FOR PROFESSIONALS

Cochlear®
Hear now. And always

Pediatric candidacy, evaluation and fitting protocol

Cochlear™ bone conduction hearing systems

Contents

Cochlear bone conduction portfolio

Selecting the most appropriate hearing technology is critical to a child's hearing success. Early access to sound is proven to make a difference in helping children learn, engage and fully experience the richness of their environment.[12]

Cochlear is proud to offer a wide portfolio of surgical and nonsurgical systems that can be used to treat children with hearing loss through bone conduction.

For more in-depth guidance on choosing and fitting a Cochlear bone conduction device, see the Candidate Selection Guide.

Osia® System

Active BC implant system

Piezoelectric technology

Powered for performance—excels in the high frequencies[1,2]

Easier MRI access at 1.5 T and 3.0 T with magnet in place[3]

For children as young as 5 years old,≈ to senior adults who want the latest technology

Up to 55 dB HL bone conduction thresholds

Direct audio streaming with compatible Apple iOS devices.+

≈ In the United States and Canada, the Osia System is indicated for children ages 5 and older.

+ For compatibility information visit www.cochlear.com/compatibility

* Remote Assist for Baha for compatible Baha sound processors is intended for a follow-up adjustment or setup of a replacement or upgrade sound processor for suitable qualified patients based on clinical judgment. Only available at clinics that have enrolled in Remote Care.

** Auracast™ broadcast audio capability is subject to third-party adoption of the Auracast protocol.

Baha® Start

- Non-surgical BC system
- Electromagnetic technology
- Faster access to sound with Cochlear Lend an Ear Program
- Access to care when and where patients need it with Remote Assist for Baha*
- For infants and children under 5 years old, patients not ready for a surgical solution, or for bone conduction demonstration
- Up to 55 dB HL bone conduction thresholds
- Direct audio streaming with compatible Apple iOS devices and Android devices.† The Baha 7 Sound Processor has Bluetooth® LE Audio and Auracast™ streaming enabled.**

Baha® System

- Percutaneous BC implant system
- Electromagnetic technology
- LowPro™ or extended 2 mm snap coupling
- Access to care when and where patients need it with Remote Assist for Baha*
- Up to 55 dB HL bone conduction thresholds
- Direct audio streaming with compatible Apple iOS devices and Android devices.† The Baha 7 Sound Processor has Bluetooth® LE Audio and Auracast™ streaming enabled.**

Wireless devices

Help patients hear even better in different and difficult listening environments

Remote microphone	Gives patients extra support in challenging environments (e.g., noisy classrooms, sports, etc.)
TV streamer	Patients can set their own personal volume and stream the TV sound directly to their device
Remote control	An alternative way to control and adjust Sound Processor volume and programs, instead of with the Osia or Baha Smart App
Phone clip	An alternative way to stream phone calls wirelessly to the sound processor, when direct streaming from a phone is not available

Color options

Osia 2 and 2(I) Sound Processor

(Interchangeable color covers)

Baha 7 Sound Processor

Baha SoundBand™

Baha SoundArc™

Baha and Osia Smart Apps‡

Adjust volume, change program and activate streaming from wireless devices

Options for the patient, caregivers, and educators to adjust and personalize their hearing experience

Device assistance and helpful maintenance tips

Locate a lost sound processor

Patient access to Remote Assist*, with compatible Baha sound processors

Baha and Osia Fitting Softwares

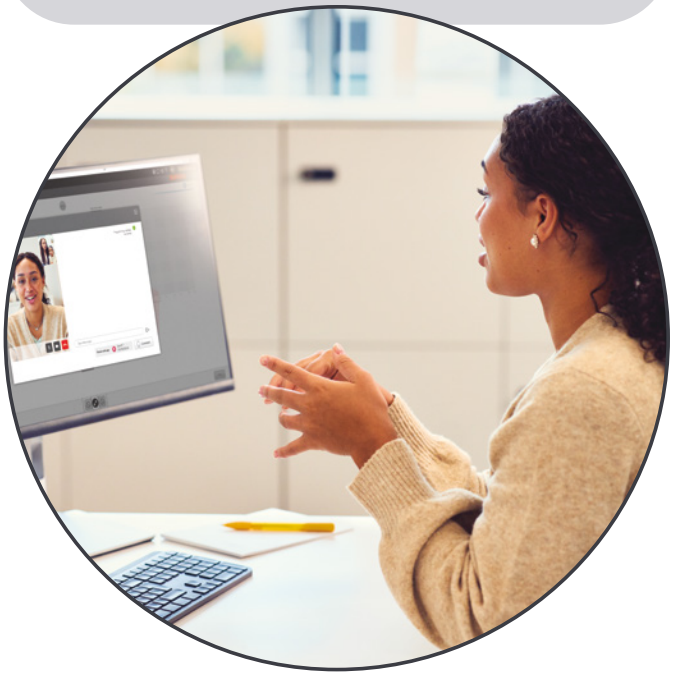
Optimized patient fitting, intuitive user interface and easy-to-use workflows

Osia Fitting Software 2

- Enhanced Fitting Workflows
- Digital Link Calibration (DLC)
  - Feedback Analyzer
  - Program Customization
- Wireless Accessory Set-up
  - Datalogging

Baha Fitting Software 7

- Enhanced Fitting Workflows
  - Feedback Analyzer
  - Program Customization
    - Remote Assist*
    - Data logging
- Verified fittings with VerifitLINK™ option
- DSL-BCD prescription option



‡ Cochlear Osia and Baha Smart Apps are available on App Store and Google Play. For compatibility information visit www.cochlear.com/compatibility

* Remote Assist for Baha for compatible Baha sound processors is intended for a follow-up adjustment or setup of a replacement or upgrade sound processor for suitable qualified patients based on clinical judgment. Only available at clinics that have enrolled in Remote Care. For compatibility information visit www.cochlear.com/compatibility.

Candidacy identification

Goals

- Identify hearing loss type (conductive or mixed hearing loss, single-sided deafness)
- Determine the impact on speech communication and quality of life
- Establish a baseline for continued monitoring of hearing outcomes

Audiological evaluation

- Case history
- Otoscopic examination of the ear and ear canal
- Tympanometry for both ears
- Acoustic reflex measures (optional)
- Otoacoustic emissions (optional)
- Questionnaires (hearing, communication, quality of life)

Depending on the age and/or developmental capabilities of the child:

- Ear- and frequency-specific bone conduction hearing thresholds.[4] Include air conduction when anatomically feasible
- Auditory Brainstem Response (ABR) with bone conduction transducer
- Behavioral audiometry
- Speech audiometry (threshold and suprathreshold)

Medical examination

- Medical consultation to determine etiology and medical treatment (if needed)

Conductive or mixed hearing loss indications

Ear to be implanted	Age*
Bone conduction pure tone average (PTA) (500, 1000, 2000, 3000 Hz) **≤55 dB HL** Air conduction thresholds are not considered	**Implantable solutions:** Osia: age 5 years and older (US and Canada) Baha: age 5 years and older (US and Canada) **Non-surgical solutions:** any age

When to recommend bilateral		
	Bone conduction PTA: Difference between ears in bone conduction PTA is within 10 dB	**At individual frequencies:** Difference between ears in bone conduction thresholds at individual frequencies are within 15 dB

Did you know?

Patients with an air-bone gap (ABG) of more than 30 dB PTA will experience significant advantages from a bone conduction system as compared to using an air conduction hearing aid.[4]

Single-sided deafness indications

Poor ear	Good ear	Age*
Profound sensorineural hearing loss **≥ 80 dB HL**	Air conduction PTA (500, 1000, 2000, 3000 Hz) **≤ 20 dB HL**	**Implantable solutions:** Osia: age 5 years and older (US and Canada) Baha: age 5 years and older (US and Canada) **Non-surgical solutions:** any age

Additional considerations
Patients who cannot or will not use an air conduction CROS hearing aid
Patients with contraindications for cochlear implantation

* In the United States and Canada, the Osia System is indicated for children ages five and older. The placement of a bone-anchored implant is contraindicated in children below the age of 5.

Bone conduction demonstration and evaluation

Goals

- Demo the bone conduction system
- Complete the bone conduction evaluation
- Provide recommendations based on evaluation results and other considerations
- Create audiological treatment plan in conjunction with medical treatment plan to address hearing needs of the child

Demonstration and Evaluation with a Baha® 7 Sound Processor

- Program the Baha 7 sound processor using the child's audiometric information
  - Use BC Direct Thresholds, if possible. If not available, use audiometric or ABR bone conduction thresholds
  - At least one low- and one high-frequency bone conduction threshold is necessary for the affected ear(s) to be fitted[11]
- Snap the processor to the SoundBand™ or SoundArc™ and place on child's head
- Conduct an aided bone conduction evaluation^ in the soundfield using the custom program
  - Isolate the test ear through plugging, muffing, or masking the non-test ear as appropriate for the child and indication
  - Determine aided benefits using frequency-specific and/or speech stimuli

^ Clinical studies have shown that a non-surgical bone conduction solution, like Baha Start, is an effective method for predicting outcomes before bone conduction implantation.[5-6]

Equipment

- Baha® 7 Sound Processor
- SoundBand and/or SoundArc
- Cochlear™ Baha Fitting Software installed on fitting computer along with NOAHlink® Wireless Programing Interface
- Audiometric test equipment with soundfield capability
- Recorded speech testing material
- Reinforcers and toys used for Visual Reinforcement Audiometry (VRA) testing and Conditioned Play Audiometry (CPA)

Baha SoundBand

Baha SoundArc

Aided soundfield testing of ear to be implanted

Depending on the age and/or developmental capabilities of the child:

- Behavioral audiometry to measure thresholds from 500 Hz through 6000 Hz using narrow band noise stimuli
- Consider measuring aided thresholds with the Ling 6(HL) test (v2.0)[10] with calibrated, pre-recorded Ling 6 sounds
- Speech audiometry (threshold and suprathreshold)

Tip

The Ling-6(HL) test developed at Western University[10] contains calibrated recordings of the Ling 6 sounds. Each of the Ling sounds is presented to measure detection and plotted on an audiogram. Since the stimuli are phonemes of speech, they may be more clinically relevant and would be less likely to interact with automatic features of the signal processing enabled in the sound processor.

^ Clinical studies have shown that a non-surgical bone conduction solution, like Baha Start, is an effective method for predicting outcomes before bone conduction implantation.[5,6]

Baha 7 Sound Processor preset program options

Program 1: **Conductive hearing loss** Set up demo patient file using BC PTA of 10 dB

Program 2: **Mixed hearing loss** Set up demo patient file using BC PTA of 35 dB

Program 3: **SSD** Set up demo patient file identical to Program 1 but with low frequency gain reduced by 10 to 12 steps in the frequencies 750 Hz and below

Program 4: **Conductive hearing Loss DSL-BCD** Set up patient demo file identical to Program 1, utilizing the DSL-BCD prescription option

Tip

Confirm mic directionality is set to OMNI to enable demo use on either ear.

Counsel on critical demonstration vs. surgical solution differences:

Demonstration with non-surgical solution

- Indirect sound transmission (skin attenuation dampens sound)
- Traditional technology not as efficient in transmitting high frequency sounds

Implanted solution: Osia System with the Piezo Power™ difference

- Improved sound quality compared to demonstration with non-surgical solution[7,8]
- Direct sound transmission through the bone (no skin attenuation to dampen sound)
- Osia's piezoelectric technology provides superior transmission of high-frequency sounds for better hearing—especially in noisy environments[1,9]
- Wearing consistency—Osia System patients used their device for an average 10.6 hours per day[1]

Bone conduction demonstration and evaluation

The Cochlear Osia 2 and 2(I) Sound Processors with Aqua+ are dust and water resistant to the level of IP68 of the International Standard IEC60529 when used with LR44 alkaline or nickel metal hydride disposable batteries. This water protection rating means that the sound processor with the Aqua+ can be continuously submerged under water to a depth of up to 3 meters (9 feet and 9 inches) for up to 2 hours. Refer to the relevant User Guide for more information.

Bone conduction treatment determination

Goals

- Determine the treatment pathway for the child including the appropriate bone conduction solution

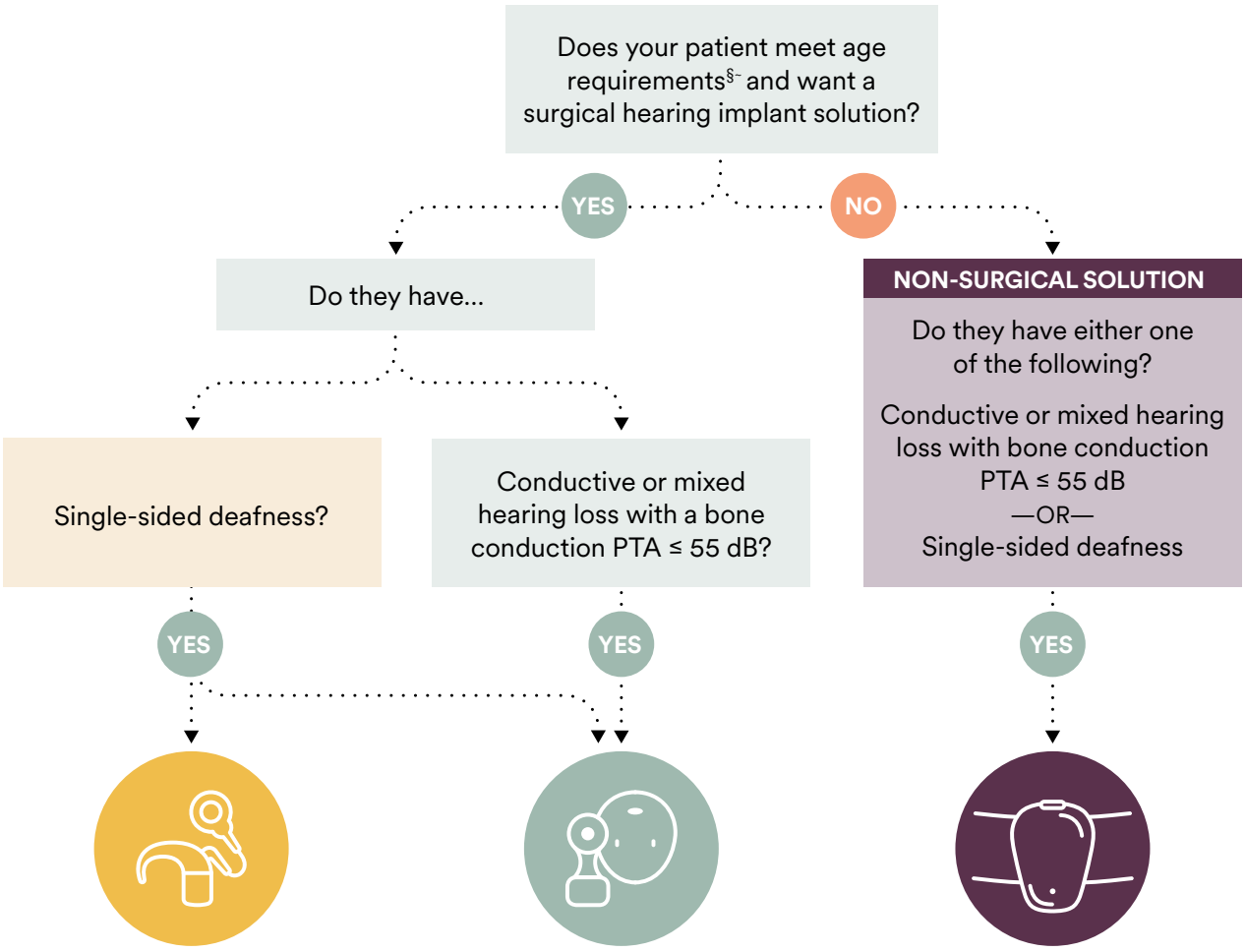
Determine treatment

A multi-disciplinary team can provide families with a holistic care plan for the child and the information needed to make decisions regarding treatment options. The team may consist of the parents, surgeon, audiologist, speech-language pathologist, social worker, and early interventionist.

Take into consideration

- Bone conduction evaluation results
- Patient use duration (short term vs. long term vs. intermittent)
- Surgical or non-surgical solution
- Unilateral or bilateral fitting
- Coexisting disorders
- Daily use and maintenance of a bone conduction device
- Patient hearing goals
- Patient age and lifestyle
- Patient health plan benefits and coverage

Bone conduction treatment determination



Cochlear™ Nucleus® System
Cochlear implant with MRI access at 1.5 T and 3.0 T with magnet in place, more info at www.cochlear.us/when-to-refer

Cochlear™ Osia® System
Piezoelectric technology and MRI access† at 1.5 T and 3.0 T with magnet in place[3]

Cochlear™ Baha® Start with Baha 7 Sound Processor
worn with a SoundBand™ or SoundArc™

Additional recommendations for specific cases

Patient with factors that preclude an Osia System	Consider the **Cochlear Baha Connect System** with the Baha 7 Sound Processor.
Baha Start or Baha System patient requiring additional clearance between their skin and the sound processor	Consider the **Baha 7 Sound Processor with 2mm** extended snap coupling.
Patient with bone conduction PTA threshold > 55 dB	Conduct a cochlear implant evaluation for a Cochlear Nucleus System, more info at **www.cochlear.us/when-to-refer**.

§ In the United States and Canada, the Nucleus System is approved for children with single-sided deafness ages 5 and older. For more information on general Nucleus candidacy criteria, please visit https://www.cochlear.com/us/en/home/diagnosis-and-treatment/how-cochlear-solutions-work.
~ In the United States and Canada, the Osia System is indicated for children ages five and older. The placement of a bone-anchored implant is contraindicated in children below the age of 5.
† In the United States and Canada the Osia OSI300 Implant in combination with the BI300 Implant, are MR Conditional at 1.5 T and 3.0 T with implant magnet cassette in place (or removed) without the need of a splint kit or a head wrap.

Counseling considerations

- Counsel on the optimal option for the patient
- Discuss appropriate expectations (see What to expect on page 17)
- Discuss wireless accessories, apps and connectivity options and how these may be an effective complement to a bone conduction solution
- Discuss retention options
- Discuss MRI considerations
- Discuss cost, reimbursement and funding
- **Osia System patients:** Counsel on the expected improvement in sound quality with the Osia System, compared to a demonstration with non-surgical solution[1,7,8,9]
- **SSD patients:** Counsel that hearing in the profound ear will not be restored but the bone conduction sound processor will send sound from the profound side to the better hearing ear
- **Baha 7 Sound Processor patients:** Discuss Remote Care via Remote Assist* to supplement in-clinic care

Tip

Continue to re-evaluate the child for bone conduction amplification over the course of medical treatment.

Next steps

- **Review with your patient and caregivers:** Cochlear Bone Conduction Solutions—your guide to preparing for surgery (BUN535)
- Provide Engagement Manager contact information to the candidate
- Complete order form

* Remote Assist for Baha for compatible Baha sound processors is intended for a follow-up adjustment or setup of a replacement or upgrade sound processor for suitable qualified patients based on clinical judgment. Only available at clinics that have enrolled in Remote Care. For compatibility information visit www.cochlear.com/compatibility.

What to expect

Assess patient's experience	Discuss their previous knowledge and experience with hearing devices. Introduce what they can expect from new devices.
Identify key situations	Talk about important hearing situations and environments, as well as current challenges.
Advise on options	Provide realistic expectations for hearing rehabilitation with their new device. • Some adapt quickly, others may need gradual adjustment • If needed, wear the device at home for 2-3 hours daily and gradually increase wear-time and in different environments • Full adaptation can take up to 6 months
Device adjustments	Adjustments may be needed over time, either via apps (Baha or Osia Smart App) or follow-up appointments via Remote Assist* or in person. • Additional wireless devices can help in challenging environments (e.g., hearing in noisy situations, from a distance, or streaming from the TV or mobile phone)
Lifestyle fit	Counsel on choosing a device that fits their lifestyle and activities. • Consider color options, water resistance or Aqua+** accessories, and ability to wear with glasses, helmets, or hats • Recommend bringing glasses, helmet, hat, etc. to surgery or appointment to discuss sound processor placement and accommodation • Explore additional retention options like the Safety Line or Cochlear Headband
Surgical procedure overview	• Bone conduction implants are typically a same day, outpatient procedure • The procedure generally takes about an hour, with additional time in the preparation and recovery areas • Patients typically go home the same day • Most patients are back to their normal routine after a few days for recovery

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**The Cochlear Osia 2 and 2(I) Sound Processors with Aqua+ are dust and water resistant to the level of IP68 of the International Standard IEC60529 when used with LR44 alkaline or nickel metal hydride disposable batteries. This water protection rating means that the sound processor with the Aqua+ can be continuously submerged under water to a depth of up to 3 meters (9 feet and 9 inches) for up to 2 hours. Refer to the relevant User Guide for more information

Patient fitting and monitoring

Goals

- Provide audibility and access to speech with comfortable wear for the child to use the device to the maximum potential

Device registration

Fill out registration card available in the surgical and/or processor docupacks —OR— log in to myCochlear Professional portal to register devices.

Remote Care* for patients with Baha 7 sound processors

Your patient, your care, anywhere

With Cochlear Remote Care, offer your patients the convenience of quality hearing care without the need to visit the clinic. Manage patient progress and offer programming to those who may be limited by location, health, mobility, or school/work commitments.

- With Cochlear Remote Assist, your patients with Baha 7 sound processors can meet you via a video appointment through their Baha Smart App, allowing you to connect to their sound processor through the Baha Fitting Software
- You will have access to all software features, such as BC Direct, Feedback Analyzer, programs and processor settings, allowing you to complete a full fitting, upgrade fitting or perform troubleshooting
- Remote Assist can be fit anywhere into your clinical model to supplement in-clinic care

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Equipment

Verification and validation for Osia and Baha

- Audiometric test equipment with soundfield capability
- Reinforcers and toys used for Visual Reinforcement Audiometry (VRA) testing and Conditioned Play Audiometry (CPA)
- Recorded speech material

For verification of Baha 7

- VerifitLINK™ (within Baha Fitting Software)
- Audioscan® Verifit2®
- Audioscan Skull Simulator

Osia System

- Cochlear Osia Fitting Software installed on fitting computer
- First fitting: Hi-Pro® 2 wired interface with the Cochlear CS45 fitting cables
- Follow-up fittings: Noahlink® wireless programming interface

Baha System

- Cochlear Baha Fitting Software installed on fitting computer
- Noahlink wireless programming interface

Recommended activation interval

Osia System

Approximately 4 weeks post-surgery

Baha Start

Immediately

Baha System

12 weeks post-surgery

Recommended follow-up intervals

Pediatric[11]

- 1 month
- 3 months
- 6 months
- 9 months
- 12 months
- 18 months
- 24 months
- then annually

Note

In cases of patients with magnets, check the site at least once in the immediate post-activation period from 2 weeks – 3 months to assess the magnet strength for appropriate retention and modification if found to be too tight or too loose.

Note

Please take age and developmental needs of the child into account when planning post-activation follow-up. For example, a young infant or child may need more extensive follow-up, while an older child or teenager may follow a more adult-type follow-up schedule.

Additional

- Follow-up as needed based on clinical judgement or patient request for clinical management or troubleshooting
- Upgrade as appropriate

Review expectations

- See 'What to expect' on page 17

Site check at every visit

Osia System

- Check magnet strength and skin under magnet for redness, irritation, or indentation

What to look for

The magnet fits strong enough to stay on the head but is not so tight that it causes discomfort, soreness, irritation or hair loss of the skin.

If skin compression, irritation, or hair loss is present, reduce magnet strength.

Use the Cochlear SoftWear™ pad if required magnet strength is in between or for additional comfort.

Important

- Fit the patient with the lowest magnet strength required for retention to avoid irritation
- Tissue can compress over time, leading to the need for a lower magnet strength
- For thin or delicate skin, consider using the Cochlear SoftWear™ pad

Baha Start

- Check fit and placement of SoundBand or SoundArc

What to look for

The connector disc fits flush and close-fitting against the skin to ensure effective sound transmission but does not cause discomfort.

SoundBand: Be able to fit one finger between the head and the SoundBand.

SoundArc: Adjust the shape so it does not wobble and the soft tip rests slightly in front of the ear on both sides.

Always use the Cochlear SoftWear™ Pad with the SoundBand and SoundArc.

Baha Connect System

- Check skin around abutment for irritation or infection

What to look for

Redness, inflammation, soreness at site.

Regular cleaning is the most effective way to prevent skin reactions. Patients who are not able to appropriately conduct their own skin care should get assistance from their family or caregiver.

Counsel the patient to perform daily site checks.

The patient should contact the clinic **immediately** if they experience any pain, soreness, itching or warmth, notice redness or irritation at the site, or notice the Baha Connect System abutment is loose.

Tip

The Baha 7 Sound Processor with the LowPro™ snap coupling is suitable for most patients, but the Baha 7 Sound Processor with 2mm extended snap coupling may be considered for patients requiring additional clearance.

Verification of fittings with the Baha 7 Sound Processor

The Cochlear Bone Anchored Prescription (CBP) is the default method for fitting Cochlear bone conduction devices. CBP has been refined by Cochlear over many years to maximize the hearing experience of patients wearing Cochlear bone conduction devices.

Additionally, Baha Fitting Software 7 now gives a new option to fit with the DSL-BCD prescription. DSL-BCD is a third-party fitting prescription method with options to fit for an adult or child. DSL is used primarily with pediatric patients due to the emphasis on audibility for the high frequencies. This method may be preferred by clinicians who already work with DSL prescriptions on other devices, or who prefer to use third-party prescription methods.

Verification of the device and the fitting is recommended to ensure audibility and comfort. Scan the QR code to access the Bone conduction verification guide.

Scan QR code or visit **www.cochlear.us/bcverification** to learn more.

Technical measurement for Baha 7 Sound Processors

The Technical Measurement workflow in Baha Fitting Software 7.0 or later will set up the sound processor to allow you to measure and compare the device to the published specification using Audioscan® Verifit® and Skull Simulator. The Technical Measurements workflow can be performed with either CBP or DSL-BCD fitting prescriptions.

Verified fittings via Verifit® and VerifitLINK™ compatibility

Baha Fitting Software 7 is the first in bone conduction to allow you to verify and adjust Baha 7 Sound Processor fittings using VerifitLINK™ with the Verifit® Skull Simulator—all from within the Baha Fitting Software 7.

Verification of fitting with SpeechMap® using VerifitLINK and Verifit Skull Simulator simulates a “real head” response so you can run test measures using the programmed sound processor to view force output, gain and other acoustic attributes and predict patient performance.

You can use the Verifit Skull Simulator to obtain objective fitting measurements and provide even more confidence in your patients’ hearing outcomes. When used with the DSL-BCD prescription method, VerifitLINK allows you to automatically and quickly fit to targets.

Fitting prescription considerations

BC Direct thresholds obtained using the bone conduction device are recommended to use as a basis for the fitting prescription.[11] BC Direct thresholds account for the child’s individual skull resonance properties and/or and skin transmission differences and specific device characteristics.

However, obtaining BC Direct thresholds may not be developmentally feasible with infants and young children. If BC Direct thresholds are not available, use audiometric or ABR bone conduction thresholds. At least one low- and one high frequency bone conduction threshold is necessary for the fitting.[11] As soon as the child is developmentally capable, measure BC Direct thresholds and update the fitting prescription.

Activation/upgrade fittings

Site check
- Complete site check as appropriate for device

Programming
- Complete programming workflow for a first fitting
- Complete verification (optional)
- Enable data logging to review at the next visit

Counseling considerations
- Counsel on regular site monitoring, proper site maintenance and reporting of symptoms
- Practice attaching and taking off device and review basic device use
- Provide Recipient Solutions Manager contact information **www.cclr.me/welcome**
- Review the activation kit and introduce accessories based on the child's hearing, educational, and extracurricular needs
- Set up the Baha or Osia Smart App and create a Cochlear Account for the carers and the child (if age appropriate)
- Discuss communication strategies and rehabilitation resources
- Discuss hearing in different situations including options for challenging listening environments

Follow-up visits

Site check
- Complete site check as appropriate for device
- For magnetic solutions, adjust magnet strength as needed (use lowest magnet strength necessary and supplement with Cochlear SoftWear™ Pad if needed)

Programming
- Review data logging
- Complete programming workflow for a follow-up fitting as needed
- Complete outcomes measures as appropriate

Counseling
- Counsel family based on the findings of the site check, datalogging, programming, and outcomes evaluation
- Review goals, record progress and revise goals as needed
- Re-train on device, accessory use, maintenance, or Smart App functionality—or refer patients to Recipient Solutions Manager for further assistance as needed **www.cclr.me/welcome**
- Re-educate on listening strategies as needed

Tip

Programming

Cochlear Fitting Software allows for customization of the prescription and configuration of the sound processor to match the patient's thresholds, profile, and individual listening needs.

Several activities are available in Baha and Osia Fitting Software for simple navigation and streamlined efficiency in programming for different fitting scenarios. Each activity has a specific workflow to guide you through the session and complete the needed fitting tasks.

Tip

Data logging

Cochlear data logging provides greater insight into the environment experienced by your patient, helping you track usage patterns, make adjustments to the sound processor, and form custom goals to suit their individual needs.

Tip

Remote Assist for Baha 7 Sound Processors

Consider using Remote Assist* for follow-up, troubleshooting, and upgrade fittings for compatible sound processors.

* Remote Assist for Baha for compatible Baha sound processors is intended for a follow-up adjustment or setup of a replacement or upgrade sound processor for suitable qualified patients based on clinical judgment. Only available at clinics that have enrolled in Remote Care. For compatibility information visit www.cochlear.com/compatibility.

Validation of fitting

To validate the fitting on the child, outcomes measures allow comparison to the pre-treatment baseline as well as previous postfitting intervals to monitor performance and serve as a point of discussion in post-treatment counseling.

- Conduct an aided evaluation in the soundfield
- Isolate the test ear through plugging, muffing, or masking the non-test ear as appropriate for the child and indication
- Evaluate performance with fitted bone conduction device using frequency-specific and/or speech stimuli
- Questionnaires (hearing, communication, quality of life)
- Compare aided testing to unaided baseline at candidacy evaluation
- Compare aided testing to last visit

Aided soundfield testing of fitted device

Depending on the age and/or developmental capabilities of the child:

- Behavioral audiometry to measure thresholds from 500 Hz through 6000 Hz using narrow band noise stimuli
- Consider measuring aided thresholds with the Ling 6(HL) test (v2.0)[10] with calibrated, pre-recorded Ling 6 sounds
- Speech audiometry (threshold and suprathreshold)

Tip

The same outcomes measures used for candidacy can be used post-fitting to validate the fitting and allow comparison to the pre-treatment baseline as well as previous post-fitting intervals to monitor performance and serve as a point of discussion in post-treatment counseling.

Tip

All day wear and impact on speech and language development:

School age children spend most of their time listening to the speech of other children and women, which has more emphasis on high frequency content.[2]

They are exposed to more complex listening environments.[2]

They need consistent access for the full range of speech sounds.[2]

They have a desire for more aesthetically pleasing or more discreet solution.[13]

Selecting the most appropriate hearing technology based on the child's changing needs is critical to their hearing success.[2]

Next steps on the child's hearing journey

Goals

- Determine appropriate bone conduction solution
- Help the family navigate the upgrade or surgical solution transition process
- Prepare the family for the device fitting appointment

Contact Cochlear

T 800 523 5798
E customer@cochlear.com
www.mycochlear.com
www.cochlear.us/rsm
www.cochlearstore.com

Resources

www.cochlear.us/upgradesforprofessionals

www.cochlear.us/orderform

How do I know if my patient should transition to the Osia System?

- Child would benefit from direct access to the bone conduction path with no skin attenuation to overcome
- Child would benefit from additional gain in high frequencies
- Child's hearing loss has progressed
- Child meets age requirement for surgical solution
- Child and family are motivated to proceed with surgical solution
- Child desires more discreet or aesthetically pleasing solution
- Child and family are experiencing tissue maintenance or hygiene challenges with existing abutment-based solution
- Child and family desire a solution designed to minimize feedback—also making hats, helmets, and headgear easier to wear

Check your patient's eligibility for sound processor replacement through insurance

The device is out of warranty AND one of the following:

- The device is lost or stolen
- Medical necessity is described including current impact on activities of daily living
- The device is broken and retired or obsolete (normal process as technology advances)

3 pathways for continuing the hearing journey

01 Transition from non-surgical bone conduction solution to surgical bone conduction solution

02 Upgrade to new sound processor technology OR new or replacement Baha Start solution

03 Transition from an implantable solution to a new or different Cochlear implantable solution

Next steps

Bone conduction solution determination

See sections: Bone conduction demonstration (page 10), evaluation (page 10), and bone conduction treatment determination (page 14)

- Complete a bone conduction evaluation using patient's current device
- Determine treatment pathway, taking into consideration evaluation results, age, patient factors, health plan benefits and coverage, and readiness for surgery

Placing the order

Transitioning to a surgical solution	**Step 1:** Schedule surgery **Step 2:** Fill out the new system order form and submit to Cochlear	
Sound processor or Baha Start System replacement	**Patient initiated** Patient calls Cochlear or places order via online store —OR— patient schedules a virtual consultation with a Cochlear Upgrade Solution Specialist	**Clinic initiated** Fill out the upgrade or replacement order form and submit to Cochlear

Cochlear may review specific patient and insurance requirements and provide you with a Letter of Medical Necessity (LMN) template.

Tip

Pediatric Baha Start System patients may qualify for Cochlear's Lend an Ear Program for faster access to sound.

Device fitting

See sections: Remote Care for patients with a Baha 7 Sound Processor and patient fitting and monitoring (page 18)

- Determine if the fitting will be through Remote Assist* or in clinic
- Schedule your patient for their fitting appointment
- Complete the fitting

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Billing and coding

The codes in this section may be reported by audiologists and other licensed clinicians for services related to pre- and post-operative analysis and rehabilitation of auditory osseointegrated (AOI) patients. This list is not intended to be comprehensive of all services that may be offered to AOI patients.

Additional coding support

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Evaluation

The following codes may be applicable based on documentation of the services listed.

92550[*]	Tympanometry and reflex threshold measurements
92557[*]	Comprehensive audiometry threshold evaluation and speech recognition
92626[‡¶Δ#]	Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); first hour
92627[‡¶Δ]	Evaluation of auditory function for surgically implanted device(s) candidacy or postoperative status of a surgically implanted device(s); each additional 15 minutes

Fitting

The following codes may be applicable based on documentation of the services listed. As of January 2024, there are two Current Procedural Terminology (CPT®) codes to report services related to the diagnostic analysis, programming, and verification of an auditory osseointegrated sound processor.

92622[#†]	Diagnostic analysis, AOI sound processor; 1st hour
92623[^]	Diagnostic analysis, AOI sound processor; each additional 15 min
V5011	Fitting/Orientation/Checking of hearing aid
Remote Care[~]	Coverage for audiology telehealth visits may vary by payer; contact payer to determine benefit coverage details

* Audiometric tests identified by codes 92550–92597 include testing in both ears. Use modifier -52 if only one ear tested.

‡ Swanson N. Do's and Don'ts for revised implant-related auditory function evaluation CPT Codes. ASHA Leader, Aug 31, 2020.

¶ The descriptions for 92626 and 92627 were revised in 2020. Please see ASHA article "New and Revised CPT Codes for 2020" https://www.asha.org/practice/reimbursement/coding/new_codes_aud/) for details of changes and proper use of the codes.

Δ Perform to assess changes in speech perception, discuss process and update rehab plan

Per NCCI edits, bundled into 92622 if performed on the same day. Use -59 modifier if the procedure is separate and distinct from primary service.

† 92622 requires a minimum of 31 minutes. For less than 31 min, use unlisted code 92700

^ 92623 requires a minimum of an additional 8 minutes

~ Medicare's telehealth list will not include the new AOI codes for inclusion in 2024. Providers are encouraged to collaborate with professional societies to communicate their desire for continued access to telehealth services.

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