

Cochlear Implant Candidacy Programming Protocol, Adult Ear & Hearing | Center for Neurosciences

Activation of the Cochlear Implant (CI) is performed by the Audiologist 2-6 weeks following surgery. While we understand all recipients are very anxious to have the CI activated there are a variety of factors to consider when determining the activation date. For example very frail patients, those who underwent a petrosectomy, or very complex ear patients may require a longer healing period after surgery. The Ear & Hearing team will coordinate to determine your specific activation timeframe to maximize your success with the cochlear implant.

INITIAL ACTIVATION, DAY 1

30-60 MINS

2-6 weeks post-op

Equipment Orientation

- Sound processors, batteries & charging, Trouble shooting supplies
- Accessories, brief overview
- Manuals and other documents

MAPPING and Programming

- Magnet selection/Incision evaluation
- eCAP: NRT/tNRI/Telemetry
- Mapping/programming

Counseling

- Practice attaching batteries and placing sound processor on head
- Consistent daily usage except when sleeping or around water
- CEASE use of contralateral hearing aid for the 1st month to encourage neural plasticity of electric hearing
- Importance of aural rehabilitation; provide handout with resources

INITIAL ACTIVATION, DAY 2

30-60 MINS

5-14 days following Day 1 of Initial Activation

Residual Hearing Evaluation

- Tympanometry
- Residual hearing to assess hearing preservation and candidacy for electro-acoustic stimulation.

CI-Aided Thresholds

- Evaluate audibility through CI sound processor in sound-field

MAPPING and Programming

- Magnet check
- Activation of acoustic component if thresholds ≤ 85 dB HL, 125-2000 Hz
 - Consider earmold impression for acoustic coupling
- Mapping/programming/data logging

Counseling

- Patient concerns and progress
- Consistent daily usage except when sleeping or around water
- CEASE use of contralateral hearing aid for the 1st month to encourage neural plasticity of electric hearing
- Importance of aural rehabilitation; provide handout with resources if needed

1-MONTH FOLLOW-UP

30-60 MINS

1-month following Day 1 of Initial Activation

Equipment Check

- Visual inspection
- Equipment concerns and needs

Residual Hearing Evaluation

- Tympanometry
- Residual hearing to assess hearing preservation and stability of electro-acoustic stimulation.

CI-Aided Thresholds

- Evaluate audibility through CI sound processor in sound-field

MAPPING and Programming

- Magnet check
- Mapping/programming if needed based on aided thresholds

Counseling

- Patient concerns and progress
- Consistent daily usage except when sleeping or around water
- RESUME use of contralateral hearing aid for daily listening
- Importance of CI-only aural rehabilitation; provide resources handout if needed

**This visit may be eliminated or completed remotely depending upon manufacturer, outcomes from Day 2 visit, and patient comfort with remote programming technology.

3-MONTH FOLLOW-UP

30-60 MINS

3-months following Day 1 of Initial Activation

Equipment Check

- Visual inspection/listening check
- Equipment concerns and needs

Residual Hearing Evaluation

- Tympanometry
- Residual hearing to assess hearing preservation and stability of electro-acoustic stimulation.

CI-Aided Thresholds

- Evaluate audibility through CI sound processor in sound-field

Evaluation of Aural Rehabilitation Status (Speech Testing)

- CI-only or newly implanted ear if bilateral
 - AzBio, Quiet
 - CNC, words/phonemes

MAPPING and Programming

- Magnet check
- Mapping/programming if needed based on aided thresholds and speech scores

Counseling

- Patient concerns and progress
- Consistent daily usage except when sleeping or around water
- Continue use of contralateral hearing aid during daily listening
- Importance of CI-only aural rehabilitation; provide resources handout if needed

6-MONTH FOLLOW-UP

60 MINS

6-months following Day 1 of activation

Equipment Check

- Visual inspection/listening check
- Equipment concerns and needs

Residual Hearing Evaluation

- Tympanometry
- Residual hearing to assess hearing preservation and stability of electro-acoustic stimulation

CI-Aided Thresholds

- Evaluate audibility through CI sound processor in sound-field

Evaluation of Aural Rehabilitation Status (Speech Testing)

- Testing performed in the sound field at 60 dBA at 0 degree azimuth for both speech & noise via recorded materials unless otherwise indicated.
- Testing obtained using Patient's personal hearing aid to simulate "real-world" performance
- If Patient does not use a personal hearing aid a clinic device will be programmed and verified for testing using evidence-based prescriptive targets.

Test Battery based on Minimum Reporting Standards:

- AzBio, +5 SNR
 - Right, Left, and Binaural Conditions
- AzBio, Quiet
 - Right, Left, and Binaural Conditions
- CNC, words/phonemes, Quiet
 - Right, Left, and Binaural Conditions

MAPPING and Programming

- Magnet check
- Mapping/programming if needed based on aided thresholds and speech scores

Counseling

- Patient concerns and progress
- Consistent daily usage except when sleeping or around water
- Continue use of contralateral hearing aid during daily listening
- Importance of CI-only aural rehabilitation; provide resources handout if needed

12-MONTH FOLLOW-UP

12-months following Day 1 of activation

60 MINS

Equipment Check

- Visual inspection/listening check
- Equipment concerns and needs

Residual Hearing Evaluation

- Tympanometry
- Residual hearing to assess hearing preservation and stability of electro-acoustic stimulation

CI-Aided Thresholds

- Evaluate audibility through CI sound processor in sound-field

Evaluation of Aural Rehabilitation Status (Speech Testing)

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 - Right, Left, and Binaural Conditions
- AzBio, Quiet
 - Right, Left, and Binaural Conditions
- CNC, words/phonemes, Quiet
 - Right, Left, and Binaural Conditions

MAPPING and Programming

- Magnet check
- Mapping/programming if needed based on aided thresholds and speech scores

Counseling

- Patient concerns and progress
- Consistent daily usage except when sleeping or around water
- Continue use of contralateral hearing aid during daily listening
- Importance of CI-only aural rehabilitation; provide resources handout if needed
- Consider Bi-annual visits for very frail patients or patients over 80 yrs to monitor skin thickness as it relates to magnet strength and to manage equipment needs

ANNUAL APPOINTMENTS FOR ADULTS

60 MINS

Equipment Check

- Visual inspection/listening check
- Equipment concerns and needs

Residual Hearing Evaluation

- Tympanometry
- Residual hearing to assess hearing preservation and stability of electro-acoustic stimulation

CI-Aided Thresholds

- Evaluate audibility through CI sound processor in sound-field

Evaluation of Aural Rehabilitation Status (Speech Testing)

- Testing performed in the sound field at 60 dBA at 0 degree azimuth for both speech & noise via recorded materials unless otherwise indicated.
- Testing obtained using Patient's personal hearing aid to simulate "real-world" performance
- If Patient does not use a personal hearing aid a clinic device will be programmed and verified for testing using evidence-based prescriptive targets.

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- AzBio, +5 SNR
 - Right, Left, and Binaural Conditions
- AzBio, Quiet
 - Right, Left, and Binaural Conditions
- CNC, words/phonemes, Quiet
 - Right, Left, and Binaural Conditions

MAPPING and Programming

- Magnet check
- Mapping/programming if needed based on aided thresholds and speech scores

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**This visit may be eliminated, left up to the patient to contact the clinic as needed, or completed remotely depending upon manufacturer, outcomes from previous visit, and patient comfort with remote programming technology.