

# Phonak Insight

## Big data can teach us about Marvel fittings with first time users

By broadening our big data collection capabilities, we can now share fitting trend data from a wider global perspective to help support clinicians in their everyday decisions.

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### Real facts about first time users

Fitting practice trends revealed through big data can help hearing care professionals make treatment decisions for their clients. With this in mind, we were interested to share our observations regarding initial fitting practices with our newest Marvel platform and with a focus on first time users.

#### Technology level matters

By enabling big data collection capabilities in more markets during our recent launch, we had access to more fitting data in the first few months post launch (54 000 hearing instrument fittings). We observed 66% fittings to have access to StereoZoom feature which is encouraging given a large body of research showing remarkable benefits. For example, Schulte, M. et al. (2018) showed participants with this feature to demonstrate 22% less listening effort, which led to 15% more participation in communication, more speaking time within groups, and more relaxed conversations.<sup>1</sup>

### New M Receiver acceptance across first time wearers

The M Receiver has been a wish from the market for a long time. Hearing care professionals like the acoustic

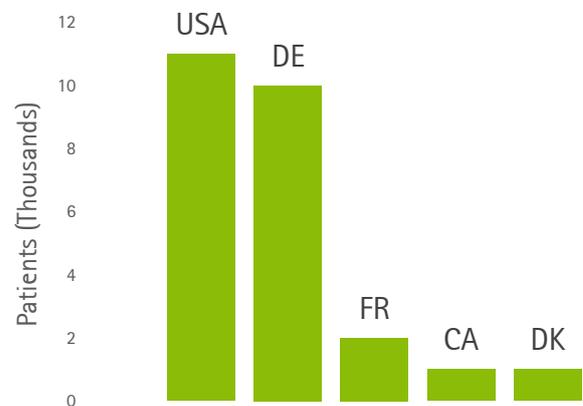


Figure 1. Rank order of countries by number of patients included within this big data investigation. Top 5 countries are shown only. (n=32k patients).

performance of a P Receiver but needed it to be smaller to fit more client ears. The gain of the M Receiver is between that of the S and P, while its size is smaller than the P. We were happy to learn that the M Receiver was used for 68% of Marvel devices for first time wearers. With the remaining receivers (S, P, UP), we observed the overwhelming majority

to be fitted with the S Receiver. Overall, the results suggest the M Receiver to be a suitable candidate for most first time wearers.

### Spontaneous first fit acceptance

Spontaneous first fit acceptance for those wearing Marvel technology has been shown to have significantly higher ratings compared with a competitor, and our prior Belong platform.<sup>3</sup> Based on this research, we have described Phonak Audéo™ Marvel to convey a 'love at first sound' experience for first time wearers. While big data can in no way provide additional support for this description, sharing the amount of fine tuning changes (%) during the first session across first time users provides an intriguing perspective.

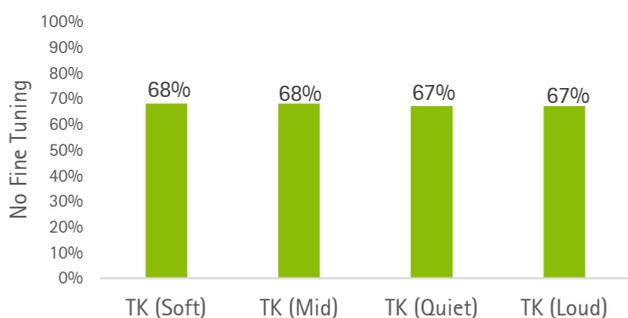


Figure 2. Percentage of devices with no fine tuning at first session for first time wearers across different threshold kneepoints within our gain model (n=5k devices).

Big data shared in the chart above confirmed that 2/3 of the Marvel fittings did not require manual fine tuning at the first session. Although recent changes in data collection make it difficult to compare this data, the data suggests Marvel is fine-tuned less often than prior platforms.<sup>4</sup>

### New AutoSense OS™ adapts to more listening situations

AutoSense OS 3.0 is the enhanced automatic operating system in Phonak Marvel hearing aids. One enhancement is the ability to incorporate streamed inputs into the automatic classification process. A recent study in 2018 confirmed that the new Audéo Marvel in combination with the TV Connector was rated by wearers as close to the ideal profile of sound attributes for streamed media, across a range of samples. Even better, the streaming solution from Phonak offers top-rated sound quality when compared to streaming solutions from 7 industry competitors.<sup>5</sup>

We were interested to learn more about the initial real world experiences of first time wearers from a data logging perspective.

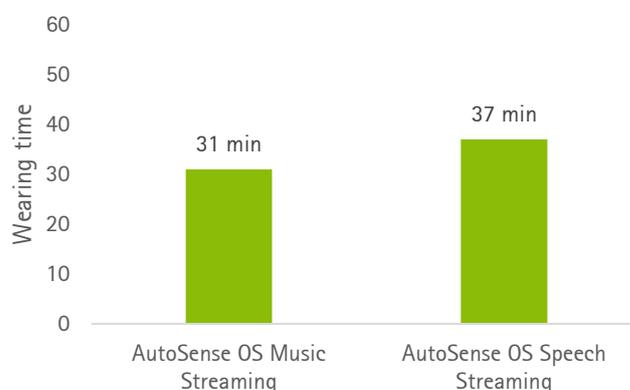


Figure 3. Amount of time recorded within DataLogging for media related programs within AutoSense OS at the second session for first time wearers (n=899 devices).

Big data showed first time wearers to experience our innovation of streaming through AutoSense OS on average 68 minutes per day. Streaming appears to be important functionality for first time users.

### Conclusion

Making big data available to clinicians can help support their decisions, enabling their clients to hear better. When fitting Marvel to first time users, clinicians can now be aware that their colleagues; (1) select M Receiver more often, (2) are less likely to adjust sound quality, and (3) often select products which have access to StereoZoom.

### References

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## Authors



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