

Field Study News

January 2017

The Phonak rechargeable hearing solution: Part 2

A recent pre-launch test of new rechargeable technology from Phonak has confirmed that both hearing care professionals (HCPs) and clients are ready for a rechargeable hearing aid. They see several benefits over existing solutions in terms of improved usability and reliability. Battery-life satisfaction was rated very high – even with streaming, Phonak rechargeable hearing aids last much longer than a normal wearing day on a single charge. Usability was fully embraced – placing hearing aids in a charger is an easier task than changing disposable batteries. Reliability was rated very high – thanks to a robust design with an integrated battery and an IP68 rating.

Introduction

While rechargeable hearing aids have been available for many years, these solutions have had several disadvantages, including insufficient battery life and long charging times. A new rechargeable hearing aid using a lithium-ion battery is now available that provides 24 hours of hearing on a single charge. A full re-charge of a depleted battery can be achieved in 3 hours.

A key aspect of the development was to ensure hassle-free handling. This was accomplished by integrating the battery into the housing, thereby eliminating the need for a battery door. A button with an indicator light allows access to the charging status as well as the ability to turn on the hearing aid via a push gesture.

A pre-launch test was conducted to investigate the satisfaction with battery life and charging time, the handling and ease of use, and the design of the hearing aid and charger. The following questions were posed:

- 1) Is there acceptance of a rechargeable system from HCPs and clients?
- 2) Is the handling and ease of use improved over conventional hearing aids requiring battery changes?
- 3) How does this hearing aid compare to previous rechargeable solutions from other manufacturers?

This paper is the second part of the Field Study News that was written in June 2016¹. It includes the final HCP and hearing aid user data from France and the United States.

Methodology

A 4 month field trial was conducted in France and the United States, including more than 50 hearing aid clinics and almost 900 Phonak rechargeable hearing aids. Participating HCPs were asked to complete 3 online surveys, the first before fitting, the second, five weeks after fitting, and the third at the end of the trial. Clients were provided with a questionnaire to be filled-out after the fitting.

The questionnaires were optional, and therefore responses were gathered only from those interested in sharing their experiences. Only those who completed the questionnaires were included in the analysis.

Results

A total of 50 hearing care clinics in the USA and France participated in the assessment. A total of 182 hearing aid users participated and responded - 54 from USA and 128 from France. Demographic information about the clinicians and customers is provided in Table 1.

	HCP	Clients
Male	55%	60%
Female	45%	40%
<40 yrs	43%	39%
41-50 yrs	45%	31%
50+ yrs	13%	30%

Table 1: Demographic description of participants in study

Ratings on quality by both the HCPs and the clients are listed in Figure 1. All ratings were between 8 and 10 on a ten point scale, with 10 being "very satisfied with the hearing aids". In fact, battery life had the highest rating, showing the hearing aids were delivering enough charge, regardless of the daily wear time of each individual.

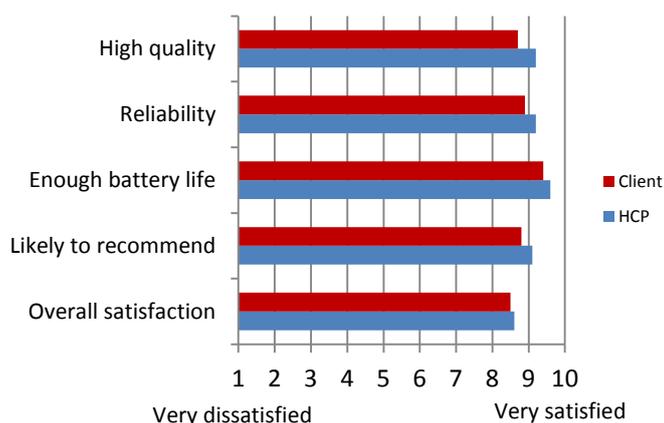


Figure 1: Mean ratings by clients and HCPs

When asked about the features that were most advantageous, the HCPs and the clients differed slightly in their opinions (see Figure 2). Although HCPs and clients rated ease of use as the most important, HCPs also thought the hearing performance, and charging time were important. On the other hand, clients rated durability, warranty, and the battery lasting longer than 3 years as important features. It is clear that clients are looking at longevity when investing in hearing aids.

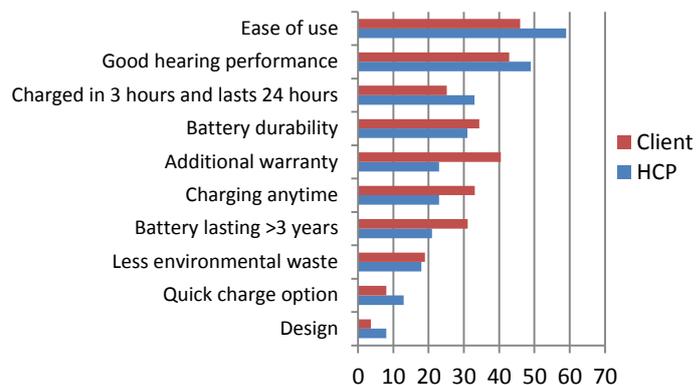


Figure 2: Percentage rating of which features show the advantages of Phonak rechargeable hearing aids.

When discussing the situations where the hearing aids will be most important, there was a remarkable difference between the responses of the professionals and those of the clients (see Figure 3). The HCPs chose sports/fitness and humid environments as the top-use situations, while the clients chose gardening and dusty environments as the important-use situations. It is evident that users are less aware of difficulties with moisture in hearing aids and are more concerned with dust and dirt. Swimming and showering were of little concern to clients. This may be due to them feeling confident about remembering to remove the hearing aids when going into the water.

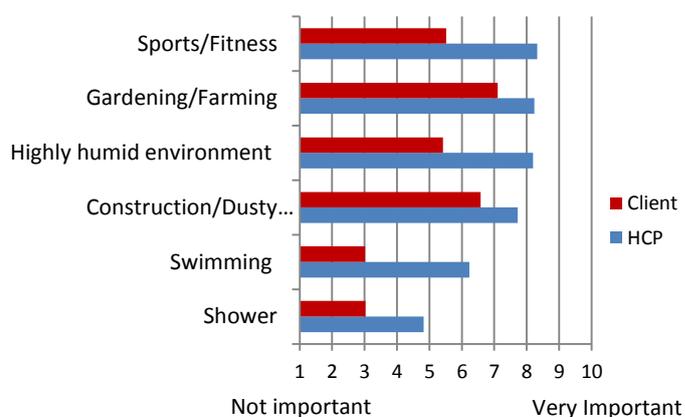


Figure 3: Ratings of environments where hearing aid use is important

In Figure 4, the HCPs compared their experience with the current rechargeable solution from Phonak to their experience with previous competitive rechargeable solutions. Over 90% of HCPs rated the new solution as "considerably better" or "slightly better" than rechargeable solutions from other manufacturers. This is a solid recommendation.

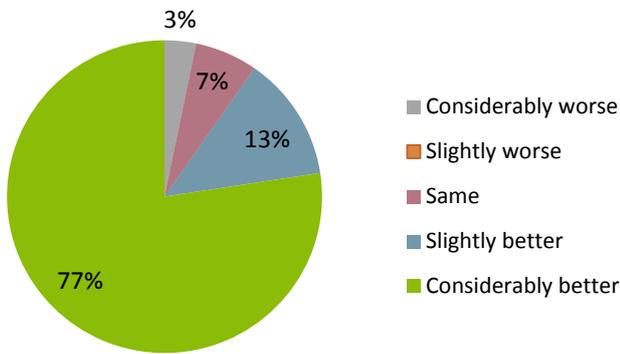
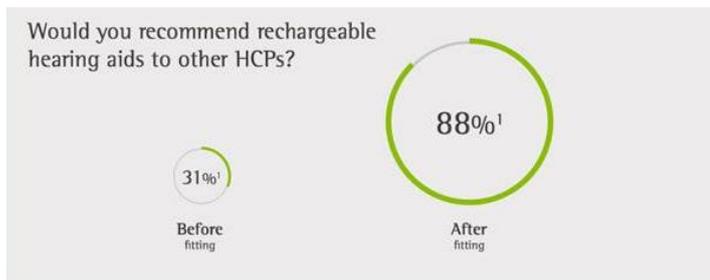


Figure 4: HCP's comparison of Phonak rechargeable hearing aids to previous competitive rechargeable solutions.

Results show that perceptions of rechargeable hearing aids have changed remarkably. After participating and gaining more clinical experience with Phonak rechargeable hearing aids, 88% of HCPs stated that they would recommend a Phonak rechargeable hearing aid to their colleagues, compared to only 31% before fitting the Phonak rechargeable solution (Figure 5). This change in tendency to recommend rechargeable hearing aids agrees with the comparisons HCPs provided in Figure 4.



After fitting Phonak Audéo lithium-ion battery technology, 9/10 HCPs would recommend it to their colleagues

Figure 5: Percentage of HCPs who would recommend rechargeable hearing aids.

Conclusion

HCPs and clients alike were not only satisfied with the Phonak rechargeable solution, but would go so far as to recommend that solution. There is a high level of trust by HCPs suggested by their willingness to recommend this form of rechargeable technology to their clients – 88% reported they would recommend the Phonak rechargeable hearing aids. This level of trust is also suggested by the clients who reported a high satisfaction rating with charging time and battery life – a rating of 9.4 out of 10.

All remaining findings showed numerous advantages to the Phonak rechargeable hearing aids. They were mainly

dominated by ease of use and hearing performance, although there were some differences in opinion between clinicians and users regarding battery life expectancy and warranty. When it came to environmental situations where the hearing aids would need to be most reliable, situations that were considered extremely important to HCPs were much less important to clients. Nevertheless, the hearing aids would be fine in these situations given the IP68 rating of the hearing aids.

After gaining more clinical experience with the rechargeable solutions, the HCPs rated the Phonak rechargeable hearing aids to be considerably better than previous rechargeable solutions. This study leads us to believe that the introduction of Phonak rechargeable battery technology has given HCPs and clients a valuable, rechargeable hearing aid with which they are significantly satisfied.

References

1 Field Study News: The Phonak rechargeable hearing solution, June 2016.

Authors

Michael Nilsson is the Head of Training and Education at Phonak headquarters, Switzerland. He has his PhD in



psychology and has gone from the House Ear Institute, where he is first author of the HINT, to four different hearing aid manufacturers where he co-authored two signal processing patents.



Davina is Audiology Manager for the Mild to Moderate Hearing Solutions team in Phonak HQ. She has been with Phonak since January 2006, specializing in audiology and hearing aid product training. She graduated with a Masters in Audiology degree from Dalhousie University, Halifax, Canada and previously worked in the UK.

Additional contributor

Dolker Taphuntsang, Voice of Customer Manager, Sonova AG