Future Hearing Journeys report

In 2020, we set out to explore the future state of hearing care. We discovered stark challenges and fabulous opportunities that will impact people with hearing loss, hearing care professionals, educators, and those in the industry. Learn how you can prepare to navigate this future landscape.

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EXPLORING THE FUTURE OF HEARING CARE

PREDICTING FUTURE HEARING TRENDS

MINING THE DATA

PREPARING FOR THE FUTURE

Exploring the future of hearing care

Introduction to the Future Hearing Journeys project

Hearing care is in flux; it is not what it was or what it will become. Its trajectory is changing due to advances in technology, global trends, changes in consumer behaviors, and the global pandemic that thrust rapid changes on all facets of the sector.

The Future Hearing Journeys project was launched to understand the characteristics and dynamics of hearing care five to ten years from now. And to anticipate the implications for people with hearing loss, hearing care professionals, educators, students, and the hearing care industry.

Person-centered care (PCC) is at the core of the Ida Institute's mission. As part of this project, we looked at future hearing care through the lens of PCC to assess the need for PCC in the future and understand its role in hearing care over the next decade.

We gathered data and insights using surveys, focus groups, interviews, and workshops, and worked with the Copenhagen Institute for Futures Studies to identify trends affecting hearing care. We used our expansive networks, largely covering high income countries in the English-speaking world, to collect these insights. And while these are not universally applicable, we hope this report - which contains the findings of our research and speaks directly to the challenges and opportunities for stakeholders around the world - will inspire and help individuals and organizations with an interest in hearing to prepare for the future.

Our approach: Understand. Explore. Create.

Future Hearing Journeys is a project in three parts: Understand, Explore, Create. These stages form the basis of all our innovation processes at the Ida Institute.

Understand

Understand is where we research and empathize to understand what the stakeholders do, say, think, and feel. It's also where we define our stakeholders' challenges and needs.

Explore

In the Explore stage, we harvest and refine ideas that address the issues that we have identified. We then create tangible examples of some of our best solutions with quick prototypes and share them to gain feedback.

Create

In the final Create stage we test our most successful prototype(s) externally before turning them into a finished product that we implement with the intention of improving the lives of people with hearing loss.

The Understand, Explore, Create process doesn't allow us to know what we're making until we are deep into the project and the end result only comes to light as we near the finish line. But the goal is always the same – a way to help people with hearing loss get better care. It is not a process without risk, but without some risk, there can be no innovation.

This report represents the findings from the Understand stage of the Future Hearing Journeys project. Led by these insights, we will be working to develop new resources that will meet our various stakeholders' future needs and help ensure that people with hearing loss will receive high-quality, person-centered care in the future. By sharing these insights, we hope to inspire others to do the same.

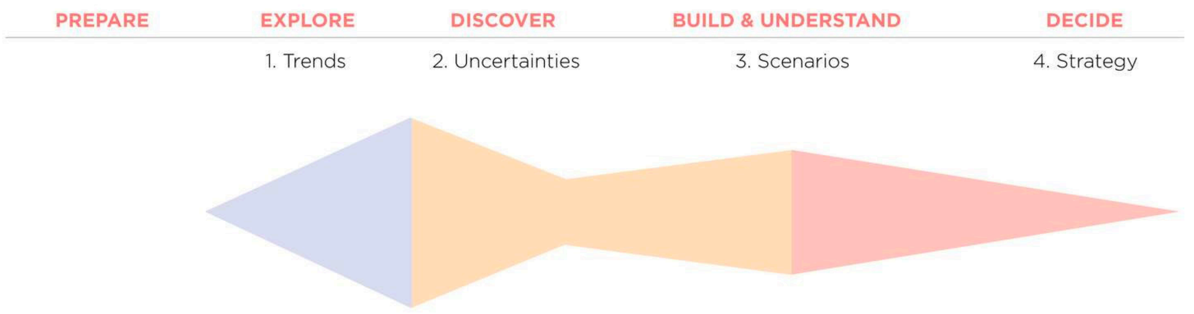
Mapping future trends

We worked with the Copenhagen Institute for Futures Studies to illuminate possible hearing care futures and used the Copenhagen Method to steer the process (see diagram below).

It began with desktop research, interviews, and focus groups, which were steeped with decades of accumulated knowledge about hearing care. We identified megatrends, trends, and uncertainties influencing hearing care and used this information to create a matrix with two axes: client engagement and technological advancement. We then developed four possible future scenarios based on the matrix, the trends, and our research.

The future will probably not be one of the four scenarios we have forecast, but a combination of them. The scenarios are extreme, but plausible. They are provocative and designed to foster debate about the type of hearing care we want to create over the next decade.

The Copenhagen Method



The Copenhagen Method is developed by the Copenhagen Institute for Futures Studies.

Megatrends and trends

Future worlds are shaped by past and present forces and it is only by identifying these that we can envision possible future scenarios. Megatrends and trends are the engines of scenario planning. They include all the catalysts of change — or stagnation — that must be considered.

Megatrends include general things such as technology, the economy, and broad social trends. They have a lifetime of at least 10-15 years and their influences define the future of global societies. Megatrends are viewed on a broad trajectory, making it easy to over- or underestimate their influence. Megatrends are interconnected and the greatest opportunities lie in looking at those relationships. We have little control over megatrends and have to look at how we can work within them.

Trends look at the development of particular industries or interests — in our case, healthcare and hearing care — and require a deep understanding of the subject. Trends are rarely entirely good or entirely bad; they must be viewed from all perspectives to discern what influences they will have.

Identified megatrends

Commercialization

Areas in society and the public sector that become assigned to commercial business

Globalization

The process of interaction and integration among the people, cultures, companies, and governments of nations across the globe

Economic growth

An overall increase in productivity and subsequent growth of wealth at a global scale

Immaterialization

The changes in our perceptions and our values that include a greater focus on value over volume and experience over physical goods

Polarization

The growing gap between extremes, such as top and bottom market segments, at the expense of the middle and lower segments

Focus on health

A global movement towards improving health and well-being, transcending all aspects of public, private, and professional lives

Democratization

A process of transformation in which equality, access, and transparency are improved by accountability, decentralization, empowerment, and openness

Network society

A society and operating environment where networks are shaping social interactions and organizational structures

Individualization

An increasing desire for personalized products and services that directly conform to the needs and interests of a particular user

Technological development

The application of knowledge or science to commerce or industrial processes. Both the innovation and diffusion of technologies

Knowledge society

Skills, information, and data constitute primary economic assets as populations become increasingly educated and the economic value of knowledge grows

Acceleration and complexity

Shortening business lifespans, innovation, and product life-cycles with greater industry convergence

Sustainability

Meeting the needs of the present without compromising the ability of future generations to meet their own needs

Demographic development

The measurable changes in demography covering the distribution and size in human population, including: urbanization, aging, ethnicity, religion, and family composition

Healthcare trends

Healthcare trends reflect digital and health innovations. They identify changes among patient preferences, human and financial resources, demographic shifts, and technological developments. Each trend is directly related to one or more megatrends. And like megatrends, healthcare trends are also interconnected.

Identified healthcare trends

Informed and empowered consumers

Demand for customized products

The changes in our perceptions and our values that include a greater focus on value over volume and experience over physical goods

Smartphones and health data

Individuals collect data on their phones to track their own information, report to healthcare professionals and insurance companies, and as part of large-scale aggregation

Interconnected healthcare communities

A move away from the in-patient approach where those who require regular medical or daily support rely on teams within a community rather than care facilities

Affordable, accessible healthcare for all

Changes in technology, including remote care, increase access to healthcare in all regions while reducing costs

Data sharing

Individuals report their personal health data to large corporations, which use this for everything from research to setting prices on insurance policies

Personalized healthcare model

Access to detailed patient data results in tailored plans and ends the one-size-fits-all model of healthcare delivery

Empowered consumers

Patients have access to information and can make informed decisions about their care and the professionals that treat them

Partnerships

The patient brings the expertise of their life experience and the healthcare professional brings the expertise of their professional experience for an approach to treatment where each is responsible to the other

Health and tech innovation

Advanced analytics

Large aggregated data sets provide real-time analysis

AI, VR, and AR as professional tools

Artificial intelligence, virtual reality, and augmented reality are used to create simulations to develop and test new treatments and train new healthcare professionals

AI systems replace doctors

Artificial intelligence becomes as accurate in diagnosing and treating patients as human doctors and is increasingly person-centered

Overabundance of choice in tech

Patients and professionals may become overwhelmed with the choice of technology to use and invest in as the quantity and variety of platforms accelerate

Personalized medicine based on DNA

Genetic mapping and stem cell-based medicine make it possible to give patients truly individualized treatments

Genetics and bioethics

As more possibilities for gene editing become available, ethical questions arise about the acceptable risks in changing a person's genetic makeup

Remote care

Patients have access to consultations and treatments without having to visit a healthcare professional in person

Challenging and changing health contexts

Ageing population

As populations age, individuals are more likely to have comorbidities, requiring extra care and resources from healthcare systems

Private tech companies in healthcare

Private companies from outside of healthcare enter the market, disrupting traditional healthcare models and increasing competition

Focus on well-being

A holistic approach to healthcare that considers mental, social, emotional, and spiritual wellness in addition to physical wellness

Burnout

A focus on addressing mental health needs requires an increased investment but can alleviate pressures in other healthcare sectors

Shortage of healthcare workers

Healthcare workers leaving the profession and not being replaced creates a strain on the system with longer waiting times and less attention to the individual

Mental health becomes a greater priority

Staff shortages and long hours contribute to healthcare workers taking extended leave or leaving the profession altogether

Decentralization and specialization

Increased contact between patients and specialized healthcare professionals transfers the focus from the general practitioner's referrals to the acute needs of the patient

Hearing care trends

Hearing care trends are our primary focus and relate directly to how hearing care will be received and delivered in the future. These are sub-trends of healthcare trends and are directly influenced by both these and megatrends, which filter down to generate the specific hearing care trends below. This means we are once again looking at a variety of factors from personal preferences for assistive devices or care delivery models to technological developments and changes in the population.

Identified hearing care trends

Informed and empowered consumer

Increasing loneliness and isolation

People with hearing loss are more prone to isolation as they may actively avoid social situations or other loud environments where it is difficult to communicate

Consumers drive their own hearing care

Better informed, digitally savvy consumers, connected via social media, prefer to seek out assessment, treatment, and management options online over going to a hearing care provider

Consumer demands for transparency, trust, and unbundling

People with hearing loss adopt a consumer-driven mindset with expectations about convenience, simplicity, flexibility, sustainability, and quality that call for transparency of pricing and an unbundling of services from products. They expect that they can trust their hearing care professionals (HCPs) to provide the best care and devices at the cheapest prices

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Digital transformation and tech innovation

Hearing loss treated through medicine

Advances in science and medicine will create new treatments for hearing loss, including surgical, pharmaceutical, and gene therapy options

Avatars and automation transform hearing care

Artificial intelligence becomes a tool used to diagnose uncomplicated cases of hearing loss. AI becomes even more accurate at diagnostics than a human HCP and more able to customize the hearing journey. Person-centered care (PCC) is transformed and performed in new ways, assisted by avatars and virtual and augmented reality

Challenging and changing hearing care contexts

Aging population with increasing demands

The aging population doubles but members maintain their active lifestyles. As the older generations make up the biggest proportion of those seeking treatment for their hearing, HCPs have a broad demographic with needs to meet. This demographic has expectations about the care they receive, how hearing devices should work, and potentially has more comorbidities to manage

Increasing public awareness and de-stigmatization

A proliferation of in-ear devices changes popular conceptions of hearing aids. Instead of being just a prescribed medical product, devices are expected to improve people's hearing and measure additional health metrics with AI assistance. Because of the popularity of these devices, stigma towards hearing devices decreases

Hearing healthcare and inter-professional practice

Integrative medicine, including hearing care, becomes a mainstream approach to healthcare wherein general practitioners play a larger role in identifying hearing loss, and HCPs become part of a cross-disciplinary team. Increased transparency and coordination between health sectors breaks down silos to help manage comorbidities

Unequal access to hearing care

Models of digitalization rely on equal access to hearing care and equal access to technology. Those with health challenges and lower digital literacy levels struggle to keep up with technological demands and require more assistance from their HCP. This is more expensive, and the costs are passed on either to public healthcare systems or, in privatized systems, to the individual

Increased competition in the hearing aid market

It is harder for independent HCPs to turn a profit based on hearing aid sales. They face competition from bigger chains buying up smaller chains and a consumer preference for wearable tech produced by electronics companies outside of the hearing aid market. People with hearing loss will benefit from competitive prices and more options — hearing aids with AI assistance, OTCs, and non-medical tech. This will make it easier for people with mild hearing loss to start their hearing journeys at an earlier stage. Decreasing regulation, however, leads to products of varying quality and opens questions about how data is handled

Hearing health as well-being

HCPs focus more on a client's quality of life as it relates to their hearing loss and how clients manage their hearing loss in daily life and less on the audiogram and hearing aids, regardless of the degree of hearing loss. HCPs support their clients and their families to help them optimize their experiences

PCC as a value proposition

PCC becomes the distinguishing factor in hearing care, evaluated by consumer-driven metrics such as 24/7 access to care, health outcomes, and satisfaction with their HCP. Manufacturers have to value PCC as much as HCPs do, so that devices make PCC accessible at all points of the hearing journey in addition to automating all technical procedures

HCPs take on new roles and qualifications to meet a blended, flexible hearing care model

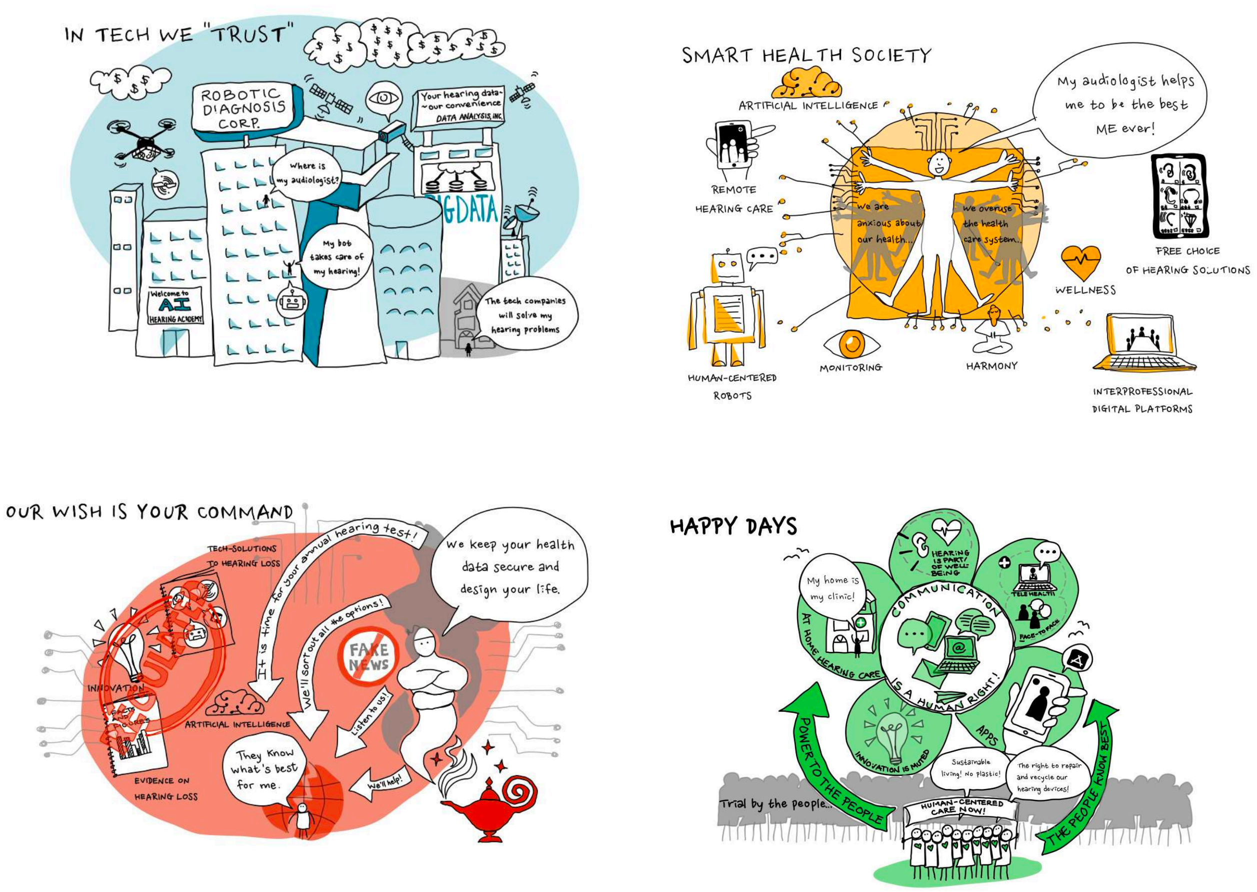
Remote care becomes dominant, enabling tailored and flexible care. Hearing health moves out of the clinic and into peoples' homes with help from technology such as sensors, self-monitoring services, etc. Direct-to-consumer models are more prevalent among people with mild hearing loss and digitally savvy consumers. HCPs shift their focus to complex cases, patients with comorbidities, and clients who are not comfortable with technology and need help with their devices. This increases the educational demands on HCPs as they become tech, communication, and digital literacy specialists, educating people with hearing loss in navigating future delivery models

Predicting future hearing trends

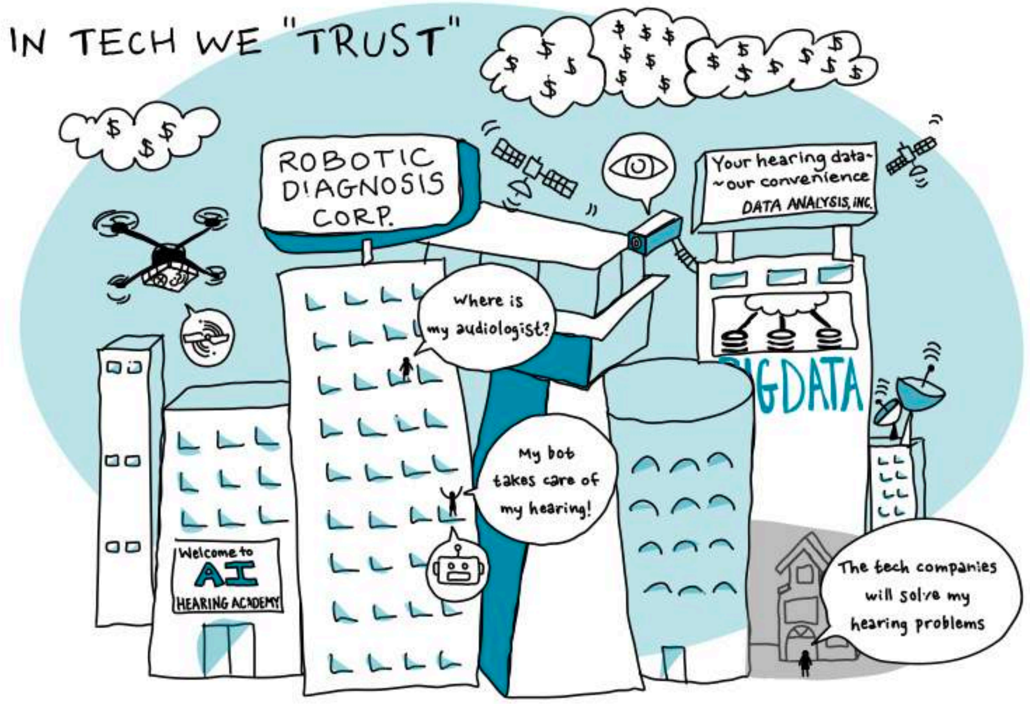
The scenarios

Scenarios paint a picture of what the trends, data, and insights say. They communicate a range of characteristics the future is likely to embody and provide a common starting point for discussions and strategic planning. Think of research as steel, lumber, and concrete, and scenarios as buildings and infrastructure. Research gives you the material and scenarios give you a city that you can explore to find the good, the bad, and the in-between.

Below are the four scenarios we have worked with in this project and used in our workshops to generate reflection on future hearing care.



The four scenarios



In tech we "trust"

Your hearing device wakes you up to remind you that your health data is due at GoogleLab today, and they have already transmitted this month's vitals. You shrug and tell them to let your friend know you will be a little late for your virtual coffee date. Welcome to 'in tech we "trust,"' where hearing care is disrupted by tech giants and start-ups who capitalize on rapid technological advances and lax regulations to flood the market with devices of varying quality — the best of which only the rich can afford. Ethical and unbiased health information is scarce, leading to the rise of direct-to-consumer models. Testing and diagnosing are done by robots, replacing the role of hearing care professionals. Consumers trade their rights to privacy for convenience without always being fully informed or understanding why data management is important. They also become less-engaged receivers of tech and expect quick fixes to their hearing loss. Customer service is delivered by bots and the role of professionals is managing complex cases where AI falls short.

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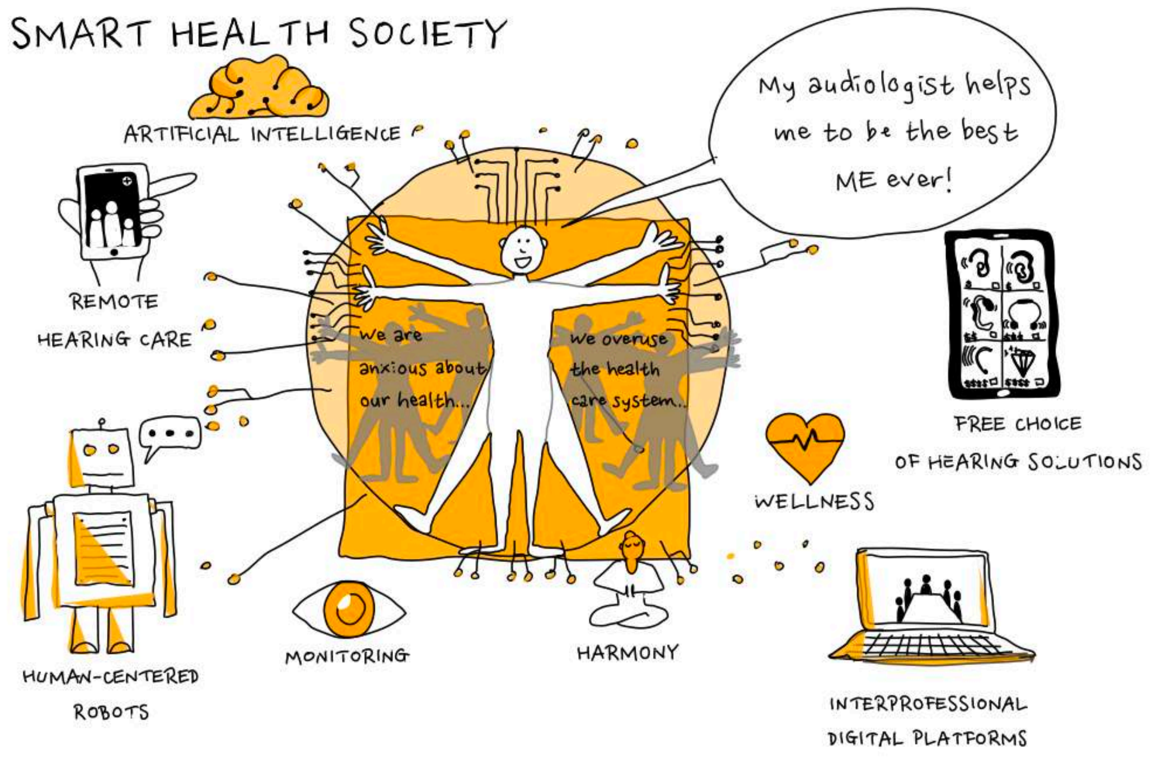
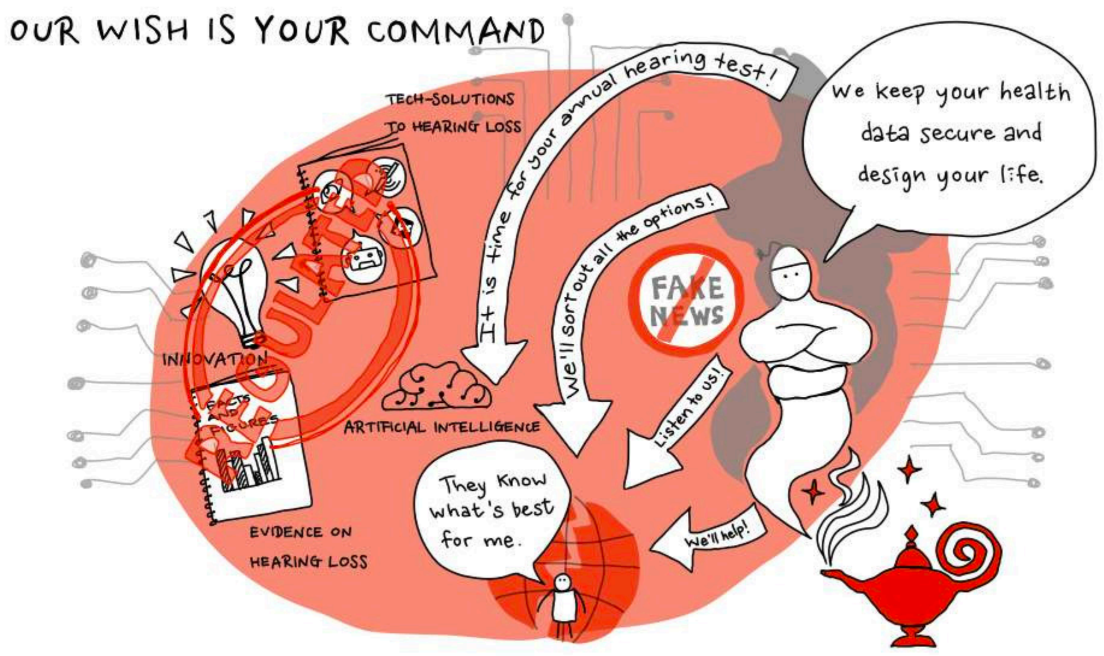


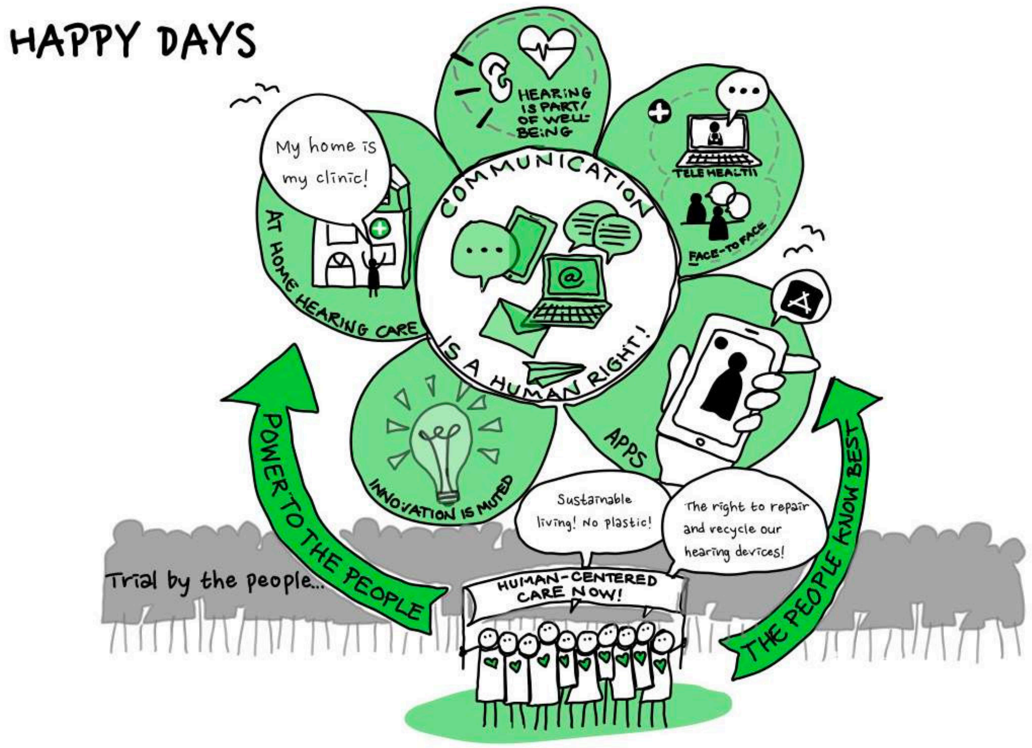


Smart health society

You're chatting to your hearing counselor as your car drives you to your company's equal access meeting. You see the pulse of light on your dashboard reminding you that your payment chip is getting low. You make a note to look for better rates from other counselors. This is 'smart health society,' where fast-paced technology meets engaged consumers. Hearing is inseparable from general well-being and consumers are informed and have legal rights to communication and equal participation in society. Individualization is expected in all aspects of life and personal health data is evaluated by AI to customize care and set insurance rates. Hearing care is delivered to consumers at home by medical teams who connect to them through advanced smart devices, providing preventative, holistic care, monitoring vital information, and tracking it through digital platforms. There will always be some aspect of a consumer's health that can be optimized. Consumers are empowered through their personal and professional networks, while their 'hearing concierge' will support them in decision-making and payment options.

Our wish is your command

The long-awaited update to your hearing device is finally out and your audiologist can upload the new version to your device soon. You hope your hearing data showed enough about your needs, so you won't have to register for an appointment to have them readjusted. You are living in a world where 'our wish is your command,' a heavily regulated world where consumer data and privacy are protected, and health services are driven by providers and funded by healthcare systems. Technological advances happen at a moderate pace and governments implement rigorous policies and procedures that professionals must follow. To prevent the spread of misinformation, sharing of health information on social media platforms is banned, but consumers are still disillusioned by misinformation and information overload. They are not actively looking for better hearing solutions and escapism is a common coping mechanism for their disillusionment. Professionals take the lead in a top-down approach for identifying and treating hearing loss, with little partnership from consumers. They expect 24/7 support and AI assistance. Due to restrictions, AI is not as accurate as hoped, but does help professionals find and reach consumers based on their health data that is kept secure by the government.



Happy days

You are on a nature hike with your group when you trip and break your hearing device. Even though you've had them forever, they are probably still covered. You joke that only the colors of hearing technology have changed in years anyway, so yours will probably be replaced with the same model. You are living in Happy Days, where innovation takes its time and the consumer experience is elevated by human-centered care. Communication is recognized as a human right and, like everything here, it is well protected with legislation. Engaged and well-informed consumers are curious about hearing tech solutions and adopt these gradually while acknowledging that tech is just part of the care package. They rely on digital and social networks to make choices about hearing health and understand that hearing is a part of well-being. The dominant care model offered by audiologists is a hybrid of face-to-face and telehealth. Implementation of tele-services is slow due to regulation and muted innovation, but this pace ensures no one is left behind. The industry and professionals are becoming more consumer-centric. They offer transparent pricing models and clear, evidence-based information. Home is the center of hearing care in this decentralized world, where cheaper, more accessible technology and online fittings alleviate stress on public systems.

Mining the data

1 survey, 60 interviews, 6 focus groups, and 2 workshops

The insights presented in this report are the sum of an extensive process of qualitative and quantitative data collection, including a survey, focus groups, and workshops.

The survey

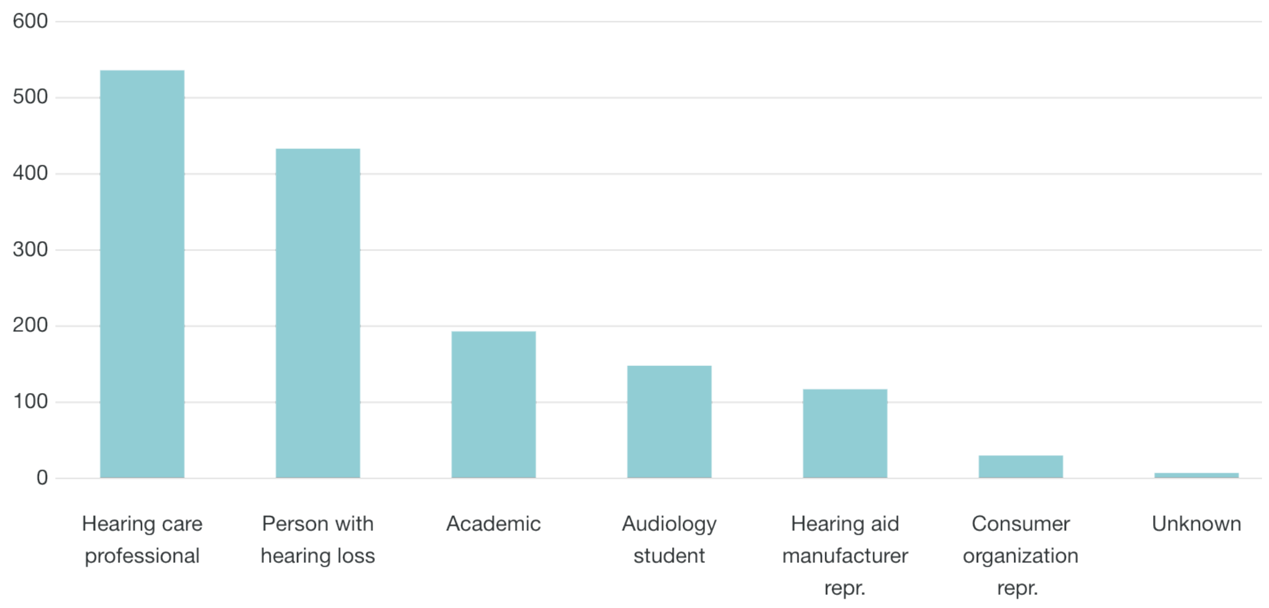
We conducted a survey asking a broad group of stakeholders about hearing care preferences, concerns, and opportunities, and the role of person-centered care (PCC) in future hearing care. The survey was distributed through digital channels and reached people across the globe. In all, 1,457 people were surveyed. Respondents included people with hearing loss, hearing care professionals (HCPs), people working in patient and professional organizations, academics, audiology students, and employees of manufacturers.

Trends and developments in hearing care vary in different parts of the world. As it isn't feasible for us to generate universally applicable insights, we focused on our existing networks, largely covering high income countries in the English-speaking world, and aimed to generate insights applicable to those and other countries with comparable levels of economic development.

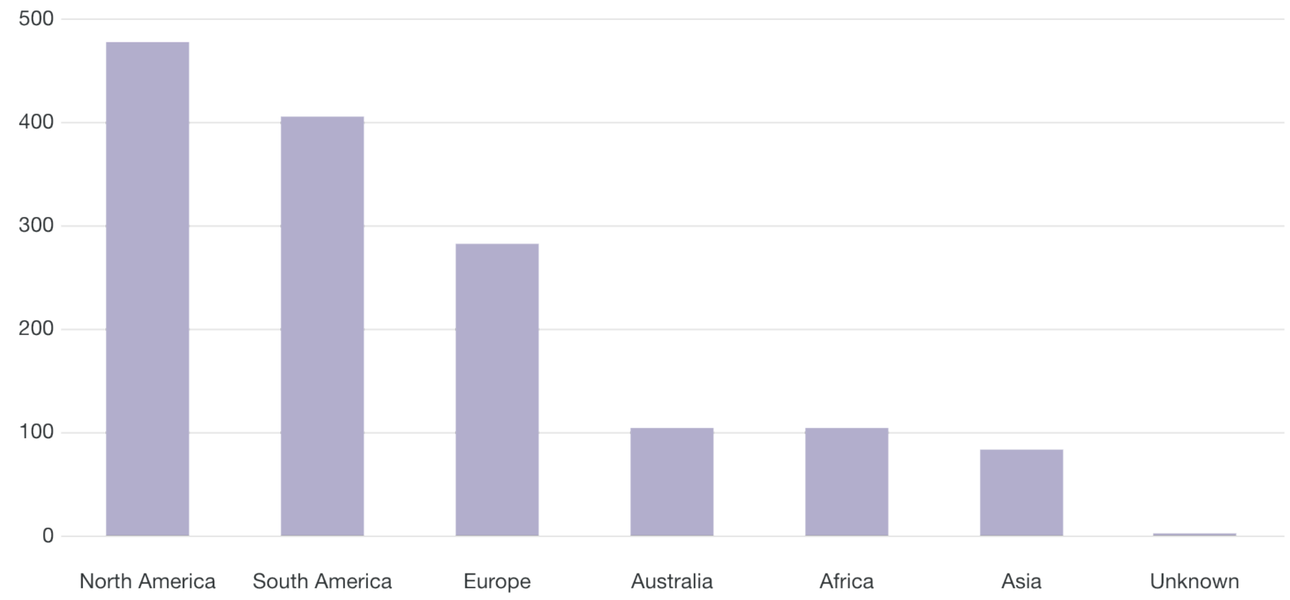
As the survey was distributed through the Ida Institute's network, we acknowledge a sampling bias in terms of gender representation, geography, and attitudes towards PCC. Notably, there is a gender bias in the category of people with hearing loss, with more women than men responding. Regionally, the respondents are not proportionally representative of the populations, in particular in South America, where most of the responses received are from Brazil.

This means that the results are not representative of a global population but that the results show tendencies among diverse populations, and provide direction, confirmation or contradiction of other data and information about specific regions or groups.

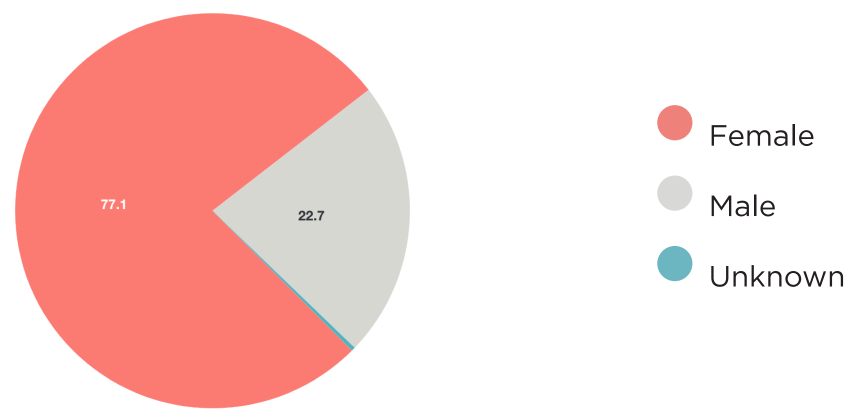
Respondents by category



Respondents by region



Respondents by gender



Focus groups and interviews

Six focus groups and 60 interviews were conducted online by staff anthropologists. Participants were opinion leaders from within each target group: people with hearing loss, HCPs, academics and students within audiology, hearing aid manufacturers, and patient and professional organizations. The focus groups of people with hearing loss included their communication partners and the questions and process were adapted accordingly.

We used analysis software (Dovetail) to tag and categorize the respondents' feedback, which was in the form of recorded Zoom interviews. The software is designed to uncover patterns across the interviews, helping us to turn the data into usable insights. The insights were then used to support and challenge the results from the survey and to inform our scenario development.

The workshops

In December 2020, we invited two groups of 25 experts in hearing care to an online workshop to learn what influences they anticipated shaping hearing care in the next five to ten years and what challenges and opportunities these would create. The experts included people with hearing loss, clinicians, academics, educators, industry professionals, and representatives from patient and professional organizations.

Ida facilitators guided the group through a structured process using the future scenarios to foster conversation, debate, reflection, and ideas through work in small groups and plenary discussions. The workshop drew out individual perspectives as well as general agreements about factors considered to have the greatest impacts on the future of hearing care.

We analyzed the findings, insights, and perspectives generated through the methods described above to identify what the future of hearing care looks like and how this will impact different stakeholders.

The perspective of people with hearing loss

Patient, consumer, client, or person with hearing difficulties? There are many ways to designate a person with hearing loss, depending on the context, perspective, and culture in which we operate. What interests us in the context of this project is the individual, and what type of care they prefer, now and in the future.

The insights below were generated and synthesized from 432 survey responses, two focus groups with a total of 14 participants with hearing loss and/or communication partners, as well as input from people with hearing loss and representatives from consumer organizations who participated in our two innovation workshops.

> **"I trust my hearing healthcare provider and appreciate having a face-to-face relationship. I am not a robot... nor is she."**
>
> *Person with hearing loss*

The human touch - a key component of care

In our global survey, we asked people with hearing loss what they value most in their care and gave them six options to rank. Most people ranked professional guidance during in-person appointments as their first priority. Also ranking high were access to the latest hearing devices and individualized counseling. Remote care and online booking services are seen as convenient additional offerings but respondents do not consider them essential. That's expected to change as younger people age and begin their patient journey and as more people experience tele-audiology; those who have tried it are generally pleased.

These conclusions are supported by the qualitative data which suggests that people appreciate the convenience and time-saving aspects of remote care, even beyond the COVID-19 emergency response. There is an interest in a hybrid care model combining elements of online services and remote care with in-person appointments.

The desire for care approached in a holistic manner as part of people's overall well-being is expected to grow - wellness and individualization trends are strong - while others will opt for convenience and quick solutions above all else.

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> **"Adjustments can be done remotely so there is no reason to have to go to a clinic for ALL adjustments."**
>
> *Person with hearing loss*

In-person, remote, or hybrid?

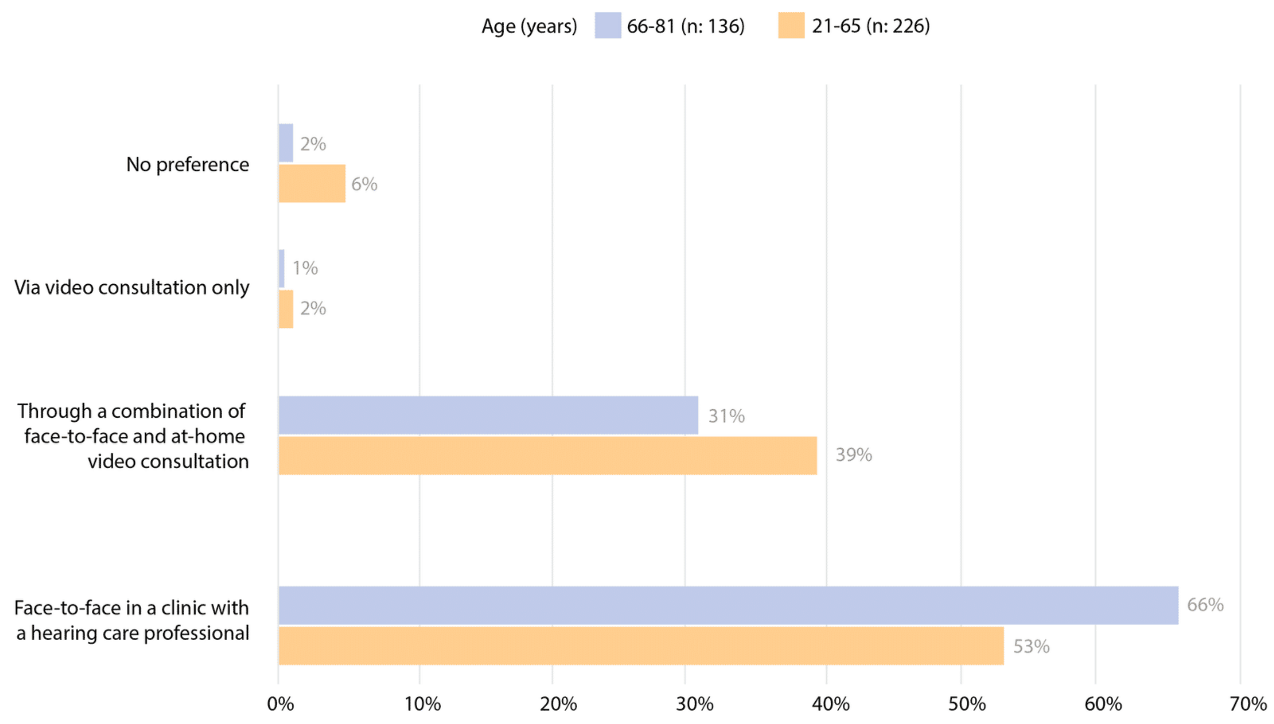
Today, the physical appointment is clearly preferred across different age groups and geographies. Not surprisingly, however, the preference for in-person appointments is higher among the 66-81 year olds (66%) compared to those aged 21-65 years (53%). The survey also shows that a relatively large percentage of the respondents (39% of the 66-81 year olds and 31% of the 21-65 year olds) would be interested in a care model combining face-to-face and remote consultations.

The trend is towards more appointments moving online and some of the people we spoke to even believe consumers are more ready or willing than hearing care professionals to make the jump. New graduates are also more likely to embrace online appointments, which could accelerate the move to online and hybrid appointments.

> **"Telehealth acceptance is poor amongst professionals – not amongst patients. Telehealth is more than Zoom. It's also telephone, website etc. The conversation needs to change from being about the device to about telehealth. And we need to do telehealth not because of COVID but because it is best for the patient – it's part of a good journey."**
>
> *Hearing care professional*

Looking at the geographical differences, there is a slightly greater openness towards telehealth among people with hearing loss in South America/Brazil - a result which could be explained by the relatively large distances people have to travel in this region to access care facilities.

What setting would you prefer for your appointments?

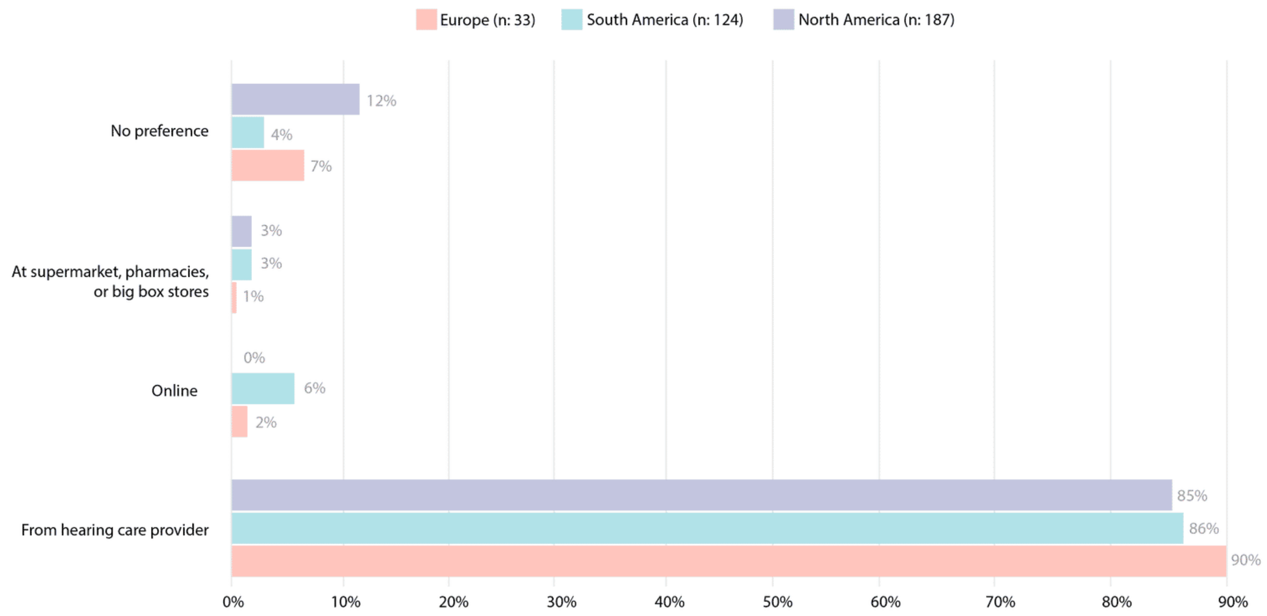


Cost and buying preferences

The cost of hearing aids is less important to the survey respondents than access to in-person appointments and individualized counseling. The cost is slightly more important for people under 65, who are also more likely than older people to buy their devices in big box stores, pharmacies, or online.

The qualitative data suggests that this tendency is linked to the notion of trust, which will continue to be a vital component of the professional/ consumer relationship. Access to reliable, transparent information - including information related to the cost of hearing devices - is also of importance.

How would you prefer to get your hearing devices?



> **"My biggest struggle would be getting reliable information. The way to get good information is to go to a real-life person you trust and ask them about things. If it was all based on technology, I think I would put my head under the pillow and go back to sleep."**
>
> *Person with hearing loss on a tech dominated future*

Hopes and fears for future hearing care

Consumer hopes for future hearing care	Consumer fears for future hearing care
■ Personalized, flexible care ■ Focus on the emotional and psychological aspects of hearing loss ■ To be able to choose between different care models (physical appointments, remote care, direct-to-consumer) ■ Convenience and accessibility ■ New technology and AI with “a human face” that empowers consumers ■ Preventive care with a focus on overall health and well-being ■ The home as the center of care with support from the family ■ Transparent and fair pricing models ■ Trust, partnership, and shared decision-making between the care provider and receiver	■ Care becomes depersonalized when delivered through tech, contributing to isolation and loneliness ■ Unequal access to hearing care and information for the less resourceful and tech savvy ■ Navigating complex information, technical solutions and delivery models will be difficult ■ More use of and dependence on AI, automatization, and big data will mean a lack of control among consumers and lack of privacy/ data protection ■ Tech giants and commercial interests will challenge systems and ethics ■ Pressure on healthcare systems

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Thoughts from the consumer organizations

Consumer organizations are great advocates for the people they represent. And, much like hearing care professionals, they are also knowledgeable guides as consumers navigate their hearing journeys. As they look a decade into the future, they recognize that technology will transform hearing care, but caution that it can alter it for better and for worse.

In technology and new delivery models, consumer organizations see the promise of access to better, more affordable tech that is easier to use. They see fewer trips to clinics and satisfying appointments done from wherever the consumer happens to be. They see hearing devices that routinely record broad health data and provide security for incidents such as falls and heart attacks.

But they also see the threat of dehumanized care where a lack of access to real people creates new problems, where indiscriminate selling of sub-standard devices leads to exploited consumers, and where the potential cost of new tech is out of reach for many people.

Safeguarding against a worst-case scenario means decision-makers need to be consumer-centric. Consumer organization representatives stress that hearing care professionals need to remain accessible to those who want to see them in person, and provide options for those who prefer meeting from the comfort of their homes. Regulators need to protect consumers, while being careful not to stifle innovation.

> **“Hearing health professionals not being up to the person-centered challenge, wanting to stick with safe ‘technology-focused’ engagement”**
>
> *Representative of a consumer organization on challenges of the future*

Mining the data

The clinician perspective

Hearing care of the future sees the seemingly contradictory megatrends of commercialization and immaterialization contribute to increased competition in the hearing device market, a greater demand for personalized healthcare, and a focus on overall well-being that includes hearing health.

Competition looming

The biggest concern of hearing care professionals (HCPs), looking forward five to ten years, is the growth of over-the-counter (OTC) devices. They worry that if OTCs become common, the need for audiologists will decrease, leading to job insecurity. New players in the market cause apprehension, and there is fear that manufacturers will market OTCs, further reducing the need for hearing care professionals. Professionals fear this could affect people's access to high-quality hearing care. They are also aware that lackluster results from OTC devices - or improper use - will taint expectations of the benefits of hearing aids and of amplification in general.

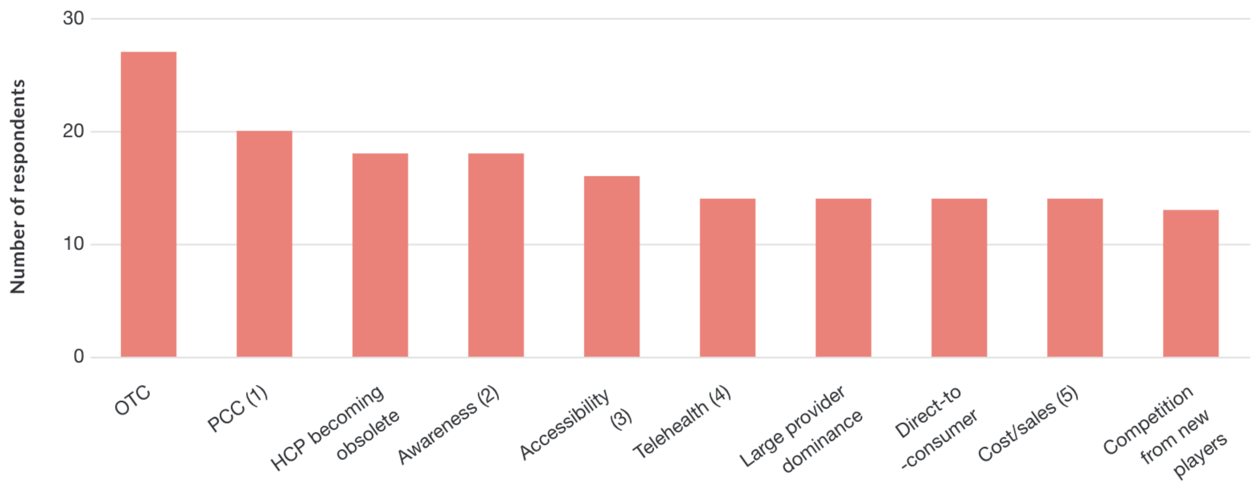
Some professionals we spoke to argue that OTC devices could also present opportunities for HCPs prescribing them to support clients. Support could be in the form of one-off counseling sessions, communication tips, hearing tests, and ad-hoc services in place of an ongoing care and maintenance plan.

"The concern is of more people purchasing OTCs, being dissatisfied, and thinking that is how all hearing aids will be for them."

Hearing care professional

What are your top concerns for the coming five to ten years?

We asked respondents to list three main concerns for hearing care. The graph below shows the number of people who chose a given topic as their prime concern.
(Top 10, n: 298)



1) Lack of access to personal counseling and understanding of the value of PCC among patients and HCPs. 2) Lack of awareness of hearing loss and value of hearing care. 3) Absence of equal and fair access to information and resources for people with hearing loss due to economic, social, geographical, and age factors. 4) Lack of human contact and personalized approach, less accurate testing and fitting in an environment with no physical contact. 5) Consumer budget constraints and prioritization of other medical demands, PSAPs, increasing overhead costs to retain qualified staff

Nurturing the relationships with clients

As discussed in the previous chapter, our research shows that personal contact with an HCP remains very important to consumers, despite advances in telehealth and online delivery models.

At the same time, rehabilitation, counseling, and PCC are high on the list of opportunities HCPs see for the future. However, PCC is also the second biggest concern for HCPs. This paradox shows that while professionals see the potential in PCC, they are also concerned about their ability to deliver it in a market disrupted by new delivery models. Training in communication and counseling methods for these new models could be the key.

Looking to the future, it will be increasingly difficult to impossible for independent practices to be competitive with large and online retailers on price. Crucial for a thriving business will be unique selling propositions including, for example, personalized care, an emphasis on counseling, building trusting, long-term relationships with consumers, and specializing.

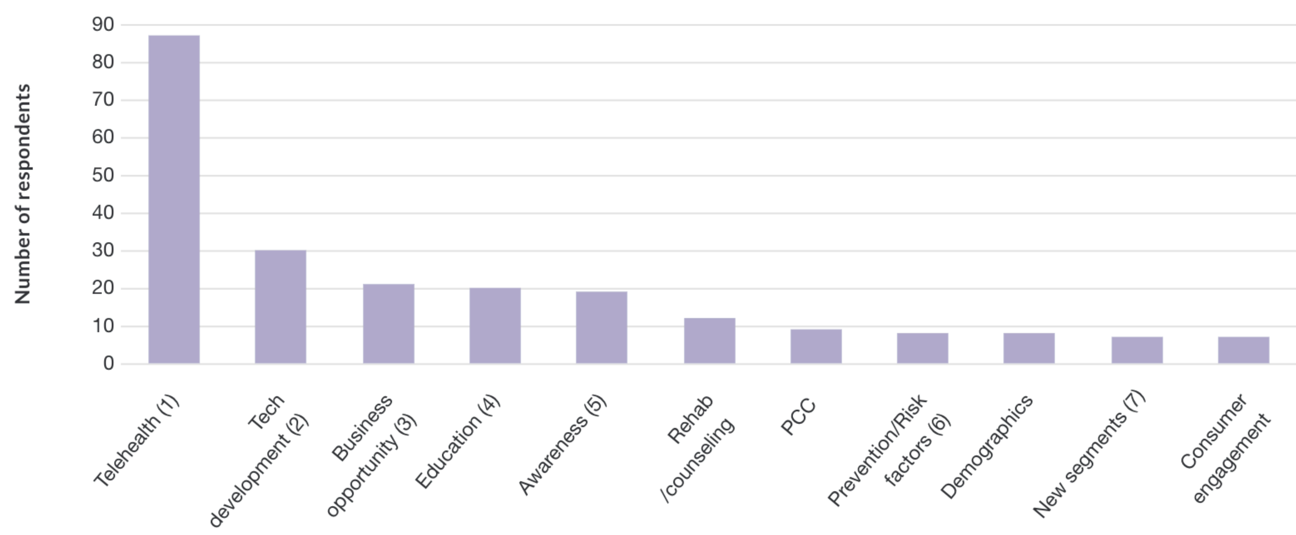
> **"Audiologists will actually be identified for their services - not a product, [but] their ability to offer total hearing care."**
>
> *Hearing care professional*

PCC can help professionals build relationships with consumers and give smaller practices an edge over large retailers in creating environments that are tailored to people with hearing loss. PCC and 21st century soft skills can also be used to humanize digital interactions and remote care, and help professionals emphasize care over tech in an increasingly digitized world. Fortunately, PCC rarely requires buying or learning technology but can lead to better outcomes and consumer loyalty.

Empowered consumers with a desire for self-management will contribute to strong relationships between HCPs and their clients; but strong relationships should not be confused for blind loyalty as consumers will also be prepared to change providers if they find one who better suits their needs.

What are the biggest opportunities for the coming five to ten years?

We asked people to list three main opportunities for hearing care. The graph below shows the number of people who chose a given topic as their prime concern.
(Top 10, n: 302)



1) Reaching patients remotely, better possibilities for follow up, in-home care. 2) Better hearing technology, greater technological development for auditory habilitation processes, improved tech leading to better outcomes, increased tech options and savviness. 3) Increased number of people with hearing loss and growth of industry, interaction with broader range of potential clients, diversified business models. 4) Motivating more students to become audiologists, introducing hearing health education programs in schools. 5) Public education, raising awareness among consumers about value of taking responsibility of own care, sensitizing government to value of audiology services, easier access to knowledge through social media. 6) Increased awareness of urban noise, greater control of ototoxic chemicals. 7) Easier access to younger generations/ younger average age adoption, expanding market as people with mild hearing loss integrate hearing aids and apps.

Tele-audiology and remote care

The number one opportunity identified by professionals for future hearing care is telehealth. Our survey found that, today, 86% of people prefer purchasing hearing devices and receiving care from an audiologist. But based on trends and insights, we can conclude that more people will be buying online ten years from now.

Hearing care of the future is not location specific. The consumer's home will frequently be where they receive care, and in most cases, care will be a hybrid of face-to-face and remote. Future care will happen from your mobile, your computer, your office, your home, and anywhere in-between and beyond. Consumers will expect as much and it will be among the criteria they use when choosing and recommending HCPs.

Tele-audiology ushers in an era of greater flexibility for both the clinician and the consumer, and extends access to quality hearing care to areas far from clinics and hospitals. Coloring many aspects of the interactions between HCPs and their clients, it can improve hearing care by making quick check-ins more feasible, giving clinicians a better understanding of their client's living environment, putting a focus on care and service rather than tools and products, and improving overall efficiency, which will allow more time for complex cases.

"If we do more tele-audiology services it will be easier to include family members in the appointments since they won't have to leave their home."

Hearing care professional

It could also improve work-life balance for audiologists, should they decide to embrace it.

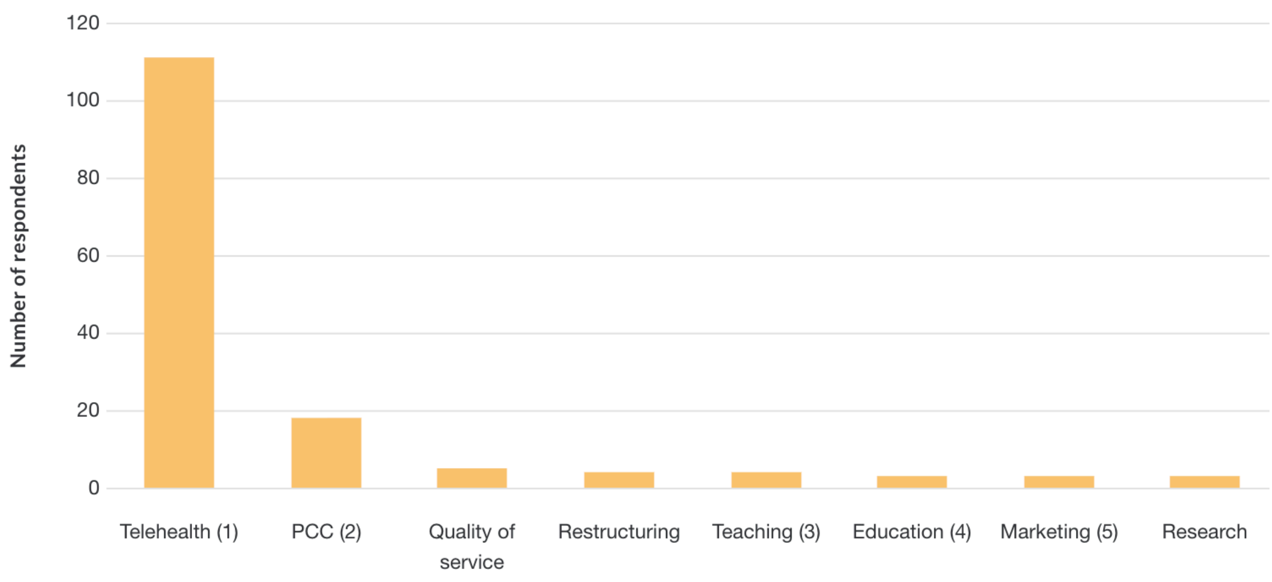
When it comes to future-proofing their practice, telehealth is the aspect that most professionals have invested in. But tech developments can lead to frequent updating of hardware and software and may come with a learning curve that is discouraging for HCPs and their clients. Professionals will need to consider how to support the technological needs and limitations of themselves and their clients - especially for tele-audiology services.

"Perhaps with remote care, there will be more time to understand the patient's life, in addition to the possibility of the professional knowing what resources the patient has."

Hearing care professional

What have you changed in your practice to prepare for the coming five to ten years?

We asked respondents to list three main things they have done to prepare for hearing care in the future. The graph below shows the number of people having chosen a given topic as their prime concern. (Top 8, n:180)



1) Taking on board remote fitting serviced offered by manufacturers, providing more tele-audiology services/ hybrid care, providing video and support materials for home care, online repair services, using Ida Institute tools to help patients prepare for appointments, investing in technology, enhancing knowledge about tech platforms. 2) Training staff in PCC, daily staff meetings to review each patient. 3) More automation allowing staff to focus on patients education and counseling, diversifying offerings to more than just hearing aids, educating clients and family about the importance of PCC. 4) Enhancing patient/consumer education, continuing professional development. 5) Online services and advertising.

Towards more holistic care

Our qualitative data suggests that people appreciate when hearing care is approached in a holistic manner as part of their overall wellbeing - a development aligned with the overall wellness trend.

Governments as well as individuals will be increasingly interested in prevention and wellness over treatment, leading to engaged consumers who consider hearing health inseparable from health. Meanwhile, ageing populations with longer lifespans - to the tune of about 20 extra months or more by 2030 according to CIFS's Next Era in Global Health - will require more care from what will be a declining workforce (the International Labour Organization has projected a 2.2% decline in North America and 2.6% decline in Europe and Central Asia between 2015 and 2030). And that's good news for HCPs.

For people with hearing loss and professionals to reap the benefits of this wellness trend will require consumers to be aware and educated about the impact of hearing loss on their overall well-being. Education and awareness are therefore also high on professionals' lists of opportunities for the future - a future where people with hearing loss are empowered to receive better care and where the scope of the professional's role is enlarged.

> **"It gives an opportunity to step up and be part of the change rather than passive recipients... Many people with hearing loss are highly disadvantaged and need active promotion... someone to play the role of an advocate and a co-designer [of health, red.]."**
>
> *Hearing care professional on PCC as an opportunity for the future*

Ways for HCPs to prepare for the future

BE LOCATION AGNOSTIC
People value the relationship with a HCP regardless of whether their appointments are online or in person

THINK HOLISTICALLY
Hearing care will be part of an increasing focus on overall well-being

BE PERSON-CENTERED
Use PCC to nurture relationships with clients and to humanize your telehealth practice

MEET THE DEMANDS OF CONVENIENCE
Organize your practice to be flexible and responsive to people's needs and preferences

DISCOVER YOUR INNER NERD
Invest in and familiarize yourself with new tech - it can free up time that you can use on complex cases

INVITE YOURSELF IN
Work with the client's home as the center of care and include the family

CREATE TRUST
Offer transparent pricing and unbundling, and help clients navigate information overload

STAY CLOSE TO THE END-USER EXPERIENCE
Solicit feedback from clients

BE AN ADVOCATE
Educate your clients and work to influence the industry and tech providers on their behalf

Mining the data

The education perspective

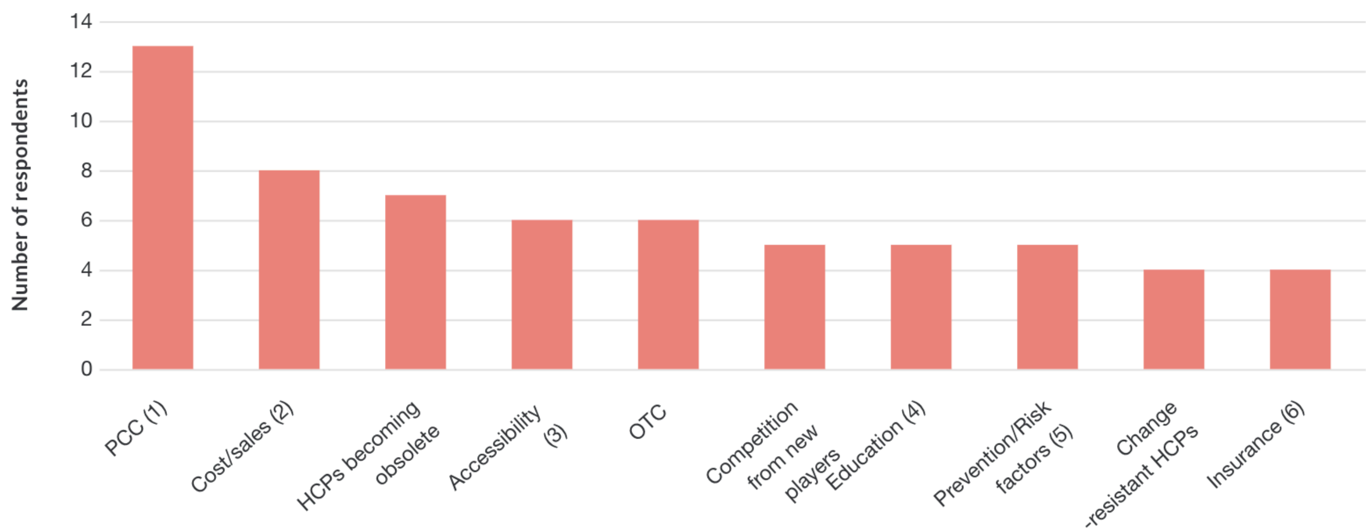
Future hearing care starts with education. To ensure that new generations of hearing care professionals (HCPs) have the skills needed to embrace change, the education sector must keep up with new technological developments, changing consumer behaviors, and new delivery models. We asked academics and students about what they see as the main concerns and challenges for the next five to ten years, and how to best prepare the education sector for the future.

Quality and acceptance of care

In a tech-dominated future, the main concern listed by the academics in the global survey is the ability of professionals to be able to deliver person-centered care (PCC). At the same time, PCC is considered by survey respondents in this category to be the second most important opportunity for HCPs in the coming years, trumped only by telehealth.

What are your top concerns for the coming five to ten years?

We asked people to list their top three concerns. The graph below shows the number of people who chose a given topic as their prime concern. (Top 10, n:107)

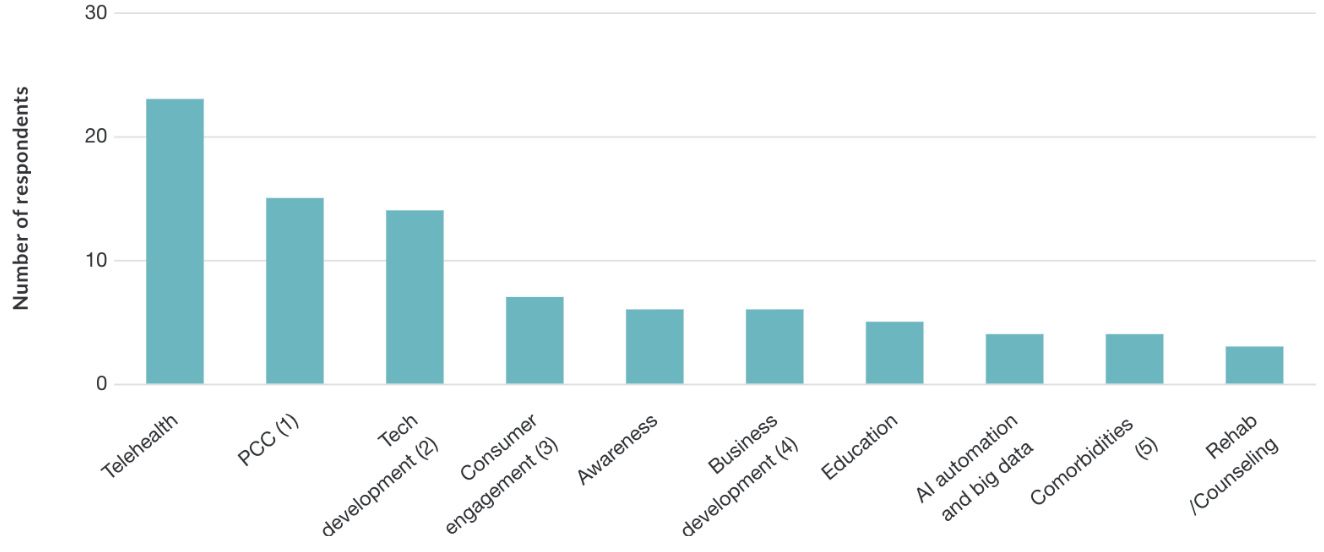


1) Telehealth a detriment to human contact. 2) Too strong of a focus on device sales from big retail organizations, new hearing solutions too expensive for people from low socio-economic status, no change in prices for hearing aids. 3) Lack of care provided in poorer communities.

4) Inadequate, inflexible education and training. 5) Increased exposure to loud sound levels, especially among teenagers. 6) Lack of reimbursement/insurance for audiological services.

What are the biggest opportunities for the coming five to ten years?

We asked people to list three main opportunities for hearing care. The graph below shows the number of people who chose a given topic as their prime concern.
(Top 10, n: 108)



1) PCC leading to improvements of quality of care, increased focus on the individual, increased awareness and recognition of audiologists role as provider of holistic services. 2) Non-hearing technology applied to hearing care, easy, reliable test equipment, amplification, greater consumer access to technology. 3) Consumers becoming more familiar with integrated technologies, ability to better understand and meet consumer needs. 4) Increased demand for HCPs and greater scope. 5) More awareness of cognitive consequences of hearing loss and an important part in reducing dementia.

Looking to the future, academics are concerned that quality of care could also be affected by other trends in the market, such as poorly designed OTC products deterring people from trying quality hearing care and leading to the misconception that technology can provide a 'quick fix' to hearing loss. The focus of big chains on sales and commission could also contribute to giving the hearing industry a bad reputation and undermine trust in the profession. A lack of awareness about the value of rehabilitation could deteriorate the quality and hence the acceptance of care.

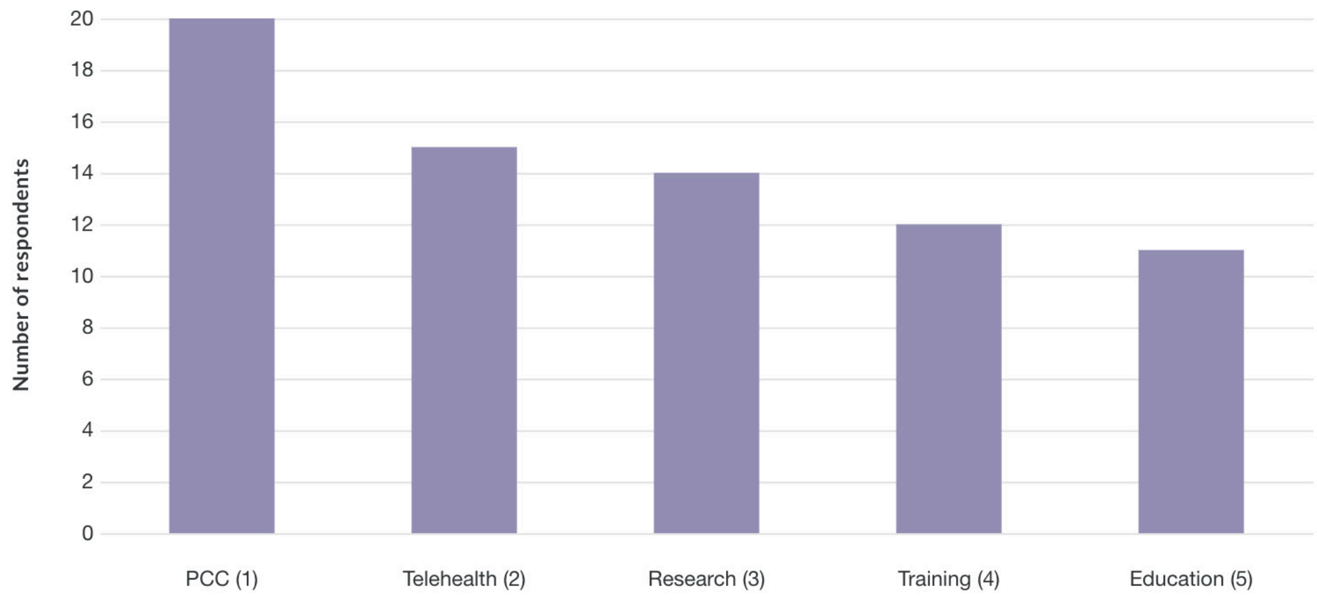
When asked what they have done to prepare for changes in hearing care in the next five to ten years, academics were most likely to mention/select PCC research and education as number one. They see the need for professionals to enhance their counseling expertise beyond the technological aspects and see PCC as an avenue for new generations of HCPs to create value for their clients.

"Audiology is about so much more [than technology] and those that don't realize that aren't going to have a place anymore!"

Academic

What have you done to prepare for changes in hearing care in the coming five to ten years?

We asked respondents to list the three most important things they have done to prepare for changes in hearing care. The graph below shows the number of people who chose a given topic as their prime concern.
(Top 5, n:103)



1) Focus teaching on PCC rather than devices/ fitting, integration of PCC in graduate training programs, conducting research on PCC benefits. 2) Enhancing telehealth counseling skills, teaching students how to deliver tele-audiology. 3) Research on PCC, hearing healthcare disparities/access to care, future trends, geriatrics/dementia. 4) Courses in hearing care and innovation, studying future trends. 5) Including classes on new tech and medical treatment, diversity in recruitment of students, development of own professional skills, moving from technology to behavioral investigations.

What does the future hold for the audiological profession?

There is a concern among academics about resistance to change in the hearing care profession. If HCPs are not willing to embrace new trends it will affect the profession. One of these trends is the global movement towards improving health and well-being, which is now also impacting hearing care. The academics foresee that there will be an increased consumer demand for hearing care to be delivered as part of holistic healthcare services. This requires new skillsets among healthcare professionals, a higher degree of interdisciplinarity, and the ability to rethink hearing care as part of a person's overall well-being.

The academics also stress that technology will bring about a future where many consumers may accept automation over personal counseling. They apprehend a future where the lack of interaction between HCPs and consumers could affect the quality of care and lead to unemployment and/or a declining workforce.

This is particularly perceived as a problem in countries such as the US where getting an academic degree in audiology is expensive and the audiologist salary may not be sufficient to pay back student debt - a perspective which could lead young people to choose a different career path. Respondents stress the need for educational reforms to address this situation - reforms which could include shorter degrees, and easier access to flexible training programs.

> **“The industry has to change its business model towards real healthcare services, or it will lose its customers with mild to moderate hearing loss.”**
>
> *Academic*

Public education and awareness

The trend towards more empowered consumers wanting to drive their own care collides with the lack of awareness about the impact of hearing loss on overall health and well-being and the ever-growing amount of information and tech choices available.

Enhancing public awareness about the connection between hearing loss and cognitive decline will therefore also be essential to support consumer empowerment and participation in the future. This could include changing the perspective on hearing to one of maintaining hearing health, rather than talking about hearing loss. Increasing awareness of the impact of hearing loss among primary healthcare providers will also be essential.

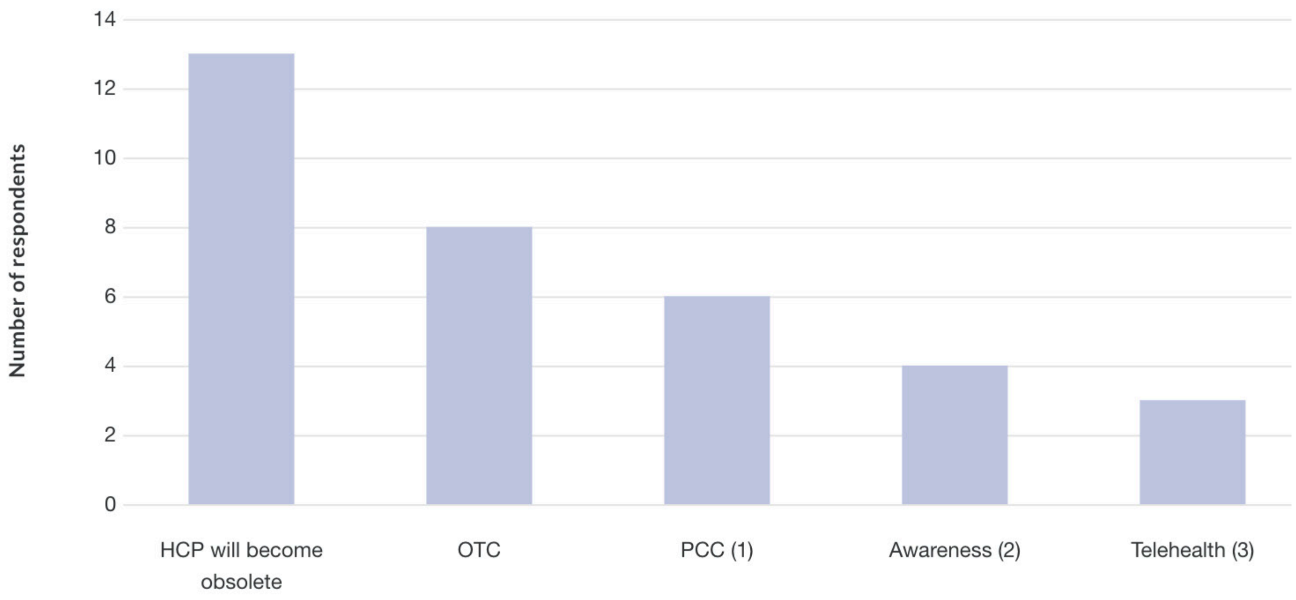
> **“There will be no more baby boomers [in five to ten years] so everyone will be/feel technologically savvy enough to manage their own hearing care and listening devices.”**
>
> *Student*

The student perspective

The main concern of students with regard to the future of hearing care is the risk for HCPs to become obsolete, followed closely by OTC devices. While they fear that automation and tech innovation will replace professionals, they also consider tech developments and telehealth as the main opportunities for cost-effective care delivery that will meet the demands and expectations of their clients in the future. They are also slightly more optimistic than the older generations about their ability to deliver counseling and PCC.

What are your top concerns for the coming five to ten years?

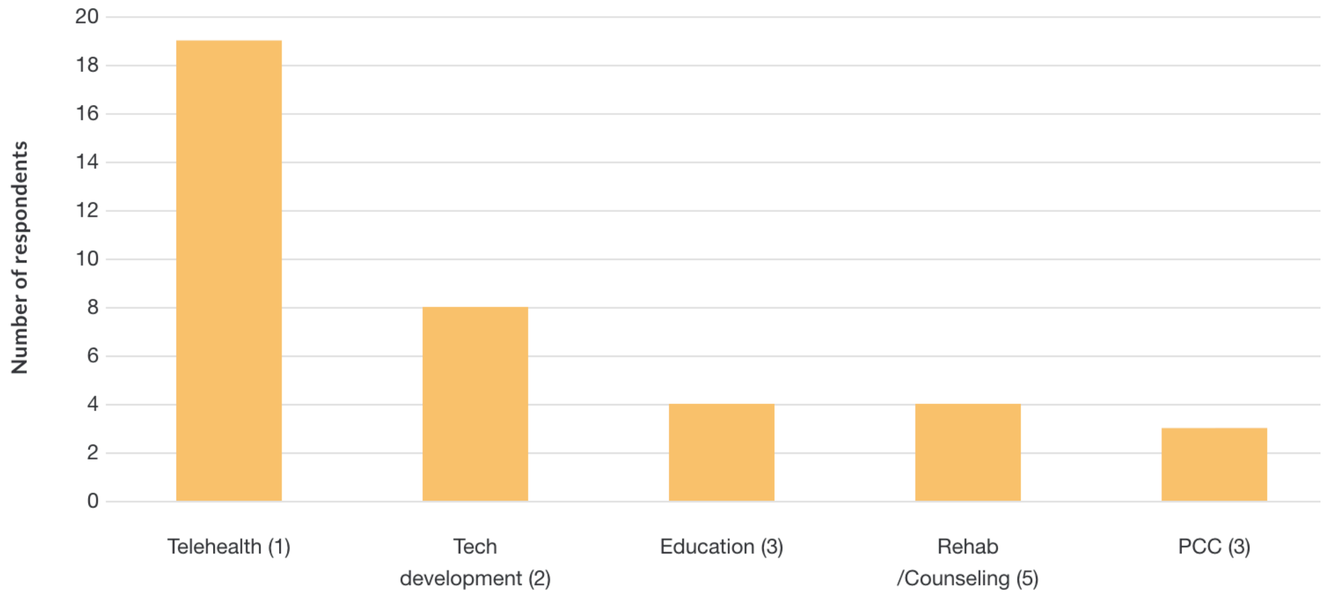
We asked respondents to list their top three concerns for hearing care in the future. The graph below shows the number of respondents who chose a given topic as their prime concern.
(Top 5, n: 62)



1) Telehealth may reduce levels of PCC care being delivered, focus on sales leading to the exclusion of PCC. 2) Lack of awareness in the general public about the importance of hearing loss, lack of understanding about the value of PCC in organizational hierarchy. 3) Less interaction with clients, consumers not interested in face-to-face.

What are the biggest opportunities for the coming five to ten years?

We asked students to list the most important opportunities for hearing care in the future. The graph below shows the number of respondents who chose a given topic as their prime concern.
(Top 5, n: 62)



1) Possibility of remote working as more clients seek remote care, E-health more integrated in routine care, helping more clients in a cost-effective way 2) Advances in hearing aids, tech partnerships, better care through better tech 3) Audiology degree combined with engineering and computer science degrees, education of community about hearing loss and ways to improve quality of life. 4) Importance of counseling/support in care 5) Focus of job increasingly holistic, paediatric rehabilitation

Top five future skills

Based on input from academics and students, we've identified the following top five skills for HCPs in the future.

1 More tech savviness and ability to use platforms for delivering telehealth

2 More focus on counseling, less focus on product

3 PCC skills - including online skills

4 Understanding hearing loss as part of overall health

5 Cultural competencies such as health literacy and the way it is affected by social, economical, and cultural factors

Mining the data

The industry perspective

Technology leads industry opportunities, but more surprising from our trends analysis and research is the desire across various stakeholders for person-centered care (PCC) to play a large role in future hearing care. In fact, most people we surveyed from the industry feel manufacturers should support hearing care professionals (HCPs) in delivering PCC. That sentiment was echoed by the industry representatives we spoke to, although their top concern is new competition.

The sample of industry representatives who participated in the survey is relatively small, with 116 respondents in total. Our insights also include interviews with 12 selected industry representatives. The tendencies we see in this category cannot be considered as global trends, but rather as indicators of what might influence hearing care in the future.

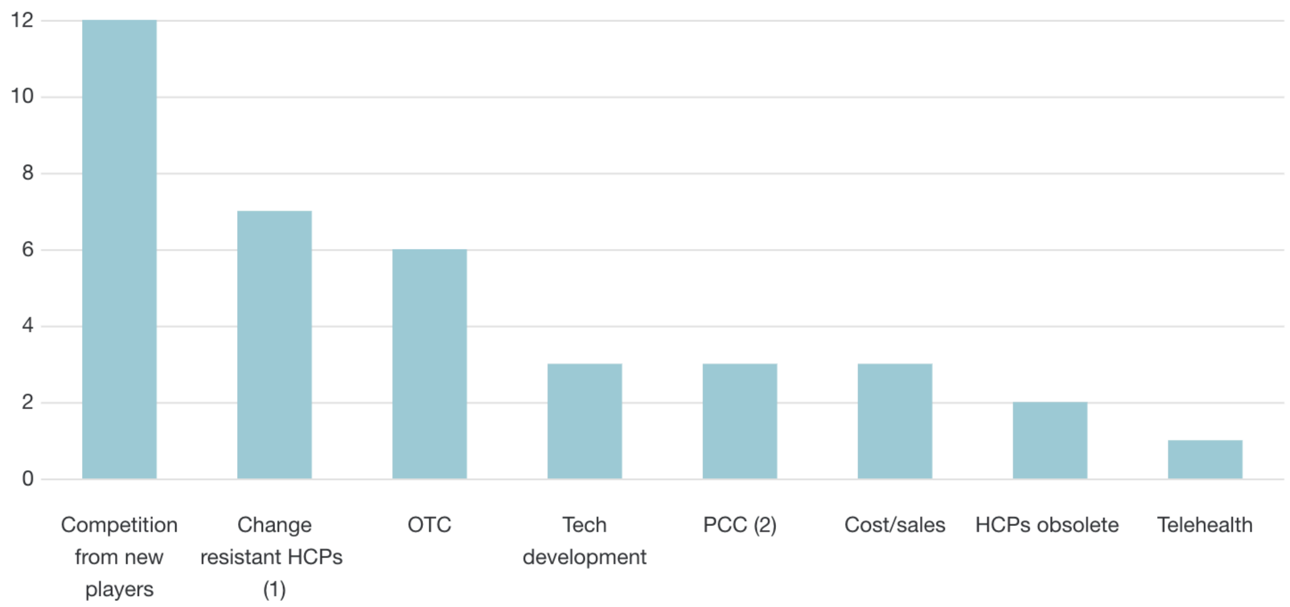
The new players

New competition is the number one concern of the industry professionals we surveyed and OTCs made the number three spot. And it's not only giants such as Apple, Amazon, and Facebook that are a threat to the status-quo, but also smaller, agile startups, and electronic brands who may have inferior products but better name recognition and/or cheaper prices. Industry representatives we spoke to mention that new players could understand and woo consumers in new, different ways. Particularly susceptible to being poached by the new players are people with mild hearing loss who may not always require the most sophisticated devices. Developing the best tech will no longer be sufficient.

> **"Normal consumer electronics by big tech companies (e.g. Apple) are slowly moving into the healthcare domain and will disrupt the conventional view on hearing health."**
>
> *Employee - hearing aid manufacturer*

What concerns do you have for the hearing care industry in the coming five to ten years?

(Top 8, n. 49)



1) HCPs reluctant to adopt new models or adding new skills. 2) Lack of connection with consumers and professionals, too much focus on technology and not enough on listening to consumers and professionals.

Changing mindsets

Industry respondents are concerned that there is a certain resistance towards change in the profession. In the future, HCPs must be prepared for active, well-informed consumers with high demands, who will expect personalized care. Hearing care will no longer be a one-way street with clients on the receiving end, and professionals must be ready to establish a true partnership with their clients. The focus will shift from providing devices to supporting clients on their journey towards better hearing and helping them self-manage their hearing loss. This will require professionals to enhance their person-centered skills.

At the same time, professionals must be comfortable navigating new technology in order to meet the demands of clients expecting both the convenience of remote counseling and a personalized experience. While this may require the development of new skills, it is also considered by the industry as an opportunity for professionals to engage with new, more active consumers. Other opportunities mentioned are the unbundling of services to increase transparency, a higher degree of interdisciplinarity to address comorbidities, and the possible inclusion of PSAPs (Personal Sound Amplification Devises) in their product offering. A change of mindset is needed to explore these opportunities and meet the expectations of future consumers.

> **“I think when it comes to remote care and about the future in audiology, I’m stuck in a bit of denial... It’s as if I’m not ready to move on. And I almost want to deny the fact that things will not be the same in the future. You actually want to grieve the fact that things will not be the same anymore, the way that you used to do things and the way that you got satisfaction from your job”**
>
> *Hearing care professional*

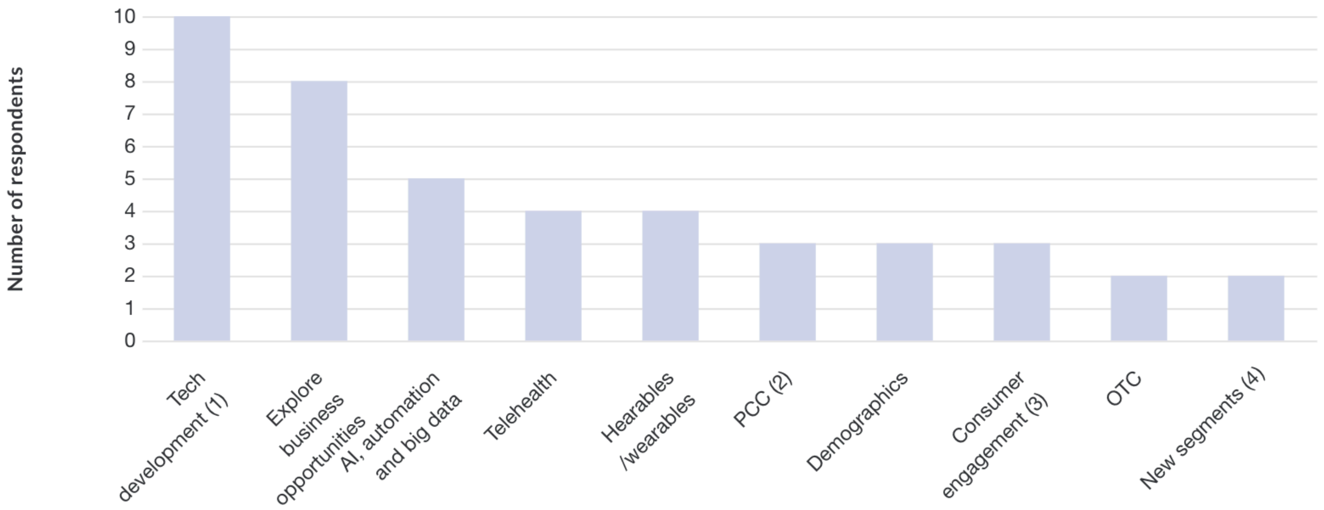
Technology leads to opportunities

For industry, four of the top five opportunities identified by our survey fall under the category of technology, following the megatrend of technological innovation and diffusion. Sensor and power source innovation is in focus as is the potential - and potential threat - of wearables. AI driven tech and remote services to assist HCPs and a larger population of people with hearing loss are other areas where industry will find opportunities.

Interestingly, in spite of concerns about new players entering the market, new delivery methods, and changing consumer preferences, the industry at large is still optimistic about capitalizing on new business opportunities.

What opportunities do you see for the hearing care industry in the coming five to ten years?

(Top 10, n: 53)



1) For example: Upgradeable devices with more features, advanced sensor technology and power sources innovation. 2) Create stronger relationships with consumers, be responsive to their preferences, more personalized and consumer oriented services. 3) More consumers becoming interested in hearing health. 4) Especially younger segments.

It's all about trust

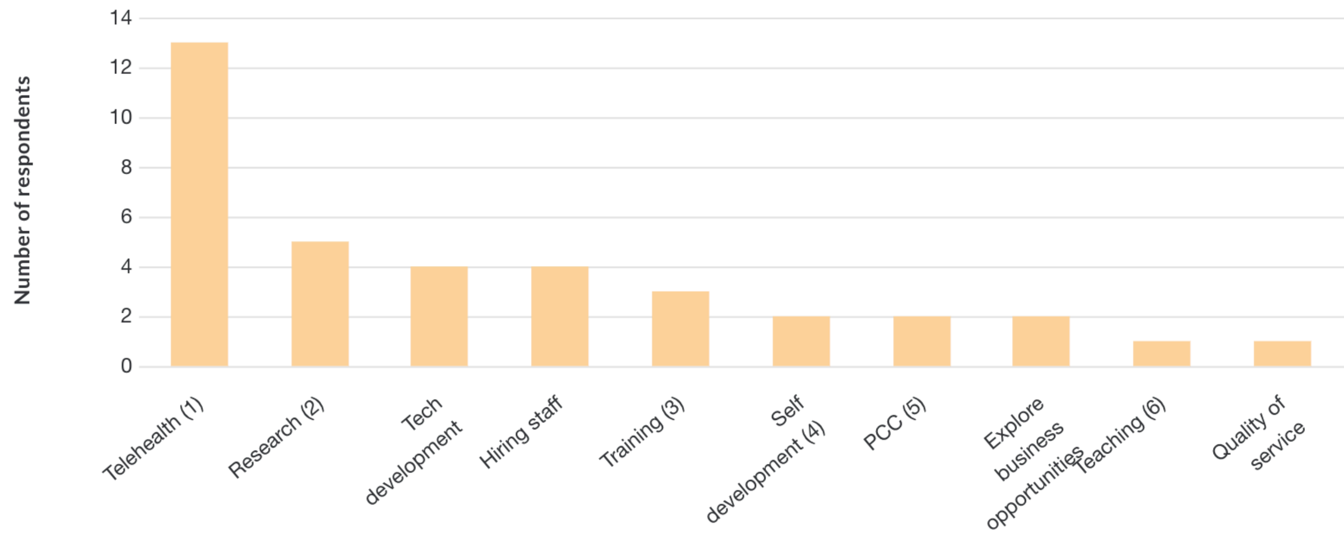
Trust is the building block of relationships and is crucial during times of change. Strengthening the trust between industry and professionals, and industry and consumers could increase loyalty and satisfaction from both groups. As we look to a changing future, new kinds of support and reassurance may be needed from allies throughout the value chain.

> **"PCC is all important. Providing information, establishing trust, and creating positive outcomes is what matters."**
>
> *Manager at hearing aid manufacturer*

PCC is a way to humanize technology, build trust, and leave people feeling more satisfied with their care and its outcomes. 41 of 61 industry representatives surveyed said manufacturers should support HCPs in delivering PCC. If this is prioritized, AI and new tech may be able to reflect PCC - although to what extent is not yet clear. PCC may also be one of the advantages professionals can use to keep sales from being eroded by new competition - of interest to both HCPs and manufacturers. But HCPs have varying levels of training and ability to counsel. If manufacturers want their products to stick with consumers, they need to offer help in this area. Selling devices is not just about the product, it's about the care as well.

What has your company done to prepare for changes in the coming five to ten years?

(Top 10, n. 41)



1) Using digital platforms to reach out to potential and existing hearing aid users, omni-channel initiatives, remote fitting platforms. 2) Investments in R&D, AI, and scientific research. 3) Online training of staff. 4) Strategy/ management development 5) PCC: better understanding of patients, introducing PCC guidelines. 6) Training of HCPs.

Possible ways for the industry to prepare for the future

- Further investment and training in telehealth solutions
- Support HCPs in transition to flexible care via hybrid model
- Support HCPs in delivering PCC
- Research in AI/ automation
- Increase data analysis capacity to understand customer needs better

Preparing for the future

Getting ready for future realities

"In a time of drastic change, it is the learners who inherit the future. The learned usually find themselves equipped to live in a world that no longer exists." This is as true now as it was when Eric Hoffer wrote it in Reflections on the Human Condition in 1973. And it will probably be true for the next generation and the next and the next.

To prepare for and thrive in hearing care of the future requires making learning a priority. That could be learning new digital or communication skills, learning about future patient preferences, or learning through collaborations with other stakeholders. The key is to enrich each other: synergy, not opposition. There is a wish to co-create the future we arrive at. And lessons learned through our Future Hearing Journeys can provide possible directions.

For people with hearing loss, personal contact with a hearing care professional will continue to be in demand - whether in person, via online platforms, or a mix of the two. Convenience, accessibility, trust, and the provision of clear, reliable information will be key for tomorrow's consumers who will expect to be guided in their self-management.

Hearing care professionals (HCPs) will have to navigate a reality with OTCs, direct-to-consumer sales, and technology that will make some of their traditional functions obsolete. Those who are able to innovate and rethink their practice to include more holistic and flexible services to meet people's expectations for convenience and accessibility will emerge stronger. HCPs of the future will have less focus on fitting hearing technology, but it is tech that will give them the time and means to focus on counseling. Tech is also a way to person-centered care (PCC) and should be looked at as a way to deliver it, not something at odds with it. PCC has tremendous potential to give smaller practices an edge and can help larger organizations humanize interactions.

The hearing care industry could defy competition from new players such as Amazon, Apple, Facebook, and the like by supporting HCPs in delivering person-centered services, and leading the way in developing truly human-centered, holistic solutions.

Academics also play a key role in supporting the development of a new skillset among future HCPs, combining core audiological knowledge with tech know-how, and strong counseling skills. PCC provides an avenue for understanding the person with hearing loss from a holistic perspective and could help educators instill core future skills in students.

We can't predict the future - but we can prepare for it. Insights gathered through the Future Hearing Journeys project will inform the work of the Ida Institute in the coming years. By sharing our findings, we hope to give all stakeholders in hearing care the tools to prepare for and shape the future.

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