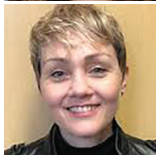


COLLABORATIVE AUDIOLOGICAL CARE

A case study of mutual benefit and improved outcomes.



BY
ADRIENNE BLECHMAN
Hearing Savers



AND
CASSANDRA KERR
CK Audiology

In the field of audiology, collaboration between independent practitioners is rare; however, it can lead to enhanced client outcomes. This article presents a case study illustrating such collaboration between Adrienne and Cassandra, two audiologists operating separate audiology businesses in the same Melbourne suburb. We initially connected virtually while pursuing a post-professional Doctor of Audiology degree at A.T. Still University and have since established a robust working relationship. Despite overlapping clinical areas with differing focuses and areas of interest, we come together to address the complex audiological needs of our clients. This collaboration extends beyond mere coordination as we actively engage in joint decision-making processes, particularly regarding specialised rehabilitation management and surgical options.

Audiology can sometimes feel like a solitary profession, but by fostering an environment where audiologists can work together, we can enhance the quality of our care, promote mutual respect, and facilitate the sharing of expertise and resources. Audiologists sometimes have concerns about losing touch with patients when they move to surgical options or explore other rehabilitation. We have both found that working collaboratively and maintaining contact with clients as they pursue these options enriches both the client and clinician experience. We hope this article will inspire other audiologists to collaborate more to optimise client outcomes.

Adrienne's story

This is the story of an 86-year-old lady, Shelly, whose name has been changed for privacy. She first consulted me in 2003, at the age of 66, after moving into an independent, low-care living complex with her husband, Rennie. They retired after running a small bespoke jewellery business specialising in opal design for 35 years. Shelly, the businesswoman, and Rennie, the artistic creator, embraced retirement. Shelly relished her newfound lease on life, finding joy in sewing, cooking and Mahjong once again. She takes pride in her ability to create fashionable clothing or cook Michelin-star cuisine. At the complex, she cultivated new friendships through social activities and representative roles. Alongside these pursuits, she and Rennie cherished their roles as parents to three children and later to five grandchildren and four great-grandchildren.

Shelly presented with an unremarkable otological history, and a mild bilateral hearing loss primarily in the higher frequencies. Our discussion focused on her immediate listening needs and goals, addressing challenges related to age-related hearing loss, particularly considering her evolving living and social circumstances. She expressed concern about potential stigma associated with wearing hearing devices and ultimately opted for bilateral completely-in-the-canal devices. She was a dedicated user, acknowledging the invaluable benefits they provided. Notably, she found joy in the newfound ability to hear her two-year-old granddaughter as she began her journey of language development.

Over the years, Shelly diligently upgraded her devices, eagerly embracing advances in technology that improved her hearing experience, particularly during bustling family gatherings and social occasions. In 2011, she seamlessly transitioned to

receiver-in-the-canal (RIC) devices with specialised landline phone and radio frequency headphones for television. In 2013, Shelly experienced sudden hearing deterioration following three spinal surgeries. An MRI excluded retrocochlear pathology, and her audiometric profile now required Shelly to rely on ultra-power receivers enclosed in custom shells on her RICs. By 2019, Shelly was using FM technology and wholeheartedly embraced technological advances in Bluetooth, always keeping me on my toes and actively seeking solutions to address her hearing limitations and enhance her communication. She marvelled at the ability to stream her phone calls, television and audiobooks while indulging in her culinary pursuits. Despite further medical complications including macular degeneration requiring regular eye injections and two hip replacements, she remained proactive in seeking hearing solutions.

However, she began to experience feelings of isolation, avoiding large social gatherings and preferring intimate gatherings with family and close friends. She acknowledged that communication had become exhausting, and she experienced constant fatigue and cognitive strain to remain engaged. Together, we needed to explore alternatives beyond her existing devices.

In 2020, I arranged an appointment at the Royal Victorian Eye and Ear Hospital for a cochlear implant candidacy evaluation. She expressed readiness for this next step in her hearing journey but the onset of the pandemic disrupted progress. In 2022 she encountered transport difficulties reaching the hospital in the CBD and she sought my guidance about local implant clinics. Coincidentally, RVEEH was expanding into satellite sites and Cassandra Kerr, working with neurotologist Dr Nadine de Alwis, had established Victoria's first private cochlear implant clinic.

Cassandra's story

In November 2022, I received an email from Adrienne for a cochlear implant candidacy assessment for Shelly. Correspondence from other audiologists is rare and surprisingly most patients find my clinic through a Google search or via their GP. Almost all of these patients are actively managed by a hearing provider but implants are not suggested as an option. Despite initial challenges, our team has embarked on a journey to enhance local implant options and accessibility in Victoria with the support of local surgeons, manufacturers and nationwide programs.

Shelly's appointment stemmed from a conversation between Adrienne and Shelly about 20 months earlier and began a transformative journey. The initial appointment included a comprehensive discussion centred on the concept of cochlear implants and their potential benefits, particularly given her proficiency with hearing aids and accessories. Shelly also wanted to preserve her existing hearing. This session prioritised providing information and offering supportive guidance rather than conducting audiological assessments. She openly expressed her apprehensions and

wanted to review all the information with Adrienne, her trusted audiologist, before proceeding any further.

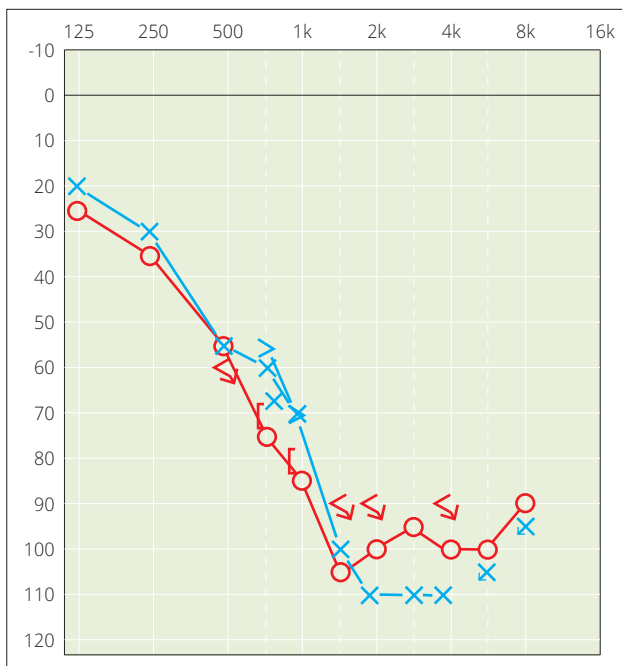
At the next assessment appointment, audiological results showed bilateral aided word scores of 14% and phoneme scores of 35%, highlighting the severity of Shelly's hearing challenges. Given Shelly's age and complex medical history, a comprehensive medical evaluation with additional tests was conducted. A thorough discussion ensued to identify the most suitable cochlear implant and processor options, considering the manufacturers available in Australia including Advanced Bionics, Cochlear and MedEL. Our dialogue centred on Shelly's individual requirements and preferences and the advantages and disadvantages of each implant and sound processor. This phase was pivotal in Shelly's journey as she became aware of the variety of options available. Given that she had had a very positive experience with Phonak hearing aids and Roger accessories, she was reassured that there was an implant system that was compatible with her existing Phonak devices, which she wanted to retain for use in her non-implanted ear. Consequently, the Advanced Bionics Marvel device was selected as the most suitable option.

Shelly's cochlear implant surgery was scheduled for late February 2024. Unbeknownst to me and my team, she experienced last-minute doubts and sought an urgent appointment with Adrienne, her trusted audiologist. This meeting, facilitated by Adrienne's unwavering support, proved instrumental as it gave Shelly the reassurance she needed to take this next big step. The surgery proceeded as planned and was successfully completed. Much to Shelly's surprise, she found the entire process to be far less daunting than anticipated and devoid of any trauma. On the day of activation, attended by both Shelly's family and Adrienne, everything proceeded smoothly, resembling a textbook scenario. Within a few hours, Shelly experienced a remarkable improvement in her hearing.

The rehabilitation journey

Shelly had her first review seven days after activating the cochlear implant. She explained that she initially obtained promising results, with speech becoming clear and understandable. However, over the week, speech became unclear and muffled again. She reported attempting to use her progressive maps. However, this did not help; she felt this made

Technical outcomes



Above/ 18/08/23 Pre-operative audiogram .

	AIDED CNC WORDS			
	WORD	PHONEME	VOWEL	CONSONANT
Right	0	15	12	17
Left	0	35	48	29
Binaural	14	35	36	34

Above/ 12/01/24 Aided pre-implant speech testing results.

	BIMODAL CNC WORDS			
	WORD	PHONEME	VOWEL	CONSONANT
Right (CI)	68	88	88	88
Left (HA)	4	25	40	18
Bimodal CI and HA	70	83	94	78

Above/ 5/4/24: Aided post-implant speech testing results, seven weeks after switch-on.

things louder but not clearer. She was remapped at this appointment. This identified that her low- and mid-frequency C- levels had stayed consistent, but twice the current was required to obtain her high frequency C- levels compared to initial activation. This was explained by the fact that she had not had any high frequency hearing for many years. At the initial cochlear implant activation, it took only minimal stimulation to obtain what was perceived as a comfortable and audible response. Once again, after remapping, there was a notable improvement in her ability to hear clearly, which prompted renewed enthusiasm. Over the next few days, a similar situation occurred, but this time, Shelly was less distressed, knowing she could schedule a remapping session within a day or two. The accessibility of local appointments tailored to her needs has been important in achieving optimal outcomes. Adjustments were made to the map on a week-to-week basis and after about three weeks Shelly's map had stabilised.

After three weeks of wearing the cochlear implant, Shelly transitioned from her Audéo Marvel 90 RIC on the non-implant side to the Phonak Link Marvel 90. This facilitated bimodal binaural processing, enabling her to experience a seamless integration between her cochlear implant and hearing aid, akin to her previous bilateral hearing aid setup. This change also meant that she could use her existing Phonak Roger system and TV streamer for bilateral streaming of phone calls and media. After adjusting to the bimodal fitting, Shelly called me to express her astonishment at the remarkable clarity of her first true

bimodal phone call. Roger devices paired with bilateral cochlear implants or bimodal fittings offer similar benefits compared to when paired with bilateral hearing aids, particularly in noisy environments. The versatility of this system enhanced Shelly's listening experiences in a wide range of real-world situations. In addition, Shelly has shown significant clinical improvement when comparing pre-and post-cochlear implantation speech scores.

With each subsequent visit, Shelly's progress continues, and she has become one of our most vocal advocates, endorsing both myself and Adrienne. As collaborating audiologists, we will continue to share the unique rehabilitation journey, which incorporates devices, accessories and implants, with this wonderful lady who continues to love life.

Reflections

Adrienne

As an audiologist running my own business for many years, I've been privileged to foster deep connections with clients who have truly become like family to me. I've had the opportunity to grow alongside my clients, adapting to their evolving hearing and communication needs through thoughtful discussions. The significance of the collaboration explored in this case study is underscored by the enduring trust established with Shelly, who has been a client of mine for over 20 years. This trust played a pivotal role in her decision to proceed with implantation and highlights the importance of cultivating a supportive relationship built on shared decision

making and mutual respect. This is particularly important for fostering confidence when making significant decisions down the road. Our collaboration fills me with optimism for similar opportunities and expanded choices for clients in the future. One of the most touching things Shelly has said is that she now feels like she's back in the part of the world she was missing and no longer feels like a mere spectator who is missing out.

"Before the implant I just sat back and I did not even try to listen as it was impossible to hear what they were saying and keep up. I had the family for dinner last week and I heard most of what they said, which was extraordinary and even the kids looked at me stunned as usually I never join in. When I watch television now, I don't even use captions. I feel like a normal person once again."

Cassandra

As a New Zealander, establishing a new business in a foreign country and operating independently within the cochlear implant domain has presented notable challenges. The opportunity to collaborate within this professional sphere has been immensely gratifying. I believe this collaboration provides mutual benefits for both audiologists and clients. The presence of a trusted, long-standing audiologist who remained actively involved throughout the entire process was of immeasurable value to Shelly, particularly during moments of uncertainty. I am optimistic that this model of care, characterised by comprehensive engagement and collaboration, can be expanded within our audiology community. ●

HSP CONSULTATION 2024

Australian Government Hearing Services Program Consultation 2024

The Department of Health and Aged Care thanks and appreciates the time and effort spent on the submitted responses to the phase one consultation survey, which closed on 2 April 2024.

In total, 132 submissions were received from service providers, professional bodies, industry groups and practitioners. In addition, 60 submissions were received from clients. The Department is currently reviewing and analysing the feedback and suggestions received. We will be sharing more information about this feedback and any proposed changes to

the schedule items at a webinar later in the year.

In the second half of 2024 additional consultation and information will be shared with stakeholders covering topics such as: proposed draft costings of service items, revised minimum specifications of hearing devices, potential new technologies and options for device supply. ●