



# *Bulletin*



**EDITED BY CHESSIE EGAN**

**Volume 29, No. 2, October 2019**

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**EDITED BY CHESSIE EGAN**  
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# EDITORIAL

Welcome to the second and last instalment of our Bulletin Edition for 2019

We hope you have been enjoying the articles as much as we have and would like to thank the members for engaging.

Our very own Bulletin continues to strive to be an avenue to share and educate, share controversial yet respectful opinions; from the latest products and patient management systems to updates and changes in and around our profession, including collaboration across the Tasman with our fellow colleagues.

You may have also noticed in our last few editions, the Bulletin has started to pack on some weight. We are getting much more membership engagement and enthusiasm to contribute. Thank you! And to our key advertisers many thanks to you too!

If this is your very first edition, you're in for a treat. We have an excellent line up of articles for those that missed the wonderful conference in Queenstown and key issues that is worth thinking about.

The landscape in Audiology is certainly evolving and I dare say that the horizon will be quite different to how we remembered when we first embarked on our course(s) behind our well used Jack Katz and Harvey Dillon text books.

What will our profession look like in the near future, mid term future versus long term future in amidst artificial intelligence, biometric algorithms, and automated self help?

Will the lines between clinician : patient be blurred as our specialities evolve to a more trans-disciplinary and holistic approach from several different disciplines?

The future is indeed in our hands and we all have a part to shape it from "*what we were to what we get to be*" [Dr D'Anne Rudden]

Happy Reading!



Chessie Egan  
Editor

# PRESIDENT'S UPDATE

Kia ora koutou,

Since the last edition of the Bulletin, we met in Queenstown for our 43rd NZAS Annual Conference, themed "The Future is Remarkable". It was our largest conference to date, with over 400 attendees. What a beautiful setting it was – congratulations again to the Conference Committee and BPSL for organising an informative and thoroughly enjoyable event. The feedback from attendees was overall excellent. Thank you to everyone who shared their thoughts, it will be very helpful for the 2020 Conference Committee whose plans are already underway for our next Conference, which will be held in Rotorua on 1-4 July 2020.

This issue of the Bulletin will be a nice flashback for those who attended the 2019 Conference, as well as providing some insight for those who unfortunately were unable to attend. Inside this issue, there are summaries of some of the keynote speakers' presentations. You can also access recordings and PDF versions of most conference presentations in the Members Only section of the NZAS website. During this year's conference, I encouraged attendees to reach out and get to know some of their fellow members, as our society grows each year and I often hear members saying they recognise fewer and fewer people. As of September 2019, the total NZAS membership is 668, with members represented in the following categories:

414 Full Members  
30 Audiometrist Members  
70 Provisional Audiologist Members  
15 Provisional Audiometrist Members  
64 Student Members  
7 Honorary Members  
68 Full Inactive Members

Hopefully by now you will all have had a chance to view our beautiful new NZAS website and database <https://www.audiology.org.nz/>. I would like to thank Helen and the team at BPSL for all the hours they spent uploading and formatting the content. Some parts of the website are still being ironed out so please continue to send through your feedback. If you haven't had the chance to see the website yet, you will need to reset your password to be able to login to your account. Please take the time to check that your records are up to date and let us know if you have any issues or questions by contacting the NZAS Administration team ([admin@audiology.org.nz](mailto:admin@audiology.org.nz)).

Thank you to the Executive Council, Helen, BPSL and all of our committee members for your continued hard work. I am constantly in awe of the dedication and passion of our NZAS members who give so much of their own time to the society in one way or another, and many who have done so for many years. For current updates on what is happening in our society and the sector, please look to the Weekly Notice Board which arrives in your inbox every Monday afternoon. I am looking forward to hearing more of your feedback when our next Membership Survey goes out in early 2020.

Please enjoy this edition of the Bulletin.

Nga mihi nui,



Libby Gibbins  
President 2019/2020

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# GENERAL ARTICLES

*The following article is a NZAS Member review of the 2019 conference keynote presentation given by Dr Andrea Pittman. Recordings are also available to NZAS Members on the NZAS website.*

## Hearing loss, hearing aids and the business of learning by Dr Andrea Pittman

Jo Ritchie, Audiologist, MNZAS

Dr Andrea Pittman gave an insightful presentation about learning and the impact of hearing loss on this skill. She emphasised that learning is an ability developed early in life. Untreated hearing loss impedes learning. Dr Pittman discussed a study which showed that children aged 5-17 years old with hearing loss are 2-3 years behind their normal hearing peers in vocabulary. Even in college, students with hearing loss still have poorer vocabulary than those with normal hearing. Another study compared college students with normal hearing to those who had cochlear implants at over 3.5 years of age and those who had cochlear implants at under the age of 3.5. The results indicate that it did not matter how early children were implanted, they were still behind the normal hearing students in vocabulary knowledge and world history. The author suggests that even children who are implanted early may still require additional support to develop language.

Dr Pittman explained that in the 2000s, there was research completed on incidental word learning in children with hearing loss. Her research team decided to develop methods to determine how many attempts it would take for a child with hearing loss to acquire new words. They developed a game where children learn to associate a word with a picture and are rewarded through progression in the game if they can retrieve the correct association. Researchers have used this method to investigate whether there are any factors that improve language acquisition speed. Interestingly, they have found that musical training and being bilingual do not improve learning speed.

Research has found that children with uncorrected hearing loss learn at a slower rate than their normal hearing peers. However, children with hearing loss corrected with hearing aids could perform at a similar level to their normal hearing counterparts. Surprisingly, children with unilateral hearing loss had poorer learning speed than those with bilateral hearing loss. The author suggests that children with unilateral hearing loss may require more learning support. Children with hearing loss also perform more poorly listening in noise than their normal hearing peers and digital noise reduction did not seem to impact their listening performance.

Dr Pittman's current research focuses on retention - whether children remember tomorrow the words that they they learned today. Initial evidence indicates that children with hearing loss do not recall information as accurately as those with normal hearing. The author suggests that we need to ensure that we are providing good quality and well-fitted hearing aids to children with hearing loss. Dr Pittman's work also indicates that we need to do more than just the provision of hearing aids, to support learning for children with unilateral and bilateral hearing loss. As Madell & Flexer (2014) state "[w]hen a child who is deaf or hard of hearing is immersed in a language-rich environment, there is potential to over-ride the potential influences of hearing loss."

### References

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Madell & Flexer (2014). *Pediatric Audiology: Diagnosis, Technology and Management*. (2nd edn). Thieme Medical Publishers, Inc.





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# Ministry of Health: Audit and Compliance

Aaron Burnside

*Team Leader Investigations (South Island), Investigations Group, Audit and Compliance, Ministry of Health*

## ABOUT AUDIT AND COMPLIANCE

Audit and Compliance (A&C) is a directorate within the Ministry of Health. One of our functions is to audit, and where necessary, investigate that claims made by Approved Assessors are done so in accordance with the Hearing Aid Services Notice 2018.

A&C auditors are appointed to perform the inspection of records by the Ministry of Health under section 22G of the Health Act 1956 and under CE2 of the Notice.

## AUDIT PROGRAMME

The national audiology audit programme commenced in 2018 and was implemented to examine both Hearing Aid Subsidy Scheme and Hearing Aid Funding Scheme claims.

The purpose of the audits is to verify that audiology providers are delivering quality services to clients with a focus on verification of claims paid.

## WHY ARE AUDITS TAKING PLACE?

A&C conducts these audits to help the Disability Support Services team confirm that hearing aid service providers are compliant with the Notice requirements.

To be eligible to claim either the Hearing Aid Subsidy Scheme or Hearing Aid Funding Scheme an approved assessor must complete the assessments, fittings and follow-up appointments with an eligible person. Claims for hearing aid services must not be submitted to Enable NZ for payment where an approved assessor has supervised a non-NZAS clinician.

## WHAT WILL THE AUDIT INVOLVE?

Audiology providers selected for audit will be required to provide copies (electronic or hard copy) of information relating to each funding claim, to verify compliance. An on-site visit may form part of the audit process after completion of the desktop analysis.

Auditors may contact clients directly to confirm who provided the services that resulted in claims being submitted for payment.

A particular focus of the audits will be to review approved assessors' compliance with clause BB5 of the Notice.

### ***BB5 Approved assessor must assess hearing and hearing needs and provide fitting services***

- (1) *An audiology provider must ensure that an approved assessor assesses an eligible person's hearing and hearing needs in accordance with the NZAS Standards of Practice.*
- (2) *An audiology provider must also ensure that an approved assessor ensures that the hearing aid provided to an eligible person is appropriate for, and is fitted and adjusted to meet, the eligible person's needs.*

## WHAT HAPPENS IF NON-COMPLIANCE WITH THE NOTICE IS IDENTIFIED AT AUDIT?

A&C will prepare a draft audit report seeking additional information from the provider where alleged non-compliance with the Notice provisions have been identified. The provider will then be given an opportunity to provide additional information to support the claims made under the Notice.

A final audit report with recommendations will then be forwarded to Disability Support Services who will then accept or reject the recommendations in the report.

Where repetitive non-compliance is identified during the audit process, the audit will be escalated to an investigation. An investigation may involve expanding the audit timeframe to review additional claims paid.

Possible outcomes of audit and investigations:

- education provided to ensure future compliance with claiming
- full recovery of payments made for work completed by a non NZAS member
- full recovery of audit costs
- manual claiming only with access to the RTL suspended
- cancellation of Authority to claim – Section 88
- referral to appropriate professional body for their consideration
- prosecution / fraud conviction







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HEARING HAS EVOLVED

## ACC Activities in the Hearing Loss Area

Anne Greville

*Accident Compensation Corporation, Auckland*

### ABSTRACT

This paper summarises some of the work going on in the hearing loss area over the last 12 months.

### ASSESSMENT GUIDANCE

Several publications to assist ENT /ORL assessors have been produced and are now accessible online. The first of these is the update of Assessment of occupational noise-induced hearing loss for ACC: A practical guide for otolaryngologists which is now available on [www.acc.co.nz](http://www.acc.co.nz) (this can be searched for by "ACC7917"). This document includes summaries of three new literature reviews commissioned to incorporate research papers published since 2009 – on impulse/impact noise, solvent exposure, and genetic hearing loss. The literature reviews are available on request.

In addition, there is a new publication: Occupational noise levels (search the ACC website by "ACC8023"), which summarises New Zealand noise measurements together with published results from the literature.

### ACOUSTIC SHOCK DISORDER

Work is currently going on to develop a short guidance document on acoustic shock disorder. Apart from the clinical aspects, the legal viewpoint will also be considered.

The current thinking is that ACC may be able to cover incidents producing this condition (regardless of whether there is any concomitant hearing loss), if they've occurred in the workplace.

Analysis of new claims (regardless of whether accepted/declined) during 2018 showed 72 potential instances. Table 1 shows the distribution of claims made as a function of the nature of the acoustic stimulus.

An analysis of the ONIHL claims was also carried out where sufficient information was provided with the original claim. Not all claims had sufficient information to enable classification. The following data relate to a total n of 2,607.

Of these, 94 claims were identified as veterans – almost all of these had other noise exposure as well. The largest sectors, and contributors of claims (regardless of whether accepted) to each sector are shown in Table 2.

### WORKING WITH ACC

A new document has been produced which summarises useful information for hearing loss providers doing work for ACC: Hearing Loss services and ACC – a handbook for providers working under the hearing loss regulations (search [www.acc.co.nz](http://www.acc.co.nz) by "ACC8043").

The document outlines relevant legislation, the two sets of hearing regulations, the role of NZAS in setting standards, cover, assessment and rehabilitation; gradual process issues, forms & resources, record keeping, hearing service items, device contributions (note the requirement to only invoice for the actual device cost), repairs (note that specified times are calculated at service date, looking backwards), services for children (remember to declare ACC involvement to Enable), performance issues, provider & vendor registration.



**Table 1. Distribution of potential acoustic shock ACC claims (2018) as a function of different noise sources.**

Noise source	N
Explosions	20
Shooting	12
Alarm	8
Headphone	7
Hammer	4
Scream	3
Fireworks	3
Door slam	3
Airbag	3
Music - percussion	2
Whistle	2
Sundry	5
<b>Total</b>	<b>72</b>

**Table 2: Largest sectors contributing to ONIHL claims, showing the proportion of total claims each contributes, together with the largest segments within each sector. (n=2,607)**

Sector	Proportion of total claims	Segments				
Manufacturing	29%	General factories	Mechanics	Metal manufacturing	Freezing works	Printing
Agriculture/horticulture	21%	Farming	Horticulture	Shearing		
Construction	20%	Construction	Heavy construction			
Transport	7%	Trucks	Aircraft	Ships		
Engineering	6%	Engineers	Electricians			
Forestry	5%	Sawmills	Forest work			
Services	4%	Gardening	Teaching			
Emergency services	3%	Defence				

## RECHARGEABLE BATTERIES

Changes are expected in the way that battery orders are processed. This means that the hearing loss teams may not be involved in sending battery orders to ACC's contracted consumables provider - OneLink. Audiologists should not make the assumption that OneLink has any information on which hearing aids the client has been provided with.

In the current scenario where more manufacturers are marketing devices using rechargeable batteries, and where different brands are designed to work only with specific batteries, it is

## GENERAL ARTICLES

important that audiologists spell out what type of batteries the client's device requires. There is a comments section on the bottom of the current version of the ACC battery form which can be used for this purpose.

### **NEW CASE MANAGEMENT MODEL**

You may notice some changes in the way that ACC responds to queries. When the model is fully rolled out, hopefully within the next few months, many clients should have access to claim's progress information online via My ACC. Hearing loss clients may have to wait a little longer. Initially My ACC will just have simple information such as Held – Accepted – Declined. More information will come later – hopefully within months.

### **MONITORING**

It is likely that there will be increased focus on monitoring audiology services / invoicing over the next few months. Details are not yet available.

### **LEGISLATION**

The definition of audiologist has been altered very slightly and is expected to be moved to regulations shortly. This should have little impact on a day-to-day basis.

### **REMINDERS FROM THE HEARING LOSS TEAM**

- Please ensure you provide client's phone numbers (including mobile) and email address on the ACC612 form.
- Please check that the client's address you provide is correct
- NAL calculation – please provide calculation based on air conduction.





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## Enable New Zealand NZAS Conference Presentation 2019

Carolyn Gordon

*Professional Advisor—Hearing, Enable New Zealand*

### ABSTRACT

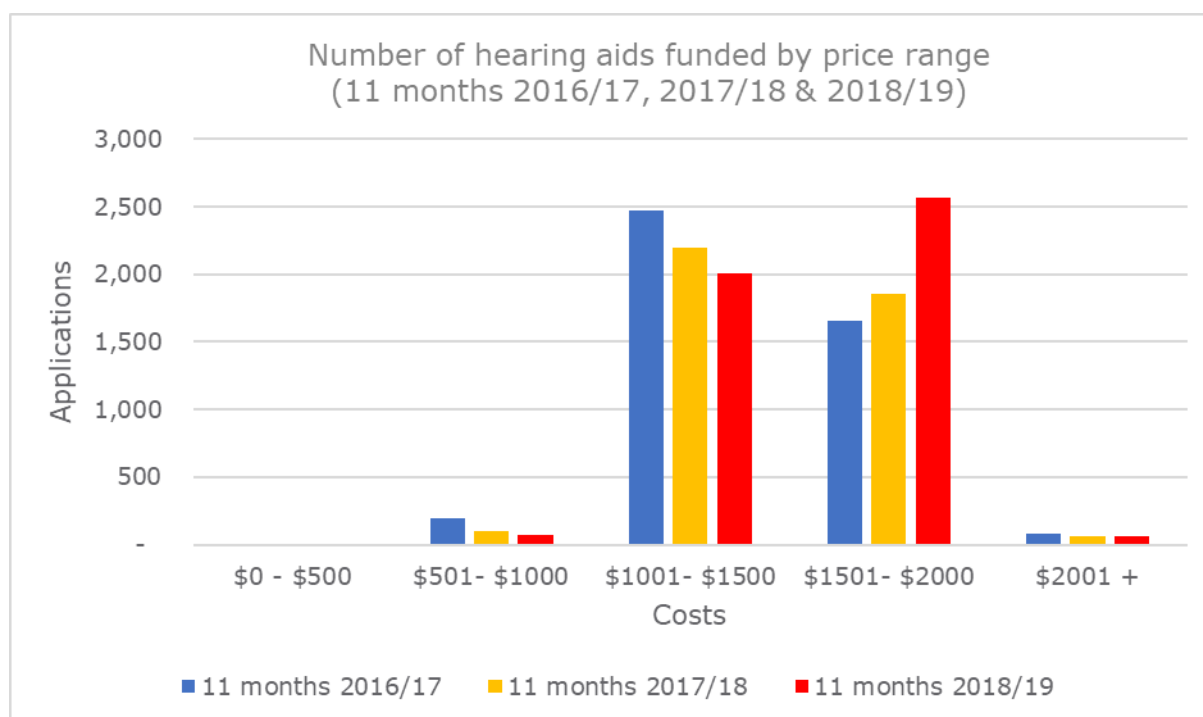
This is a summary of information presented at the NZAS Conference 2019 in Queenstown on 3 July 2019.

### EXPENDITURE

During the past three years, Enable New Zealand has been managing the Ministry of Health (MOH) Hearing Budget which covers both the Hearing Aid Subsidy Scheme and the Hearing Aid Funding Scheme. The MOH Hearing Budget is approximately \$1.4 million per month or \$17 million per year. Funding expenditure has been exceeding the Budget. For the year ending May 2019 hearing expenditure was \$8 million over budget and at the same time the previous year it was \$5 million over budget.

During the past year, there has been a slight reduction in the number of subsidy claims and funding applications made. Prior to this the number of subsidy claims and funding applications was increasing. During the past year, the overall funding expenditure has also been slightly decreasing reflecting the reduction in numbers of subsidy claims and funding applications.

An analysis of the number of hearing aids requested by price during the past three years indicates that the number of hearing aids requested in the \$1000-\$1500 cost range has been steadily reducing and the number of hearing aids in the \$1500-\$2000 cost range has been increasing with a big increase in the 11 months prior to 31 May 2019 (as shown by Figure 1). Almost all the hearing aids in the \$1500 to \$2000 cost range were priced at or just below the Review Price Point (\$1600) and have advanced technology.



**Figure 1: Number of hearing aids funded by price range. Note: These costs do not include Bone Conduction Hearing Aids (BCHA) or Bone Anchored Hearing Aids (BAHA) or hearing aid accessories.**



## AVERAGE PRICES

During the past year the average price for hearing aids for children has been decreasing (currently approximately \$1450) but the average price for adults has been increasing (currently approximately \$1550). The increase in average price for adults is correlated with the increase in requests for advanced technology and reduction in requests for standard technology as in Figure 1. (Note that BCHA or BAHA are not included in the average price).

The Ministry of Health is concerned about the Budget over-spending and but wishes to provide funding for as many persons with hearing loss as possible. To address over-spending the Ministry of Health has recently announced that the Average Price Point for both Adults and Children will be reduced to \$1300 from 1 August 2019 with reviews every three months.

Both adult and children average prices will need to be reduced significantly to achieve this target. The average price is influenced by the number of requests for advanced technology and its cost.

## CHILDREN'S AND YOUNG PERSONS REVIEW

For the months of July, October and November 2018 and March 2019 it was noted that the average price for children's hearing aids spiked. Due to concerns regarding the average price, Enable New Zealand conducted a retrospective review of children's hearing aid applications to determine what factors were contributing to high average prices. All applications made in November 2018 for hearing aids priced between \$1400 (Children's Average Price Point) and \$1600 (Review Price Point) were reviewed. Almost all the requests were for hearing aids priced at \$1595 or \$1600 and were for advanced technology.

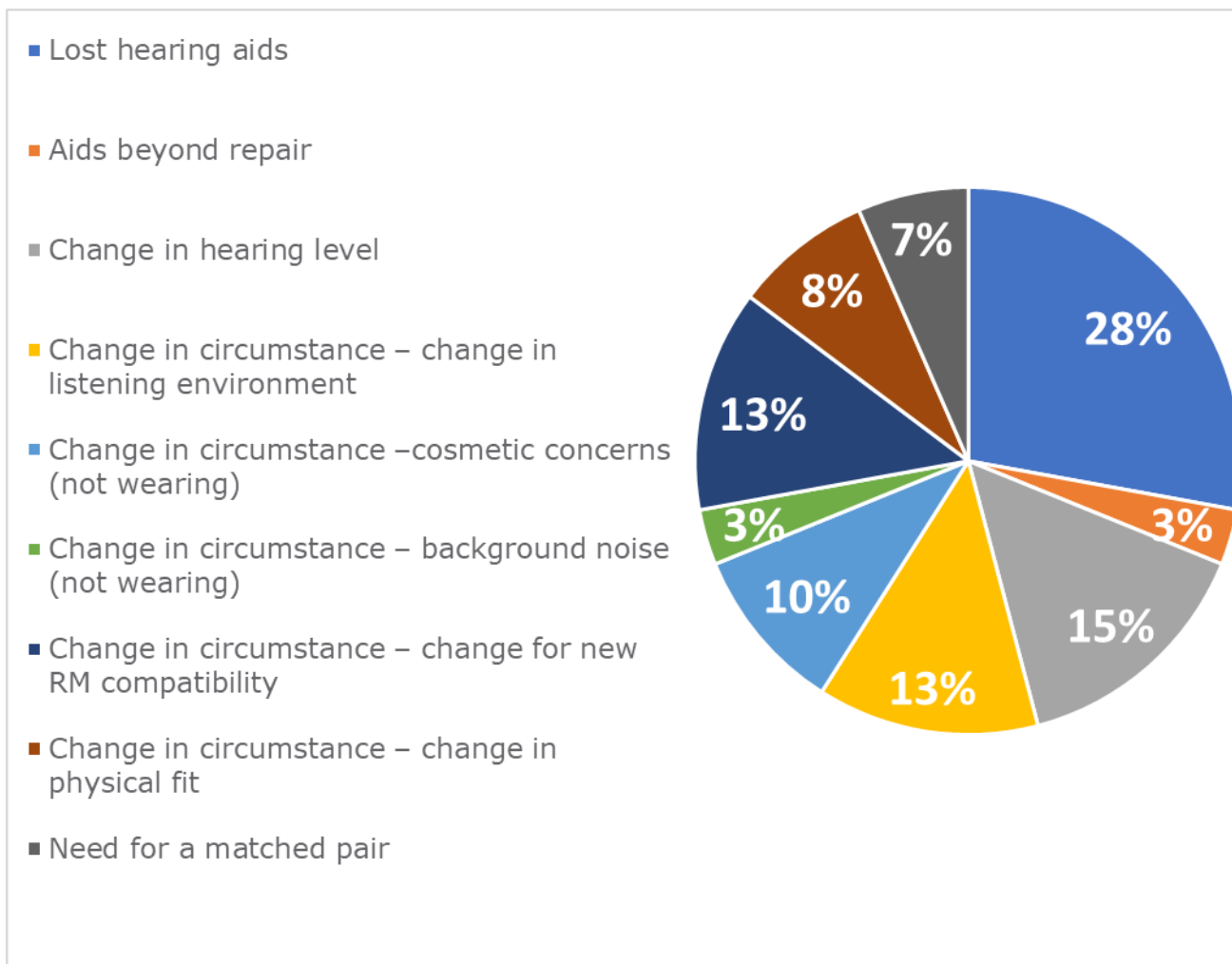
It was found that approximately half the applications were for replacement hearing aids and half were new requests. The average age of hearing aids requiring replacement was approximately four years. Approximately, half the applications provided adequate reasons for replacement and/or an adequate rationale for the need for advanced technology. Requests were made to audiologists for reasons for replacement and/or rationales for need for advanced technology with a 100% response rate.

### **Need for advanced technology rationales provided were:**

- Advanced noise management and adaptive directionality for noisy listening environment – educational environment
- High number of channels required for steeply sloping or unusually shaped audiogram configurations
- Impulse noise management – requirement for more advanced feature to reduce rejection
- Greater automation – children unable to change programmes (developmental or learning disorders or too young).
- Late diagnosis of hearing loss – delayed speech development or unilateral loss not aided previously
- Wind management feature to reduce rejection of aids and outdoor activities.
- Matched pair (one ear not previously aided)
- English second language
- Sudden hearing loss

## SUMMARY

In summary, the reason for replacement and rationales for the need for advanced technology provided were adequate. The Ministry of Health provide funding for up to three hearing aids per ear every six years for children, however the need to replace or a rationale for advanced technology should be provided on each application.



**Figure 2: Reasons for replacement hearing aids being requested for children and young persons.**

### **NEW ONLINE CLAIM/APPLICATION SYSTEM FOR ENABLE NEW ZEALAND**

Enable New Zealand will soon be replacing the RTL system online claim and application system which should be faster and easier to use.

# SUMMARY: Is Anyone Listening? Inequality in New Zealand's Fully Funded Hearing Aid Scheme

Andrew Wallace, Dr Andy Asquith & Dr Shane Scahill

(2019) *Journal of Policy Studies UK*, DOI: 10. 1080/01442872.2019.1599842

## ABSTRACT

This paper explored the New Zealand Ministry of Health's (MOH) allocation of funding for the Hearing Aid Funding Scheme (HAFS) and the level of service delivery by public and private sectors. The crux of the paper centres on how the system is funded and in what ways the market structure may be affecting access to health care. The study involved three main sampling strategies with primary data being collected from the District Health Board (DHB) clinics and private providers. This was supported with secondary data of service utilization and claims, which was made available via the MOH. DHB and private provider data was collected online and by telephone. This study found that the market structure and nature of the New Zealand hearing industry is consistent with an oligopoly, which has been assumed in the past but never formally acknowledged. Publicly funded DHB clinics are restricting access to adult hearing aid referrals, as well as referring rejected patients to private audiology providers for ongoing treatment. The findings were consistent with implementation of co-payment fees through DHB and private audiology providers. These findings indicate that high co-payment fees may be increasing the chance of negative externalities, due to a reduction in access and affordability.

## SUMMARY OF INTRODUCTION

The study looked to determine whether access to the HAFS for adults is negatively influenced by the availability of DHB audiology services and whether the market structure within New Zealand's private audiology sector has reduced access and affordability for adults who meet the HAFS criteria. The article further explored whether the New Zealand government is providing sufficient DHB service to meet the current need.

While there are benefits to spending more on health care and increasing accessibility, the New Zealand government is faced with increasing demand, limited resources and making trade-offs. One method to reduce cost is through the use of co-payments. However, the New Zealand Treasury suggests that while co-payments in health care can be beneficial, they can also have a negative impact if they are too high and therefore reduce accessibility. These negative effects can, however, be mitigated where those on low incomes are exempt from co-payments or subsidised.

With an increase in corporately owned clinics the market structure in New Zealand is now representative of an oligopoly. An oligopoly can be defined as a market with few sellers, usually differentiating homogeneous products and creating a market structure that is difficult to enter. An important aspect of an oligopoly is that dominant firms must have sufficient size to influence the pricing and output decisions of other firms in the market. Ideally, a perfectly competitive market would exist to ensure patient affordability, however, health care markets depart from this model in a number of ways: (1) barriers to entry are high; (2) often few firms are present; (3) health care service provision is not uniform and; (4) externalities are often present in health care. Unlike government entities such as DHB's private health care providers are responsible to shareholders for return on investment, meaning competition and market forces play a role in health systems.

We know hearing loss is a significant issue, hearing is a critical sense for communication, and individuals with a hearing impairment are at risk of reducing their quality of life including; anxiety, depression, social isolation and medical health. As result of hearing loss individuals can find it difficult to gain employment resulting in loss of individual productivity and output.



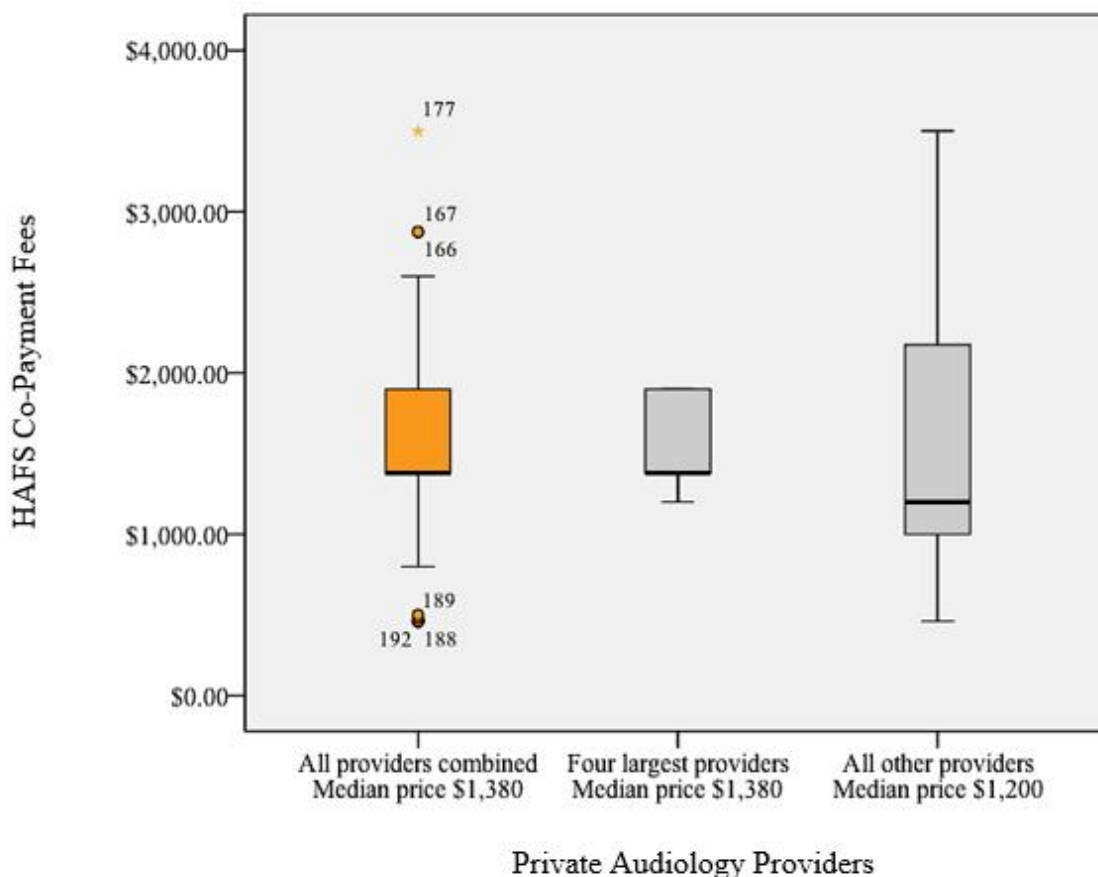
Capella (2003) suggest the effect of hearing loss on employment is evident in a number of studies, that have shown 'hard of hearing' people are over-represented in unemployment, blue collar roles and significantly under-represented in professional, managerial and technical positions.

The study built on the current body of knowledge to better understand whether sufficient funding was being allocated to the HAFS and whether the market structure present in the New Zealand private audiology was reducing access for HAFS patients.

### SUMMARY OF DATA COLLECTION

The research collected data from private audiology providers throughout New Zealand to ascertain the mean fitting fee charges for HAFS patients and define the market structure. Further data was collected from the MOH to identify how many adult HAFS claims were being paid out annually, to private providers and DHB providers. Finally, DHB's were surveyed to identify how many DHBs were seeing adult HAFS patients and whether they were referring patients to private audiology providers, exposing them to market forces.

The study obtained HAFS charges from 225 private providers throughout New Zealand, the results found that the minimum fitting fee charge for HAFS patients was \$460.00 and the maximum charge was \$3500. The median HAFS co-payment charge was found to be \$1,380 (incl. GST). Further analysis of the data confirmed the market structure was consistent with an oligopoly, as can be seen on the following boxplot. The largest providers have sufficient size to influence price and output.



**Figure 1. Box plot summary**

Data collected from the MOH identified that 59% of HAFS claims as of 2014 were made through private audiology providers.

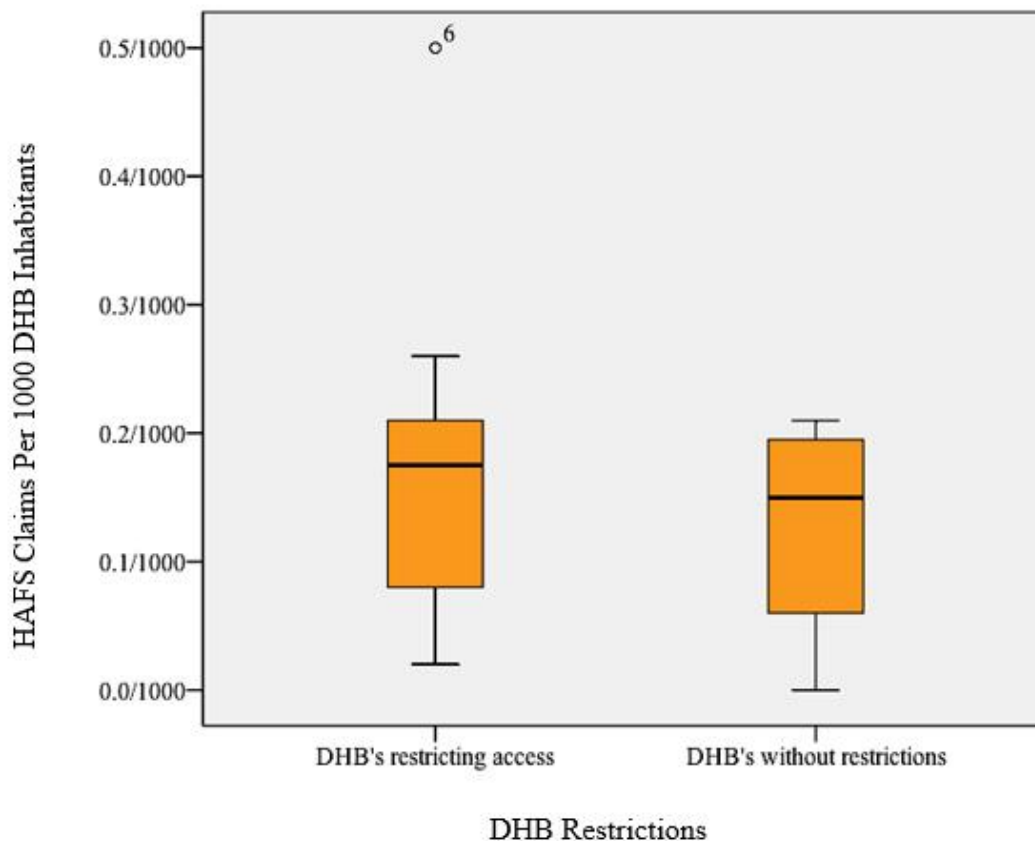
**Table 1. HAFS claims**

HAFS Claims Issued Through Private Providers and Public Providers						
	July 2011 - June 2012		July 2012 - June 2013		July 2013 - June 2014*	
DHB Claims	284	46%	429	46%	400	41%
Private Claims	330	54%	509	54%	566	59%
<b>Total</b>	<b>614</b>		<b>938</b>		<b>966</b>	

Key: \*Denotes that data is annualised.

Data from DHBs was collected through a survey, with 15 out of 20 regional DHBs responding. The DHB survey identified that 87% of DHB audiology clinics surveyed were seeing new adult patient hearing aid referrals. However, 13% of DHB audiology clinics offered no adult hearing aid service at all. The survey results indicated that 73% of DHB clinics are placing some sort of restriction on access. Of the surveyed DHBs 75% of clinics are referring patients to private audiology providers, by way of a referral letter. The second section of the survey identified that 33% of clinic’s surveyed required a service fee or co-payment charge from HAFS patients. The bilateral service fee charges ranged from a minimum of less than \$199.00 (incl. G.S.T) through to a maximum of \$799.00 (incl. G.S.T).

Further analysis of the data was undertaken, which looked at HAFS claims per 1000 inhabitants of each DHB region.



**Figure 2. DHB box plot summary**

## SUMMARY OF KEY ISSUES

The results demonstrated that the four largest private audiology providers have sufficient size to influence price and output within New Zealand's hearing industry. The structure of the New Zealand private hearing industry is consistent with an oligopoly, as defined by Layton, Robinson and Tucker (2008). This is clearly demonstrated in the data summary (Table 1). However, distribution of the HAFS through private audiology clinics is currently essential for ensuring sufficient availability to meet demand. The risk is that should the market move closer to an oligopoly, larger firms will have greater influence over price. This is evident in the mean price charged for the fitting fee component of the HAFS. Whereby, the mean for all providers combined was the same as for the four largest suppliers, demonstrating that they have sufficient size to influence price.

The data also identified that nine of the DHB audiology clinics were applying restrictions on accepting new adult hearing aid referrals or referring adult hearing aid patients to private providers. While four of the clinics were adding a co-payment fee to HAFS claims. Because DHBs are required to operate within an allocated budget, the risk of restricting access to certain services increases, meaning private providers play an important role in ensuring access to health services. However, the study showed that co-payment fees for HAFS patients are considerable at both private audiology providers and some DHBs. The World Health Organisation (2004) states that co-payments are a regressive way of financing health care, since individual contributions are not always related to income. The data (Table 2) demonstrates that the majority of HAFS patients are exposed to market forces, due in part to limited access to DHB audiology services.

The data was analysed to look for association between adult HAFS claims and restrictions on access to DHB audiology clinics. The data (Table 3) shows that the claims per 1000 inhabitants in each DHB region varied considerably. While it was found that DHB clinics are placing restriction on audiology services for adult hearing aid patients, as well as requesting co-payment fees. Neither of these actions, have been shown to significantly effect access to the HAFS through DHBs. The results suggest that restricting adult hearing aid services may not influence accessibility, as the number of claims per 1000 inhabitants remained reasonably stable over the three-year period. Only one DHB had a 44% reduction in claims over that period.

## SUMMARY OF CONCLUSION

This study found that the market structure and nature of the New Zealand hearing industry was consistent with an oligopoly. It was also found that publicly funded DHB clinics are currently restricting access to adult hearing aid referrals, as well as referring rejected patients to private audiology providers for on-going treatment. In addition, the findings identified that the implementation of co-payment fee was common practice in private audiology providers and some DHB services. However, private audiology fees were considerably higher on average than the DHB co-payment fees. These findings indicate that higher co-payment fees may result in a reduction in access and affordability for patients meeting the HFAS criteria. Although, there is potentially a restriction in access due to high co-payment fees and inadequate DHB services, the study found that restriction criteria may also influence accessibility negatively. It may in fact be more beneficial to introduce legislation around the type of restrictions applied by public health service providers, or preferably, it would be more prudent for the New Zealand government to contribute \$1380.00 toward the HAFS fitting fee. This would ensure equitable access to the HAFS for those who most need it, therefore, mitigating the effects of access, affordability and market forces on HAFS patients.

Policy-makers need to be aware of the cost of lost productivity due to hearing loss and the impact on both individuals and society. Furthermore, there is a need to understand what the ramifications are of restricting access and subjecting the hearing impaired to the economics of a market structure, which is price-controlled by an oligopoly.

This study highlights the need to increase funding for the HAFS to ensue equitable access to hearing aid services for those most in need.





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## Supporting our Veterans Together: A Recap from Veterans' Affairs

Daniel Johnson

*Rehabilitation Advisor, Veterans' Affairs*

Kia ora tātou,

It was great to see so many of you at conference this year. This message is a quick recap of our presentation in Queenstown.

Carolyn Gordon is our new Professional Advisor here at Veterans' Affairs. She assists in reviewing applications and provides recommendations for the review of our guides and policy. A key part of Carolyn's role is providing information for Veterans' Affairs staff about the hearing needs of our veterans and information for audiologists about how Veterans' Affairs funds hearing aids.

In the first six months of this year 66% of the aids that we funded were over-scale. We were able to fund these aids thanks to the detailed information provided to us by audiologists. The need for sound clinical reasoning takes up the biggest amount of time in our application review process. Being provided with details about veterans' work and physical environments, and the impact of these on hearing capacity, is invaluable in speeding up the application process.

Here are five questions to cover on applications for over-scale hearing aids:

- What complex hearing environments is the veteran exposed to?
- How often is the veteran in complex hearing environments?
- What tasks are impacted by the veteran's hearing issues?
- How does hearing loss affect the veteran's safety and the safety of their family?
- Is the veteran withdrawing from their regular activities because of their hearing issues?

These questions not only address the sound clinical reasoning required for over-scale applications but can also trigger further support being offered to veterans that address their social, health, and independence needs. That extra bit of information makes all the difference.

### WHAT'S ON AT VETERANS' AFFAIRS

**We are taking a new approach to veterans leaving the military**—This means that veterans may attend an audiologist appointment for a review or audiogram so that we can establish a hearing-baseline once they leave the Defence Force.

**We are hosting expos for veterans**—A Vietnam Veterans Health and Wellbeing Expo is happening in October, here in Wellington, for Vietnam veterans who live in the lower North Island. Expos for other veteran cohorts will be run in 2020. You can register your interest with us to be a provider at these events.

**We are funding review appointments**—We know that sometimes hearing aids do not work as well as they should, so we are now funding review appointments. The funding covers appointments within the first 12 months of a veteran receiving aids, and are to ensure that veterans' hearing needs are met.

**We have improved our website**—Our new easy to use website launched this year and a provider section is currently being developed.

**We are developing a quick reference guide**—This is a two page version of our Guide for Audiologists and will be distributed later this year.

If you have any questions or want to register your interest with us for future events please contact me, [daniel.johnson@nzdf.mil.nz](mailto:daniel.johnson@nzdf.mil.nz).



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## OPINION: America's Next Top (APD) Model

Angela Loucks Alexander, Au.D., CCC-A, MNZAS

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*Opinion pieces are the views of the author and does not represent the views of the sub-committee members of the Bulletin Committee, or necessarily the views of the NZ Audiological Society as a whole.*

A few months ago, I attended a 20-hour online conference on Auditory Processing Disorder (APD) through American Speech-Language-Hearing Association (ASHA). I expected the conference to add to my knowledge base and confirm some things I already knew. However, I was not expecting to obtain a priceless perspective regarding the two most commonly used models of APD.

In our clinic, I was trained using the Buffalo Model and my colleague, Samantha Lenz, Au.D., was trained using the Bellis/Ferre Model. We both practice what we learned and believe this to be best practice. Based on my learning experience through the conference, there seems to be one main difference between the two models. An analogy is best used to explain this new viewpoint.

### COMMON APD MODELS

The Bellis/Ferre Model is great at keeping things black and white. It is precise and looks for clear cut patterns through objective testing with quantitative results. If these aren't readily observed, further, identifiable patterns are explored through electrophysiological testing. The Bellis/Ferre Model can be helpful in differential diagnosis (Bellis, Billiet, & Ross, 2011). As far as my observation is concerned, this is the preferred model of APD diagnosis by ASHA, as most of the lectures in the conference were based on this model.

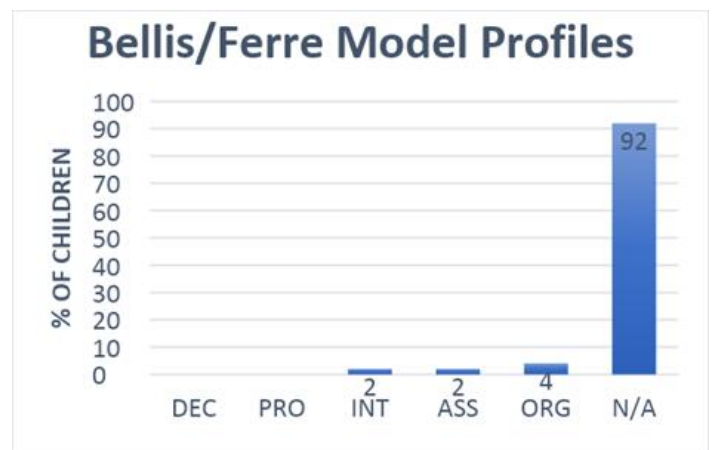
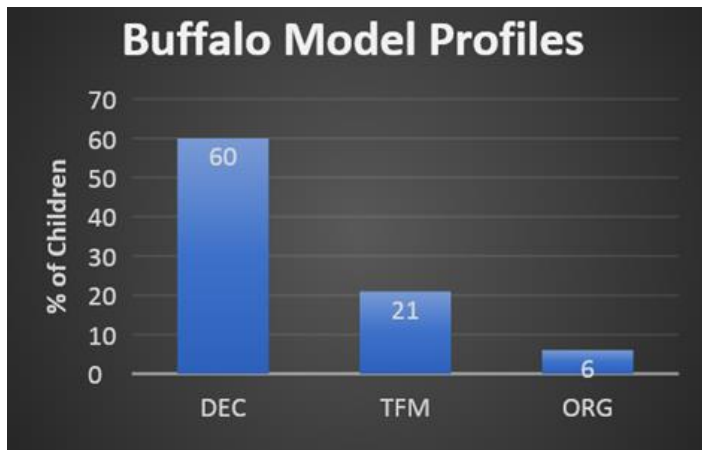
By contrast, the Buffalo Model thrives in grey. It recognizes that the client comes to us with problems and we need to meet them where they are with whatever difficulties they are experiencing. The Buffalo Model looks at both quantitative and qualitative information during assessment. For example, a person may perform an auditory task correctly, but may take a long time to respond. Quantitatively, you would say that the person has no difficulties, but qualitatively, you can see that they are taking far longer and expending more energy than their peers. These qualitative observations are counted and compared against normative data (Katz, 2007).

### AN IMPORTANT CONCERN

I think that most audiologists prefer things that are black and white. For example, we have a good idea of what defines the current state of a tympanic membrane from tympanometry. We usually prefer facts that are cut and dry. Black and white findings make us feel comfortable with our clinical decisions.

However, could a black and white perspective during testing reduce our clinical validity? Is it possible that we might bypass client concerns in favor of black and white assessment results? Benoit Jutras, Ph.D., presented results of his 2007 study where retrospective data on 48 children with APD was collected and analyzed. Each case was investigated through the lens of both models.

This study found that when viewed through the lens of the Buffalo Model, 60% of these children were described as having a Decoding profile, 21% were classified with a Tolerance-Fading Memory profile, and 6% fell into the Organization profile. In comparison, the same children were analyzed utilizing the Bellis/Ferre model, with which 92% of participants were not classified in any category (Jutras et al., 2007).



## DOES APD ALWAYS STAND ALONE?

Another model that is gaining quite a lot of traction is Deborah Moncrief's idea of Amblyaudia, or "lazy ear." She presented a very strong case during the ASHA conference with her colleague, Andrew Vermiglio, regarding the idea of a "medical entity" and the important factors to consider in creating greater construct validity (Moncrief & Vermiglio, 2019).

However, Vivian Iliadou, MD, PhD., brought up an interesting point during her talk on international perspectives in APD. She reports that the authors of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) have found that identifying "homogeneous disordered populations" is no longer the goal even though this was a focus of psychiatry in the past (2019). For example, Autism was classified in the DSM-IV as Autistic disorder; Asperger disorder; childhood disintegrative disorder; and pervasive developmental disorder, not otherwise specified and has now become "Autism" in the DSM-V (American Psychiatric Association, 2013). To quote Iliadou, "The reasons that led to this realization is that there is a clinical reality where symptom heterogeneity within disorders is present and there is a significant sharing of symptoms across disorders. Taking into consideration this clinical reality, it looks like fluidity of across disorders boundaries permits for more accurate patient presentation and description and for increased diagnostic validity" (2019).

This statement resonates with my understanding of APD and its diagnosis and treatment. I do believe that APD can be heterogenous in its presentation and allowing it to be so in the clinic may increase our clinical validity. From my understanding, Autism, which is essentially a conglomerate of symptoms, presents with a main deficit of social engagement. Similarly, APD is a conglomerate of symptoms with the main deficit being a listening deficit. So, to the question, "Does APD always stand alone?" I argue, no.

## WHERE DO WE DRAW THE LINE?

Dr. Iliadou's point should be considered when it comes to the idea of a clinical "gold standard" for APD. From the Buffalo Model perspective, it is only "as good as gold" when we improve the quality of life in these individuals. That is, we diagnose and then double check by comparing our findings with parent/teacher/self-reported concerns. Our most important confidence comes when we treat the auditory problems we found and then the person reports success in the academic, occupational, and/or social environments of previous concern.

I believe that the difference between the two models comes down to an overarching concern with sensitivity vs. specificity. Which would concern you more: a false positive or a false negative diagnosis? Which seems like the more critical achievement: a true positive or true negative?

Based on my conference attendance and previous clinical experience, I believe the Buffalo Model is more concerned with the potential for false negatives and prouder of true positives. The Bellis/Ferre model appears to be more concerned about getting false positives and prouder of true negatives.

Gail Chermak warned against studies that use subjects who are "suspected of having APD" as opposed to clients with known brain lesions as it could decrease specificity (2019). Also, she wanted the participants to be wary of utilising questionnaires like the CHAPPS as it was found to only have a .2 correlation compared to findings on the following APD tests: Low-Pass Filtered Speech (LPFS), Competing Sentences (CS), Two-Pair Dichotic Digits (DD), and Frequency Patterns With Linguistic Report (FP) (2019). While this correlation is low enough to instil less faith in the questionnaire, it makes me question if the tests were doing enough to identify the problems the children were having. We use the Buffalo Model Questionnaire in our clinic and do find that test results from the Central Test Battery align with parent/professional/self-report. Understandably, Dr. Chermak was primarily concerned that a lack of specificity would lead to "over-identification or overuse of the diagnostic label" (2019). However, to give some clarity on my thoughts, Wade Chein and Frank Lin (2012) recently identified that up to 80% of people 80+ years old have hearing loss. However, with obvious refrain, if we changed the definition of hearing loss to only cases that are moderately severe or worse, I believe we could significantly reduce the incidence of hearing loss in older people.

### A NEW PERSPECTIVE

Providing APD therapy for many years has changed how I see APD. In a way, it gives me the ability to envision what real-world changes may occur for each child or adult. This is guided by their current complaints and test results. The things that seem to improve as a result of auditory training are the things that I, tacitly, associate with APD. In that way, I believe that being a therapist has made me a better diagnostician because it gives me clarity on the potential for improvement. While there are infinite ways that APD might affect a person with APD, there are only a finite number of speech sounds in our lexicon. The Buffalo Model believes that we should begin at the phonemic, or speech sound, level to ensure that proper decoding is occurring before moving on to higher level tasks like integration. I feel that the Buffalo Model isn't given the credibility it deserves as an all-inclusive diagnostic and therapy approach. It is, simultaneously, the most basic, complicated, therapy I've ever done in my life.

Could we have helped some of the people who didn't qualify for a diagnosis based on the Bellis/Ferre Model? At our clinic we have had the opportunity of working with children with whom others would have believed were intellectually disabled. With therapy, we have been able to make vast improvements to these children's academic achievement and interactions with loved ones. These instances make me wonder if targeting solely true positives, and perhaps not providing therapy for potentially more global, overarching problems, may mean that we are passing up on the opportunity to help these children and adults with expressed auditory difficulties in their day-to-day lives. In these instances, I believe we have nothing to lose and everything to gain by adding another tool to their toolbox.

The ASHA online conference was priceless in exposing me to other perspectives that I had not fully understood or considered. I think that both constructs have their upsides, especially based upon the personality of the clinician. I have great respect for the minds behind the Bellis/Ferre Model and understand that we are all working to achieve the best outcomes for our patients. Both models have something to offer, but I believe that they may be looking at altogether different things. I do have some concerns about individuals who are missed, but that's the concern of the lens I look through. I would like to propose the need for greater acknowledgement of the qualitative and case history concerns noted by our clients who look to us for help. I would also like for it to be noted that individuals who have other diagnoses may not be out of our reach when it comes to successful therapy outcomes. We are fortunate to be tasked with guiding our communities in overcoming hearing problems to lead better lives. Let us ensure not a single crumb is left unswept in identifying all potential diagnostic and therapeutic avenues for our patients.



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# Meningitis and Sensorineural Hearing Loss—The Development of a Nationwide Protocol for the Timely Assessment of Hearing and Cochlear Implantation

Thomson BJ, Souter M

*Canterbury District Health Boards Southern Cochlear Implant Programme*

Meningitis is a condition that arises from infection and inflammation of the meninges - the membranous layers that surround the central nervous system - and is associated with high morbidity and mortality rates<sup>1,2</sup>. Whilst some of the common bacterial causative organisms (*Streptococcus pneumoniae*, *Haemophilus influenzae*) are vaccinated against in the New Zealand immunisation schedule, others such as *Neisseriae meningitidis* are not, and targeted immunisation programmes are run in response to regional and national outbreaks<sup>2</sup>. Meningitis is primarily a disease of infants and children in New Zealand with both geographical and ethnic disparities (being more prevalent in Maori and Pacific Island children)<sup>3</sup>.

Sensorineural hearing loss is a potentially devastating sequela of meningococcal infection<sup>1,4</sup>. Delay in the diagnosis, imaging, and referral to a specialist cochlear implantation service can lead to permanent and irreversible hearing loss, due to the rapid rate of cochlear ossification following the acute phase of the illness<sup>4</sup>. This can render implantation difficult, if not impossible, and can leave the patient with permanent deafness and the associated disability.

We have conducted a review of international literature, alongside multi-disciplinary input from audiology, otolaryngology and paediatric teams in Christchurch and Auckland. From this, we have created an evidence-based guideline for paediatric and adult patients presenting with meningitis, with regards to the investigation and management of their hearing. The aim of the guideline is to create a national standard that will improve the time to contact with the cochlear

implantation service in appropriate patients, and result in appropriate follow-up of those not reaching this threshold of hearing loss.

When designing the guideline, there were several key points we wanted to incorporate: hearing loss tends to occur early in the meningitis illness; a severe hearing loss is unlikely to improve; normal hearing after the acute illness phase appears to remain stable; and cochlear fibrosis and ossification can occur early (within a few weeks following the acute infection)<sup>3</sup>.

Patients presenting with confirmed or suspected meningitis should be referred early in their hospital admission to the departments of both Otolaryngology, Head and Neck Surgery, and Audiology by the medical or paediatric teams. Age-appropriate audiology assessment should be arranged and undertaken within 7-10 days of admission to hospital.

Where there is a normal result (type A tympanograms, otoacoustic emissions (OAEs) present and/or hearing within normal limits bilaterally), then no further follow up is required. It is recognised that if OAEs are present and there are type A tympanograms, but thresholds are not obtained, then follow-up in three months may be indicated.

In those with an abnormal result following initial audiometric testing, where a sensorineural hearing loss (SNHL) is confirmed, we suggest the following management:

- Mild SNHL: No MRI scan is required. Audiometry should be repeated at 2 weeks and referral for consideration of hearing aids if the hearing is stable.
- Moderate/Severe/Profound SNHL (unilateral or bilateral): MRI of the internal acoustic meatus (IAMs) should be undertaken within 48-72 hours. Notification (for moderate loss) or referral (for severe/profound losses) to the cochlear implant program should occur.

For patients where the initial assessment demonstrates type B tympanograms and/or it is not possible to establish air conduction and bone conduction thresholds, an urgent general



anaesthetic for ventilation tubes/ABR should be arranged. This may require urgent referral and transfer to a tertiary centre. The Otolaryngology team should be involved at this point, as an MRI IAMs should be considered at the time of the general anaesthetic, particularly in paediatric patients.

The guideline is shown in [diagram format here >](#)

We hope to have the full protocol available on the New Zealand Audiological Society website within the coming weeks, with links to and from the Starship guidelines.

The overall aim of this guideline is to improve contact time of appropriate patients to the cochlear implant service, and improve hearing outcomes. As stated at the conference, we welcome feedback from audiologists regarding the guideline, particularly those working in regional centres.

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# Words from an Indigenous Audiologist: Are Hearing, Listening, and Communication Important for Māori? From a Māori Worldview, the Answer is Yes.

Alehandrea Manuel

*PhD Student, Auckland University*

*Republished with permission from Audiology Now (76)*

Tēnā koutou, tēnā koutou, tēnā tātou katoa.

Ko Whetumatarau te maunga. Ko Awatere te Awa. Ko Ngāti Porou te iwi. Ko Hinerupe te marae. Ko Mila raua ko Piriniha ōku mātua. Nō Manurewa ahau. Ko Alehandrea Raiha Manuel tōku ingoa.

Nō reira, tēnā koutou, tēnā koutou, tēnā tātou katoa.

During my PhD provisional year, I asked myself countless times whether hearing, listening and communication are important for Māori? From a Māori worldview (te ao Māori), the answer is yes. During my audiology studies I likened the cochlea to a koru. A koru is a symbol of creation, new life, new beginnings, and growth. In this sense, the cochlea and all its unique components are always creating new movements, transforming vibrations into messages, and transmitting those messages towards the brain.

The cochlea also represents a pūtātara. A pūtātara is a very rare concha shell trumpet in Aotearoa (New Zealand), gifted by Tangaroa (god of the sea) and Tāne Māhuta (god of the forest). Together our atua (gods) had gifted a treasure so beautiful we were able to communicate with each other. The voice of a pūtātara was blown on various occasions such as signalling an enemy's advance and announcing the birth of a newborn baby in a village. Presently, the pūtātara is predominantly used to call manuhiri (visitors) on to the marae (courtyard). So, if we think about it from a Māori worldview, hearing, listening, and communication have always been important for Māori.



**Pūtātara**

## AN INDIGENOUS SOCIAL POSITION

I came into Audiology to increase our Māori hearing health care workforce and find ways to improve indigenous hearing and ear health. After graduating in Audiology Studies at the University of Queensland, I spent three wonderful years in Townsville under the mentorship of A/Prof Joseph Kei, Dr Sreedevi Aithal, Dr Venkatesh Aithal, Joshua Myers and Karen Nielsen. When an opportunity to undertake research that was by, for and with Māori, I took a huge leap and moved back to the land of the long white cloud.

Upon returning, I went through a self-exploration of my social position. This is a critical exercise as an emerging researcher and audiologist who aims to provide better hearing health care services that are 'by Māori, for Māori'. Ontology is concerned with the nature of reality, what is seen to be real, our way of being, and what it means to exist. Indigenous ontology emphasises indigenous relationships with all of creation. We exist through our spiritual relationships with the living and non-living.

Kaupapa Māori researcher Dr. Kirsten Smiler<sup>1</sup> discusses a star constellation to conceptualise Māori Deaf identities. The constellation enables Māori Deaf people to connect to Māori

metaphors that depict whakapapa (genealogy) and moral teachings. In different situations the star qualities of the appropriate identity may shine brighter. With regards to my whakapapa, the infamous Ngāti Porou anthwem 'Paikea' (the whale rider) acknowledges that I am a descendant of Paikea. On the trips back to the East Coast with my family, I would lean against the giant trunk of Waha-o-Rerekohu Papatūānuku (mother Earth). As I looked towards the ocean I would thank Tangaroa for helping me find my place in the world like our ancestor Paikea.

In the Western world such relationships are recognised as myths. How have I come to know that such beliefs are valid? I have interwoven my ontological positioning with my epistemological thoughts. Epistemology is our way of knowing, or our way of understanding and explaining knowledge that we see as valid. Indigenous perspectives of how one knows and prioritises that knowledge is a matter of place and whakapapa. Historically, knowledge that was passed on to the next generation was predominantly done so verbally. Histories have been stored through Māori systems of knowledge via "genealogies, within landscapes, weavings and carvings, and personal names"<sup>2</sup>. Such knowledge is 'taonga tuku iho', an intergenerational gift that is to be valued and treasured. Who has rights to accessing that taonga is a matter of axiological ethics, values, and moral judgements.

Axiology is our ethics and values systems that guide and judge which information is deemed as worthy knowledge<sup>3</sup>. The traditional positivist paradigm is value-free and researchers working in a positivist frame have taken power over indigenous narratives and how stories were told. As a result, many Māori have distrust in researchers and their processes. I am a Māori Filipino woman, daughter, granddaughter, audiologist, and junior researcher who has for the most part grown up in an urban Western world. From this social position, I acknowledge that there may be constraints on access to knowledge when working with Māori elders, even with my elders in New Zealand or the Philippines. I acknowledge that my perspectives and priorities may be different from those younger as well as older than me, from those who grew up in a different town, and even from patient perspectives.

## A WESTERNISED SYSTEM

In New Zealand, Māori adults have higher self-reported disabling hearing loss rates than non-Māori yet have greater unmet need for hearing healthcare services and technology than non-Māori adults. Ethnic-specific prevalence rates among adults in New Zealand are not yet published. With more research identifying hearing loss as a modifiable risk factor for cognitive decline, ethnic-specific data and more timely interventions through diagnosis and rehabilitation are required. Improvements in our hearing health care system may enable older Māori with hearing loss to continue participating in society and enhance their quality of life.

What is hindering older Māori and whānau (family members and/or members with a common experience) from attaining quality hearing health care services? Both direct and indirect costs of health care services have been identified as barriers to health care for older Māori. However, research shows that when costs are reduced Māori still receive reduced access. Factors like racism, culture, health literacy, and the number of Māori health care workforce play a significant role in Māori in the health care provision and health outcomes. Such factors may also exist within New Zealand's hearing health care systems

In other health areas, health professionals have blamed Māori for their state of health, their behaviours, and choices. Some poor healthcare experiences reported by older include: not receiving good treatment, shorter consultation times, poor rapport between health professionals and patients, no discussion or explanations for the clinicians' decisions, use of jargon, reduced number of referrals to specialists compared to non-Māori, and failure to take into account the and sharing information. Both explicit and implicit forms of racism deflect the responsibility of health professionals, hide the power relations that exist between Māori and health professionals, and reduce the visibility of Pākehā (New Zealand European) privilege<sup>4,5</sup>

In audiology specifically, Māori patients predominantly do not share



**Kowhatu ki te Uru –  
Pou whenua at  
Karekare.**



the same ethnic background as their audiology provider. It is estimated that less than 5% of audiologists in New Zealand are Māori. Reports have shown that when the provider and the patient come from different cultural or racial groups, the patient will still receive less discussion, less listening, a reduced standard of care, and poorer focus on building and maintaining relationships. Whilst audiologists attempt to develop communication skills, increased difficulties in establishing communications and relationships may remain.

Hearing health care professionals in New Zealand have minimal guidance as to what makes a service culturally appropriate and accessible. Within the New Zealand Audiology Society (NZAS) audiology guidelines of antidiscrimination, there is no current mention of te Tiriti o Waitangi (the Treaty of Waitangi) or cultural safety guidelines. Furthermore, there is no cultural competence or cultural safety training within New Zealand's audiology tertiary education. I, however, wonder whether New Zealand audiologists use tools of patient-centredness and cultural safety to guide their practice and collaborations with Māori and Pacific patients/clients post tertiary education.

This is a failure deeply rooted in colonialism and imperialism that have shaped and dominated our curriculum of hearing health care practice<sup>6</sup>. A fundamental shift in the higher education practice of hearing health care, including that of audiology, is therefore required. We should therefore be moving beyond cultural competence and towards 'critical consciousness'. The critical consciousness pedagogy discussed in 1974 by Paulo Friere is about liberating the masses from the systems, processes and practices that perpetuate inequities. Given the evident barriers that racism and culture play in health care provision, further research looking into power relations, experiences, and perspectives of Māori in hearing health care is needed.

## KAUPAPA MAORI RESEARCH

My PhD entitled 'Taringa Whakarongo' (listen with your ears) seeks to explore older Māori and whānau experiences and perspectives of the hearing health care system and the various impacts hearing loss may have in their roles and functions in society. It also aims to understand what perspectives hearing health care clinicians and non-clinicians have of hearing health care service provision for older Māori. Three qualitative methods have been chosen: go-along interviews, whānau interviews, and focus groups. They will be utilised to bring older Māori and whānau realities of the current hearing health care system to the forefront.

Given there is limited research to address the current gaps in hearing health care, this is an area that requires further attention from a Kaupapa Māori stance. Kaupapa Māori theory and methodology seeks to reinforce the validity and legitimacy of Māori ways of knowing<sup>2</sup>. It has grown as a form of resistance from the dominant colonial distance by decolonising Western methodologies. In addition, it challenges power relationships in research, critiques victim-blaming and cultural-deficit discourse, fosters safe research processes, and maintains high quality that promotes and supports well-being will be utilised for the interviews and focus groups i.e. mihimihi (greet), whakawhānaungatanga (process of establishing relationships), karakia (prayer), whakawatea (process of clearing), as appropriate.

Older Māori and whānau have the right to access quality hearing health care services. As a socially positioned indigenous researcher, I have deemed this topic important and the way to go about investigating this topic reflects my indigenous cultural, racial, moral and political mores. This study will add to the existing body of knowledge in Kaupapa Māori research development and provides an opportunity to reflect upon and evaluate my position as an audiologist, a researcher, and a Māori Filipina.

New Zealand could potentially have hearing health care services tailored towards Māori with ongoing participation and partnership with hard-of-hearing Māori and is hoped that the information gathered from the study will have a large impact on the provision of hearing health care services for Māori in New Zealand as well as open up more hearing health research opportunities for Māori, other underserved populations in New Zealand and indigenous peoples worldwide. I would like to say thank you to everyone who has been part of my audiology and research journey, supervisors A/Prof Elana Curtis and A/Prof Grant Searchfield, and Brain Research New Zealand for funding my research.

If you have any queries/questions or would like any further information please feel free to email me on: Alehandrea.Manuel@auckland.ac.nz

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## OPINION: 32 Years an Audiologist

Mike Anderson, MNZAS

*Opinion pieces are the views of the author and does not represent the views of the sub-committee members of the Bulletin Committee, or necessarily the views of the NZ Audiological Society as a whole.*

I arrived on Planet NZ Audiology in 1987. It had already been inhabited for about 15 years having been colonised initially with a dozen or so audiologists. The seven of us heading for Melbourne University to do a postgraduate Dip. Aud., would represent about a 15% increase in its population. The inhabitants were an almost even split of males and females, mainly of European ethnicity, with just one or two from other places. With immigration, the demographic of audiologists and the patients who now step into our world has changed enormously, especially in the North Island. However, from my perspective, a patient is still a patient with very similar needs, no matter what their background.

Change was afoot. We were arriving into the era where an increasing prevalence of in the ear hearing aids was superseding a decade or so of behind the ear hearing aids. The latter had been improving at a glacial rate in terms of size and tuning flexibility to a stage where there were now available up to four "trimmers" (variable potentiometers) to shape the analogue amplification curves more appropriately for an individual's hearing loss. In general, the hearing aids and the equipment could be described as "clunky" compared to that of today. Techniques such as modifying tubing and vents and filters in tone hooks could be used to shape the amplification curves further. Evaluation of these hearing aids was limited. A person sat in front of a speaker in the soundproof booth and indicated tones heard with the aids turned on and off, the difference being the functional gain. An hour was allocated to fit hearing aids. This involved seeing that moulds were comfortable, adjusting trimmers with a small screwdriver, measuring the functional gain and lastly, practising and counselling. There was plenty of time.

A full audiological workup involved a large battery of tests with "battery" being an unintentional double entendre. For example, acoustic reflex decay measurements of a tone for 10 seconds at 10dB(HL) above acoustic reflex thresholds or an acoustic immittance machine that allowed the tester to go up to 125dB(HL) was more than enough to batter vulnerable hair cells into submission.

At the completion of University study mainly at Melbourne, most audiologists worked for District Health Boards or at the Valhalla of the audiologist gods a.k.a. the National Acoustics Laboratory (NAC). The study was sponsored on scholarships from either the Department of Health or the Hospital Boards themselves. As has been the case until recently, we were trained and expected to practise as generalists. Our supervisors and trainers left us to it once sure that we could do no harm, and then after a year or so, sat in on a procedure to decide whether we were suitable for full membership of the NZAS. In my case, it was a hearing aid fitting appointment which turned into a total failure. The patient was miserable at the outset having decided that maybe he wasn't interested in a hearing aid after all. After going through the process to the point where his snivelling was becoming unbearable, he readily accepted our offer to leave and left unaided (but only just!). My supervisor then pithily observed that he could see that the patient wasn't interested at the outset, but despite this, considered that my technique and calm demeanour in the face of disaster merited full membership of the NZAS. It reminded me of my full licence motorcycle test where I was told to go down the road 100 yards and come back without putting my feet on the ground. Things weren't quite so rigorous but I don't think I've "done any harm".

Conferences were very much of the current format but a bit more intense than they are now. Smaller numbers meant greater contact with the guest presenters and, being of a similar bent and mainly DHB or NAC employees, made for fun evenings together. The highlight was the Conference dinner which, apart from the meal, involved humorous "sketches" of usually an audiological theme. This continued until about 2000 but faded as the membership increased and its makeup became increasingly diverse. NZAS had gone from being akin to a large loose



## GENERAL ARTICLES

family where you knew almost every member and the location where they practised, to the large organisation it is these days where you know hardly anyone, let alone where they practise. Once the New Zealand Audiology M. Aud. course became established, Valhalla shifted to Auckland University which in turn has faded into the situation today where there are many Valhallas. Most members work in private or company practices and are mostly female.

The process to attain full membership these days is a much more exhaustive and costly process - as are the university fees you are required to pay - with much more direct supervision and limits on what you can and can't do. The hearing aid fitting process is far more intense. Prior to the fitting, there is an enormous range of hearing aid features and cost options to explain and patients' needs can be so much better attended to with elegant rather than the "clunky" choices of yore. In general, there is still only the 1 hour allocated for the fitting process. Now you need to construct the aids, connect them, adjust them in a multitude of ways, perform real ear measures, connect assistive devices and then explain and practise it all. With full audiological work ups, there are written protocols but some of the previous tests have been replaced with others, so the time required is similar. Equipment for testing has largely been migrated into computers requiring new sets of skills to manage it all, as well as for the ever-burgeoning "paperwork". Many members generously give their time to the various committees and sub-committees on top of their already heavy workloads.

In conclusion, since my arrival 32 years ago, Planet NZ Audiology is a much more crowded and complex place and its citizens need to run much faster to manage, but this applies to our world in general. It impresses me how you manage.



## More on Telehealth—A Data Approach: Innovation in healthcare requires us to change our thinking and our methods

Elaine Saunders, PhD.

*Co-Founder, Blarney and Saunders Hears; Adj Professor in Health, Swinburn University, Victoria, Australia*

*Republished with permission from Audiology Now (76)1*

The model of Telehealth practice described by The Ida Institute in a recent article in Audiology Now (Issue 74) resonated with a foundation of traditional models tailored to delivery via Information Communication Technology (ICT) systems. The level of innovation discussed is perhaps an open question. It is well documented that hearing healthcare is failing to meet the demand and is burdened with rising costs. We can't succeed in innovation in healthcare if we base our work on the methods that have caused the problems in the first place. We innovate to solve the problems. In Australia the issue is that many people who would benefit from hearing aids don't get them. The well documented reasons include barriers due to distance from a service, cost, and the perceived stigma of wearing hearing aids.

The article by the Ida Institute really describes the advantages of teleaudiology mainly as being more convenient for the client, which it is. Gabrielle Saunders in her work at the Veteran's Association (VA) demonstrated that thousands of client travel miles were saved<sup>1</sup>. It's not clear though how teleaudiology saves health dollars if a single professional audiologist is interacting with a client in an appointment, but the appointment is over the internet. It is still audiology and audiologist time. The Ida Institute tools, whilst client centred and well regarded and used, are audiology tools that are not differentiated from tools one would use in the clinic, even though enabling technologies mean that we can think outside the box and do things differently.

### THE BIGGER PICTURE

There is a bigger picture in hearing healthcare planning. This is one where teleaudiology can be used to address the barriers of cost and distance, and where the audiologist does gain time and potentially reduce costs.

Collectively, we have to find ways to reduce some healthcare costs. Let's first look at some facts:

- There will be 8 million people in Australia with measurable hearing loss by 2050. That's one in four people.
- Most people who would benefit from getting hearing aids don't, even though there are negative health consequences associated with not treating hearing loss.
- There are more Smartphones than people in the world today.
- Soon there will be 20 times more monitoring sensors than people in the world.
- Artificial intelligence, a subset of data science, is one of the most powerful tools to help us deliver better healthcare more efficiently.
- The cost of data storage has plummeted during the past 20 years.
- Clearly, we should be reviewing the service model in audiology.

We also know from the well tested work of Goldstein and Stephens, dating back to 1981<sup>2</sup>, that most people with hearing loss are easy to help, whilst a portion require more intense help. This figure was corroborated by the MarkeTrak data<sup>3</sup> in 2010.

These data point to the potential of establishing a blended model of care where an appropriately qualified teleaudiologist, or team of teleaudiologists support the less complex cases, and triage care for all cases, leaving the audiologist to use their diagnostic and clinical management skills to work with the more complex clients. This model is scalable and rewarding

for the audiologist. The model needs suitable tools and infrastructure, but these are much less costly than sound-proof rooms and medically priced audiology equipment. A teleaudiologist doesn't need to be able to do otoscopy, or take ear impressions, or carry out audiometric tests. They need to be able to counsel and influence clients, be very comfortable with ICT tools, understand hearing and communication needs and how they interact with their environment, interpret audiometric results and understand audiology reports, understand hearing aids and how to tune them remotely (if that function is available), ask the right questions when they can't see the client, and spot red flags.



**A member of our Teleaudiology team.**

The teleaudiologist will have many client interactions in a day. They need to be able to influence someone to visit a GP if they haven't. They need to be able to pass the client on to an audiologist, if the case is complex. The audiologist may be remote to that client or face to face depending on choice and circumstances. Given the different point in time Auditory Enablement model of Goldstein and Stephens<sup>6</sup> provides a functional model of care that can be applied. Every aspect of evaluation and remediation is addressed in this model, but the methodology for each step is not prescribed. The appropriate methodologies are applied by the clinician, be it teleaudiology or face to face.

## THE FUTURE

Imagine how interesting this can be for the audiologist. Perhaps groups of audiologists could share a teleaudiology team. Perhaps big chains will have teleaudiology teams.

Another aspect of an innovative teleaudiology model is the potential for collecting and interrogating large data sets. The potential for the time it takes to generate evidence is reducing as the time it takes to gather large data sets decreases. As stated by Ray Wolfinger in the late 60s, "The plural of anecdote is data." The ability to refine and improve the client experience is improving rapidly as we collect data from hearing aid users and use machine learning and other AI applications to interrogate it. We can learn more about a client today by supplying a hearing aid over the internet, monitoring a self-fit setup and usage, and making programme changes remotely than a clinician working face to face with a client 15 years ago could have dreamed of.

Data from online hearing assessment, such as the Blamey Saunders SPT4, combined with usage data, multiplied by many thousands of clients is providing data insights and evidence at a faster rate than could be completed in several years in the 1990s. We need to inform ourselves about the success of this kind of approach using these large data sets. As a profession, we should be embracing the opportunities and of this transformation in audiology<sup>5</sup>.

The recent community response to the launch of My Health Record in Australia shows that people have some ambivalence to health record storage, even though many of those same people may entrust critical health data such as heart rate and blood to an Apple or Google cloud.

Innovating in healthcare is challenging, not just because of regulatory issues, but because of the emotional and psychological factors associated with health. As with My Health Record, it is up to us as professionals to embrace enabling technologies, and help our clients navigate the new waters of healthcare.



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# Be a pioneer partner in New Zealand



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You will have heard the news. Specsavers Audiology has expanded its offering into New Zealand.

Unsurprisingly, after an official launch in early July, we're already mapping out our store network and matching talented audiologists with desired locations.

In fact, to date, 10 of our stores have already been secured for partnership.

The response has been overwhelming, the welcome has been warm, and we're set to open our first store in the new year.

If the idea of being your own boss with all the support and guidance you require sounds appealing, get in touch today.

Email: [anz.audiologyrecruitment@specsavers.com](mailto:anz.audiologyrecruitment@specsavers.com) | Call: 0800 337 899  
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Dear colleagues,

Firstly, I must extend my gratitude to you all for the positive and extensive interest that you have shown in our plans to launch Specsavers Audiology in New Zealand.

I have been humbled by the number of likeminded professionals who have approached our team following the conference in Queenstown. Your overwhelming support of our plans to improve accessibility and affordability for everyday Kiwis shows us you, as a profession, have a commitment to putting customers first.

As a product of many great conversations, I am pleased to formally announce that we already have 10 of our 53 store locations secured for audiology. Having launched our partnership offering only four months ago, this is a remarkable position to be in.

With our first stores set to open soon, I look forward to sharing with you and the New Zealand public our clear and transparent pricing model, fantastic range of quality hearing aids and the professional environment in which our services will be provided.

In the interim, I am delighted to introduce you to our team on the ground in New Zealand, whose primary purpose is to support our partners as they grow their own businesses.



**Paul Rolfe**  
Audiology Relationship Manager



**Clara Kwaramba**  
Professional Services Consultant



**Elisa Wood**  
Audiology Training Manager

To learn more about Paul, Clara and Elisa, please take a moment and visit [www.audiology-anz.com/nz/the-team](http://www.audiology-anz.com/nz/the-team). With around only 25 or so opportunities for partnership available in New Zealand, I encourage you to put yourself first and not let others hold you back from the opportunity to explore being part of something extraordinary.

Warm regards,

**Darrel Magna**

Executive Director and General Manager – Audiology, Specsavers Australia and New Zealand

PS If you wish to explore partnership opportunities now before the choice becomes extremely limited you can contact our team on **0800 337 899** or email [anz.audiologyrecruitment@specsavers.com](mailto:anz.audiologyrecruitment@specsavers.com) to learn more about our New Zealand rollout and partnership opportunities. .



## RESEARCH REVIEW

### Assessing Hearing Loss Self-Management in Older Adults

International Journal of Audiology 57: (313-320)  
Convery, E, Meyer, C, Keidser, G, and Hickson, L (2018)

Reviewed by Ian Henderson  
*Attune Hearing, Australia*

*Republished with permission from Audiology Now (76)*

#### ABBREVIATIONS

<b>HHC</b>	Hearing Health Care
<b>PIH</b>	Partners in Health Scale
<b>C&amp;R</b>	Cue and Response Interview
<b>HLSM</b>	Hearing loss self-management

#### AIMS AND CONTEXT

The aims of this study were to assess i) whether hearing aid users' self-management could be assessed with a purpose-designed tool; and ii) whether its outcomes would be useful to the clinical audiologist.

Underscoring these questions is the proposition that hearing health care (HHC) takes a predominantly biomedical approach, offering mostly technology-based solutions. Insufficient measurement is made of client rehabilitation autonomy, knowledge of hearing loss, services access and the monitoring of psychosocial realities associated with hearing loss. It is argued that self-management in these areas is fundamental to successful HHC outcomes e.g. improved client quality of life, increased hearing aid usage and reduced service provider costs. "Fewer unplanned interactions ... and more efficient allocation of clinical resources" are cited as examples of the latter.

#### METHOD AND MATERIALS

Thirty older participants were included in the study, with hearing aid experience ranging from 1.5 to 37 years. Convery et al. chose two complementary assessment tools from the Flinders Chronic Condition Management Program for this purpose i.e. the Partners in Health Scale (PIH) and the Cue and Response (C&R) interview. PIH is designed to gauge a patient's views on self-management, independent of the clinician. Its text was modified for the HHC context; neither measure had previously been used with a large sample of hearing impaired people. It examines:

- patients' knowledge
- partnership in a treatment program
- recognition and management of symptoms
- personal coping capacity.

C&R is run by the clinician, employing a Motivational Interviewing technique. It is designed as a prompt for authentic client testimony, rather than information and advice from the service provider.

In summary, while the PIH and the C&R target identical parameters, different techniques are used to extract information i.e. the PIH is self-reported while the C&R is interview derived.

## RESULTS AND CONCLUSIONS

Data analysis included these questions:

i) is there a correlation between the self-report vs interview-derived responses?; ii) are the participant's demographic characteristics correlated with their responses to specific topics e.g. emotional well-being? Overall scores were significantly lower in some categories when interview derived than when self-reported i.e. Emotional Well-Being, Social Life, Monitoring Changes.

One interpretation of this is that participants' personal disclosure level was higher in a chat with the audiologist than in a questionnaire.

No significant correlation was found between demographics and responses on the PIH. On the other hand, a link was found between age and self-management on the C&R i.e. younger participants – not surprisingly – had higher hearing loss self-management (HLSM) scores. On the C&R, HLSM scores were highest for Attending Appointments and Accessing Services, and lowest for Social Life and Emotional Well-being. The authors deal at length with the dichotomy of practical vs felt experience in the discussion.

Content analysis was applied to the C&R in line with three preselected themes from current literature i.e. clinical practice in audiology is biomedically focused, device-centred, and clinician-led. These were tallied and reflected the following patterns:

### 1. Clinician minimisation of the psychosocial impact of hearing loss:

Reminiscent of the finding that a richer client experience may emerge in the interview format, C&R recorded more emotional responses on hearing loss e.g. "angry, sad, upset, anxious...", "I get frustrated when my wife's rummaging in the cutlery drawer and trying to talk to me when she should know better". This contrasted markedly with participants' higher confidence with hearing and hearing aid knowledge.

More important was the reported sense of many participants that one didn't discuss psychosocial aspects of deafness with an audiologist! One participant commented "I've never had a conversation like this with my audiologist ... she's never given the impression that this is the kind of thing she'd be interested in talking about". By contrast, another participant asserted "she's very competent, empathetic".

### 2. Low client knowledge of non-technological support for hearing loss:

Knowledge of Treatment and Adherence responses were mostly focused on hearing aids. This included more familiarity amongst longstanding hearing aid users with buttons, streamers and tinnitus management. Most participants indicated a greater likelihood of consulting an audiologist with hearing aid issues, rather than hearing change issues. Family understanding was seen by some as low in both areas i.e. hearing aids were often viewed by families as a deafness panacea; there was insufficient family collaboration on hearing strategies.

### 3. Clinician-led rather than shared decision making:

More individual variation (of reported audiologist style) was seen on this than any other item e.g. some audiologists were seen as empathic decision-partners, others were seen as paternalistic e.g. "You need hearing aids and that's that". A clinician-led theme predominated, which a minority actually preferred and expected.

Convery et al. concluded that apart from hearing loss knowledge and services access, there is an "uneven distribution" of self-management skills amongst Australian HHC clients (albeit, admitting that their sample was biased towards higher motivation and socioeconomic status).

## IMPLICATIONS FOR AUDIOLOGY

The study demonstrated the clinical value of adapting the Flinders comparative tools for assessment of hearing loss self-management. That a motivational interview format yields more

insight into unmet psychosocial needs than does self-report suggests more and more questionnaires alone aren't "the answer". Likewise – generic handouts on communication tactics, without some form of tailoring to client's personal stories. Moreover, the authors have confirmed the importance of profiling clients' emotional self-management, alongside more conventionally surveyed items e.g. ear mould insertion and program button function.

On the one hand, they rightly suggest intervention strategies. On the other, the "unheard", "undiscussed" themes emerging from participants' comments provoke the question: would it also be beneficial to the audiologist's i) decision making inclusivity; and effectiveness in dealing with the psychosocial aspects of hearing loss?

From a change management, client and career fulfilment perspective, the answer strongly appears to be "yes". Convery et al. cite a rhetoric-reality disparity from research in this regard, i.e. most Australian audiologists see themselves as "person-centred", yet in practice this is not as widely matched by behaviour.

An understanding of audiologist variation in "walking the talk" could be elucidated further by examination of counselling culture in Australia e.g. how comfortable are audiologists with addressing (as appropriate) clients' depression, anxiety and relationship challenges; does this vary with clinician training and life experience; is a counselling time priority systematically advocated by audiologists and stakeholders?

Clock time aside, the study's findings suggest that currently, many clients are withholding key clinical information from audiologists.

The authors in fact found significant "variation" amongst audiologists in their empathy and capacity to empower clients. More details on how the participants defined these qualities favourably would help in the development of "antidotes" to the (frequently mentioned) paternalistic practices. That client disclosure was at its most lucid in a chat with the audiologist vs a self-report survey hints at a likely embracement of increased two-way "talk time".

Either way, simple steps may be considered for redressing the imbalance identified by the authors. e.g. reframing of HSP's Rehab Plus as not just a behaviour change tool but a locus of control change agent; broader staff and corporate KPIs to acknowledge qualitative client outcomes; an addition to the COSI to indicate "Strategies to Meet Needs" viz one or a combination of accessories, tactics, partner inclusion, hearing aids, referrals, room acoustics, referrals and family discussion (participant 14's quote is a reminder of our otherwise narrowly perceived suite of services: "Well, aside from hearing aids there really isn't anything else is there?").

Convery and colleagues' use of verbatim quotes is another "easy" change audiologists can make – when these appear in file notes alongside technical and administrative details they can have the powerful effect of humanising the client's journey and clinician's strategies.

An economic rationalist may argue that by emphasising non-technological and deeper personal issues in these ways equates to an Audiologist "taking his/her eye off the ball". The counterargument to this is: "client focus" is invariably part of the publicly declared business promise, client self-management reduces resource utilisation, and improved client emotional state leads to better word of mouth marketing.

Finally, the direction implied by Convery et al. meshes well with contemporary Australian research on memory, chronic care and conversation patterns and repairs, e.g. work by Rebecca Bennett, Louise Hickson and Christopher Lind.



## OPINION: A Cautionary Tale (Quis Custodiet Ipsos Custodes?)

Richard Bishop AuD, MNZAS

*Opinion pieces are the views of the author and does not represent the views of the sub-committee members of the Bulletin Committee, or necessarily the views of the NZ Audiological Society as a whole.*

Following the presentation from the Ministry of Health audit team at our recent conference in Queenstown, you might be interested to read of my experiences with this team. I thought belatedly after the presentation that these people watch us, but who watches the watchers?

I tell this story, not to seek your pity, but to highlight how bureaucrats can and do treat professionals with contempt and impunity. It is a cautionary tale not to warn you to be careful and fail to carry out your professional responsibilities, but to alert you to not take your professional position for granted. I also hope that it will serve as a wake-up call to the Society that we need to be strong to communicate our values and lead the provision of services for people with listening/receptive communication difficulties, and not to let the bureaucrats dictate to us from their position of ignorance how we should do our jobs

A large part of my practice involves working with primary school-aged children with learning difficulties which are secondary to their listening difficulties. Frequently, but not always, my analysis of their auditory status indicates that, in addition to learning appropriate communication management skills, they would benefit from appropriate amplification technology to help them listen in real-world situations by increasing their received auditory redundancy; almost always, I will also recommend the use of a companion, or remote, microphone to improve important signal-to-noise ratios at school and in their family lives. My aim is to provide as much audiological help as possible in as many areas of the children's' lives as I can, recognising that listening difficulties are going to impinge on lots of different aspects of their lives.

I have had a high success rate with this treatment. The children tend to take up the amplification very positively and it is wonderful to see their initial response to the hearing aids and to learn how the consequent reduction in their listening effort has resulted in advances in many different areas of their educational development. Families often also report that their children are more auditorily responsive, that the noise levels at home have diminished and that the children participate in family activities much more spontaneously.

Unfortunately, this population of children is poorly served in terms of government assistance towards the cost of these devices. The Ministry of Education will assist in purchasing this equipment if the child is not meeting educational goals but will not consider assisting if the child is doing reasonably well at school, despite not meeting their potential.

Until 2014, the Ministry of Health had 2 criteria for providing amplification for children. The first was that the child had to have a "hearing loss", presumably some degree of deafness, although this has never been precisely defined. This criterion survives to this day. It refers to a paper by Clark (1981)<sup>1</sup> which is quoted in the New Zealand Audiological Society Best Practice Guidelines. This paper is an academic discussion of different schemes for classifying the pure tone audiogram but nowhere makes any definition as to what constitutes a "hearing loss". Nevertheless, the Ministry of Health insists on quoting this paper as providing the (NZAS-endorsed) definition on which this criterion is based. It seem apparent to me that the Ministry of Health officials have never read this paper.

The second criterion did not state any degree of deafness requirement, essentially the same criterion that applies to adult funding and subsidies; it was based on the successful outcome of a hearing aid trial. In 2014, the Ministry of Health unilaterally withdrew this criterion; there was no discussion with the New Zealand Audiological Society as far as I am aware, nor did the Society appear to object to the withdrawal of the criterion.

## GENERAL ARTICLES

The result was confusion as to whether it still existed or not. I have a lengthy email trail from 2013 of correspondence with Ministry of Health, ACCESSable and subsequently ENABLE discussing this confusion. Throughout this correspondence with the Ministry of Health and its agents, both I and many of the correspondents remained confused; some Ministry of Health staff, however, kept restating the (non-existent) definition of "hearing loss" in the above article as though this would magically make it appear. At no time were they able to quantify this, for instance in the same way that the ACC defines its 6% fence.

After I was randomly audited by Ministry of Health, the Ministry warned me not to submit any applications for funding that did not meet the first criterion. I asked them again to please specify what they considered to be a hearing loss but again they failed to do so. As a result, I continued to try to fulfil my professional responsibilities and act in the best interests of my clients and to submit applications for funding for hearing aids for these children.

In late 2017, the Ministry of Health laid a complaint against me with the New Zealand Audiological Society. The Ministry did not specify what Ethical Principles or Rules they thought I had violated.

The Ministry of Health then informed me that I was suspended as an Accredited Assessor. The New Zealand Audiological Society Complaints Board then informed me of the complaint but did not specify which Ethical Principles or Rules had been violated. Because the complaint was coming from a governmental body, which could easily pursue legal action against me, I felt it was prudent to engage a lawyer to make sure that I did not make any legal errors that could threaten the viability of my practice.

The Complaints Board met with me and my lawyer to consider the complaint. The Convenor of the Complaints Board commented that the whole process had got out of hand and that it could have been resolved without the trouble and expense of the Complaints Procedure. The Complaints Board found in my favour, that I had not violated any Principles or Rules of Ethics of New Zealand Audiological Society, and further, that it was not my place to determine whether an application met the funding criterion set by Ministry of Health.

Although the Complaints Board found for me, and made a recommendation to the Ministry of Health that my status as Accredited Assessor be reinstated, it took a further 3 months and several letters from my lawyer before I was finally reinstated.

The Ministry of Health did not communicate to me that, when I was suspended, I would not be able to claim any funding from Ministry of Health, including funding for adult subsidies; there had never been any question about my application for adult subsidies. As a result, I had continued to follow accepted practice and deduct the subsidies from invoices to clients for their hearing aids.

When I later submitted claims for these subsidies after my Accredited Assessor status had been restored, I was informed that I was not entitled to this money. As a result, I was out of pocket for a substantial sum related to the subsidies themselves, the lawyer's fees and the cost of my time. I was also subjected to considerable stress during this process.

When I sought an avenue to express my displeasure with the actions of the Ministry of Health staff, I met a dead end. Querying complaints procedures on their website brought up lots of avenues to complain about health professionals, but not the Ministry itself. The Ombudsman's website required one to have lodged a complaint with the offending body before the Ombudsman could get involved. Catch 22.

The number of points arise from the sad tale:

1. The complaint was inadequately triaged when received by the New Zealand Audiological Society Complaints Board. No attempt was made to determine which Principles or Rules had been transgressed.
2. Because the complaint was poorly triaged, it resulted in my incurring considerable costs in terms of lawyer's fees and time in preparing my response to the complaint, plus my inability to access the subsidies resulted.

3. If I had known that I was not able to apply for subsidies during the period of my suspension, this would have prevented me from treating clients who would have been eligible for their hearing aid subsidy, resulting in even greater financial hardship for me and threatening the viability of my practice.
4. The New Zealand Audiological Society offered no support for me during this whole process, except to find in my favour.

This story shows that staff of the Ministry of Health is not accountable and can and does act arbitrarily, with no legal precedent, and with no consequences for themselves.

It also illustrates that, until now, the New Zealand Audiological Society has not supported its Members in disputes with external agencies.

If we are to make progress in the provision of audiological services to the community, NZAS needs to be able to provide clear leadership to the community and support to its Members.

## References

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1. Clark JG. (1981). Uses and abuses of hearing loss classification. ASA, 493 – 500





A scenic beach with waves, people, and seagulls. The sky is blue with several white seagulls in flight. The ocean is a deep blue with white foam from the waves. In the foreground, several people are on the beach, some holding surfboards. The overall atmosphere is bright and sunny.

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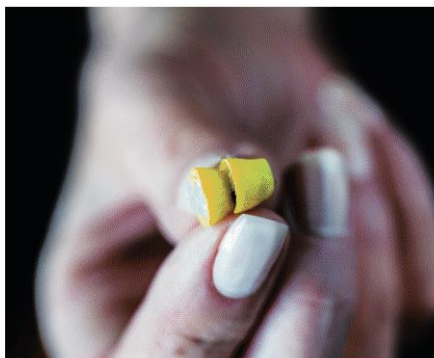
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The Bulletin Committee welcome short articles of a scientific and clinical nature of general interest to audiologists in the areas of professional training and clinical service delivery. Short papers on historical reviews or on applied clinical and theoretical research (including case studies) will also be accepted. Articles should aim for clarity and brevity, with up to 2,500 words being an acceptable size. All manuscripts will be acknowledged but authors are requested to retain a copy.

Articles should be supplied as e-mail attachments. Most word processing program files can be accepted. Please supply any graphic items as separate files not embedded in the word processing file, and indicate originating program for both word processing and graphic files.

Authors should include the title of the article; the author's name, preferred title, work address and contact details; a short abstract if applicable; and full references, typed according to the guidelines of the Publication Manual of the American Psychological Association. Tables and figures should be identified by a number and include full titles and descriptions.

News and reviews of new products and news of members should be sent to NZAS ([admin@audiology.org.nz](mailto:admin@audiology.org.nz)).

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When submitting an article for publication in the Bulletin please follow the below guidelines:

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- Article is relevant to audiologists in the areas of professional training and clinical service delivery
- Article could not be considered marketing or promotional information for a product organisation or service - unless submitted as a paid advertisement for the e-Bulletin
- The article does not discredit or undermine the clinical skills and professional ability of another clinician or clinical service
- Any related financial interests (for example, owner or shareholder in the business) is clear at the beginning of the article
- Article is clearly written and generally lacks grammatical errors
- Author(s) has included:
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  - the author's name, preferred title, work address and contact details;
  - a short abstract if applicable;
  - full references
- If the article is a case study, then all identifying details have been obscured or omitted to ensure that the identify of the affected individual(s) remains anonymous
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