

The Next Generation of Osia: Introducing the Osia® 3 Sound Processor

Channing Hughes | Bailey Harmon, Au.D., CCC-A | Hannah Lynott

© 2026 continued.com, LLC. All rights reserved. Unauthorized reproduction prohibited. See final page for complete terms.

What's in This Handout

KEY TAKEAWAYS	3
COURSE CONTENT	4
The Osia System & Osia 3 Sound Processor	5
Osia System Multi-Center Study (SONUS).....	7
Guiding Recipients Through Replacement	10
NOTES.....	12
QUIZ SUMMARY	13
REFERENCES	14
ADDITIONAL INFORMATION	15–16

Key Takeaways

Key Takeaway	Clinical Implication
The Osia System uses a piezoelectric transducer and monolithic OSI300 implant design.	Minimizes feedback and delivers a powerful, transcutaneous bone conduction option for patients with conductive hearing loss, mixed hearing loss, or single-sided deafness.
The Osia 3 Sound Processor introduces the Zaphium chip and a lithium-ion battery.	Provides improved signal processing, a fitting range up to 65 dB HL, and up to 30 hours of hearing on a single charge.
ForwardFocus offers a fixed directional beam with noise reduction set at -11 dB.	Gives patients an additional option for very challenging listening environments beyond standard Auto Directionality.
The Osia 3 Sound Processor is the first fully rechargeable active bone conduction processor and carries an IP68 rating.	Supports patient convenience (charging case, quick-charge option) and adventure-ready use, with the Aqua+ accessory available for extended water exposure.
The SONUS multi-center study (n=29) found significant improvements in speech perception, high-frequency gain, self-reported hearing ability, and satisfaction with Osia 3 versus Osia 2.	Gives clinicians outcome data to support counseling existing Osia 2/2(I) recipients on the benefits of upgrading to the Osia 3 Sound Processor.
Replacement sound processor coverage requires the current device to be out of warranty plus at least one qualifying criterion (no longer meets patient needs, broken/unsupported, or lost/stolen).	Clinicians should document functional and activities-of-daily-living impact and submit required materials to upgrade@cochlear.com to support medical necessity.

Course Content

Learner Outcomes

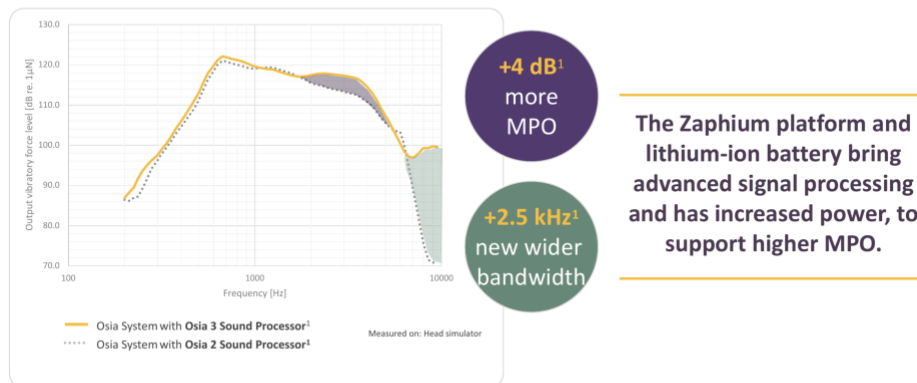
- After this course, participants will be able to describe the features of the Osia 3 System and counsel patients about its use.
- After completing this course, participants will be able to describe the key findings of the SONUS study and explain the demonstrated clinical and patient-reported benefits associated with the Osia 3 Sound Processor compared with the Osia 2 Sound Processor.
- After this course, participants will be able to identify the requirements for an Osia 2 to Osia 3 Sound Processor replacement order and apply the appropriate process for eligible patients.

The Osia System and Osia 3 Sound Processor

The Osia System is described as the most powerful active bone conduction implant system, with a 65 dB HL fitting range. Its components include the Cochlear Osia OSI300 implant, whose monolithic design helps minimize feedback, and a Piezo Power transducer that provides power in the high frequencies. The BI300 implant supports effective sound transmission, and the Digital Link delivers a consistent, strong signal to the Osia 3(I) Sound Processor.

The Osia 3 Sound Processor is enhanced by the new Zaphium chip, which offers improved signal processing and industry-leading connectivity, and is powered by a new lithium-ion battery designed to help deliver up to 65 dB HL and up to 30 hours of hearing. The processor is still driven by Piezo Power technology.

Even more power in the mid to high frequencies



1. Fitting range overview - Osia Systems, Cochlear Limited, Sweden, 2026, 02295355.

10

Figure 1. Output vibratory force level by frequency, Osia 3 vs. Osia 2 Sound Processor.

Compared to the Osia 2 Sound Processor, the Osia 3 Sound Processor provides an average of 4 dB more maximum power output (MPO) and a new, wider bandwidth extending 2.5 kHz further into the high frequencies, giving even more power in the mid-to-high frequency range.

ForwardFocus for the Osia System

ForwardFocus is intended for use in very challenging listening environments. Unlike Auto Directionality in the Everyday program, where noise reduction fluctuates between -3, -6, and -9 dB depending on the clinician's settings, ForwardFocus is auto directional with a fixed beam width, and noise reduction is always set at -11 dB.

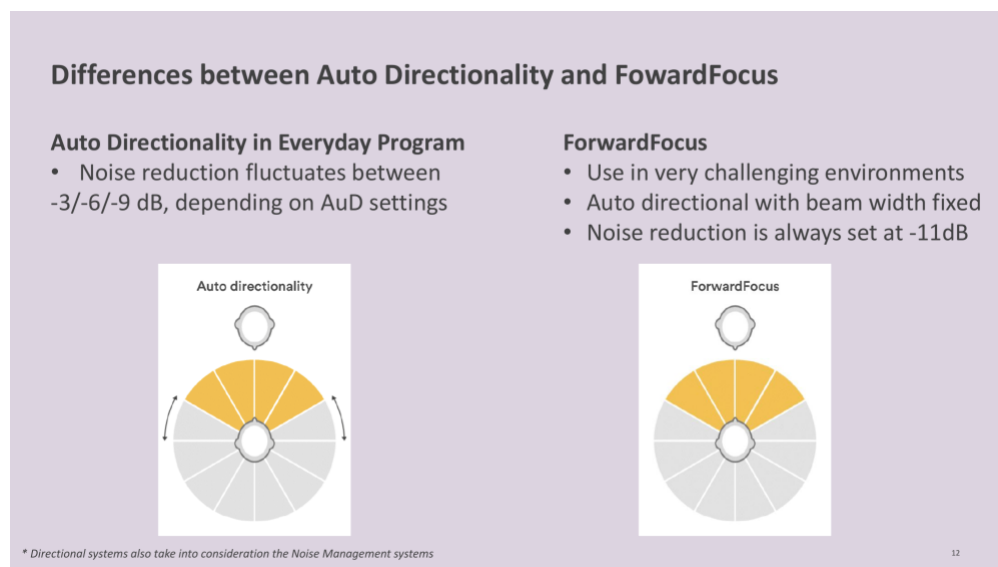


Figure 2. Beam-pattern comparison of Auto Directionality and ForwardFocus.

Charging and Battery Performance

The Osia 3 Sound Processor is the first fully rechargeable active bone conduction sound processor. Its on-the-go charging case provides up to two full charge cycles, the processor delivers 19 to 30 hours of hearing on a single charge, and 15 minutes of charging provides approximately 2 hours of hearing.

Battery life varies by user depending on the age of the battery, the programs used, implant type, skin thickness over the implant, and battery type; streaming may decrease battery life depending on how often and how long it is used.

The Osia 3 Sound Processor and Osia 3 Charger must be charged for a minimum of 3 hours prior to the patient's first fitting.

Adventure-Ready Design

The Osia 3/3(I) Sound Processor carries an IP68 rating for dust and water resistance under the International Standard IEC60529. These processor configurations were tested by continuous submersion in freshwater for 60 minutes at a depth of 1 meter and functioned as intended. The Aqua+ accessory offers added protection for water activities, and retention accessories offer added peace of mind during sports and other activities.

Connectivity and Wireless Technologies

The Osia System is described as the first active bone conduction system with direct streaming from compatible Android and iOS devices, and the first active system with Bluetooth® LE Audio and Auracast™ broadcast audio capability (a firmware update will be required to use certain features as compatible devices become available).

New wireless devices, including the TV-Streamer+ and Multi-Mic+, boost the patient's hearing experience with OneTouch Pairing, AutoStreaming, and support for Auracast broadcast audio. Remote Care is also available to counsel and fit patients via video for a follow-up adjustment or setup of a replacement or upgrade sound processor, for suitable qualified patients based on clinical judgment, at clinics enrolled in Remote Care.

Osia System Multi-Center Study Insights (SONUS)

The SONUS study is described as a pivotal, interventional, open-label, prospective, multi-center clinical investigation of hearing outcomes with the Osia 3/3(I) Sound Processor compared to the Osia 2/2(I) Sound Processor in adult Osia implant recipients (n = 29) with mixed hearing loss, conductive hearing loss, or single-sided deafness.

Inclusion criteria required participants to be 18 years or older, to have used their Osia 2/2(I) for at least 1 month, and to have conductive or mixed hearing loss with bone conduction thresholds up to 65 dB HL, or single-sided deafness with an air conduction PTA ≤ 20 dB HL in the contralateral ear. Study sites included the Denver Research and Technology Lab (USA), Cochlear Macquarie (Australia), and HEARnet (Australia).

The study used a crossover design: after screening and baseline assessment, participants were randomized to a first-period device (Osia 2 or Osia 3), completed a 1- to 2-week take-home trial before a Period 1 assessment, then crossed over to the other device for a second take-home trial and Period 2 assessment.

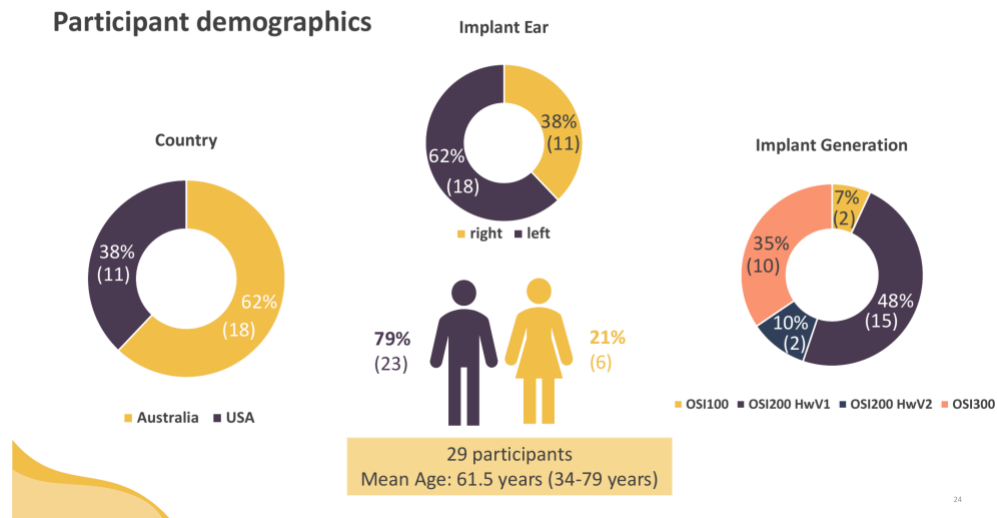


Figure 3. SONUS study participant demographics.

Regarding hearing history, 83% of participants had mixed hearing loss, 10% conductive, and 7% sensorineural hearing loss. The most common causes of hearing loss were categorized as other (31%), unknown (24%), cholesteatoma (14%), atresia (10%), chronic otitis media (10%), radical mastoidectomy (7%), and tumor (4%). The study's inclusion criteria allowed bone conduction thresholds up to 65 dB HL.

High-Frequency Audiometric Outcomes

Aided thresholds with the Osia 3 Sound Processor showed significant improvement over the Osia 2 Sound Processor in the high frequencies. Functional gain at 4000, 6000, and 8000 Hz was greater with Osia 3 than Osia 2 at every frequency tested, for an average improvement of 11 dB across 4, 6, and 8 kHz.

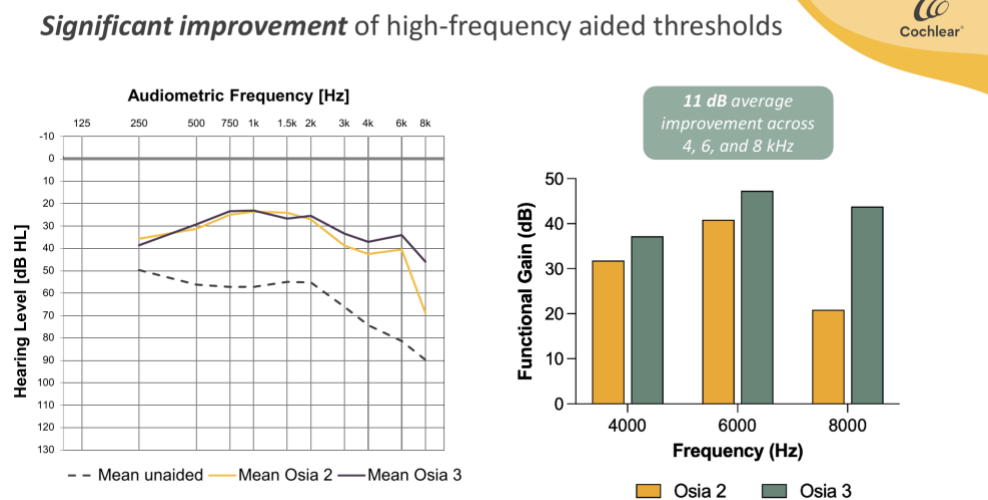


Figure 4. High-frequency aided threshold and functional gain improvement, Osia 3 vs. Osia 2.

Speech Perception Outcomes

Speech perception in quiet (CNC words) at both 50 dB SPL and 65 dB SPL was significantly better with the Osia 3/3(I) compared to the Osia 2/2(I) in the Everyday program, with mean paired differences of 6.2% at 50 dB SPL and 5.9% at 65 dB SPL (n = 27).

Speech perception in quiet (CNC) at 50 dB and 65 dB SPL was **significantly better** with Osia 3/3(I) compared to Osia 2/2(I) in Everyday program

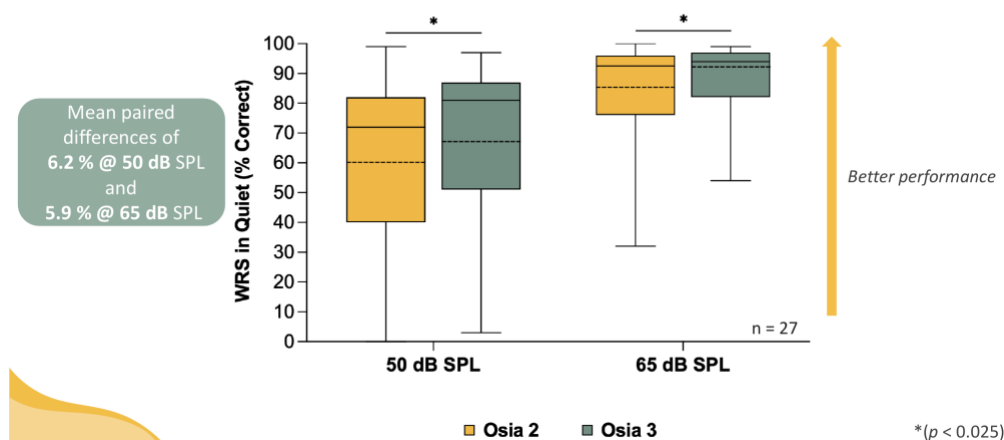


Figure 5. Speech perception in quiet (CNC), Osia 2 vs. Osia 3.

Speech-in-noise performance, measured with AzBio sentences at a fixed signal-to-noise ratio (S0N180), improved with the Osia 3/3(I) in the new Noise program compared to the Osia 2/2(I) in the Noise program, with a mean paired difference of 7.3% (n = 27).

Speech in noise improvement between Osia 2/2(I) in Noise program and Osia 3/3(I) in new Noise program (fixed SNR) at S0N180

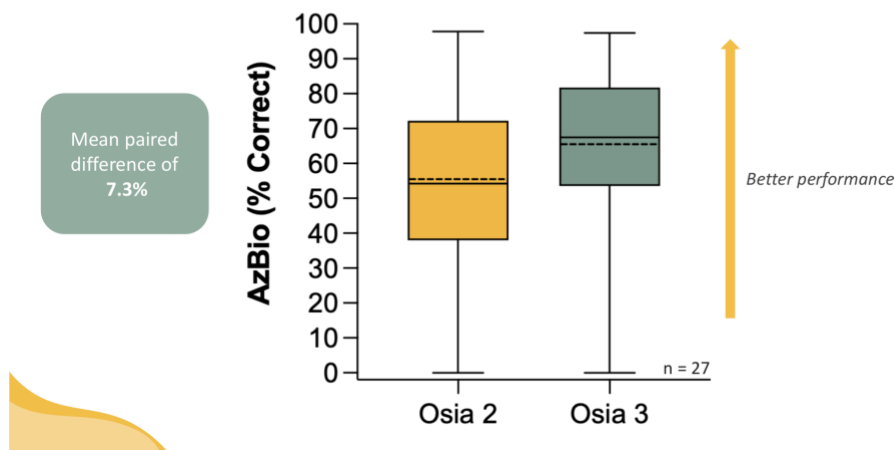


Figure 6. Speech-in-noise performance (AzBio), Osia 2 vs. Osia 3.

Speech performance in adaptive noise (speech reception threshold, dB SNR) was also better with the Osia 3/3(I) compared to the Osia 2/2(I), with a clinically meaningful average improvement of 1.1 dB (n = 28).

Self-Reported Hearing Ability and Satisfaction

Participants reported significantly improved functional hearing with the Osia 3/3(I) compared to the Osia 2/2(I) on the SSQ-12, with a mean paired difference of 0.74 in the global score (n = 27), including improvements across the Speech and Hearing, Spatial, and Quality subdomains.

Participants also reported higher satisfaction when using the Osia 3/3(I): satisfaction with overall hearing performance rose from 86% to 89%, hearing in background noise from 64% to 86%, overall sound quality from 71% to 96%, hearing in wind from 32% to 61%, and listening to music from 32% to 93%. All study participants (100%) indicated they would recommend the Osia 3/3(I) to other Osia users.

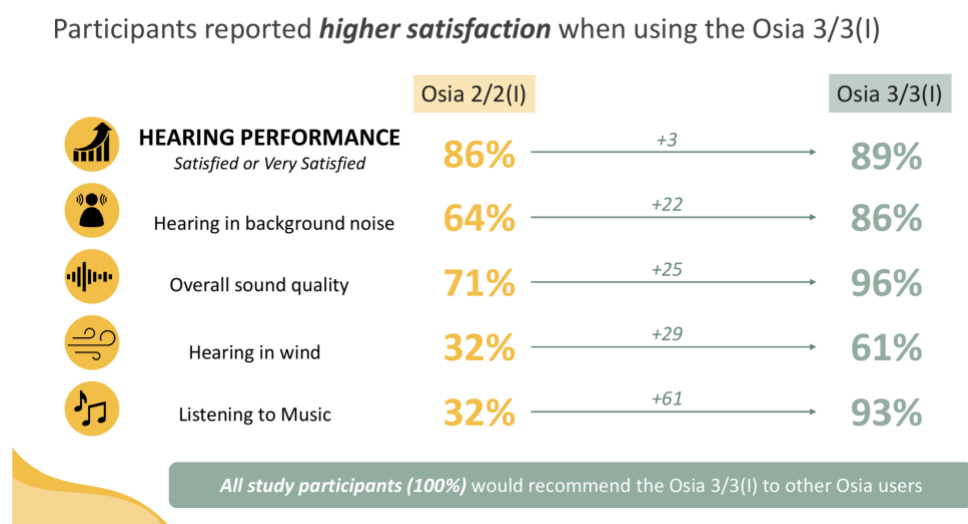


Figure 7. Participant satisfaction ratings, Osia 2/2(I) vs. Osia 3/3(I).

Key Study Findings

- Speech perception improved in both quiet and noise with the Osia 3/3(I) compared to the Osia 2/2(I).
- Participants reported significant improvements in self-reported hearing ability (SSQ-12).
- 90% of participants were satisfied or very satisfied with overall hearing performance using the Osia 3 Sound Processor.
- 100% of participants would recommend the Osia 3 Sound Processor.

Guiding Recipients Through Their Replacement Sound Processor Journey

Coverage for replacement sound processors typically follows one of three pathways: Medicare coverage at end of useful life (5 years) for beneficiaries who meet CMS criteria; Commercial or Medicare Advantage coverage based on the plan's medical necessity policy; and Medicaid coverage, which varies by state-specific guidelines.

Clinicians and recipients should contact the insurance company or local Hearing Implant Specialist to determine specific eligibility for coverage.

A recipient is typically considered eligible for a medically necessary replacement sound processor when the current device is out of warranty, and one or more of the following criteria are met: the sound processor no longer meets the patient's needs, including support for activities of daily living; the device is broken and no longer supported by Cochlear (with a description of how the device is broken); or the device has been lost or stolen.

Clinics can use the advanced search function in Noah® to select a fitting range and device manufacturer, generating a list of recipients who may be eligible for a replacement sound processor.

Documentation Requirements

Documentation best practices for replacement orders include four elements: referring to the device as a “replacement sound processor;” specifying that the clinic is ordering the device; enforcing the benefit to the patient, including impact on activities of daily living; and providing robust clinical notes, including audiograms, product claims, booth testing, and imaging.

Insurance payers evaluate medical necessity based on functional impact rather than device age or technological advancement alone. Documentation should describe how the current sound processor's limitations affect the patient's safety and quality of life, social and entertainment participation, and overall functional impact — this creates the strongest justification for replacement approval.

Required materials should be submitted to upgrade@cochlear.com and must clearly justify the medical necessity for replacement, document that replacement technology was discussed and deemed appropriate, include chart notes from visits with an audiologist, physician, or physician assistant, and include a provider signature (handwritten or electronic) with a date/time stamp.

Submitting a Sound Processor Replacement Order

Orders may be clinic-initiated, where the audiologist submits the order along with supporting chart notes to upgrade@cochlear.com, or recipient-initiated, where Cochlear requests the supporting chart notes directly. In either case, Cochlear requests a prescription via DocuSign, submits the order to insurance and manages approval and collection of any co-insurance, and the audiologist and recipient receive notification once the replacement processor ships.

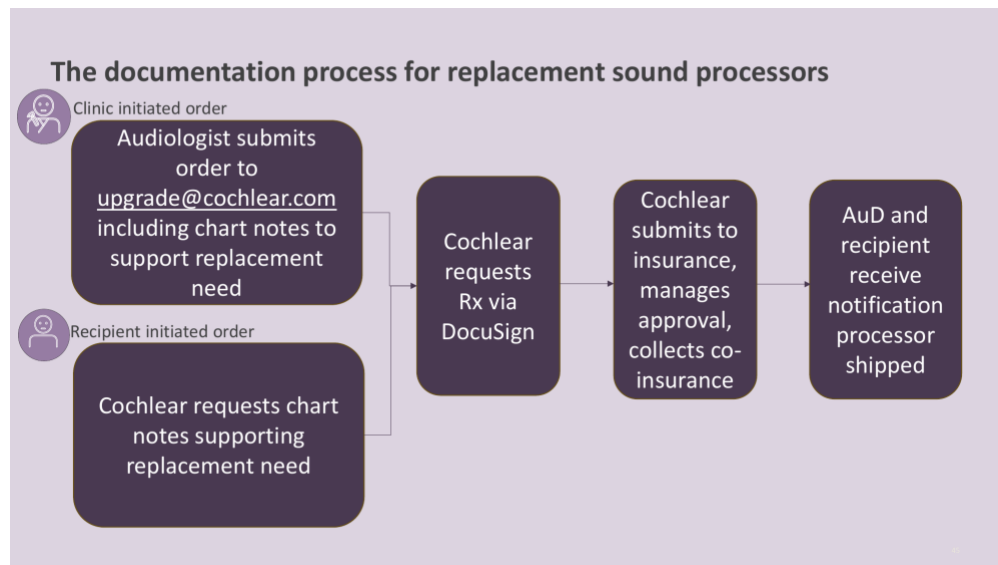


Figure 8. Documentation process flow for replacement sound processor orders.

Conclusion

- The Osia 3 Sound Processor builds on the Osia System's piezoelectric bone conduction platform with the new Zaphium chip, a rechargeable lithium-ion battery, ForwardFocus, an IP68 rating, and expanded wireless connectivity.
- SONUS study data demonstrate significant improvements in speech perception, high-frequency gain, self-reported hearing ability, and patient satisfaction with the Osia 3/3(I) compared to the Osia 2/2(I).
- Clinicians play a central role in identifying eligible patients and submitting well-documented replacement sound processor orders to support timely approval and continuity of care.

References

- Cochlear Limited. (2023). *Osia System R5 datasheet* (D1991788 V1 2023-06).
- Cochlear Limited. (2023). *Design verification report, Osia System R5* (D2043008 V2 2023-03).
- Cochlear Limited. (2025). *EN Osia 3 and 3(I) Sound Processor user manual ROW* (D2068700).
- Cochlear Limited. (2026). *EN Osia 3 SP and OSI200 PROF datasheet* (D2304775-V1).
- Cochlear Limited. (2026). *EN Osia 3(I) SP and OSI300 PROF datasheet* (D2304776-V1).
- Gawliczek, T., Wimmer, W., Caversaccio, M., & Kompis, M. (2020). Influence of maximum power output on speech understanding with bone anchored hearing systems. *Acta Otolaryngologica*, 140(3), 225–229.
- Hearing outcomes with the Osia 3 Sound Processor compared to the Osia 2 Sound Processor in adult Osia implant recipients (SONUS). ClinicalTrials.gov Identifier NCT07156461. <https://clinicaltrials.gov/study/NCT07156461?term=Osia%203%20Sound%20Processor&rank=2>
- Holder, J. T., Sheffield, S. W., & Gifford, R. H. (2016). Speech understanding in children with normal hearing: Sound field normative data for BabyBio, BKB-SIN, and QuickSIN. *Otology & Neurotology*, 37(2), e50–e55. <https://doi.org/10.1097/MAO.0000000000000907>
- Med-El. (n.d.). *BCI602 BONEBRIDGE system factsheet* (29214 r4.0).
- Oticon Medical. (2024). *Sentio 1 Mini product information* (275144en, Version A).
- Tejani, V. D., Stevens, S., Meyer, A., Bartoshuk, M., Berry, S., Aubuchon, P., Cismas, M., Doolittle, S., Drob, J., Flores, N., Hill, L. M., Levy, E. M., Litton, H., Maher, R., Marchegiani, A., Mauro, L., Moyer, C., Novak, J. L. S., Purdy, J., ... Murray, G. (2025). Audiological outcomes of the Cochlear Osia 2 bone conduction system implanted under expanded indications in a pediatric population. *International Journal of Audiology*, 1–10. <https://doi.org/10.1080/14992027.2025.2550530>

Additional Information

Presenter Bios

Channing Hughes, Acoustics Product Manager

Channing Hughes is a Product Manager for Cochlear Americas. She holds a Global MBA from Thunderbird School of Global Management. Channing began her career in medical devices in 2010 and product management in 2013. A patent holder with a heavy emphasis on new product development and innovation, Channing joined Cochlear in 2024 and is thrilled to bring her passion for helping others through meaningful clinical solutions to the world of hearing health. In her role, Channing is responsible for leading the team launching the Osia 3 Sound Processor.

Bailey Harmon, Au.D., CCC-A, Clinical Research Audiologist

Bailey Harmon, Au.D., CCC-A is a licensed audiologist and Associate Clinical Research Audiologist at Cochlear Americas, where she conducts clinical investigations and device fittings for cochlear implants, bone conduction systems, and hearing aids. She holds a Doctorate of Audiology from the University of Colorado Boulder and has contributed to numerous research publications and conference presentations on vocal control, neuroplasticity, and cochlear implant candidacy. With experience spanning clinical care, academic research, and public outreach, Bailey is passionate about advancing hearing healthcare through evidence-based practice, interdisciplinary collaboration, and patient-centered innovation.

Hannah Lynott, Recipient Services Product Manager

Hannah Lynott is a Product Marketing Manager for Cochlear™ North America Inc. She joined Cochlear in 2019 and has held several roles across the organization before moving into her current role supporting the Recipient Services department.

Presenter Disclosure

Channing Hughes — Financial: Channing Hughes is employed by Cochlear. Non-financial: Channing Hughes has no relevant non-financial relationships to disclose.

Bailey Harmon — Financial: Bailey Harmon is an employee of Cochlear North America and has no other relevant financial disclosures. Non-financial: Bailey Harmon has no relevant non-financial disclosures.

Hannah Lynott — Financial: Hannah Lynott is employed by Cochlear. Non-financial: Hannah Lynott has no relevant non-financial relationships to disclose.

Additional Information (continued)

Handout Information

About This Document

This document is created for accessibility and is an AI-generated supplement synthesized directly from the presentation's PowerPoint content.

Reference Use & Links

This handout is for reference only. Non-essential images have been removed. Any links are current at the time of the live webinar but are subject to change.

Copyright

Images used in this course comply with copyright laws; permission has been secured where required. All use of these images outside this course may violate copyright laws and is strictly prohibited.

Social Workers

For additional information regarding standards and indicators for cultural competence, please review the NASW resource: [Standards and Indicators for Cultural Competence in Social Work Practice](#)

Need Help?

Select the "Help" option in the member dashboard to access FAQs or contact us.

Limitations/Risks

- The applicability and accuracy of the course content may vary by the clinical, geographical, and cultural context; you should evaluate the course accordingly.
- As healthcare is rapidly evolving, new findings may change the validity of the information presented in this course. Providers should always consult the latest research and guidelines from professional associations.
- The interventions discussed in this course may be limited in generalizability, requiring practitioners to consider specific individual and population factors.
- The course may not cover all possible risk factors, diagnostic methods, or treatment options, and complex cases may require additional considerations.
- Healthcare providers should apply cultural competence and sensitivity to ensure effective and respectful care based on their patients' diverse needs.
- Providers should always evaluate the limitations of diagnostic and screening tools, considering their potential for false results as well as any ethical implications.
- It is the responsibility of course participants to critically evaluate the evidence from multiple sources to guide professional practice.

No part of the materials available through the continued.com site may be copied, photocopied, reproduced, translated or reduced to any electronic medium or machine-readable form, in whole or in part, without prior written consent of continued.com, LLC. Any other reproduction in any form without such written permission is prohibited. All materials contained on this site are protected by United States copyright law and may not be reproduced, distributed, transmitted, displayed, published or broadcast

without the prior written permission of continued.com, LLC. Users must not access or use for any commercial purposes any part of the site or any services or materials available through the site.