

Audiological Bulletin No. 4

Widex Outcome Measures

Hearing aid outcome measures assess the impact of hearing aid fitting on the hearing aid wearer's life, as seen from the hearing aid wearer's point of view. Typically, subjective hearing aid outcomes are assessed using questionnaires. The information provided by outcome measures can include a wide number of dimensions of hearing aid fitting outcomes including benefit, satisfaction, usage and reduction in hearing handicap. This information can be used to validate that the hearing aid fitting was successful.

Outcome measures can be very helpful in clinical practice because the information provided by a questionnaire is structured and quantifiable. This means that if a generic questionnaire is used, the results can then be compared to published studies. This is useful as a benchmark to determine if an individual client is sufficiently helped by a hearing aid fitting or to determine if a hearing rehabilitation program is helpful for a population. Also, third party funders of hearing aids may require documentation of the success of a hearing aid fitting. Additional purposes of outcome measures can include: optimising fine tuning, establishing pre-fitting goals, and determining pre-fitting motivation and expectations.

In order to help clinicians fit Widex hearing aids, there are now two outcome measures available. The first is a Senso Diva Fine Tuning Diary, which helps clinicians determine if the fine tuning parameters of a Senso Diva fitting are optimal.

Fine Tuning Diary

The purpose of the Senso Diva Fine Tuning Diary is to determine if the fitting of Senso Diva is optimal. It is very important to ensure that the fit of the hearing aid is the best possible. A sub-optimal fitting can be detrimental to overall satisfaction with the instrument and can therefore compromise the usage and benefit from the hearing aid. Therefore, in order to maximise the benefit and satisfaction provided by Senso Diva, any fine tuning issues should be resolved.

The Fine Tuning Diary is structured in the manner of a follow up interview. There are three types of questions within the Fine Tuning Diary. The questions in the first section help to determine if there are practical problems associated with the use of the hearing aid: i.e., physical comfort, operation. The remaining questions relate to sound quality and aided hearing ability. Both the questions on sound quality and aided hearing ability reflect the features in Senso Diva.

The Fine Tuning Diary is self-explanatory and no formal instructions are needed. It is meant for the hearing aid client to complete the diary at home. As most users require some time to adapt to a new sound image, it is advantageous to postpone completing the Fine Tuning Diary until a certain acclimatisation has occurred. In this way, the client can read the questions first and then respond to the questions as they gain the experience with their hearing aid in a number of diverse situations. Thus allowing the hearing aid client to structure their thoughts and experiences of Senso Diva, so that they can better clarify any concerns. For most of the questions, the response is indicated on a continuum scale, allowing the client to make fine distinctions in responding.

If the responses in the Fine Tuning Diary appear to indicate that there is a problem with the performance of the hearing aid, it is important to understand the cause of the problem before proceeding to fine tuning. Some problems may be related to poor understanding of the functionality of the hearing aid. In such cases, counselling is the most appropriate step. Also, when interpreting the responses to the Fine Tuning Diary, it is important to consider all of the responses together, rather than just consider each question in isolation. Usually, if the fitting is not optimal, this is reflected in a number of questions.

There are fine tuning tools within the Senso Diva Fitting Manual and the Fine Tuning Guides in Compass. The Fine Tuning Diary is designed to be compatible with the existing fine tuning guides. Within Compass, there are two types of fine tuning guides for Senso hearing aids: the Specific fine tuning guide and the Composite fine tuning guide. The Specific fine tuning guide focuses on the reason for and the solution to one complaint at a time and the Composite fine tuning guide lets you mark several complaints and provides a solution to the combination of complaints. Both of these fine tuning guides reflect the frequency and level dependent fine tuning in Senso Diva and suggest counselling when this is the most appropriate step.

International Outcome Inventory for Hearing Aids (IOI-HA)

You are offered to use the International Outcome Inventory for Hearing Aids (IOI-HA). The purpose of the IOI-HA is to measure the impact of hearing aid fitting on the client's life. When the user completes the questionnaire, it assesses the subjective hearing aid fitting outcome. The IOI-HA was developed by a group of researchers as a product of an international workshop on self-report outcome measures in audiological rehabilitation (Cox et al, 2000). It was created in order to make a standardised measure that can be used internationally and careful translations of the scale have been made into 21 languages (Cox et al, 2002). As it is an already established generic questionnaire, the results can be compared to internationally published studies (Cox & Alexander, 2002; Kramer et al, 2002). This questionnaire may be helpful for either determining the fitting success of an individual client or documenting the fitting outcome for third party funders or assessing quality assurance in your practice.

The IOI-HA questionnaire was created to be both general and brief and it can be used for all hearing aid models. The questionnaire consists of seven questions which each assess a different self-report outcome dimension. Each question investigates a different aspect of the personal impact of hearing aid fitting on the client's life. The questions respectively relate to:

1. Daily use
2. Benefit
3. Residual activity limitations
4. Satisfaction
5. Residual participation restrictions
6. Impact on others
7. Quality of life

The questions were written to be unambiguous and require only a low reading level. The response categories are designed with five possible responses and each item has a separate response continuum. Responses are presented so that the most favourable responses appear on the right. The five responses have semantical distinctions that are roughly equally spaced from each other.

The IOI-HA questionnaire is self-explanatory and no formal instructions are required for the hearing aid client. As it is possible for the client to fill out the questionnaire without help, the client can complete the questionnaire at home or at the hearing aid fitters' office.

As the questionnaire is general, when considering the results of an individual client, we suggest that you consider the response to each question separately rather than generating a total score. However, when considering quality standards in your practice, generating a total score may be helpful for statistical purposes. If you wish to generate a total score, each question is scored from 1 to 5 for the responses from left (worst) to right (best), respectively. The values for each question are then added to give a total score. A higher score is indicative of a better outcome and the maximum total score is 35.

Summary

Clients and clinicians both benefit when the outcomes of hearing aid fitting are measured using a hearing aid outcome measure. For this reason, Widex is offering two types of outcome measure – a Fine Tuning Diary and the IOI-HA. The Fine Tuning Diary is to be used following the hearing aid fitting, to determine that the fitting parameters are optimal. The IOI-HA is to be used at the completion of the fine tuning process to determine that the hearing aid has a positive impact on the hearing aid client's life. The information provided by these two questionnaires covers a number of aspects of hearing aid fitting, which is helpful information to the hearing aid fitter.

References:

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