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Program the Aid, and Whatever You Hit is the Target

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What is the gain/response target of optimal hearing aid amplification? If there is an “optimal” fitting, it might logically be assumed that different hearing aids would provide the same amplification for identical audiograms. If not, then the assumption of “optimal” should be questioned.

Figure 1 shows a moderate hearing loss on the left, and the results of four different premium open fit RIC hearing aids (right image) programmed to that loss, and based on the first fit programming for a new user. Even ignoring targets below 500 Hz and above 4000 Hz, differences in the target gains vary from about 10 to 18 dB.

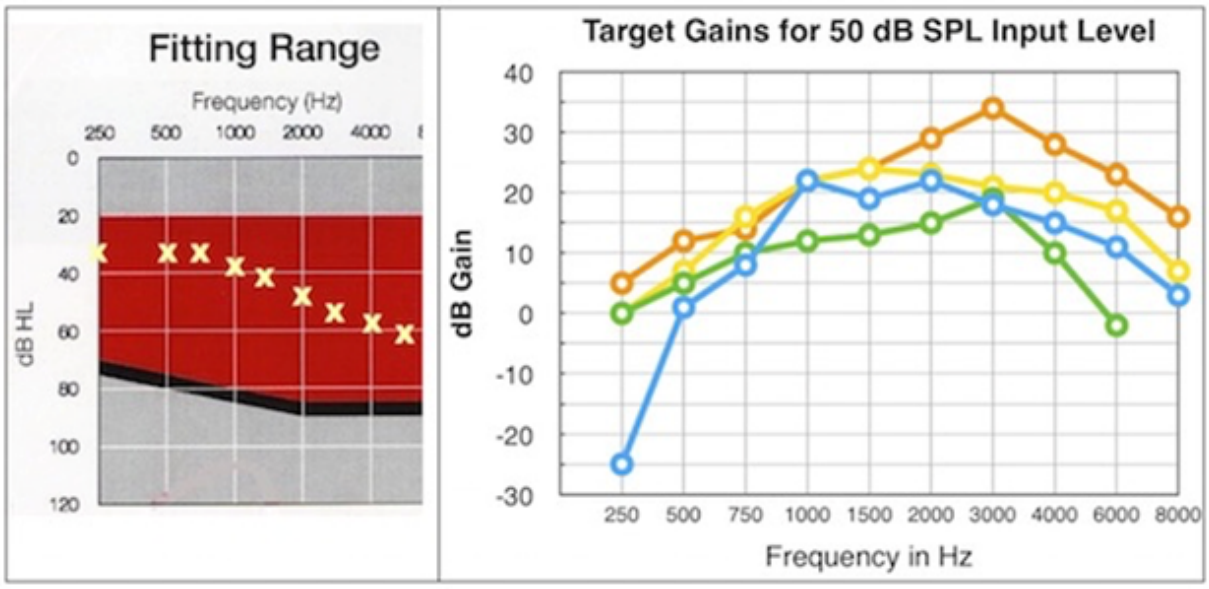

Figure 1. Moderate sloping hearing loss (left) to which four premium RIC open-fit hearing aids were programmed. The responses to the right are the 2 cc coupler responses for the quick fit, and new user as prescribed by the manufacturers’ fitting software.

A logical assumption would seem that the first fit would be the best recommendation from a manufacture, unless the goal is to provide a hearing aid that does not provide appropriate amplification. But, would anyone actually do this? That would be hard to imagine. It would seem desirable to provide the greatest user listening satisfaction from an initial fitting.

If all four hearing aid target gain responses are “optimal” (according to the manufacturer) for the moderate hearing loss shown, then those not agreeing must be less than optimal. But, which is correct? And, by what/who’s standards? It is illogical to believe that they are all optimal for the same loss and hearing aid style and ear coupling recommended, with the only difference being the company/model brand.

After all, if the differences are this great, then why not just throw a dart and let whatever it hits, be

the target?

The expected explanation for these target gain discrepancies is that these numbers are just a “starting point” in the fitting process. Still, these differences are a lot of “starting point” to overcome! Why does it appear that with hearing aid programmed fittings, that to hit the target, shoot first and call whatever is hit, the target.