

Assessment Tools And Practice Patterns In Adult Cochlear Implant Candidacy: Insights From Spanish-Speaking Countries

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Abstract

The primary aim of this study was to examine adult pre-cochlear implant (CI) Spanish assessment tools and CI provider practice patterns used in Spain and Spanish-speaking countries in Latin America.

Methods: This study is a cross-sectional survey directed at CI providers who assess CI candidacy in countries where Spanish is the primary language.

Results: A total of 51 respondents were included in the study. Respondents represented eleven countries, 10 from the Latin American region, and one from Europe—Spain. The majority of respondents were audiologists (N=31/51, 60.7%) and most respondents worked in a private practice setting (N=37; 68.6%). For speech perception testing during CI evaluation, 89.4% of respondents used bisyllabic words (N=42/47), and 48.9% (N=23/47) endorsed the use of recorded materials. 47.6% (N=20/42) of respondents reported using hearing-specific patient-reported outcome measures (PROMs), and 46.3% (N=19/41) reported using tinnitus-specific PROMs in CI assessments.

Conclusions: Our findings suggest that bisyllabic words are the preferred and most commonly used tool for aided speech perception testing, aligning with regional guidelines and protocols in Spanish-speaking countries. Opportunities to improve the quality of care include expanding the use of recorded materials for unaided and aided speech recognition testing, and PROMs to capture the functional, emotional, and social impact of hearing loss prior to

Clinical implications

The present study's findings highlight substantial variability in CI assessment practices across Spanish-speaking countries and underscore the importance of standardizing candidacy protocols to ensure equitable access to CI technology. It also identifies two main areas for improvement in clinical practice, which include incorporating the use of recorded materials for speech testing across clinical settings, as well as incorporating the use of PROMs in the assessment of CI patients.



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and after cochlear implantation. Additionally, the development of standardized guidelines and protocols that can be disseminated broadly would help ensure consistent assessment practices and improve the care for Spanish-speaking patients worldwide.

Introduction

Disabling hearing loss is a pervasive global health concern, affecting over 430 million people, which represents more than 5% of the global population (WHO, 2025). Cochlear implantation is an effective intervention for individuals with significant hearing loss. Despite their proven efficacy, global uptake remains low (Sorkin, 2013; Sorkin & Buchman, 2016) in the general population and disproportionately low among Hispanic populations (Neukam et al., 2024; Tolisano et al., 2020).

In Latin America and the Caribbean, eighteen primarily Spanish-speaking countries account for nearly 417 million people (WHO, 2023). With the addition of Spain, the global Spanish-speaking population outside the United States (US) increases to approximately 465 million people (WHO, 2023). Most of these countries have established multidisciplinary cochlear implant (CI) programs, with the first multi-channel devices implanted in 1985 in both Chile and Spain (Calvino et al., 2023; Goycoolea et al., 2005). Since the early 1990s, CI programs in Latin America and Spain have actively provided CI services using devices from Advanced Bionics [Valencia, CA, USA], Cochlear [Sydney, Australia] and Med-EL [Innsbruck, Austria] (Calvino et al., 2023; Goycoolea et al., 2005; Goycoolea et al., 2025). Presently, products from all three US FDA-approved CI manufacturers are available across much of the region, with the exception of Cuba and Nicaragua. Ten of the nineteen countries have direct access to all three manufacturers. Furthermore, clinical CI guidelines and protocols have been updated in the last decade, with two region-specific clinical guidelines and two clinical protocols developed and endorsed by professional organizations or academic institutions (Corredor-Rojas et al., 2024; Giraudo et al., 2019; Manrique et al., 2019; Piccione et al., 2022). Together, they reflect decades of regional clinical expertise and consistent availability of CI technology.

Within the US, Hispanics—people of Hispanic origin, heritage, nationality, lineage, or country of birth before arriving in the US—represent a rapidly growing population, with projections estimating an increase to 111 million by 2060 (US Census Bureau, 2018). While

Keywords

Cochlear implants, Hispanics, Spanish speakers, cochlear implant service delivery.

most US Hispanics identify as bilinguals, approximately 29% report speaking English “less than very well” (US Census Bureau, 2022). Given the shared language across Spanish-speaking populations, CI practice patterns in Latin America and Spain hold direct relevance for US CI providers, as there are no published guidelines for cochlear implant assessment of Spanish-speaking adults living in the US. Insights from these regions can provide valuable direction for addressing the unique challenges faced by Spanish-speaking adults in the US, where language barriers and health-care disparities continue to affect access to CI services (American Speech Language Hearing Association, 2024; Schuh and Bush, 2022; Ullauri et al., 2025).

The primary aim of this study was to examine adult pre-CI Spanish assessment tools and CI provider practice patterns used in Spain and Spanish-speaking countries in Latin America. These findings will later inform the development of clinical guidelines for evaluating Spanish-speaking adults in the US.

Materials and Methods

A survey investigating practice patterns of CI providers in primarily Spanish-speaking countries was developed using the web-based Qualtrics XM Platform (Qualtrics Core XM Survey Software, 2020) (Qualtrics, Provo, UT). The study was approved as exempt research by the University of Miami Institutional Review Board (IRB Study #20250176). The survey was electronically distributed to CI professionals in Spanish-speaking countries via direct email, Advanced Bionics' and Cochlear Latin America email contacts, and through social media channels (Facebook and LinkedIn). Informed consent was obtained from study participants. Responses were anonymously recorded between January 16 and June 20, 2025, and all data were password protected. No incentives were provided for survey completion.

Survey Design

This study is a cross-sectional survey containing a total of 23 questions. Five multiple-choice questions

focused on demographics, and 18 questions focused on CI assessment practices. Questions were presented in either multiple choice or fill-in-the-blank format. The survey questions are available in Appendix 1. The survey was limited to CI providers who assess CI candidacy in countries where Spanish is the primary language. Those from countries where Spanish is not the primary language and who do not provide CI care were excluded. Demographic information collected included professional field, type of work setting, country of work setting, years of experience, and number of new implanted patients per year seen at their facility. The questions regarding pre-CI care included assessment tools, test conditions, and commercial availability of the tools.

Survey Data Analysis

Statistical analysis was conducted utilizing the Qualtrics XM Platform's Stats iQ. Both quantitative and qualitative analyses were employed. Descriptive statistics were utilized to describe patient demographic responses in the form of frequency counts and percentages. For context and to ensure rigor and consistency in the data analysis, results were compared to existing clinical guidelines and protocols publicly available in Spain and Latin America, which have been published or endorsed by professional or academic institutions within these regions.

Results

A total of 148 professionals initiated the survey. Of those, five were excluded because the respondents were not from Spanish-speaking countries (3 from Brazil, 2 from the US), two were excluded, since the respondents did not specify in which country they practiced, and 90 were excluded because they did not respond beyond the second question.

Demographics

A total of 51 respondents were included in the study. Respondents represented 11 Spanish-speaking countries: 10 countries from Latin America, and one country from Europe—Spain. (Table 1). The majority of respondents were audiologists (N=31; 60.7%) and worked mostly in private practice (N=37; 68.6%), followed by hospitals (N=18; 23.60%), and academic hospitals (N=11; 14.5%); 39% (N=20) worked in multiple work settings (e.g., private practice and hospital

settings). Most were experienced professionals with more than 20 years in practice (N=24; 47.1%). The majority of respondents activated less than 20 new CI devices annually (N=40; 78.4%) (Table 2).

Assessment Tools

This study focused on four domains of assessment commonly used during the pre-CI phase: speech audiometry testing (including speech reception threshold and word recognition), the speech perception test battery for CI assessment, hearing and tinnitus-related quality-of-life (QoL) measures, and cognitive screening measures.

Speech Audiometry

Regarding speech reception threshold (SRT), 44 respondents provided answers, with some offering multiple responses (e.g. bisyllabic words and monosyllabic words), resulting in 49 total responses. Most participants (N=32; 72.7%) reported using words, while 34% (N=15) did not specify the type of test. One respondent reported using digits-in-noise, and another reported using a matrix of vowels and consonants. Among respondents who reported using words for SRT testing (N=32), 31.25% (N=10) use bisyllabic words, 18.75% (N=6) use trisyllabic or polysyllabic words, 9% (N=3) use monosyllabic words, and 40.6% (N=13) referenced specific word list authors (e.g., Tato, Cardenas y Marrero). However, because these authors provide lists containing monosyllabic, bisyllabic, and polysyllabic words, it was unclear which exact word list the respondents used specifically for SRT.

For word recognition testing, 41 respondents answered this question, and some provided multiple answers (e.g. bisyllabic words and monosyllabic words) resulting in a total of 47 responses. Of these, 75.6% (N=31) reported using words, 14.6% (N=6) reported using sentences, and 21.9% (N=9) did not specify the type of test administered. Of those who reported using word lists, 38.7% (N=12/31) used bisyllabic words, 16.1% (N=5/31) used monosyllabic words, and 25.8% (N=8/31) did not specify what type of word lists they used. Additionally, 19.3% (N=6/31) cited the authors of the words lists (e.g. Cardenas y Marrero, Tato) instead of listing the type of word list used. As was the case with SRTs, we could not determine which list type the respondents used for word recognition. Recorded materials for word recognition testing were used by 53.6% (N=22/41) of respondents. For the

Table 1. Number of study respondents, countries represented, and cochlear implant manufacturers used in the region

	Country	Population (WHO, 2023)	Number of Survey respondents	Medel	Advanced Bionics	Cochlear
1	Mexico	129,739,759	13	Manufacturer's office & distributor	Distributor	Distributor
2	Costa Rica	5,105,525	2	Distributor	Distributor	Distributor
3	El Salvador	6,309,624		Distributor		
4	Guatemala	18,124,838		Distributor	Distributor	Distributor
5	Honduras	10,644,851			Distributor	Distributor
6	Nicaragua	6,823,613				
7	Panama	4,458,759		Distributor	Distributor	Distributor
8	Cuba	11,019,931	1			
9	Dominican Republic	11,331,265			Distributor	Distributor
10	Bolivia	12,244,159		Distributor		Distributor
11	Ecuador	17,980,083	2	Distributor	Distributor	Distributor
12	Venezuela	28,300,854	1	Distributor		Distributor
13	Peru	33,845,617	1	Distributor	Distributor	Distributor
14	Colombia	52,321,152	7	Distributor	Distributor	Distributor
15	Argentina	45,538,401	14	Manufacturer's office	Distributor	Distributor
16	Chile	19,658,835	2	Distributor	Distributor	Distributor
17	Paraguay	6,844,146		Distributor		Distributor
18	Uruguay	3,388,081	1	Distributor		Distributor
19	Spain	47,911,579	7	Manufacturer's office	Manufacturer's office	Distributor
	Total	464,767,459	51			

Sources:

Cochlear Spain details: <https://www.cochlear.com/es/es/connect/contact-us>Cochlear Latin-America details: <https://www.cochlear.com/la/es/connect/contact-us>Medel Spain details: <https://www.medel.com/es-es/contact-med-el>Medel Spain Latin America Details: <https://www.medel.com/latam/about-medel/med-el-latam/distribuidores-y-oficinas>Advanced Bionics Spain details: <https://www.advancedbionics.com/us/en/home/contact-us/f/ab-global-offices>Advanced Bionics Spain Latin America Details: <https://www.advancedbionics.com/us/en/home/contact-us/f/global-distributors><https://data.who.int/countries>**Table 2.** Demographics of study respondents

Participants' professional field	Number of respondents	Percentage
Audiology	31	60.70%
Otorhinolaryngology / Otology	3	5.80%
Speech Language and Hearing (Fonoaudiología)	7	13.70%
Speech and Language Therapy	7	13.70%
Other: Audiology & Speech Language Pathology (Logopedia)	3	5.80%
Total:	51	
Number of years practicing	Number of respondents	Percentage
Less than 5 years	1	2.00%
5-10 years	7	13.70%
11-20 years	19	37.30%
More than 20 years	24	47.10%
Total:	51	

Practice setting	Number of responses *	Percentage
Private practice	37	48.60%
Hospital	18	23.60%
Academic hospital or clinic	11	14.50%
Non-for-profit organization (non-academic)	2	2.60%
Community clinic	1	1.30%
Military Hospital	1	1.30%
Other (e.g. School, Government)	6	7.80%
Total number of responses:	76	
Number of new CI recipients per year	Number of respondents	Percentage
Less than 20	40	78.00%
20-50	8	16.00%
50-60	3	6.00%
Total number of respondents	51	

* 39% of respondents work in more than one setting.

three countries with more than five respondents, providers from Spain (N=1/7; 14.3%) reported the lowest use of live-voice for word recognition testing (Table 3).

Table 3. Use of non-recorded materials (Live-voice) to conduct word recognition (speech audiometry) per country

Country	Respondents	Recorded	Live-voice	% Using Live-voice
Argentina	9	5	4	44.4%
Mexico	11	6	5	45.5%
Spain	7	6	1	14.3%
Colombia	5	3	2	40%
Chile	2		2	100%
Ecuador	2	1	1	50%
Costa Rica	2		2	100%
Venezuela	1		1	100%
Peru	1		1	100%
Uruguay	1	1		0%
Cuba*				
	41	22	19	

*Did not answer.

Speech Perception Test Battery for CI Evaluation in Adults

Potential cochlear implant candidates are assessed using a speech perception test battery to determine if they are candidates for the procedure. This test battery includes different test materials that help determine CI candidacy, assess daily listening situations with a given technology, and also help document post-implantation outcomes (Dunn et al., 2024). When

asked about speech perception tests used to assess adult patients who are potential cochlear implant candidates, 89.4% of respondents (N=42/47) reported the use of bisyllabic words (Fig. 1), and 48.9% (N=23/47) indicated the use of recorded materials. Respondents from Colombia reported lower reliance on live voice (N=1/6; 16.70%) compared to Argentina (N=8/12; 66.7%), Mexico (N=5/13; 38.5%), and Spain (N=2/6; 33.3%) (Table 4).

The majority of respondents reported conducting testing in both quiet and noise conditions (N=33/47; 70.2%). Most respondents (N=27/33) specified the signal and noise presentation levels they used. Of these, 55.5% (N=15/27) reported using a signal presentation level of 65 dB SPL. However, noise levels varied considerably across respondents, with 55 dB SPL emerging as the most commonly used noise level (N=6/27; 22.2%).

Patient-Reported-Outcomes-Measures (PROMs)

A total of 47.6% of respondents (N=20/42) indicated that they incorporate hearing-specific PROMs into CI evaluations. (Table 5). Among these, the most frequently reported measure was the Spanish version of the Speech, Spatial and Qualities of Hearing (SSQ) (N=5/20; 25%), where four respondents specified using the SSQ-12 Item Scale (Cañete et al., 2022) and one only mentioned SSQ without clarifying if it was the SSQ-12 or the SSQ-49 (Sanchez et al., 2022). Respondents also acknowledged the use of the

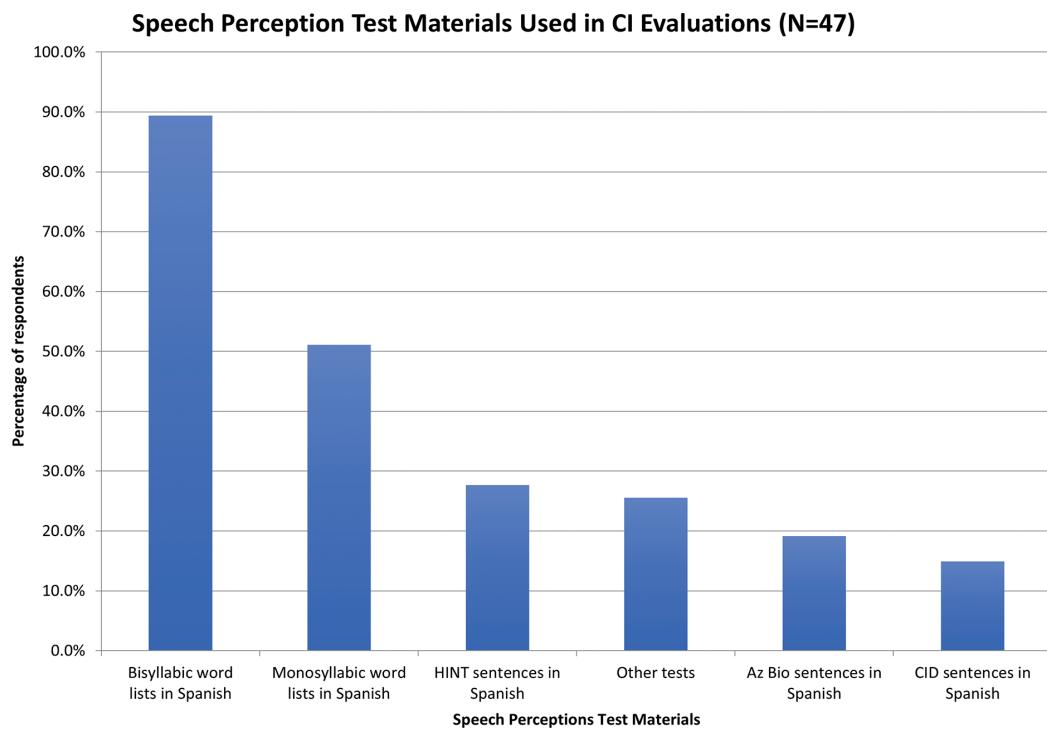


Figure 1. Speech perception test battery in Spanish used to assess potential CI candidates

Table 4. Use of non-recorded materials (Live-voice) to conduct speech perception testing to assess potential CI candidates per country

Country	Respondents	Recorded	Live-voice	Percentage Using Live-voice
Argentina	12	4	8	66.7%
Mexico	13	8	5	38.5%
Spain	6	4	2	33.3%
Colombia	6	5	1	16.7%
Chile	2		2	100%
Ecuador	2	1	1	50%
Costa Rica	2		2	100%
Venezuela	1		1	100%
Cuba	1		1	100%
Uruguay	1	1		0%
Peru	1		1	100%
Total	47	23	24	

Table 5. Use of hearing-specific PROMs as part of the CI assessment per country

	Respondents	Use of PROMs = YES	Use of PROMs = NO	% Using PROMs
Argentina	9	7	2	77.8%
Colombia	5	1	4	20%
Spain	6	4	2	66.7%
Mexico	12	6	6	50%
Chile	2		2	0%
Costa Rica	2	1	1	50%
Cuba	1		1	0%
Ecuador	2	1	1	50%
Peru	1		1	0%
Uruguay	1	1		100%
Venezuela	1		1	0%
Total	42	21	21	

Spanish versions of the Nijmegen Cochlear Implant Questionnaire (N=2), Listening Fatigue Vanderbilt (N=2), Hearing Handicap Inventory (Adults and Elderly) (N=2), and Hearing Implant Sound Quality Index (N=2). There are multiple Spanish adaptations of some of these tools, and the respondents did not specify which version they use (Sanchez-Cuadrado et al., 2015; Benitez-Barrera et al., 2025; Carrillo et al., 2019; Lopez-Vazquez et al., 2002; Calvino et al., 2016).

A total of 46.3% (N=19/41) of respondents endorsed the use of tinnitus-specific PROMs. Of these, the majority (N=15; 79%) reported the use of the Spanish version of the Tinnitus Handicap Inventory. There are two Spanish versions of this tool (Der et al., 2012; Herraiz et al., 2001), and participants were not asked and did not specify which version they used.

Cognitive Screeners

Half of the respondents (N=20/40; 50%) endorsed the use of cognitive screening tools, with Spanish versions of the Montreal Cognitive Assessment (MoCA) (N=8; 40%) and the Mini Mental State Examination (MMSE) (N=5; 25%) being the most commonly reported. There are multiple adaptations and validations of these tools (Loureiro et al., 2018; Custodio et al., 2020; Llamas-Velasco et al., 2015), and participants were neither asked, nor did they specify which version they used.

A comparison of the survey findings with current publicly available regional clinical guidelines and protocols (endorsed by professionals and/or academic organizations) in Spain and Latin America is presented in Table 6. This table provides an overview of contemporary recommendations regarding speech perception test batteries for CI assessment, PROMs, presentation levels and conditions, and compares these with clinical practice trends identified by this study.

Discussion

The present study aimed to gain a broader understanding of current adult audiological CI assessment tools and practices among CI providers in Spanish-speaking countries. The main goal was to generate insights that could inform the development of guidelines for assessing adult Spanish-speaking patients living in the US.

Our study results shed light on current trends in CI assessments in 10 Latin American countries and Spain

regions, identify opportunities for improvements in clinical practices, and provide a comprehensive overview of available and preferred assessment tools. A key finding from our survey is the widespread use of bisyllabic word lists as part of the CI assessment speech perception test battery with nearly all (90%) of our respondents acknowledging their use. This practice aligns with national guidelines and protocols from Argentina, Colombia, and Spain (Corredor-Rojas et al., 2024; Giraudo et al., 2019; Manrique et al., 2019), which recommend bisyllabic materials as the preferred format for speech perception testing in CI evaluations. Interestingly, 51.1% of respondents reported using monosyllabic word lists, despite their exclusion from most contemporary regional guidance (Corredor-Rojas et al., 2024; Giraudo et al., 2019; Manrique et al., 2019). Only the Med-EL [Innsbruck, Austria] protocol, which was endorsed by Universidad de Desarrollo de Chile (Piccione et al., 2022), recommends the use of monosyllabic words. This gap between guidance and practice underscores the need for greater standardization and more effective dissemination of updated protocols across clinical settings. Importantly, our survey did not specifically assess whether clinicians base CI candidacy decisions on bisyllabic test results; it only asked whether these test materials are used during the assessment phase.

Most respondents reported using a combination of bisyllabic words and sentences as part of the speech perception test battery for CI assessment (Fig. 1), and 70% of respondents endorsed testing patients *in-quiet* and *in-noise* conditions. Since the survey did not ask whether *in-noise* testing conditions were performed with sentences, words, or both, it is unclear which specific test conditions providers used to assess CI candidates. Clinical guidance from the Argentinian protocol (Giraudo et al., 2019) recommends *in-noise* testing for both sentences and words. This contrasts with current English-Language protocols such as the Minimum Speech Test Battery (MSTB-3), which recommend *in-noise* testing only for sentences (Dunn et al., 2024).

Similar to findings from CI programs in the US (Prentiss et al., 2020), an additional source of variation is the inconsistency in testing conditions and presentation levels used by professionals. For example, for respondents who test in noise, 55.5% use 65 dB SPL as the speech presentation level. Reviewed protocols recommend a 65 dB SPL presentation level (Giraudo et al., 2019; Manrique et al., 2019), whereas

Table 6. Comparison of survey findings with publicly available regional clinical guidelines and protocols endorsed by professionals and academic organizations

Protocol	Year	Authors	Endorsed	Speech perception testing for CI assessment			Presentation level
				Monosyllabic	Bisyllabic	Sentences	
Clinical Guidelines for Cochlear Implants (Guía Clínica Sobre Implantes Cocleares)	2019	Manrique et al.	Spanish Society of Otolaryngology, Head and Neck Surgery (Sociedad Española de Otorrinolaringología y Cirugía de Cabeza y Cuello)	Bisyllabic words (does not specify)	Bisyllabic words (does not specify)		65 dB SPL
Protocol for assessing aided outcomes in children and adults (Protocolo de Evaluación de Resultados con Equipamiento niños y adultos)	2019	Giraldo et al.	Argentinian Association of Audiology (Asociación Argentina de Audiología)	Bisyllabic words Dr. Juan Manuel Tato	Sentences everyday language (Oraciones lenguaje corriente)	Yes	65 dBA and 50 dBA
Protocol for CI candidates and recipients - Medel (Protocolo de Directrices para Candidatos y Usuarios de Implante Coclear - Medel)	2022	Piccione et al.	University Desarrollo-Chile, Auditory, Senses and Communication Research Center - CESCO (Universidad del Desarrollo-Chile, Centro de Investigación de la Audición, los Sentidos y la Comunicación - CESCO)	Monosyllabic (EARS)	Sentences (Oraciones - EARS)	Yes	70 dB SPL
Guidelines for the diagnosis and treatment of sensorineural hearing loss in children and adults (Guía para el diagnóstico y tratamiento de hipoacusia neurosensorial en adultos y niños)	2024	Corredor-Rojas et al.	Colombian Association of Otolaryngology (Asociación Colombiana de Otorrinolaringología)	Bisyllabic words (does not specify)			5 SNR

the Argentinian protocol by [Giraudo et al. \(2019\)](#) also suggests both +10 dB and +5 dB signal-to-noise ratio. Variation is also evident in regional protocols regarding test materials: three recommend bisyllabic words, one recommends monosyllabic words, and two recommend both words and sentences (Table 6). Overall, the variability observed across guidelines, protocols, and respondents may substantially affect the patient journey as one person could qualify for a CI at one clinic but not at another due to differences in testing parameters ([Prentiss et al., 2020](#)).

Another area of variability was the use of recorded versus live-voice materials. Roughly half of the respondents reported using recorded materials for word recognition and for administering the CI speech test battery. This is concerning, given the consensus in international guidelines that recorded materials enhance test reliability and reproducibility ([Abdala et al., 2003](#); [CI Task Force, 2023](#); [Dunn, et al., 2024](#); [Giraudo et al., 2019](#); [Zeitler et al., 2024](#)). The underutilization of recorded materials may reflect resource limitations or entrenched clinical habits, but it also represents a clear opportunity for improvement in assessment quality and consistency.

Regarding the use of PROMs (hearing-specific and tinnitus-specific), 47.6% - 46.3% of respondents reported incorporating these assessments into CI evaluations, respectively. Current international guidelines recommend the use of hearing-specific PROMs to monitor outcomes over time and to compare cochlear implantation with other hearing interventions ([CI Task Force, 2023](#); [Dunn et al., 2024](#); [Zeitler et al., 2024](#)). Tinnitus-specific PROMs are essential for assessing and implanting patients for whom tinnitus is a co-existing handicap, particularly in cases of asymmetrical and unilateral hearing losses ([Manrique et al., 2019](#); [Vallés-Varela et al., 2013](#); [Ramos et al., 2018](#)). These instruments provide valuable insight into the functional, social, and emotional impact of hearing loss and its treatment. Our findings highlight an opportunity to improve adherence to these recommendations.

Lastly, half of the respondents (50%) reported the use of cognitive screening tools with the Spanish versions of the MoCA and the MMSE being the most commonly reported. This finding is not surprising, as only the Argentinian protocol ([Giraudo et al., 2019](#)) recommends the use of cognitive screening tools to complement the pre-CI assessment and monitor post CI outcomes. Similarly, cognitive screenings are not commonly used as part of the pre-CI test battery in the US, but are instead

optional clinical tools available to assist with patient-centered care ([Dunn et al., 2024](#); [Prentiss et al., 2020](#)).

In summary, these findings highlight substantial variability in CI assessment practices across Spanish-speaking countries and underscore the importance of standardizing candidacy protocols to ensure equitable access to CI technology. Furthermore, our study results offer a basis for developing culturally and linguistically appropriate guidelines for Spanish-speaking adults in the US, which will be critical for improving access, accuracy, and comparability of CI evaluations in different settings.

Limitations of the present study

The main limitation of the study is the small number of participants who completed the survey, which limits the ability to draw region-wide conclusions and only allows the reporting of observed trends. Given that the majority of participants (80%) were from four countries—Argentina (N=14), Mexico (N=13), Colombia (N=7), and Spain (N=7), the observed trends might be more representative of these countries. Another potential limitation is that 39% (N=20) of respondents worked in multiple work settings (e.g. private practice and hospital settings), therefore we do not know if the responses represent assessment patterns in both settings or only in one of them. A further limitation worth noting is the variability in how participants interpreted the term logo-audiometría (speech audiometry), which may explain the inconsistent responses to the following questions: 1) ¿Qué prueba utilizas para realizar la logo-audiometría en pacientes adultos y evaluar el umbral del reconocimiento del habla? (What test do you use to conduct speech audiometry in adult patients and assess speech recognition threshold (SRT)? and 2) ¿Qué prueba utilizas para realizar la logo-audiometría en pacientes adultos y evaluar la discriminación auditiva? (What test do you use to conduct speech audiometry in adult patients and assess word recognition (WR)?). According to the Asociación Española de Audiología (AEDA), logo-audiometría or audiometría verbal refers to any test using speech signals such as phonemes, words, phrases, or continued speech ([AEDA, 2021](#)). However, it also specifies that, for speech recognition threshold (umbral) and word recognition (discriminación), the recommended materials are word lists ([AEDA, 2021](#)).

Conclusions

CI professionals in Spanish-speaking countries in Latin America and Spain have decades of experience and expertise in the field of cochlear implantation. Publicly available guidelines and protocols exist for assessing adult CI candidacy in these countries. However, there are no universal guidelines for all Spanish-speaking countries.

Our findings suggest that bisyllabic words are the preferred and most commonly used tool for aided speech perception testing, in line with recent regional guidelines and protocols. Opportunities to improve the quality of care include expanding the use of: 1) recorded materials for unaided and aided speech testing, and 2) PROMs to capture the functional, emotional and social impact of hearing loss before and after cochlear implantation.

Additionally, the development of standardized guidelines and protocols that can be broadly disseminated would help to ensure consistent assessment practices and improve care for Spanish-speaking patients worldwide. Finally, identifying gaps in available testing materials is critical in order to guide future research and development efforts.

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Conflict of interest

Alejandra Ullauri holds a consulting agreement with Advanced Bionics, LLC, receives royalties from Plural Publishing, and owns Audiology En Espanol.

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Mariana Mejia-Turnbull receives a salary from the NYU Grossman School of Medicine and is a member of the Cochlear's Northeast Regional Council.

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AU, MAH, MMT and SV conceptualization and data analysis. AU, MMT and SV methodology. AU Manuscript drafting. MAH, MMT and SV manuscript editing. AU and SV data revision.

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