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Acoustics — Hearing aid fitting management (HAFM)

Acoustique — Gestion des appareils de correction auditive

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Foreword

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This document was prepared by Technical Committee ISO/TC 43, *Acoustics*.

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Introduction

The World Health Organisation (WHO) estimates that there are 360 million people with hearing impairment, approximately 5,3 % of the world population[22]. Hearing aids (HAs) are one of the most widely-used treatment options for people with a hearing loss[39][40]. For the proper use of HAs, hearing aid fitting management (HAFM) is a crucial issue for manufacturers, practitioners, hearing aid professionals and especially for HA users[39][42][43]. Individually optimized outcome of HA use is supported by comprehensive HA fitting protocols[42] and the impact of "poor fit and comfort" can lead to non-compliance, HA return[43] and additional hearing loss with over-amplification. Accordingly, the whole process of HA fitting should be optimized to achieve functional benefits, user satisfaction and cost-effectiveness.

Two observations are important to take into account when developing an HAFM standard. Firstly, the term "hearing aid fitting" is widely used[16][44]–[46] among service providers and industry sectors. Secondly, it has potentially conflicting interpretations: while guidelines for HA fitting have been written to tackle these issues by various national and professional bodies[17][18][23]–[32][34]–[37][47][48], many jurisdictions are still not covered worldwide and there is a need to promote a more common understanding of the HA fitting process. It is likely that different understanding of fitting has led to non-uniform care, outcome variability and, in many cases, dissatisfaction with the use of HAs.

The main purpose of this document is thus to provide a general framework for HAFM including the pre- and post-fitting stages to make it more explicit and transparent so that all related tasks, including professional services, administration and financial aspects can be systematized. The overall objective is to achieve the best possible hearing rehabilitation, which can only be accomplished through adequate knowledge, training and skills of the professional and a systematic approach to HA fitting in close collaboration with the client. The general framework of HAFM in this document is divided into six stages (client profile, counselling, hearing aid fitting, verification and validation, post-fitting counseling, and follow-up) based on the common practices of hearing aid professionals, and as recommended by various pre-existing guidelines.

By dividing the hearing aid fitting process into stages, HAFM service providers can systematically identify and administer the service components needed for high service quality, user satisfaction, client-centered services, client self-efficacy and compliance rates with HAs (e.g. consistently using HAs and attending follow-up appointments). The stages focus on the components of the framework to achieve high rehabilitation outcomes such as communication skills, speech intelligibility, perception of the acoustic environment, comfort for the HA users and sound quality. In addition, this document can be a basis for making cost assessments for each stage or component, which can help improve public health funding systems. Another possible application is to use this document as a minimum basis for the development of professional training programs in HAFM.