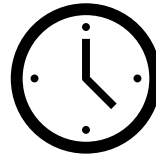


What type of hearing aids are worn longer per day?



It can take a lot of time and effort to get someone with hearing loss to finally try hearing aids. Many people put off getting hearing aids for a multitude of reasons. But when they finally get to the point of being ready to try hearing aids, what hearing aids should they select? Why not get them to try the hearing aids that are **most likely to be worn the longest per day?**

We analyzed data from over 5000 hearing aid fittings to answer the following questions:

1. What type of hearing aids do people wear longer per day: rechargeable or non-rechargeable?
2. Do people with higher performance levels wear their hearing aids longer per day than those with lower performance levels?

The answers we got from the data were clear and significant. Let's first look at the rechargeable vs. non-rechargeable question. We compared hearing aids that have the same acoustic and wireless features, like the AQ sound XC Pro and sound XC Pro. Based on their DataLogging information, **people who wore our rechargeable hearing aids wore them on average 1 hour and 10 minutes per day longer than those with non-rechargeable hearing aids** ($p < 0.0001$).

We also looked at the wearing time for rechargeable vs. non-rechargeable at each of the different performance levels to see if there was any variation. At the 3 performance level, there was the biggest difference in wearing time: people with the 3-level rechargeable hearing aids wore them 2 hours and 16 minutes longer per day than those with non-rechargeable 3-level hearing aids ($p < 0.0001$). At the 5 level, the wearing time was similar and at the 7 and 9 levels the rechargeable hearing aids were worn 1 hour & 16 minutes and 54 minutes longer per day on average, respectively ($p = 0.0004$, $p < 0.0001$).

We looked at the wearing time for these hearing aids to see the differences, however we were not able to ask the clients directly why they wore their rechargeable aids much more. Could it be the wearers are less concerned about conserving battery life? Could it be they put the hearing aids on earlier in the morning because they are so easy to go from the charger to their ears? Even though we don't know why yet, it's an interesting factor to consider when recommending hearing aids to a client – knowing that on average people with rechargeable hearing aids wore theirs more than an hour more per day than those with non-rechargeable hearing aids.

Let's now look at the 2nd question to see if there is any relationship between performance level and wearing time. For this analysis, we again looked at products in the same family, like the AQ sound XC Pro 3, 5, 7, and 9. Table 2 provides an example of some of the results of performance level vs. time worn per day.

Battery Type	Average Wearing Time	Standard Deviation
Rechargeable	9h 23m	3h 7m
Non-rechargeable	8h 13m	3h 5m

Table 1. Average wearing time per day for rechargeable and non-rechargeable hearing aids.

Performance Level	Average Wearing Time Per Day	Standard Deviation
3	8h 39m	3h 39m
5	8h 49m	3h 1m
7	9h 8m	3h 10m
9	9h 32m	2h 45m

Table 2. The average wearing time per day is higher for each successively higher performance level.

When we compared each technology level to the others, there was only one that showed a significant difference. **Clients who owned the 9 performance level wore their hearing aids on average 53 minutes per day longer than the 3 level** ($p = 0.0131$).

Again, this data just shows us the raw facts and not the reasons why someone with 9-level hearing aid would wear their devices longer than someone with 3-level hearing aids. Could it be because they are more satisfied with the sound quality? Could it be they find the 9-level hearing aids help them in more situations? Could it be they are less tired and can manage concentrating on conversations for longer? We don't know the reason why, but we do know that the 9 performance level is worn significantly longer than the 3 performance level.

We were curious if there was any correlation between performance level and hearing loss, however based on the data, hearing loss was not a significant factor. We also wondered if higher performance levels were just typically purchased as rechargeable devices, but the ratio was quite even between rechargeable and non-rechargeable, for each performance level.

If we return to the original questions we wanted to answer:

1. What type of hearing aids do people wear longer per day: rechargeable or non-rechargeable?
2. Do people with higher performance levels wear their hearing aids longer per day than those with lower performance levels?

The data that supports that on average people with rechargeable hearing aids wore their hearing aids more than an hour more per day than those with non-rechargeable hearing aids. And regarding performance levels, clients who owned the 9 performance level wore their hearing aids almost an hour longer per day than the 3 level.

If we were to combine these two results, it seems that those with rechargeable, level 9 hearing aids took advantage of wearing their hearing aids most of all per day. When we also reflect on new clients and what should be considered when fitting them with new hearing aids, perhaps we should share information about all performance levels, including the top levels, and also share with them the opportunity to try rechargeable hearing aids, as they might enjoy the benefits of hearing better for longer each day.