

Conversations shine with Lumity.

Introducing Phonak Audéo™ Lumity



An enlightening hearing experience.

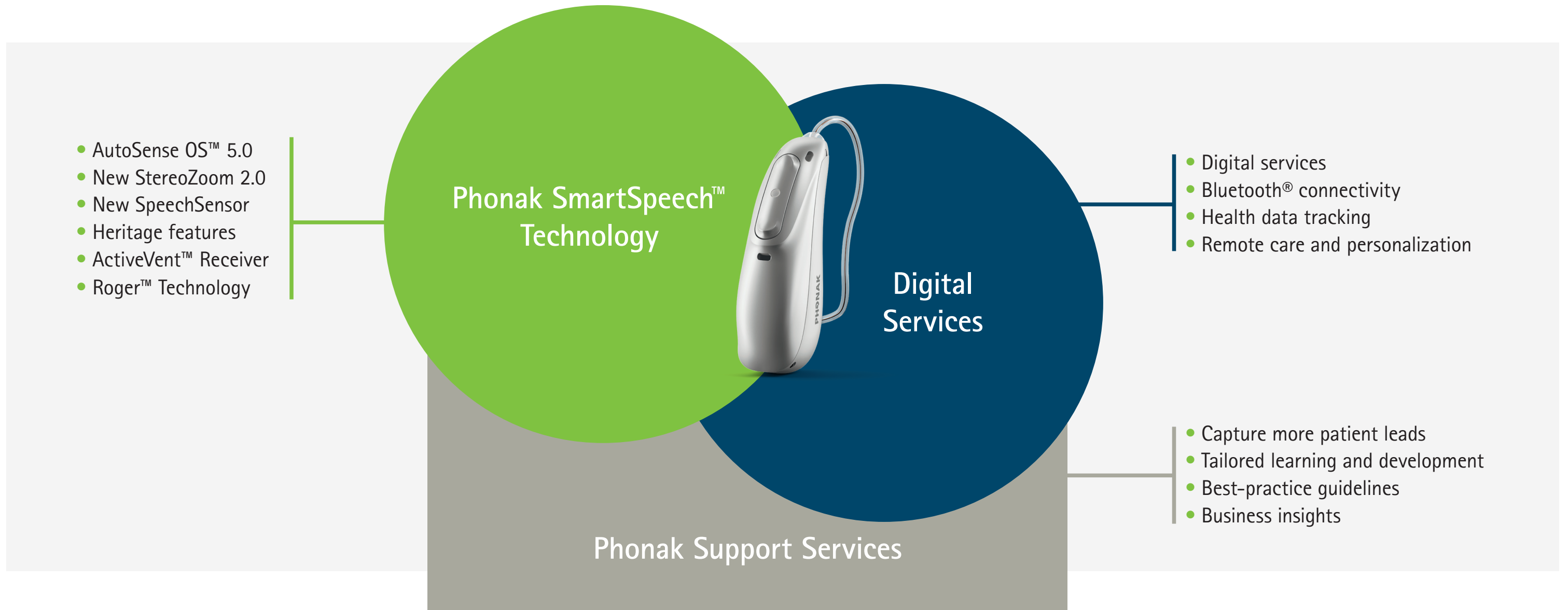
For over 75 years, Phonak has created innovative hearing solutions that positively impact the lives of millions of people. With the introduction of Phonak Well-Hearing is Well-Being™ we provide you and your patients with a deeper understanding of the importance of hearing health and the role our hearing solutions play within it.

Phonak Lumity delivers an enlightening hearing experience. This next generation of solutions is based on a strong heritage of audiological expertise and incorporates the proven reliability and innovation of lithium-ion technology. Allow your patients to hear conversations in a new light. A friendly phone call can brighten up their day or a well-timed punchline can leave their cheeks glowing for hours.

Conversations shine with Lumity.

Partner for success with an industry leader

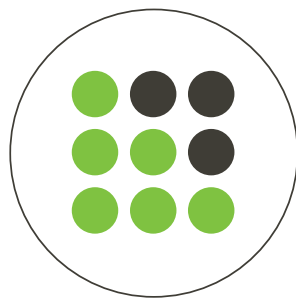
By partnering with Phonak, you are gaining access to over 75 years of successful business experience and an offering that goes far beyond innovative hearing solutions. You are partnering with business support, digital services and market expertise to ensure the growth of your business and long-standing patient satisfaction.



Experience the evolution of speech understanding with Phonak SmartSpeech™ Technology.

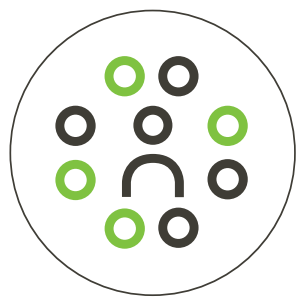
Conversations in a variety of situations can be challenging, especially with a hearing loss. Market research (MarkeTrak IX) shows that hearing aid adopters report social benefits of hearing aid use, such as better ability to engage in group activities and positive impact on relationships.¹

Phonak Lumity, the first fully rechargeable RIC portfolio, delivers unique products and features that help your patients to fully immerse in conversations. Rechargeable technology plays an important role in the evolution of our hearing technology. It delivers the necessary voltage requirement to support both a motion sensor and hearing performance features.



AutoSense OS™ 5.0

AutoSense OS 5.0 has been trained with artificial intelligence-based machine learning to accurately identify a sound environment. It perfectly orchestrates the numerous comfort and speech understanding features in Lumity to adapt to your personal environment.



Phonak SmartSpeech™ Technology

Lumity features unique SmartSpeech Technology, a collection of features that AutoSense OS 5.0 seamlessly adapts, each feature proven to provide either improved speech understanding or reduced listening effort in many listening environments.^{2,15}

This technology not only highlights Phonak's dedication to providing the best possible solution for speech understanding but benefits your patients' well-being as it has been shown from scientific literature, reduced listening effort can free up cognitive resources³.



Addressing listening challenges with key solutions

Driven by a heritage of audiological expertise, Phonak creates key solutions that address the most challenging listening situations. Additionally we know from studies that reducing listening effort may also reduce feelings of fatigue⁴ making people feel less tired at the end of the day⁵.

With a deep understanding of patient needs, we incorporate your valued input to create innovative technology – resulting in Phonak being rated as a leader in speech understanding among Hearing Care Professionals worldwide⁶.

Understanding in quiet

Speech understanding in quiet remains a key challenge for hearing aid wearers. In fact, it's the biggest predictor of hearing aid benefit.⁷ Phonak Lumity with **Speech Enhancer** helps reduce the listening effort required when communicating with someone who speaks softly e.g. from a toddler, or from a distance, in quiet surroundings⁹. This could provide an additional benefit as reducing listening effort may free up cognitive resources for purposes other than listening³.

Hearing on the move

Ever tried having a conversation while walking? It is not always easy to walk and face your conversation partner at the same time. Featuring **Motion Sensor Hearing**, Phonak Lumity changes the directional microphone mode into the more open setting of Real Ear Sound and deactivates Dynamic Noise Cancellation when having a conversation while walking in a noisy environment. We know from independent research that listeners with hearing loss likely spend more effort on maintaining awareness of their surrounding than listeners with normal hearing⁸. In a study, conducted at the University of Ontario, 78% of participants preferred Motion Sensor Hearing for environmental awareness¹⁰. This feature is enabled through rechargeable technology and integrated motion sensor.

Conversations in noise

Being able to immerse and participate in a conversation, in the presence of background noise, is challenging especially with a hearing loss. Hearing aid use has been shown to make listening easier¹¹. Phonak Lumity addresses this with the combination of directional microphones and noise cancellation. The benefit of directional microphone technology is well documented¹². The improved Signal-to-Noise (SNR) ratio from directional microphones, has been shown to improve speech intelligibility in typical speech in noise situations where the target speech is coming from the front direction and the noise is from the side and rear¹³. With Lumity, your patients can reduce the listening effort required when having a conversation in noise with **Dynamic Noise Cancellation**.⁹





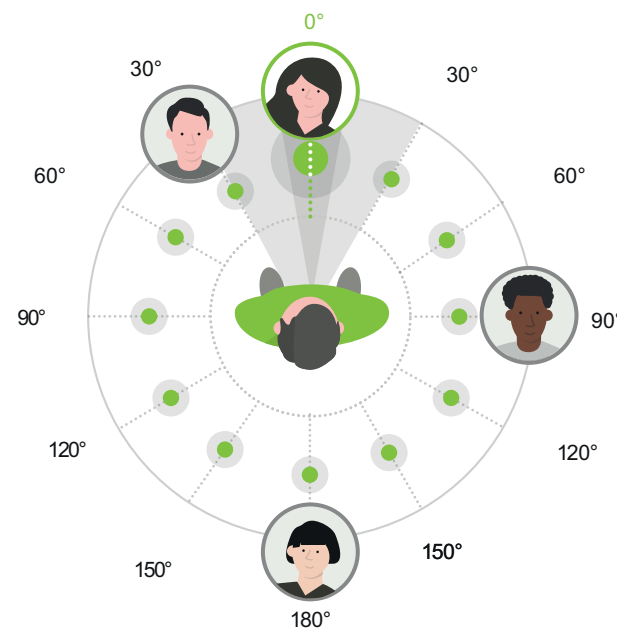
New StereoZoom 2.0

Our sense of hearing contributes to a sense of environmental awareness: by processing and interpreting the sounds around us, listeners are able to monitor changes in the acoustical environment¹⁴. Therefore a hearing aid should be able to balance environmental awareness with speech focus. This is particularly important for those special conversations with that one special person, such as catching up with a best friend, or a special celebration with a loved one. It is so important that we are able to fully immerse in the conversation.

This is where the new StereoZoom 2.0, Phonak's unique binaural directional beamforming technology comes in. **StereoZoom 2.0 is smoother, smarter and stronger.** There is a smooth transition between the wider directional mode of UltraZoom and the narrower focus of StereoZoom 2.0. It intelligently adapts the strength of focus as the level of noise increases. The result is 3 dB better SNR.*

How does this bring a shine to the conversation? Your patients can enjoy 16% better speech understanding when having a conversation with a friend or loved one in those challenging social environments.**¹⁵

But that's not all. StereoZoom 2.0 is also stronger than before, with an even more focused directional microphone mode. Imagine trying to focus on a conversation in a noisy place when you are tired, the effort can be draining. With Lumity and StereoZoom 2.0 your patient is able to adjust the focus strength of StereoZoom 2.0 to their preference and in real time via the Speech Focus slider in myPhonak app. This extra focus can lead to 2.5 dB better SNR.***

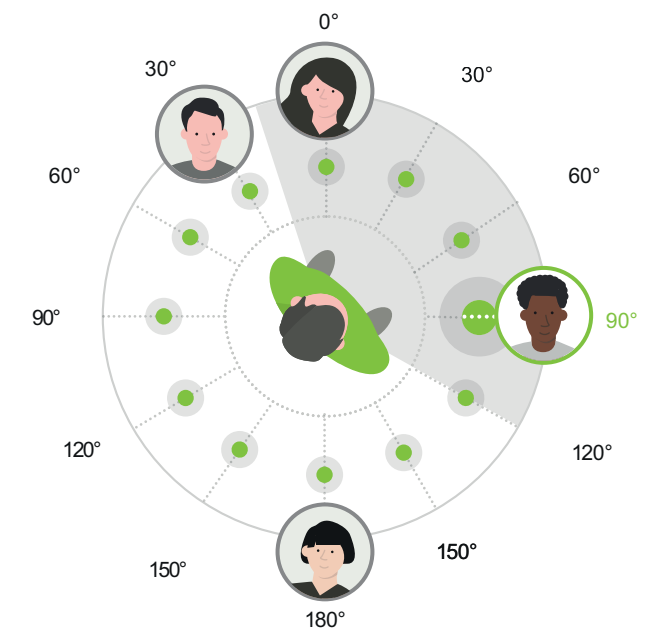
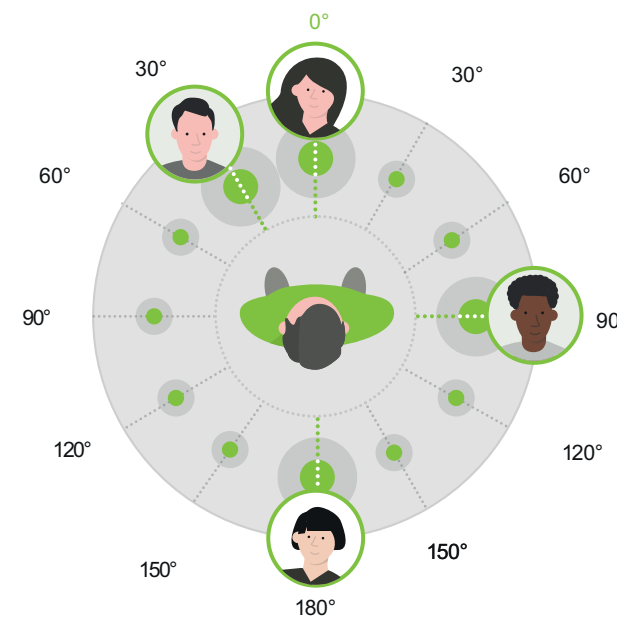


New SpeechSensor

Social interactions are strong contributors to our social-emotional well-being. In these situations conversations do not always happen from the front, so it's important to be able to identify from which direction speech is coming. Having more access to sound not only provides clarity, but reduces listening effort^{16,17,18}.

Phonak Lumity features SpeechSensor, an algorithm that **detects the direction from which the main speech signal is coming.** This information is sent to AutoSense OS 5.0 which automatically adjusts the directional microphone mode depending on if speech is coming from left, right or behind.

The real life benefit means your patients can understand speech 15% better when speech is from the side/rear in addition to 11% reduced listening effort.**¹⁵



* Compared to Real Ear Sound (tested with power dome)
 ** Compared to fixed directional and for moderate to severe hearing loss
 *** Default strength compared to maximum strength with power dome

Intelligently boost speech understanding using ActiveVent™ Receiver^{19,20}

When the power of conventional acoustic coupling simply isn't enough to hear in loud noise or to understand speech, allow your patients to block out background noise with the ActiveVent Receiver.

Lumity is compatible with the ActiveVent Receiver – the world's first intelligent hearing aid receiver that combines the hearing performance of a closed fit with the comfort of an open fit. This provides a no compromise hearing solution for your patients. Orchestrated by AutoSense 5.0, ActiveVent intelligently balances speech clarity in noise and listening comfort. The combination of Lumity with ActiveVent Receiver provides on average 10% better speech understanding in noise* while providing natural sound in everyday listening situations.

* Compared to conventional acoustic coupling



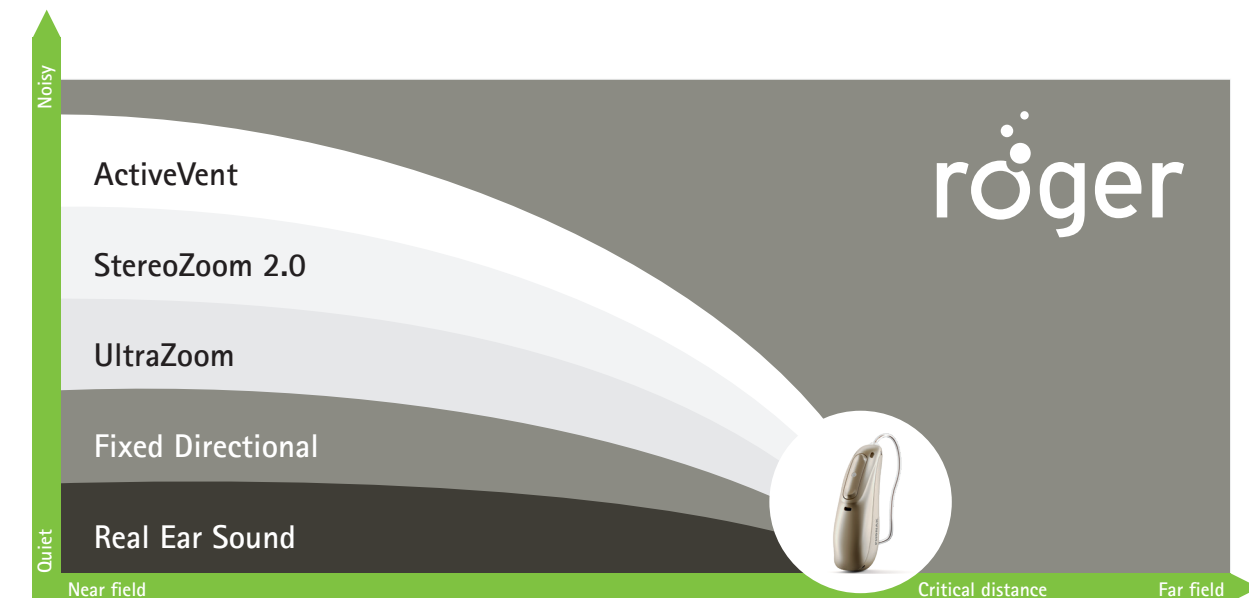
Understanding in noise and over distance with Roger™ microphones

Roger is an intelligent wireless technology that transmits speech directly to Lumity hearing aids via RogerDirect™, helping to overcome distance and noise. Functioning like a third ear, Roger picks up the voice of a speaker, television, music or the telephone and wirelessly transmits it to the listener, while reducing background noise.

In the near-field, the directional microphones in Lumity hearing aids perform well and can improve the signal-to-noise ratio (SNR). Once the distance between the sound source and listener increases, directional microphones are less capable of improving the SNR. That's when Roger microphones help to bridge the understanding gap in the far-field and enhance the SNR by:

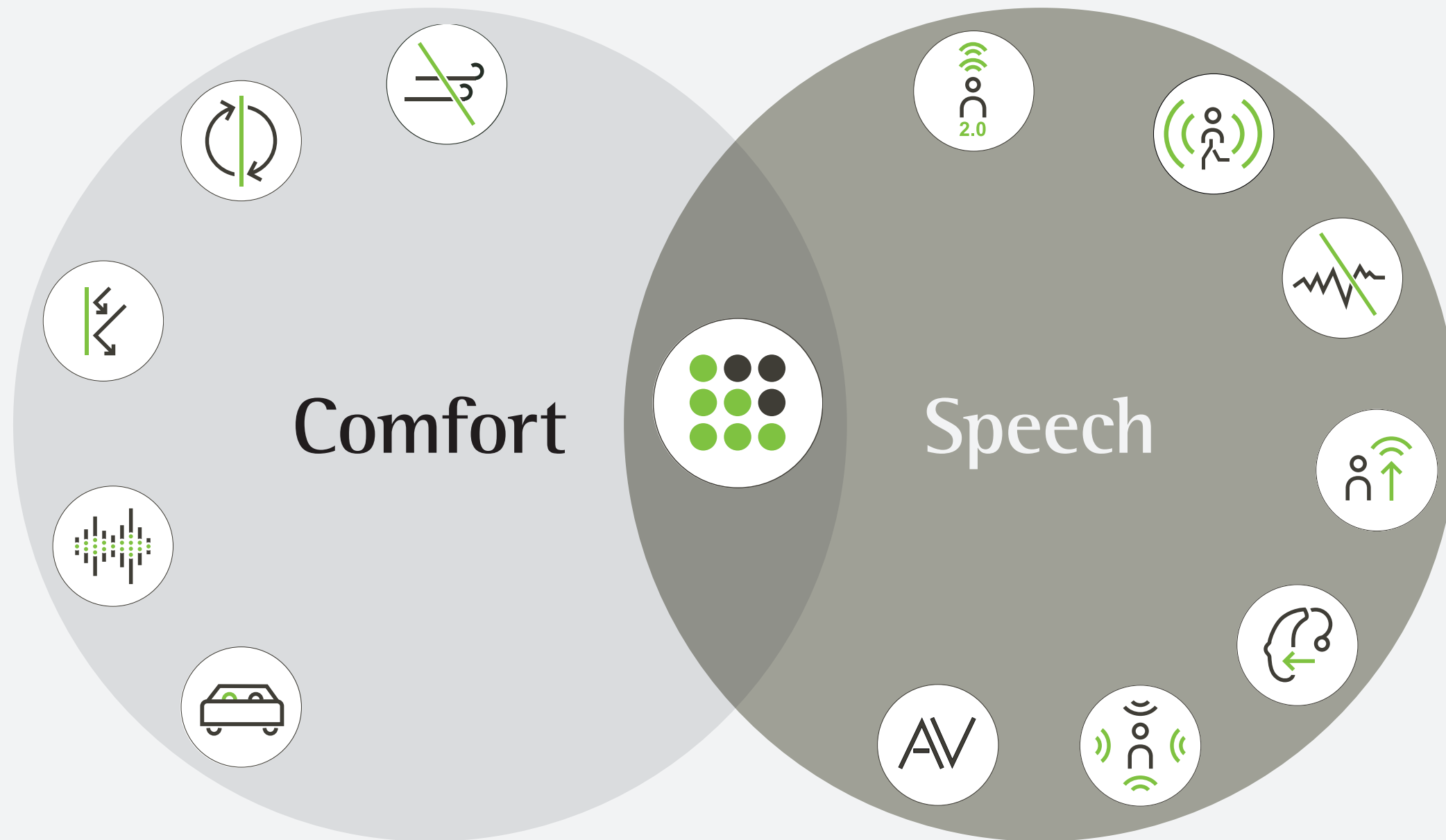
- Eliminating distance between the listener and the sound source
- Utilizing its beamformer to optimize the SNR at the sound source
- Adaptively mixing the wireless microphone signal with the ear-level microphone signal of the hearing aid, increasing the gain of the Roger receiver in higher ambient noise levels

The combination of Lumity hearing aids and Roger lets group conversations in noisy environments and over distance shine.



Master orchestration for hearing performance

Lumity with AutoSense OS 5.0 balances many features focused on improved speech understanding and comfort. So no matter who is speaking, conversations shine with Lumity.



Phonak Audéo Lumity – Let conversations shine



Phonak Audéo L-R

Powered by the innovative technology of the Phonak Lumity platform, for mild to profound hearing losses and the ideal solution for patients who desire a discreet RIC housing.



Phonak Audéo L-RT

Packed with Lumity features and a telecoil, for those who want greater auditory access in public spaces equipped with loop systems.



Phonak Audéo Life™ Lumity

Our world's first waterproof* rechargeable hearing aid in its second generation. All Lumity features come packed in a waterproof and sweatproof housing!



Color range



P1 Sand Beige



H0 Beige



P3 Sandalwood



P4 Chestnut



P5 Champagne



P6 Silver Gray



P7 Graphite Gray



P8 Velvet Black

Charger options



Phonak Charger Ease

In a new small and compact design, charging Audéo L-R and RT hearing aids in just three hours to offer a full day of hearing.**21



Phonak Charger Case Go™

Exclusively designed for Audéo Life, can fully charge the hearing aids on the go up to 3 times on a single charge

Compatible Roger microphones and accessories



Roger On™



Roger Select™



Roger Table Mic II



PartnerMic



RemoteControl



TV Connector



myPhonak app

* up to 50 cm

** 16hrs of battery on a single charge, including 8hrs of everyday listening, 4hrs of Bluetooth streaming and 4hrs of TV streaming. Battery life may be minimally reduced when using ActiveVent receiver.

Leverage digital services to optimize your patients' experience

With the universal connectivity to a multitude of Bluetooth® enabled devices, your patients can seamlessly connect to the world around them. Phonak offers a host of digital services to set you apart from competition and ultimately benefit your patients. These include the myPhonak app with Remote Support for more tailored counseling; New health data tracking for patients to unleash healthier versions of themselves and more personalization opportunities for patients to take control of their hearing needs.

myPhonak

This app empowers your patients to personalize their hearing experience and to access remote support. It allows your patients to not only take control of their hearing with remote control functionality, but to track their health data and connect to their HCP remotely. It provides them with the comfort of knowing that they are receiving optimal care and assistance.

Remote support

Offer remote support with any iOS® or Android™ smartphone wherever and whenever your patients need it. Phonak is rated #1 for remote support by HCPs in the US.²² Your patients can benefit from tailored counseling in situations which prove to be challenging for them. Differentiate your clinic and offer the added benefit of Remote Support.

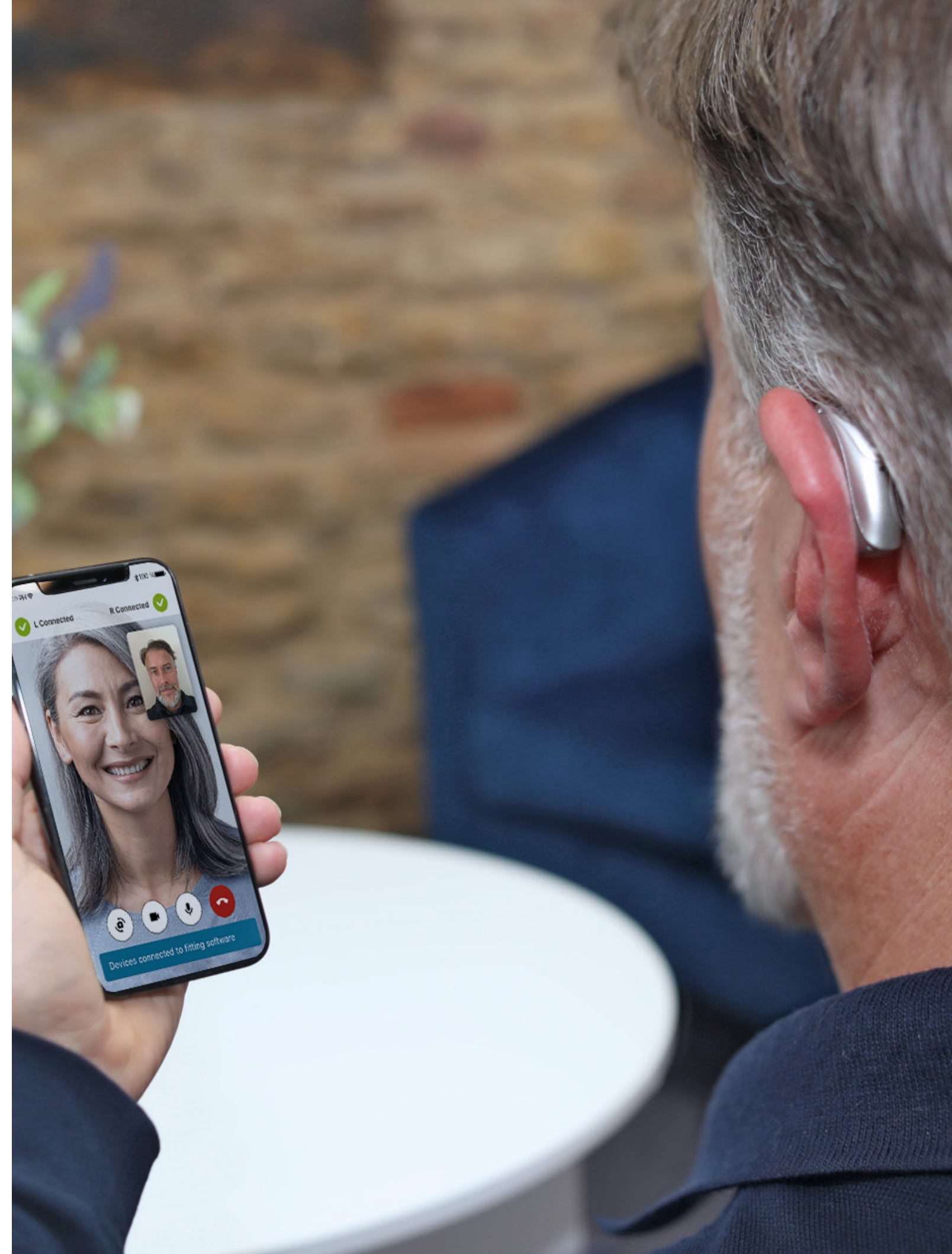
New health data tracking functionalities

Preliminary evidence suggests that in older adults, hearing loss might be associated with lower physical activity.²³ With the new health data tracking functionality, empower your patients to unleash healthier versions of themselves.²⁴ Thanks to a motion sensor and lithium-ion technology, Lumity empowers your patients beyond hearing improvement and enables them to track their activities e.g. steps and activity levels.

Personalization

myPhonak provides your patients with access to features for an even more personalized customer experience. It allows your patient to control everything from how much volume they receive to how much noise they want to reduce and even how much they want to focus on speech. This means your patients can control and potentially enhance their hearing experience using personalized adjustments, and even create personalized programs specific to their own life.

To find out more please visit www.phonakpro.com/eSolutions





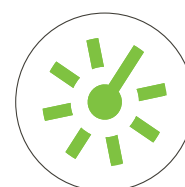
Bluetooth connectivity for everyone

Phonak Audéo Lumity provides parallel connectivity to iOS and Android smartphones, TVs, Roger devices and wireless accessories. This universal connectivity provides your patients numerous possibilities to stay simultaneously connected to their favorite Bluetooth devices. It allows for up to 8 Bluetooth enabled devices to be paired, two of which can be simultaneously connected.



Tap Control

With a motion sensor and rechargeable lithium-ion battery technology, Lumity hearing aids make it possible to steer Bluetooth features via a double tap on the ear. This function allows the wearer to accept/end calls from connected iOS/Android smartphones; pause/resume streaming from connected Bluetooth devices and access to Bluetooth based voice assistant apps. If required, the sensitivity of Tap Control can be even adjusted in the myPhonak app.



Target 8.0

Access and adapt new features and products within Target 8.0. This propriety fitting software offers easy-to-use functionality in-clinic and enables remote support for distance support when patients cannot travel to your clinic.

New in Target 8.0 is:

- Compatibility to Lumity devices
- Adjust QuickSync settings
- Fitting of StereoZoom 2.0

Hearing care professionals rate Phonak as #1 for connectivity solutions.²²

Choose Phonak support services to future-proof your business growth

Our support spans beyond just hearing solutions as we grow with you personally, technologically, financially and professionally on all levels, which ultimately equates to a successful and long lasting business partnership.

Choose from our numerous support services that will assist you in future-proofing your business for success. Phonak provides innovative ways for you to communicate with your patients by leveraging our Well-Hearing is Well-Being philosophy. Partnering for success with an industry leader means we grow together. Phonak can provide you with marketing support, lead generation and tailored tools specifically designed to develop and equip you and your team with expert business support for future success.

Capture new leads

Available exclusively to Inner Circle members

We support you in lead generation and provide the most up-to-date Phonak Hearing Screener. With this customizable online hearing test you can obtain an audiogram without physically seeing the patient. It can be integrated into your own professional website. Offer more meaningful services on your website, capture leads and gain first insights at any time of the day.

Highlights

- Updated online hearing screener type which assesses the patient's hearing sensitivity to four pure tones in quiet
- Patients will have the option to track their environment noise during the test
- Improved dashboard for efficient and effective management of the Hearing Screener
- Lead generation tool which is provided to HCPs and can be customized to any look and feel.

Functionality

- Environment Noise Tracker
- Audiogram Prediction Model

We partner with you so you can be at your best

Receive tailored learning from Phonak to develop you and your team for future success. Differentiate yourself and your services from competitors and utilize our multiple offerings:

- Well-Hearing is Well-Being
- Conferences
- Events
- eLearning
- Evidence based best practice guidelines

Set for the future

Ensure the hearing success of your patients and your business with a broad portfolio of leading solutions from Phonak. Receive expert business insights and best practice benchmarks to future-proof your business. With over 75 years of business experience, our team of experts is equipped to assist you with proven solutions designed to ensure your long term business success.

Please contact your local sales rep to learn more about our offering or visit:

www.phonakpro.com



Phonak Audéo Lumity summary

Key benefits for your patients

- Improved speech understanding in many hearing situations^{2,15}
- Reduced listening effort in quiet and in noise⁹
- Precise detection of speech from any direction
- Universal connectivity to a multitude of Bluetooth enabled devices
- A personalized hearing experience and health data tracking with the myPhonak app
- Easy to use, rechargeable with quick charging options
- Your patients can connect with you without having to go to the office



Key benefits for you

Lumity improves your image

- Lumity provides new, innovative technology, including a waterproof solution
- Lumity features proven Phonak technology for improved speech understanding and reduced listening effort in combination with new innovative features StereoZoom 2.0 and SpeechSensor as part of SmartSpeech Technology
- The Lumity portfolio offers solutions unique to Phonak, giving you a competitive edge²

Lumity saves you time

- The all-rechargeable portfolio means no more counselling on how to insert and remove batteries
- With universal connectivity, Lumity is easy to connect and demonstrate, saving time for additional in office demonstration and counselling
- Thanks to AutoSense OS 5.0, Lumity is easy to use and precisely adapts to the patient's environment, so they don't have to think about it!

Lumity increases revenue in your practice

- Capture new business with the Lumity lead generation marketing toolkit
- Lumity offers opportunities for cross-selling leveraging unique Phonak technologies like ActiveVent Receiver & Roger
- Lumity offers an opportunity to upgrade more patients to new rechargeable technology

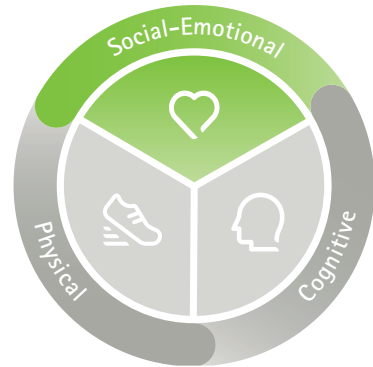
Lumity provides peace of mind

- Lumity features proven Phonak technology – so you can know your patients are getting the sound quality you expect from one of the industry leaders
- Lumity is easy to use and precisely adapts to the environment so you don't have to worry your patients aren't hearing their best
- Audéo Life Lumity is waterproof* for increased protection from humid and wet environments

* up to 50 cm

Phonak Well-Hearing is Well-Being

We believe that hearing well is key to living a fulfilled life.



Hearing well...

Fosters easier engagement, stronger connections and a more positive outlook.



Supports cognitive fitness³



Enables people to live a more active and healthy lifestyle.

We address hearing loss holistically and take action to treat hearing loss as a catalyst for well-being.

Visit www.phonakpro.com/well-hearing to implement Well-Hearing is Well-Being into your daily practice.

References

- Abrams, H.B., & Kihm, J. (2015). An Introduction to MarkeTrak IX: A New Baseline for the Hearing Aid Market. *Hearing Review*, 22(6), 16. Retrieved from <https://www.hearingreview.com/2015/05/introduction-markettrak-ix-new-baseline-hearing-aid-market/> on March 25, 2021.
- Appleton, J. (2020) AutoSense OS 4.0 – significantly less listening effort and preferred for speech intelligibility. *Phonak Field Study News* retrieved from www.phonakpro.com/evidence, accessed February, 2022.
- Latzel, M. & Hobi, S. (2022) Receiver with mechanical vent provides benefit of open and closed acoustics for better speech understanding in noise and naturalness of own voice perception. *Phonak Field Study News* in preparation. Expected mid of 2022.
- Thibodeau L. M. (2020) Benefits in Speech Recognition in Noise with Remote Wireless Microphones in Group Settings. *Journal of the American Academy of Audiology*, 31(6), 404–411.
- Sarant, J., Harris, D., Busby, P., Maruff, P., Schembri, A., Lemke, U., & Launer, S. (2020). The effect of hearing aid use on cognition in older adults: Can we delay decline or even improve cognitive function? *Journal of Clinical Medicine*, 9(1), 254. <https://doi.org/10.3390/jcm9010254>
- Pichora-Fuller, M.K., & Singh, G. (2006). Effects of Age on Auditory and Cognitive Processing: Implications for Hearing Aid Fitting and Audiologic Rehabilitation. *Trends in Amplification*, 10(1), 29–59. <https://doi.org/10.1177/108471380601000103>.
- Holman, J.A., Drummond, A., Hughes, S.E., & Naylor, G. (2019). Hearing impairment and daily-life fatigue: a qualitative study. *International Journal of Audiology*, 58(7), 408–416. <https://doi.org/10.1080/14992027.2019.1597284>.
- Knorr, H. (2021). *Market Research* ID 4437. Please contact marketinsight@phonak.com if you are interested in further information.
- Dillon H, Hickson L, Seeto M. (2018). Hearing aids: What audiologists and ENTs should know. Keynote address: *World Congress of Audiology*. Cape Town, SA.
- Edwards, B. (2016). A Model of Auditory-Cognitive Processing and Relevance to Clinical Applicability. *Ear and Hearing*, 37(suppl.1), 85S–91S. <https://doi.org/10.1097/AUD.0000000000000308>.
- Appleton, J. (2020) AutoSense OS 4.0- significantly less listening effort and preferred for speech intelligibility. *Phonak Field Study News* retrieved from www.phonakpro.com/evidence, accessed February, 2022.
- Appleton, J., & Voss S.C. (2020) Motion-based beamformer steering leads to better speech understanding and overall listening experience. *Phonak Field Study News*. Retrieved from www.phonakpro.com/evidence. Accessed August 2022.
- Winneke, A., Schulte, M., Vormann, M., Latzel, M. (2018). Spatial noise processing in hearing aids modulates neural markers linked to listening effort: an EEG study. *AudiologyOnline*, Article 23858.
- Ricketts TA. Directional hearing aids: then and now. *J Rehabil Res Dev* 2005;42(4, Suppl 2):133–144.
- Bentler RA. Effectiveness of Directional Microphones and Noise Reduction Schemes in Hearing Aids: A Systematic Review of the Evidence. *J Am Acad Audiol* 2005;16(07):473–484.
- Mueller GH, Ricketts TA. Directional-microphone hearing aids: an update. *Hear J* 2000;53 (05):10–19 perception. *Phonak Field Study News* retrieved from www.phonakpro.com/evidence, accessed May 2022.
- Brungart, D.S., Cohen, J., Cord, M., Zion, D., & Kalluri, S. (2014). Assessment of auditory spatial awareness in complex listening environments. *The Journal of the Acoustical Society of America*, 136(4), 1808. <https://doi.org/10.1121/1.4893932>.
- Woodward, J and Latzel, M (2022) New implementation of directional beamforming configurations show improved speech understanding and reduced listening effort. *Phonak Field Study News* in preparation. Expected end of 2022.
- Hornsby, B.W.Y. (2013). The effects of hearing aid use on listening effort and mental fatigue associated with sustained speech processing demands. *Ear and Hearing*, 34(5), 523–534. <https://doi.org/10.1097/AUD.0b013e31828003d8>.
- Picou, E.M., Ricketts, T.A., & Hornsby, B.W.Y. (2013). How hearing aids, background noise, and visual cues influence objective listening effort. *Ear and Hearing*, 34(5), e52– e64. <https://doi.org/10.1097/AUD.0b013e31827f0431>.
- Pichora-Fuller, M.K., & Singh, G. (2006). Effects of Age on Auditory and Cognitive Processing: Implications for Hearing Aid Fitting and Audiologic Rehabilitation. *Trends in Amplification*, 10(1), 29–59. <https://doi.org/10.1177/108471380601000103>.
- Winkler, A., Latzel, M., & Holube, I. (2016). Open Versus Closed Hearing-Aid Fittings: A Literature Review of Both Fitting Approaches. *Trends in hearing*, 20, 1–13. <https://doi.org/10.1177/2331216516631741>.
- Latzel, M & Hobi, S (2022) ActiveVent™ Receiver provides benefit of open and closed acoustics for better speech understanding in noise and naturalness of own voice, accessed August 2022.
- Nilsson, M. & Omisore, D., (2017). The Phonak rechargeable solution: Part 2. *Phonak Field Study News*, retrieved from www.phonakpro.com/evidence, accessed February 19th, 2018.
- Knorr, H. (2022). *Market Research* ID 4543. Please contact marketinsight@phonak.com if you are interested in further information.
- Kuo, P. L., Di, J., Ferrucci, L., & Lin, F. R. (2021). Analysis of hearing loss and physical activity among US adults aged 60–69 years. *JAMA Network Open*, 4(4), e215484–e215484.
- Tsimpida, D., Kontopantelis, E., Ashcroft, D., & Panagioti, M. (2019). Socioeconomic and lifestyle factors associated with hearing loss in older adults: a cross-sectional study of the *English Longitudinal Study of Ageing (ELSA)*. *BMJ Open*, 9(9), e031030. <https://doi.org/10.1136/bmjopen-2019-031030>.
- Wells, T. S., Nickels, L. D., Rush, S. R., Musich, S. A., Wu, L., Bhattarai, G. R., & Yeh, C. S. (2020). Characteristics and Health Outcomes Associated With Hearing Loss and Hearing Aid Use Among Older Adults. *J Aging Health*, 32(7–8), 724–734. <https://doi.org/10.1177/0898264319848866>.
- Buyl, R., Beogo, I., Fobelets, M., Deletroz, C., van Landuyt, P., Dequanter, S., Gorus, E., Bourbonnais, A., Bourbonnais, A., Giguère, A., Giguère, A., Giguère, A., Lechasseur, K., Gagnon, M. P., Gagnon, M. P., & Gagnon, M. P. (2020). E-Health interventions for healthy aging: A systematic review. *Systematic Reviews*, 9(1), 1–16. <https://doi.org/10.1186/s13643-020-01385-8>.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc., and any use of such marks by Sonova AG is under license IOS is a registered trademark or trademark of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries. Android is a trademark of Google LLC.

life is on

Since 1947, Phonak is dedicated to preserving life quality by opening new acoustic worlds. Already back then, in the days of our foundation, our company was driven by a formative conviction: We believe that well-hearing equates to well-being and thus is essential for living life to the fullest. In fact, the sense of hearing is directly linked to social, emotional, cognitive and physical well-being. Today as in future, we thrive to offer the broadest portfolio of innovative hearing solutions. And, together with our hearing care professionals, we keep on focusing on what matters most: improving speech understanding, changing people's lives and having a positive effect on society as a whole.

www.phonakpro.com