



## INTRODUCTION

## The Need for a Global Hearing Care Framework

Hearing healthcare is undergoing dramatic transformation. Teleaudiology is providing a new way in which clinicians can provide hearing services, hearables and other technologies are offering alternatives to hearing aids for hearing help, and over-the-counter hearing aid regulation has allowed consumer stores and online retail to sell hearing aids directly to the person with hearing difficulty. These changes and others are opportunities for improving and expanding hearing healthcare to more people in new ways, but with all of this change comes confusion.

Common questions that arise are whether teleaudiology will make audiologists obsolete, whether hearables will replace hearing aids, whether retail distribution of hearing aids will replace clinical care. There is a need for a method to describe the changes that are happening that answers these questions, and give clarity to how the different aspects of hearing healthcare relate to each other. Such a method will also provide a way to easily compare different approaches to hearing healthcare, with the traditional approach to fitting a hearing aid by an audiologist in a clinic being just one of many approaches now available to meet the needs of those with hearing difficulty.

## **KEY VALUES OF THE FRAMEWORK**

This special issue introduces a framework for hearing healthcare that is becoming increasingly necessary to understand the rapidly changing approach to helping people with hearing difficulty. The application of this framework offers a number of key advantages for hearing healthcare providers, consumers, and many, if not all, stakeholders in the field. Over the past decades, the classic clinician-to-patient very "medical" model of hearing aid provision prevailed around the world. However, various approaches of service delivery have existed for more than a decade without having a big impact on hearing aid care delivery in general. These models differed in a number of respects and lack of a framework hindered clarity, transparency, and a structured understanding of the details of the different service delivery models. This also prevented a structured and natural discussion of the opportunities, advantages, as well as shortcomings and limitations of the different service models. Introducing a framework of hearing aid service delivery considering different key aspects of the various models provides a range of key advantages. The framework allows structuring different approaches to care delivery along different, important aspects of care delivery. Having a framework allows identifying specific characteristics of different delivery models such as to identify specific objectives of a care model—e.g., who the target consumer group is or in which healthcare context is a model specifically advantageous. Next, it allows identifying opportunities, advantages or risks,

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and shortcomings of different delivery models and addressing them by developing the right product and service delivery solutions, targeting the right user group and also educating the tools and professional staff needed for various care models. The articles in this edition demonstrate the use of such a framework to revise, reframe, or instigate new thoughts about how hearing healthcare can and should be delivered. Service delivery models in our view should not be mutually exclusive and have rigid walls between them. On the contrary, transitions between different models should be possible and build upon the different approaches which would also be fostered by a framework as outlined here. Finally, a framework also allows criteria to be defined for comparing and evaluating different care models using a structured and systematic approach.

## EMERGENT RESEARCH QUESTIONS

As outlined earlier, the framework provides a number of key advantages. However, to fully leverage the potential of such a framework, several key questions are raised that need to be addressed in the near future. First and foremost, how do user outcomes with the devices compare and specifically what are the patient-centric benefit and value dimensions to be used for comparing different solutions and care models? What does "good" look like, and which outcome measures are we using for comparing "good" user satisfaction with the different archetypes: do professional measures of audibility or speech intelligibility, subjective consumer satisfaction, or quality of life apply?

How does adoption and continued usage of devices after purchase differ across these framework archetypes? Which individual user profile or specific forms of hearing loss are most appropriate for each archetype in the framework? Can we identify individual characteristics and profiles of a consumer in order for them to be successful with hearing healthcare in one or more of the archetypes of the framework? Besides user benefit and user profiles we also need to look into other aspects of new models of service delivery. We need to consider whether we have the tools for delivering solutions and services to a user for the different consumer journeys of the different models. What does a user journey look like, which phases and steps are involved, and which tools do we need to provide a "good" service model? Finally, we need to consider the country or healthcare system-specific context in which a new model of service provision is introduced: Are government requirements (healthcare programs and regulatory frameworks) ready for different models of hearing care service delivery and what kind of training and education to students and existing healthcare providers do we need to support these different delivery models?

There are many more questions that will arise from this framework that will need to be answered to understand and improve hearing healthcare outcomes. The introduction and application of the framework in this special issue is a needed and constructive step forward for the field of hearing care.

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