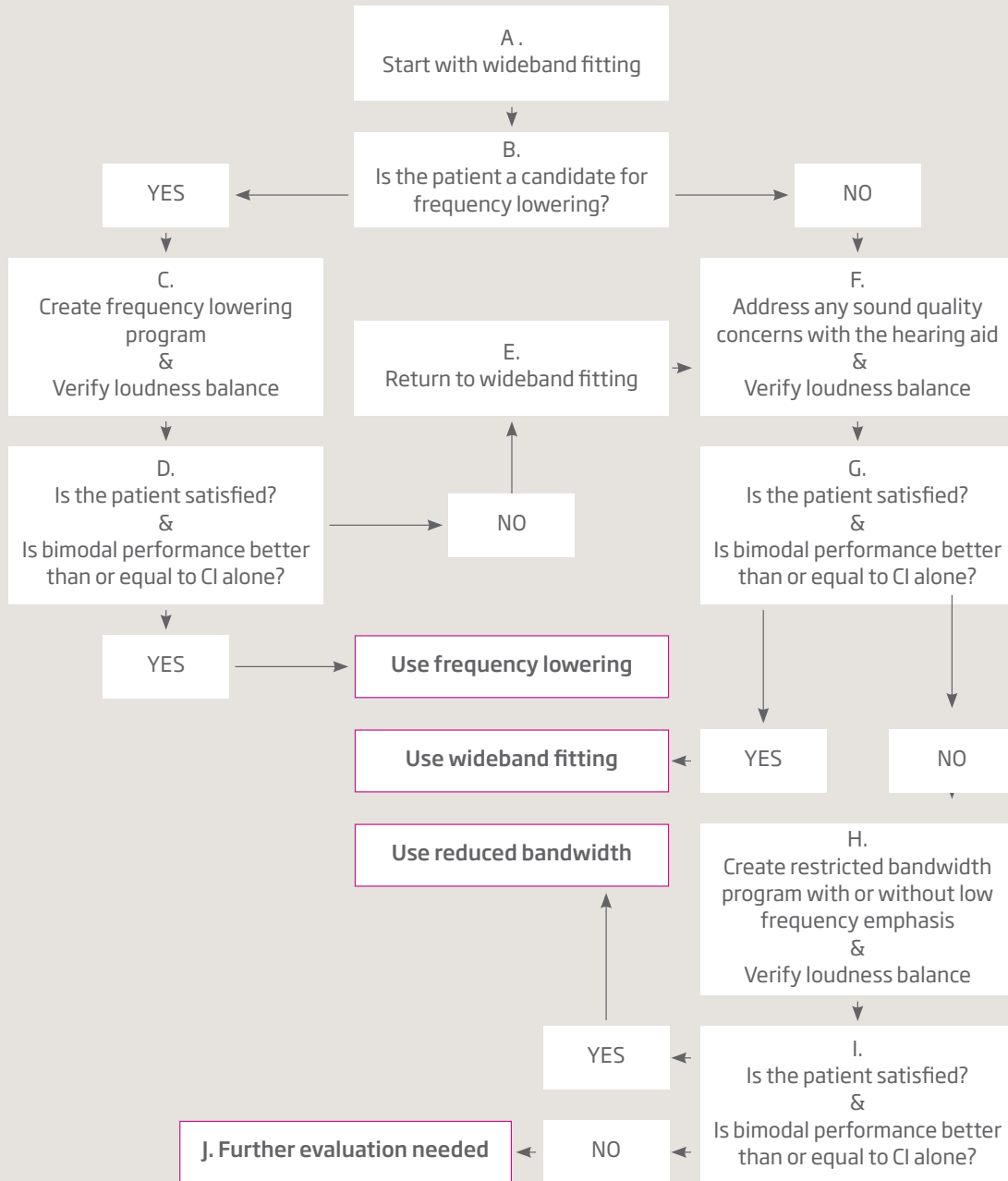


Bimodal flowchart

All unilateral cochlear implant recipients with aidable residual hearing in the other ear are candidates for hearing aid use. This flowchart provides an evidence based, yet practical, method for fitting a hearing aid on a bimodal patient. The flowchart takes into account wideband fitting, restricted bandwidth fitting, use of frequency lowering and loudness balancing.



Try the interactive flowchart at bimodal.oticon.com

How to

A.

Wideband fitting means that you should match targets for as wide a bandwidth as possible according to the prescriptive rationale of your choice e.g. DSL or NAL.

B.

Consider using frequency lowering if high frequency audibility is not possible using conventional amplification. The potential for improvement of audibility will depend on the patient's hearing loss, type of frequency lowering available & settings chosen.

C.

Activate Oticon Speech Rescue in the fitting panel of Genie 2. An individual setting, based on the maximal audible output frequency is automatically prescribed for the patient, if needed.

C, F, and H.

Loudness balancing is an attempt to balance loudness between the cochlear implant & hearing aid such as they are judged to be equally loud. While the patient listens to live sound, let him/her point to the attached picture of a head with an arc on (below), to show where he/she hears the sound. Using the overall gain trimmer in the bimodal fitting panel, turn the loudness of the hearing aid up or down until the client shows that the sound comes from directly in front.

D, G, and I.

Evaluate subjective (e.g. the Speech, Spatial and Qualities of hearing scale, SSQ) and/or objective performance comparing the CI (or better ear) alone versus bimodal (e.g. the Minimum Speech Test Battery for Adults, MSTB).

E.

Disable frequency lowering to return to wideband fitting if the patient is not satisfied and if bimodal performance is poorer with frequency lowering ON.

H.

Even if amplification of the mid to higher frequencies is possible, this may degrade performance in certain patients. Potential advantages of restricted bandwidth over wideband fitting include improved battery life and better conditions for feedback reduction. Use the high frequency cut-off slider in the bimodal fitting panel to remove the gain at different frequencies. Proceed to increase gain in the low frequencies as some patients may also benefit from additional low frequency emphasis using the low frequency trimmer in the bimodal fitting panel. See C for loudness balancing.

J.

Further evaluation is likely to involve the CI, try to contact the CI-audiologist. Find more in-depth recommendations on bimodal fitting strategies in the Oticon White Paper by Carisa Reyes.

