be high and gets higher ratings than previous Phonak generation products as well as competitor products. (Figure 1)

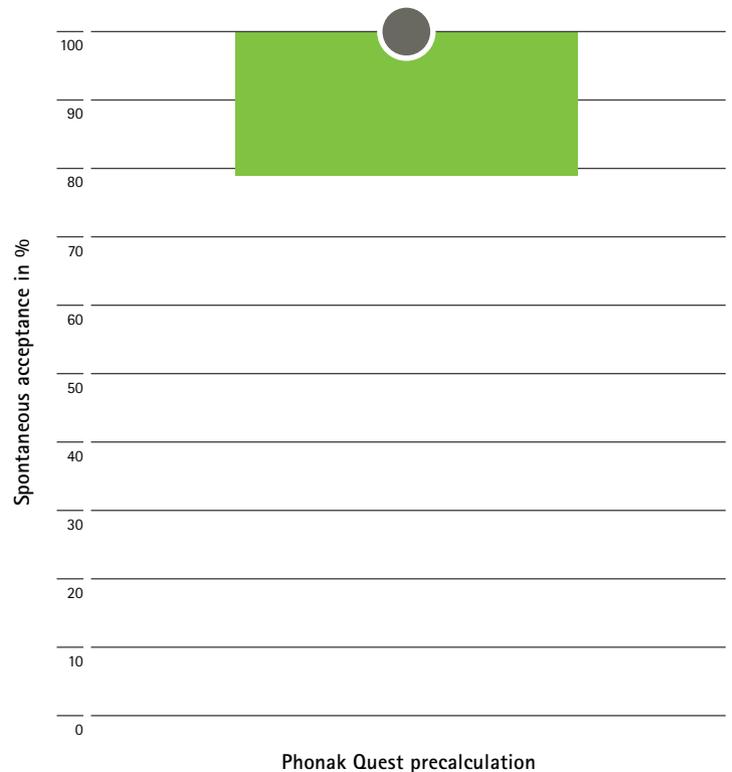


Figure 1
Graph showing the spontaneous acceptance, rated by clients, as a percentage score. The maximum score was 100% (indicated by the black circle). n=20 Phonak Research center data.

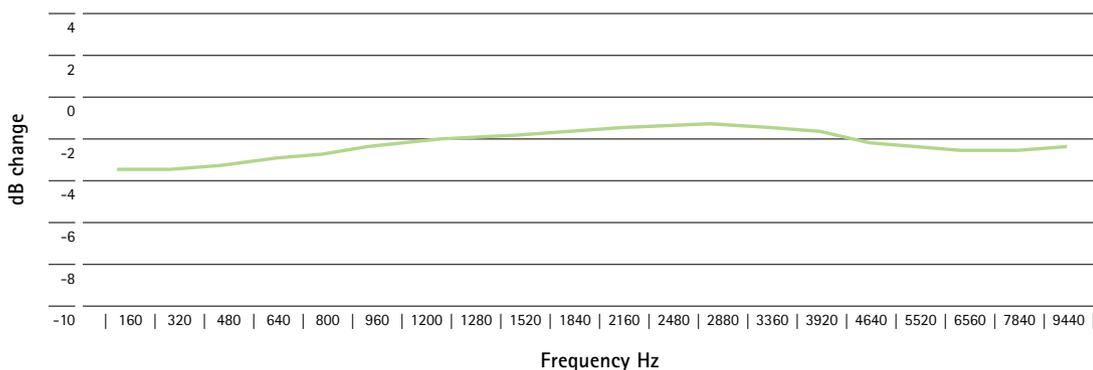
First fit acceptance

Once the initial fitting has been made the client gets their first opportunity to experience sounds outside of the HCP's office. Typically they will then return to the HCP for a follow up where fine-tuning adjustments will be made. A good indication of how accurate or successful a precalculation is, can be determined by the amount of fine tuning required within the first few appointments and how far this fine tuning deviates from the initially prescribed settings.

Fine-tuning data was collected from 11,208 Phonak Quest hearing aid fittings. The amount of fine tuning that was applied from the

time of fitting to the last appointment was analyzed. The deviation from the precalculated settings across frequencies for soft, moderate and loud sounds was recorded. The fitting formula selected for the results shown was the Adaptive Phonak Digital formula.

Results show that on average only 2.2 dB of fine tuning was required across all frequencies for soft, quiet, moderate and loud sounds. This indicates that the precalculation is accurately predicting the gain requirements for the hearing aid wearers in a broad range of listening situations.



■ Average changes

Figure 2
Graph showing the average fine tuning applied in dB between the first fit appointment and the last appointment. n=11,208. Phonak Target hearing aid fitting data 2013.

Out of the proverbial drawer: Increased wearing time

Another indicator of first fit acceptance is wearing time. Using logged data from 8,000 fittings the wearing time of Phonak Quest hearing aids was compared to that of previous Phonak generation hearing aids. In fact more than 70% of Phonak Quest hearing aids are worn for more than 6 hours per day, and the number of those who wear their hearing aids for 10 hours per day or more has doubled.

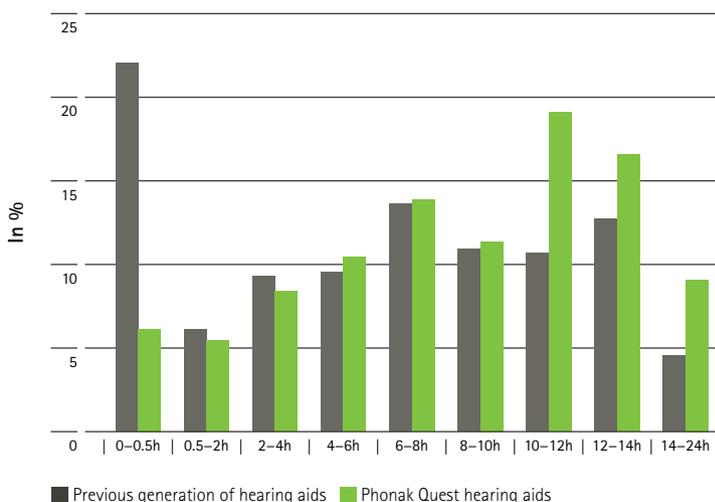


Figure 3
Graph showing the increased wearing time of the Phonak Quest hearing aids (shown in green) compared to the previous generation of hearing aids (shown in gray). n=8,000. Phonak Target hearing aid fitting data 2013.

The moment of truth for Phonak Quest

So does Phonak Quest help to achieve good first fit acceptance? If we return to the success factors that Kochkin et al list, the hearing aid needs to be able to offer a good fit, comfort and sound quality. From the initial subjective measurements for spontaneous acceptance, the amount of fine tuning required, to the increased wearing time of the hearing aids, Phonak Quest delivers.

This means that the HCP can fit from across the Phonak Quest portfolio happy in the knowledge that every product, regardless of performance level, includes this precalculation which offers these benefits to the end user. So Phonak Quest hearing aids contribute to keeping the client satisfied.

References

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- ² **Mulrow ,Tuley, Aguilar (December 1992):** Sustained benefits of hearing aids, *Journal of Speech and hearing research* Volume 35, 1402–1405
- ³ **Kochkin, MarkeTrak V (February 2000):** 'Why hearing aids are in the drawer', *Hearing Journal*
- ⁴ **Kochkin et al, MarkeTrak VIII (October 2009):** Impact of the hearing care professional on hearing aid user success, *Hearing Journal*

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