

Everything will be okay

Anna Leatt (Anna.Leatt@uhbw.nhs.uk)

University Hospitals Bristol and Weston NHS Foundation Trust

Introduction

A recent internal audit highlighted a relatively high number of cases where parents initially declined intervention following the diagnosis of a permanent hearing loss. As a result the team hope to improve the uptake of children's hearing services within our community through several agreed 'action plans'. One action was to better understand parents' experience of the newborn hearing diagnostic process at Bristol using arts based methods. This information would inform service development plans including producing information for the website and various other mediums.

TURNING HEADS

created with Jessica

It started before his third birthday -
he would turn your faces towards him.
"I can't see your mouths."

He answered "yes" to everything.
If he couldn't hear the question,
the answer was "yes". That's the kind

of boy he is - always smiling, positive.
You're so proud of him. His smile
can light up rooms by blue-tooth -

like his new hearing aids. He syncs
them up to TV, laptop. He can hear
so much better. Now he's seven,

he puts them in himself, does it so
quickly. At first, it was a struggle -
but now, he says: "I can do it

better than you" - and he's right.
Your journey can be tracked through
the pictures on his hearing aids.

He's been through all the trains.
Now he's onto Star Wars. Still,
he's drawing people to him...

like that stranger who stopped you
in the shop one day, and told you:
"I just want to say - everything

will be okay."



FINDING OUT

created with Hannah

You remember every second
in that little room.
Complete unknown -

so many questions.
Would she be able to speak?
Would she go to school?

You didn't have an image.
Meeting deaf adults and children
has given you that vision.

You have this joy in common -
you can share the celebrations.
The confidence to join a club,

sitting in bed giggling to a book.
And you can share the questions too.
Managing hearing aids can be hard --

they fall off, get lost, get chewed,
but with the right things in place,
there's nothing your child can't do.

The friend that everyone wants to play with.
Watching her play with a stethoscope
was sad at first, but over time

you've learned that there are stethoscopes
that she can use.



Discussion

Four parent volunteers described their journeys as family members of a baby or child with a permanent hearing loss. The created poems (with permission) will be displayed:

- visually and with audio recording on the Children's Hearing Centre website
- UHBW social media sites (Facebook, Instagram, Twitter and LinkedIn)
- a poetry gallery within the department will be created to display all of the poems in a quieter area for private reflection
- visual snippets from the poems on the diagnostic test room walls

Method

We worked with the patient experience team within the trust and Beth Calverley, poet in residence. Parents of children were invited to work with Beth to express their experiences of having a child identified with a hearing loss as poems. Beth hosted a gentle conversation with each parent. They were free to share as much or as little as they wished. Beth wove their words into a poem, live in the moment, and invited each co-creator to shape the poem as they wished. Some sessions took place in person while others took place via phone/video call. Each person received the original typewritten poem to keep as a memento of their experience. In addition, staff members also shared their feelings and experiences of diagnosing hearing loss and supporting families through childhood.

Taking part in the poetry session was really useful to me. It gave me the opportunity to pause and reflect on how I felt at the beginning of our journey with hearing loss (parent)

I feel a wave of privilege to have spent time with family members, listening to their experiences. They expressed many emotions: shock, worry, uncertainty, guilt, connection, pride, love, joy. Throughout the poems, there's a thread of trusting intuition, tuning into a deeper rhythm, and finding creative ways to connect with the world. These connections seem all the brighter for it (Beth, poet in residence)

I was listened to and I got a poem out of it. The fact a clinician sat in and listened as well meant she got to hear how difficult it is for parents, and that is so beneficial (parent)



Staff Hearing Impairment Group

Kirsty Fitz-Poole (Kirsty.fitz-Poole@nelft.nhs.uk)
Paediatric Audiology (Havering, Barking and Dagenham)

1. Introduction

- Whist training staff members about the audiology service, it became apparent that a number of staff had hearing loss themselves. I felt these staff may benefit from further support from the Trust. I therefore initiated a service improvement project to develop a Trust Hearing Impairment Staff Network.

2. Methods

- The project involved collaborative working across departments, including Human Resources, Equality and Diversity, IT and Audiology.
- The aim was to establish a pathway for staff with hearing loss to readily access support and advice.
- Having identified that there was a population at the Trust with hearing loss, we advertised a meet up group for peer support, which then evolved into a platform for a focus group on how to improve the workplace for those with hearing loss and a bi-monthly meet up group.



Challenges

- Spreading the word across the large number of employees and managers at the Trust.
- Meeting varied needs of those with hearing loss
- Booking appropriate speakers at the group
- As a paediatric site, extra funding was agreed from E&D budget for assessment. This can also be covered by paying via bank staffing

4. Discussion

- NELFT take pride in being a leading disability confident employer. The feedback from staff with hearing loss has highlighted how they felt listened to, supported and valued.
- Paediatric Audiologists enjoyed the varied work of seeing adult staff members and networking across the Trust.
- Our Hearing Impairment Staff Network has been a great success and we would love to inspire other Trusts across the country to develop something similar to better support those with hearing loss working for the NHS.

Trust Intranet Page

Hearing Support Group



The group offers support for members of staff with a hearing impairment and those who think they may have a hearing impairment. The group helps raise the profile of staff, providing advice and guidance in a confidential and safe environment. The group meets on a two-monthly basis and is open to all staff who want to get involved in any way. Here are some of their thoughts and worries that they have shared:

"I was scared to tell my manager about my hearing impairment for fear I may lose my job."

"I booked a hearing test and went in my lunch break, I was put off the cost of a hearing aid."

"I have told people I work with I have a hearing loss in my NELFT Office but I still have to remind people I work with to look at me when they talk so I can lip read."

"Sometimes in work I pretend I heard what was said and hope I will catch up on the conversation."

"I was worried people might think I was ignoring them."

"I found this group and feel so much more informed about my hearing and how equipment can help me at work, I even got offered a hearing test."

"Thanks to the NELFT HI group I have now got a device to help me in meetings and now have let IT know not to call me on the phone but use email instead."

The Group is chaired by Natalie Higgins, STAR Worker

The Executive Champion for Disability is Simon Hart, Executive Director of People & Culture

The Group is supported by:

- Colin Igbokwe, ICT Infrastructure Lead & Disability Ambassador
- Kirsty Fitz-Poole, Audiologist

If you would like to become a member of this group and for more information on how NELFT can help you at work with equipment and support from other staff please get in touch with ED&I Team and come along to our group!

For further information, advice and how to join the group email: DisabilityNetwork@nelft.nhs.uk.

Kirsty Fitz-Poole offers help and advice to NELFT staff. To get in touch, contact Kirsty on Audiology@nelft.nhs.uk.

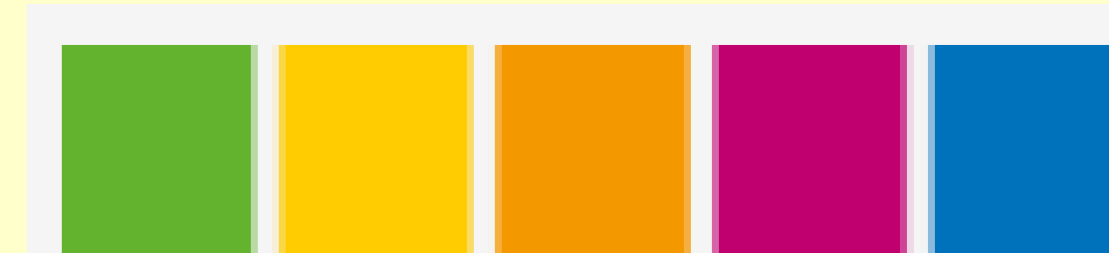
Hearing Support Group meetings in 2022 (open to all staff)

- We meet on a bi-monthly basis on the second Thursday, every two months, 11am - 12:30pm. Join here.



3. Results

- Early interventions that lead on from the focus group included:
 - Subtitles added to the Trust induction training videos
 - Developing a robust pathway for BSL interpreters to be booked for training
 - Deaf awareness training rolled out for managers
 - Phone free access to IT support
 - Advertising the peer support network
- The group evolved and we set up regular support group, with an agenda of guest speakers with topics like tinnitus, listening equipment, troubleshooting hearing aids and British Sign Language classes.
- Key attendance: Staff with hearing loss, Equality & Diversity, IT and Audiology
- Over the past 5 years that we have been developing this Network, we have helped support over 70 staff members
- Leading on from this, we have made a huge step forward developing a pathway for staff with hearing difficulties to get support in house.
 - Self Referral or via Equality & Diversity
 - Report (see example template) shared with GP to facilitate a referral for local audiology support.



REMOTE TRIAGE APPOINTMENTS FOR VESTIBULAR PATIENTS DURING COVID AND BEYOND.

STREAMLINING THE PATIENT PATHWAY TO FACILITATE BEST PRACTICE AND REDUCE CLINICAL VARIANCE

Caroline Rae - Vestibular Team Lead, NHS Tayside. Joanna Forrest - Specialist Audiologist, NHS Tayside

INTRODUCTION

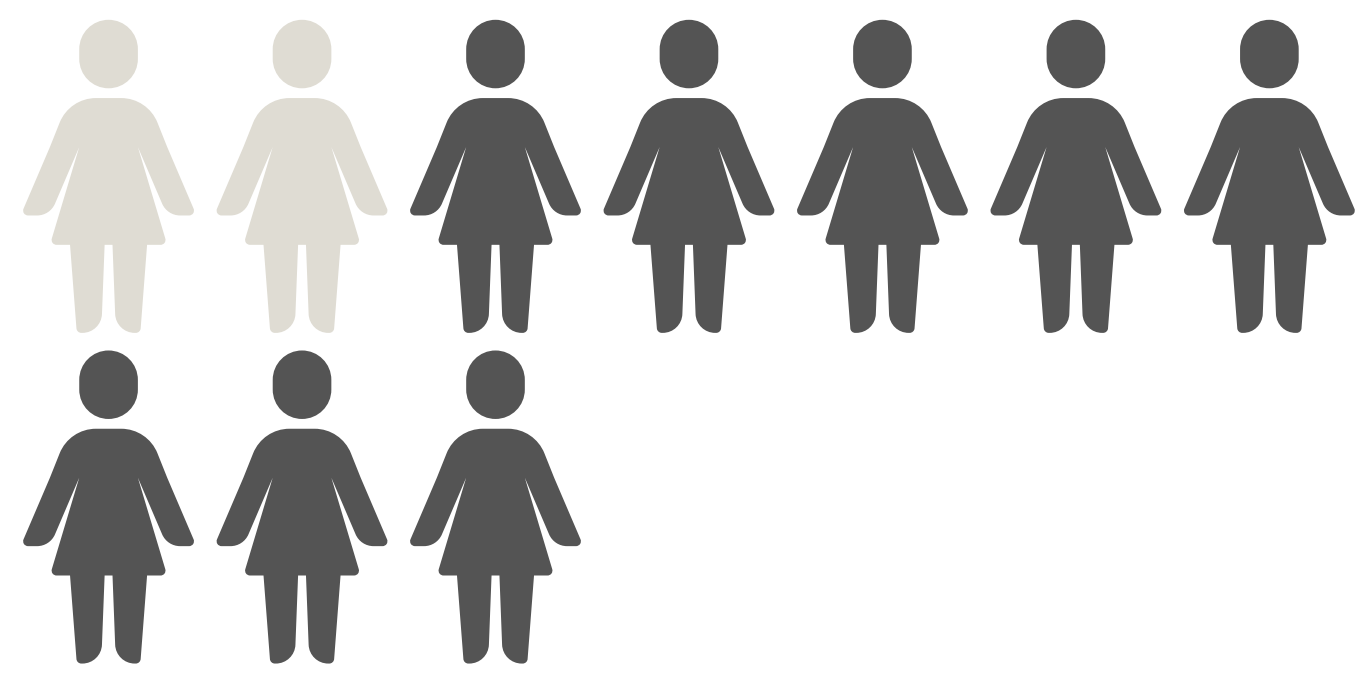
The COVID 19 Pandemic has changed the way that outpatient departments are run across NHS Scotland. Initially this was due to physical distancing regulations and enhanced infection control measures, but as remobilisation continues it is evident that the waiting list challenges are going to be a major focus going ahead for all outpatient clinics including ENT and Audiology.

In 2020 the pathway for those presenting with vestibular dysfunction (vertigo and dizziness) was redesigned and a remote triage appointment carried out by vestibular audiologist was introduced. All patients referred to ENT for vertigo/dizziness attended and initial remote Near Me or telephone triage appointment. This reduced face to face appointments at a time when outpatient appointments were cancelled for those with vestibular dysfunction and also reduced clinical variance for these patients, making sure that they were seen in the most suitable clinic for assessment and treatment.

AIMS

The aim of this project was to map and audit the patient pathway for remote triage vestibular appointments and assess its clinical relevance as services across NHS Scotland remobilise

RESULTS



Since August 2020 500 vestibular patients were remotely triaged by audiology. 88 (18%) of these patients were referred on to ENT and 412 (82%) were managed by vestibular audiologists. 84 (17%) patients were discharged without requiring a face-to-face appointment. The average wait for an initial appointment was 67 days which is within RTT guidelines for this patient demographic, especially at a time when waiting lists in most specialities are climbing.

ENT vertigo appointments are 30 minutes. 412 patients managed by vestibular audiologists over 18 months is the equivalent of 59 ENT clinics or an average of 3 clinics a month freed up for ENT consultants.

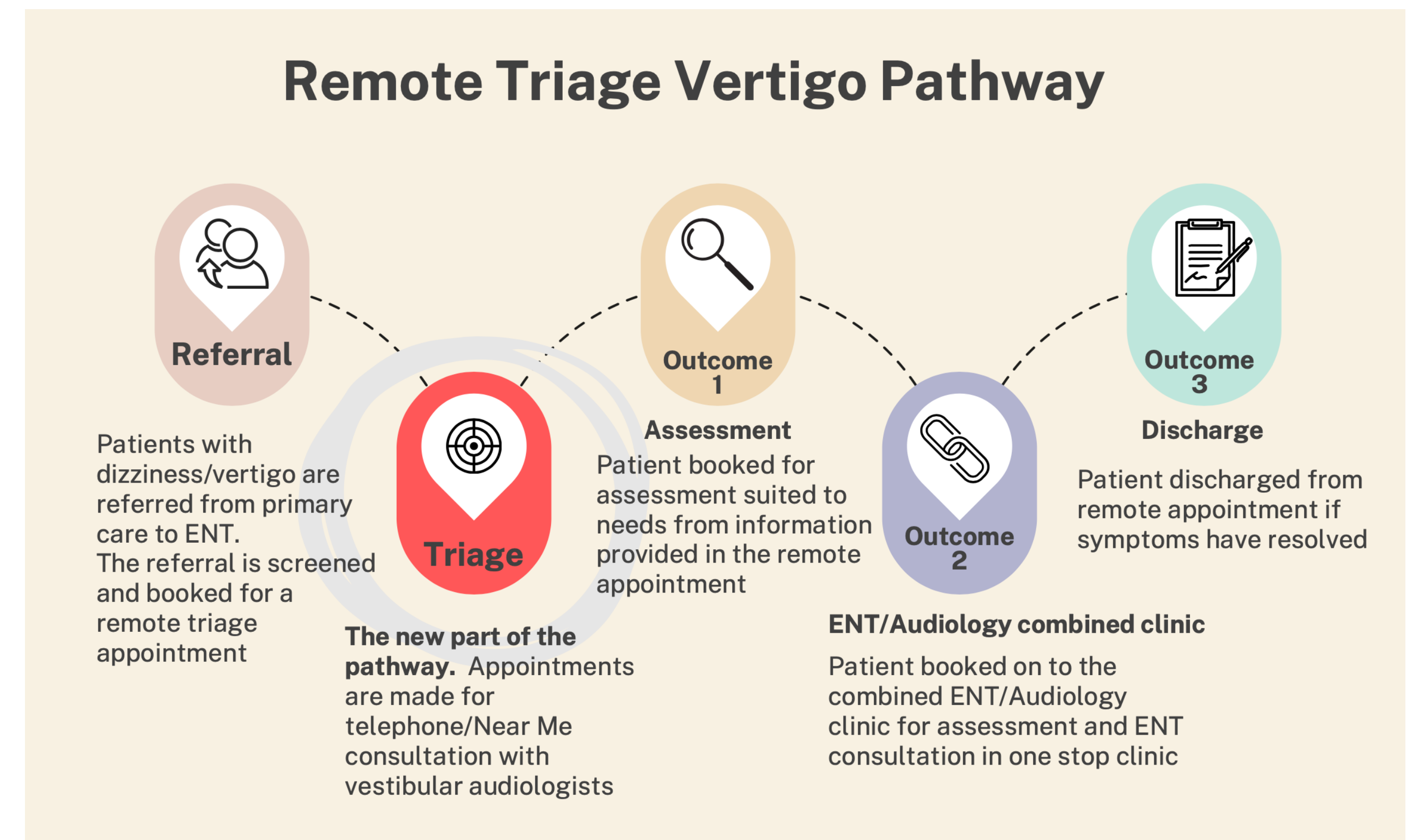
2019 ISD figures show total direct cost per attendance of a new patient for an ENT consultant as £153 vs an Audiologist cost per attendance for a new patient is £59. This amounts to a £94 saving per new patient appointment managed by audiology. In total this is a 38,728 saving over the 18 month span that this new pathway has been running.

DISCUSSION

The introduction of a remote triage appointment has been beneficial. This was introduced due to pandemic requirements but will now be a routine part of the patient pathway. This pathway utilised the skills mix available. It is shown to be timely and effective. Further audits would be beneficial to see the re-referral rate and discharge rate following vestibular rehabilitation and these will be carried out looking at this demographic over a wider time frame.

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METHODS

The new remote triage appointment pathway was mapped and a retrospective audit carried out using the AuditBase and TRAKcare patient management systems to see if there was the prospect of longterm benefit in the new pathway.

Retrospective data from 500 patients who have attended a remote triage appointments since August 2020 was audited and analysed.

Referral to treatment, onward referral, discharge and DNA rates were investigated to ascertain if a remote triage pathway was beneficial for this patient cohort where early intervention and treatment often produces better long term outcomes.

AVERAGE RTT 67 DAYS FOR THIS PATIENT DEMOGRAPHIC

£38,728

SAVINGS OVER THE 18 MONTH PERIOD. COST OF AUDIOLOGIST TIME VS ENT TIME

CONCLUSION

Mapping the remote triage patient pathway has shown that vestibular audiologists are well placed to manage this patient demographic. The remote triage appointment reduced patient handovers and the need for an initial face to face appointment, this reduced clinical variance and ensured that patients were seen in the correct clinic for the correct assessment and management.



Verity Langlands

Seashell

Audiology Assessment for Children and Young Adults with Complex Needs; The journey to a bespoke audiology suite.

Seashell is a national charity providing education, health and care for children and young adults with complex learning and communication difficulties and/or disabilities including autism, deaf/blindness, multisensory impairments, hearing, visual impairment, complex physical disabilities and/or additional medical needs. Seashell operates Royal School Manchester, Royal College Manchester, Residential Homes, Health, Outreach & Family Services.

Seashell Health teams work to facilitate healthcare with the needs of the individual at the forefront of decisions. The audiology team have long been exploring innovative assessment techniques and rehabilitation approaches which offer flexibility, and support students to access audiological care. Amongst the considerations, we support behaviours that challenge and physical disabilities both of which require environmental considerations and adaptations; the service is supported by appropriate clinical protocols and flexible pathways and we have been able to provide students' NHS service's with important clinical information which could otherwise be obtained.

New School Build

Audiology access for children, young adults with complex needs, intellectual disabilities, Autism and ADHD has been widely considered within NHS departments in recent years. NHS England are currently leading an agenda to close the inequality gap for children and young adults in special residential schools accessing hearing checks; audiology services across the country are making progressive steps and amendments to their services to support children, young adults and adults with complex needs.

The opportunity arose for a bespoke audiology suite to be built as part of a wider special school new build, and by showcasing this journey we hope to inspire and demonstrate the facilitation of an inclusive audiology service.

The journey of the design of this suite demonstrates considerations, challenges and collaborative working with the child/young person at the centre of the decisions.

We were also able to demonstrate a trans-disciplinary approach across the necessary companies and professionals involved when building an audiology suite.

Collaboration

We invited specialist companies and representatives to come onsite and observe audiology sessions to understand the challenges, considerations and needs of the project.

In these initial meetings we sought consultation from professionals including Shaun Moore (IAC audiology test room design) to ensure the location for the booth was optimal within the school designs; including considerations of acoustic noise and electrical interference in surrounding constructions (particularly due to the extensive specialist equipment and rooms designed into the overall build) as well as ensuring space and ceiling height allowed for the soundproof booth to be installed effectively.

We also engaged with Mike Anderton (TLC for Schools) to start discussions about the project. TLC specialise in bespoke multi-sensory environments. Along with Natus (Audiology clinical equipment), and the project transformation lead Seashell, the trans-disciplinary team met frequently and each redesign was talked through in detail to understand the requirements of the various industry; to ensure the work pulled together to fit the purpose.

With each meeting the collective looked through the plans for every aspect of the room, each profession put forward their ideas and challenges; collective decisions were made with the needs of the students being prioritised throughout the process.

Considerations & Challenges

Clinical appointments for children and young adults with complex needs/autism/ADHD host a number of challenges, ranging from transportation to clinical settings, waiting areas, staffing, inflexible clinical approaches and unsuitable pathways and protocols. When designing this bespoke audiology suite we were able to use our specialist knowledge and work with a rich trans-disciplinary design team to create an inclusive setting.

Considerations

The purpose of the build was to create an audiology paediatric booth specifically designed to assess and manage hearing for children and young adults with complex needs. When discussing the challenges we consider those with:

- Visual Impairment/Multi Sensory Impairment (MSI)
- Physical Disabilities
- Autism
- Behaviours that challenge
- Barriers in communication
- Anxiety/Fear of examination

Challenges

- Initially we were given with some key requirements to establish a solid foundation to the project:
- Finding a team who will work creatively and collaboratively for a shared goal.
- To work with innovation whilst ensuring the booth remains fit for purpose and in keeping with regulations of an audiology test room.
- Working to a specific space within a school (considering fire regulations etc.)
- The bringing together of expertise from complex needs specialist services and audiology specific equipment.

Features of the Audiology Clinic Suite

We made decisions with the specific cohort of students at Seashell in mind; what their needs are to be able to access an audiology clinic space and service.

MSI

- Using textured surfaces to enable student to recognise and map their environment through touch.
- VRA rewards to suit variety of visual impairments

Physical Disabilities

- Ensuring the turning cycles are suitable for the most robust wheelchairs
- Having various seating options available to suit the needs of the individual
- Having VRA reward choice to suit physical limitations such as head turning

Additional measures to ensure safety

- Soft furnishings
- Removing toy towers, and replacing them with individual and removable VRA rewards.
- Ability to empty the room

Optimising engagement/Encouraging participation

- Colourwash and mood lighting
- Vibro-chair

Watch this space:

We are working towards contributing data nationally, to inform peer reviewing & assessment for complex cases.

We aim to showcase our solutions for 'difficult to test' scenarios.

We are evidencing our work in articles and presentations nationally and internationally.

“From the very outset Seashell’s Audiology & Transformation team engaged with IAC Acoustics to create a groundbreaking clinical testing environment for children and young adults with complex learning difficulties. Whilst all Paediatric audiology facilities are individually tailor-made to suit the client brief, the scheme for Seashell was exceptionally bespoke due to the complex needs of the students and requirement to address environmental and clinical testing challenges. Personally, from an IAC perspective, the final outcome is a result of what can only be described as “Collaborative Teamwork” by all parties involved, including Matt McCormack from Natus, Mike Anderton from TLC For Schools, and Seashell’s Principal Audiologist Verity Langlands and the Transformation Project Design Lead David Walker. It goes without saying that the facility for Seashell will not only be bespoke, but will be the first of its kind with functional capabilities and unique testing environment for children and young adults with complex needs”. Shaun Moore (IAC), Sales Director & Project Consultant.

Special Thanks.

To Shaun Moore, David Walker, Mike Anderton & Matt McCormack

Experience in Audiology with a patient informed choice pathway for MRI requests

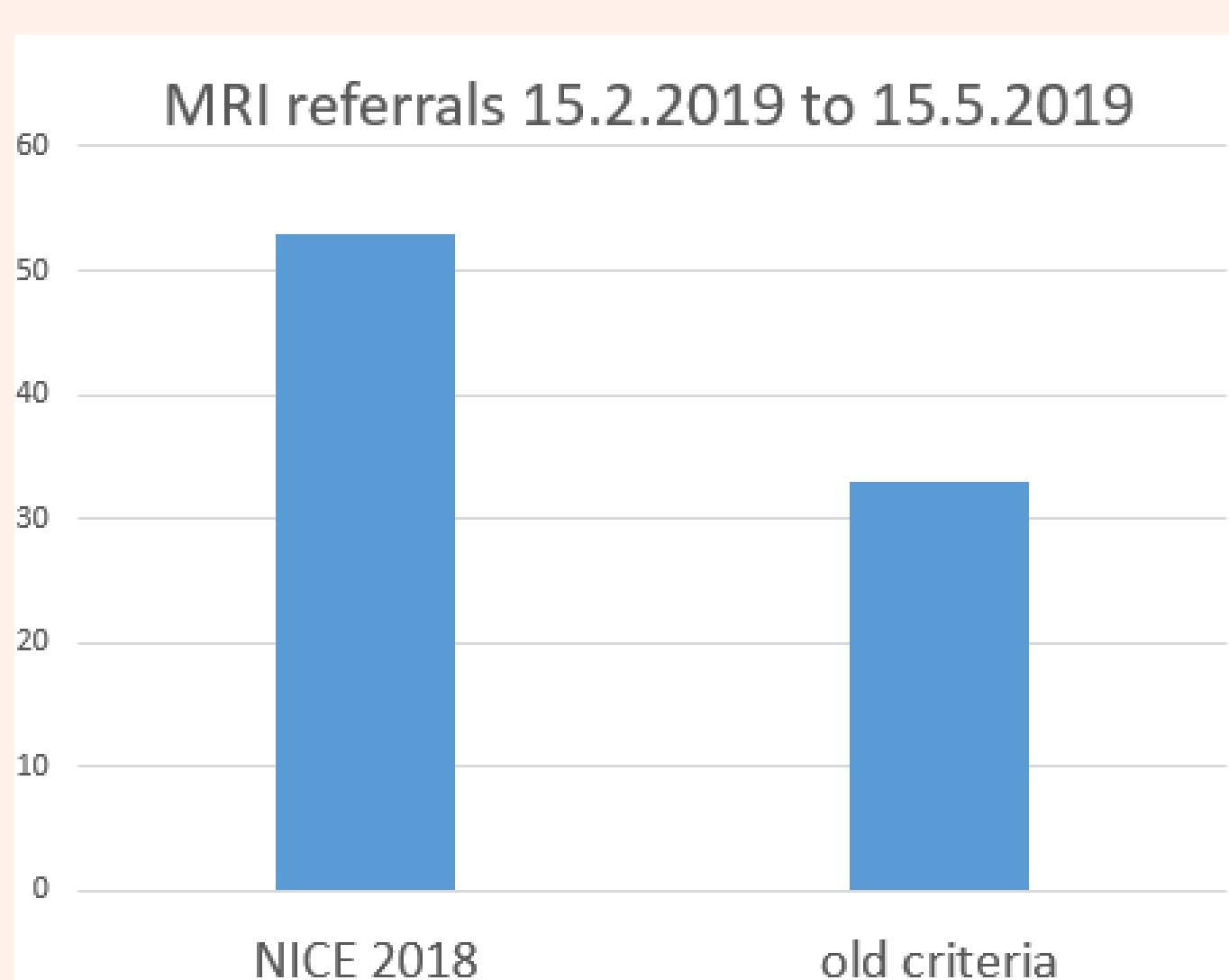
Phil Lindsey (Audiology), Kerri McArdle (Audiology), David Hamilton (ENT), Nick Dawe (ENT), Joanne Dixon (Radiology)

Background/summary

- The NICE 2019 guidance for managing hearing adult hearing loss tightened up criteria for MRI referrals and the consequent increase in referral rate was raised as a concern by Radiology. Audit indicated a striking 60% increase in Audiology referral numbers.
 - Discussions between Audiology and ENT came to a consensus that MRI requests were suitable for an informed choice pathway. The MRI scan is looking for a rare condition which even when found most often leads to conservative management. The scan can show up incidental findings, most commonly age related brain changes which the patient might not necessarily want to know about.
- (If it was your family member what would you want?)**
- Patient information to facilitate an informed choice pathway was developed jointly with input from Radiology and with patient feedback.
 - Radiology have been very supportive and the pathway aligns well with their national 'Get It Right First time' (GIRFT) initiative. ENT/Audiology requests make up the largest number for any directorate within this Trust. Using an informed choice pathway ensures that patients who proceed to a scan actually really understand and want it. This frees up finite scanning resources for other patients/conditions.

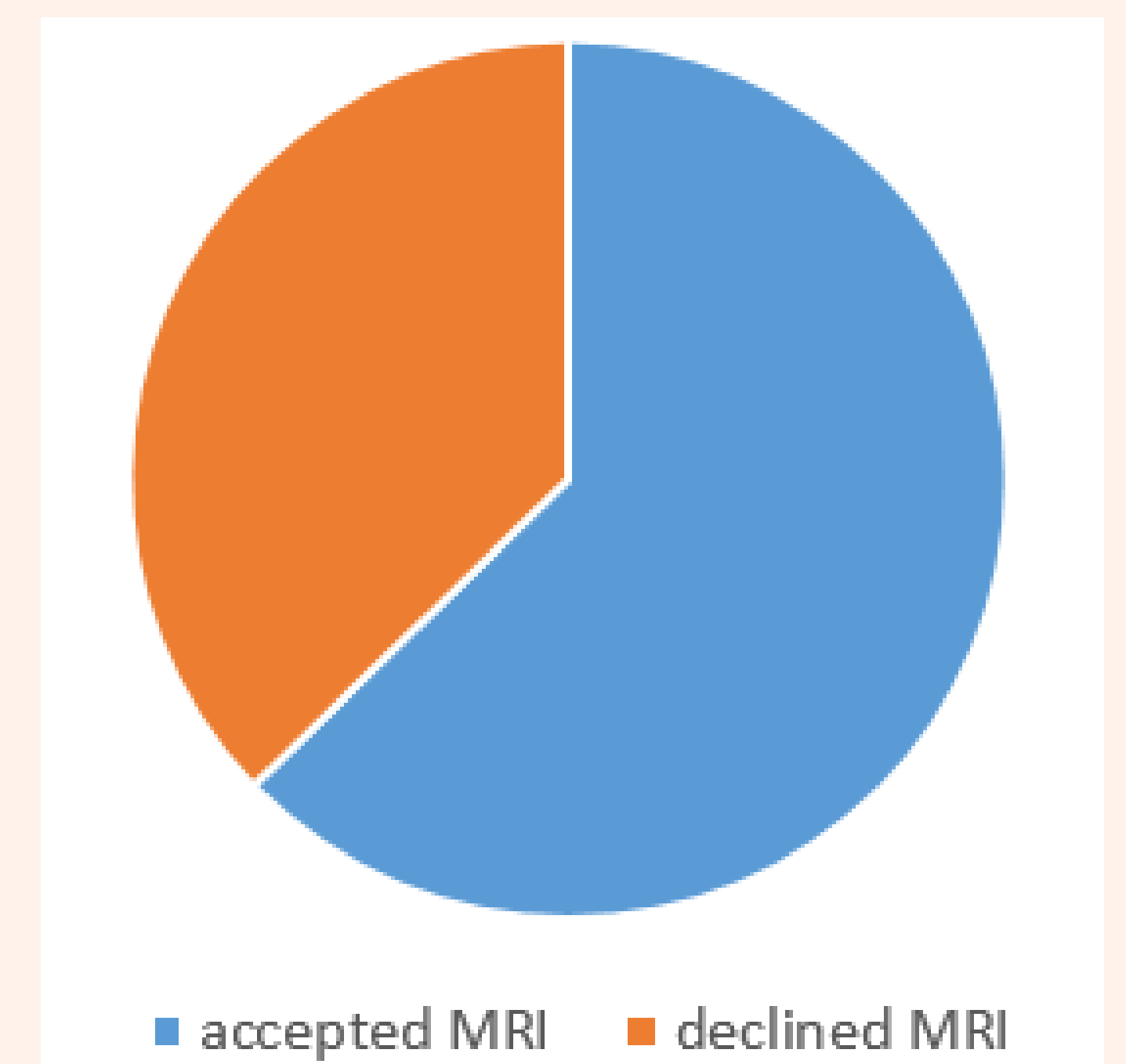
Historic Increasing MRI referrals

- The 2018 NICE guideline for managing adult hearing loss tightened up the criteria for cochlear asymmetry to ≥ 15 dB at any two adjacent test frequencies (0.5, 1, 2, 4 and in addition including 8kHz)
- Over 3 months all Audiology MRI referrals using the NICE criteria were reviewed against the previous more lax criteria (≥ 20 dBHL at two adjacent frequencies) There was a 60% increase!



Referral numbers for MRI following introduction of the patient informed choice pathway

- Over an 18 month period 523 patients with asymmetrical SNHL followed the pathway and 185 patients declined the scan (35%).
- Over a 12 month period 253 patients with unilateral non-pulsatile tinnitus followed the pathway and 86 patients declined the scan (34%).



Developing the patient information

- Initial draft based on other NHS informed choice information (managing skin melanoma)
- Discussion and feedback incorporated from ENT, Audiology and Radiology colleagues
- Feedback sought from patients by questionnaire

Patient feedback on first draft

- 'I think people are quite frightened of having an MRI and it might be worth pointing out that there is someone with them all the time'
- 'I do not understand the phrase *asymmetrical hearing loss*'
- 'Information provided seems clear and concise - this information would have led me to not have the scan'

The Newcastle upon Tyne Hospitals
NHS Foundation Trust

Department of Audiology, Ear, Nose and Throat

MRI or no MRI?

We have written this leaflet for people diagnosed with a difference in hearing in each ear, or with non-pulsatile tinnitus which is unilateral or is intrusive to a much greater degree on one side than the other. This is to understand the options for investigation. If you have any questions please ask your audiologist or doctor

What are the options?

This difference, or asymmetry, of inner ear hearing is occasionally caused by a benign, non-cancerous swelling of the balance nerves called an acoustic neuroma (also called a vestibular schwannoma). This can be confirmed by a Magnetic Resonance Imaging (MRI) scan of the hearing nerves. An alternative scan may be needed if you have any metallic implants. Choosing to have an MRI or not to have an MRI will not affect your wait time for other treatments in the department, e.g. getting hearing aids fitted or balance rehabilitation.

What do the National Institute for Clinical Excellence (NICE) guidelines recommend?

These government guidelines ask us to consider an MRI of the inner ear, including the hearing and balance nerves, when an adult is found to have a significant difference of inner ear hearing ability between ears, even if they are experiencing no other symptoms.

You can choose whether or not to have an MRI.

There are pros and cons to having the MRI. This decision aid will help you and your audiologist, or Ear, Nose and Throat (ENT) doctor, discuss whether it is the best option for you.

This decision aid was jointly created by ENT, audiology, radiology and patient representatives.

How do the benefits and drawbacks of having an MRI, and not having an MRI, compare?

The following table summarises things most people are likely to think about when choosing to have an MRI or not. There may be other things that are important to you. Talk to your audiologist or ENT doctor about all of these things.

Audiologist Script:

- The hearing test results show a difference between your two ears which meets the criteria for referral for an MRI scan to investigate what may be causing the difference in hearing
- There are advantages as well as disadvantages to having an MRI scan investigation. We therefore are not automatically arranging a scan but instead are asking you to consider whether you really want it
- We are giving you some written information about the pros and cons of having a scan to take home and consider, and you might want to discuss this with other family members.

Patient feedback on the pathway

- 9/9 stated they preferred the informed choice pathway compared to the clinician deciding on their behalf
- 8/9 stated that the written information was clear
- 4/9 stated that they liked to have both the written information and verbal advice. 4/9 preferred written information only and 1/9 preferred verbal information.

HAs in the CI department - The smart alliance?



Authors: Ms. Amanda Speers, Mrs. Nicola Willmott & Ms. Stephanie Corkill
Auditory Implant Centre, Belfast Health and Social Care Trust

Background

The change in the NICE guidelines¹ has led to more cochlear implant (CI) recipients using a hearing aid (HA) in their contralateral ear. Along with a more natural hearing experience, the evidence suggests additional benefits of a bimodal solution being improved speech understanding in quiet and noise².

In 2021 Cochlear and GN Hearing began their collaboration to create a system where both the CI and HA work together to optimise both connectivity and wireless streaming³.

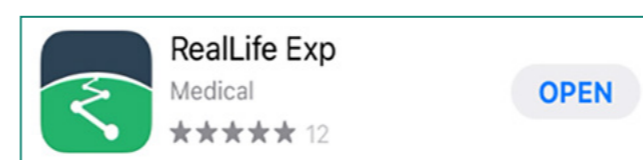
Many Auditory Implant Centres do not routinely manage the HA in the contralateral ear, resulting in the patient attending two different centres for their Audiological care.

Method

Recipients of the Cochlear Nucleus® 7 sound processor with usable contralateral hearing were offered the opportunity to exchange their current HA for a danalogic Ambio Smart HA.

After training audiologists followed the bimodal fitting flow for Cochlear sound processors and danalogic Ambio Smart HAs. Devices were linked and then Bluetooth paired to the patient's mobile device for streaming.

Over a 10 day period patients completed a short survey on their phone using the 'RealLife Exp' app. Each day they responded to the same 8 questions providing us with an ecological momentary assessment of their experiences each day.



Audiologists recorded their clinical experiences after each fitting and consolidated their findings at the end of the trial.

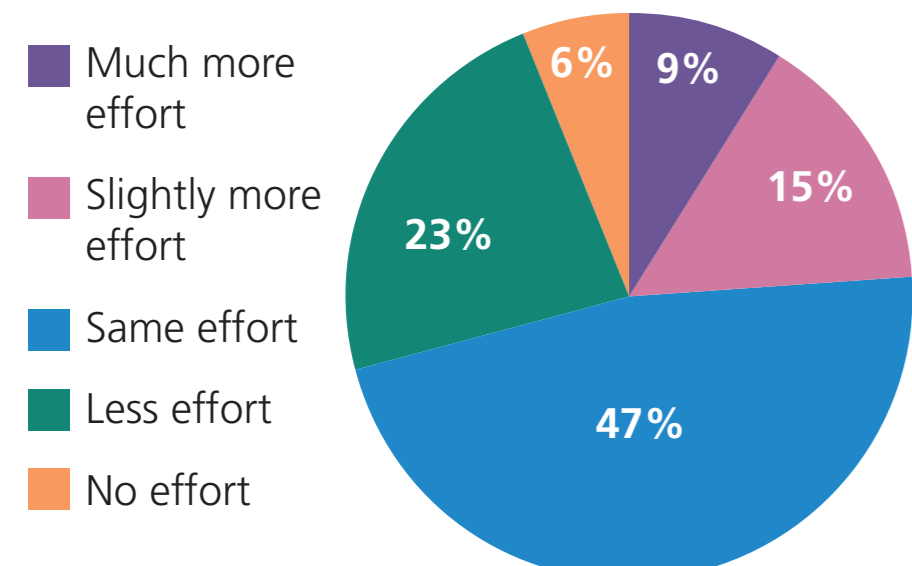
Aim

- To fit patients bimodally in an Auditory Implant Centre with the Cochlear and GN Hearing collaboration system.
- To obtain initial feedback on the clinicians' experience of fitting a HA in an Auditory Implant Centre.
- To evaluate the patient's everyday reflections with a new bimodal solution compared to that of their previous solution, and assess their experience of Bluetooth streaming.

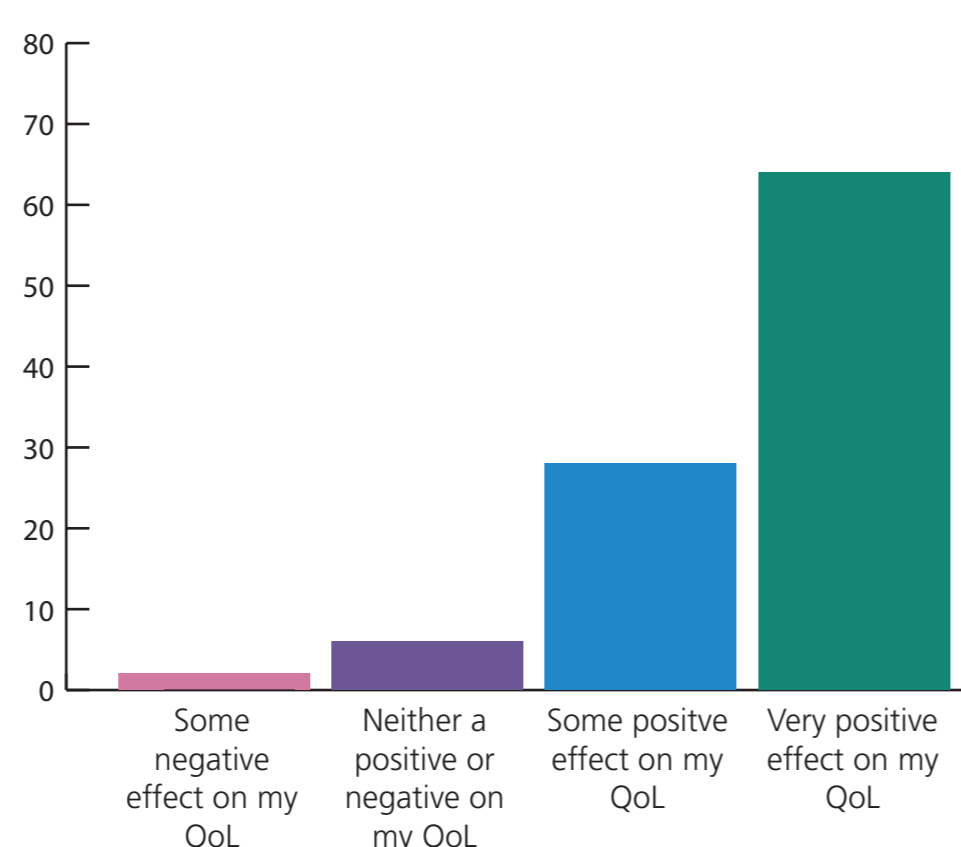
Results

N=10. Average age 47 years (range 18-70 years) Average time with this bimodal solution = 4.4 months. The survey returned an 89% response rate with patients completing 91 surveys in total.

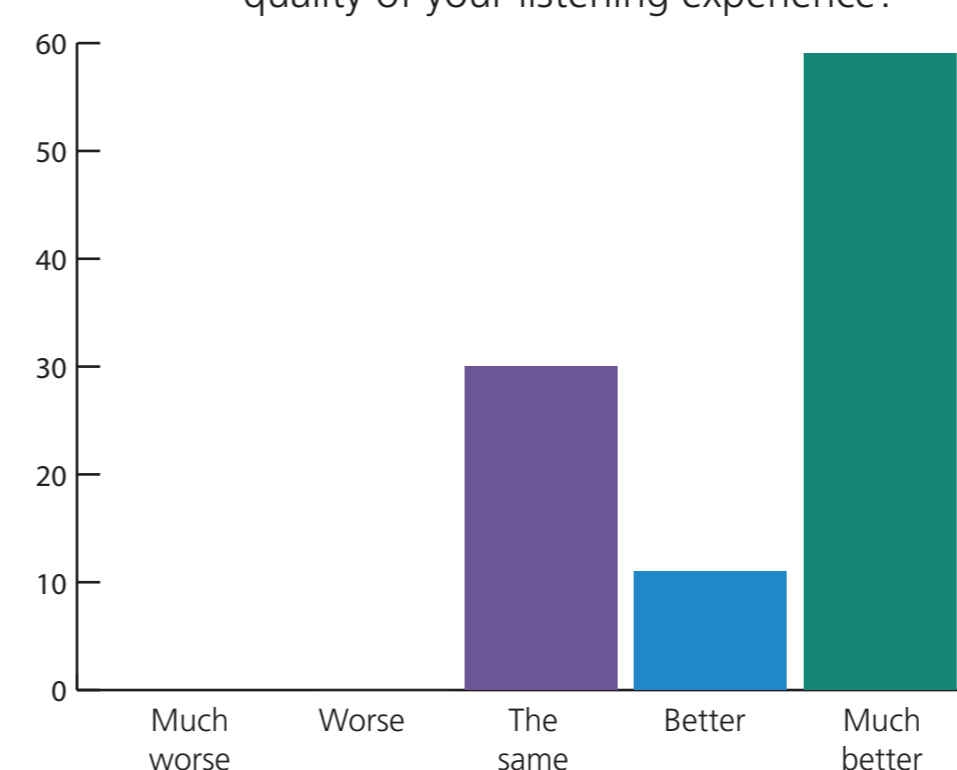
On average, how much effort did you put in to listen effectively today with your new bimodal system, compared to your previous bimodal system?



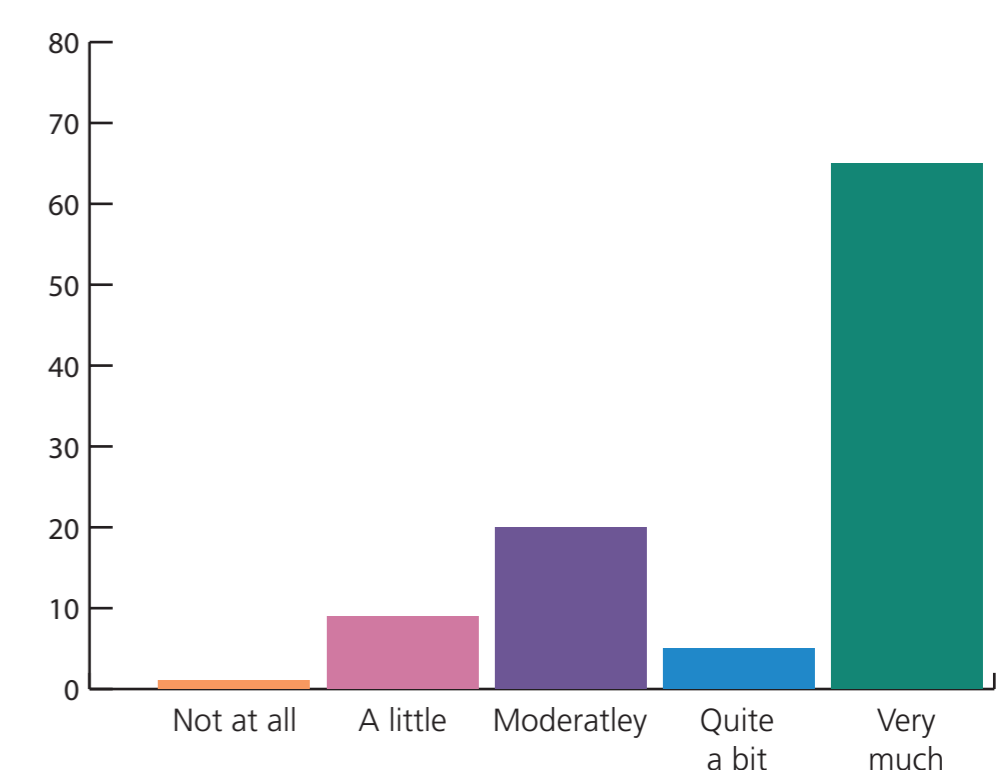
How does your bimodal hearing system impact your quality of life?



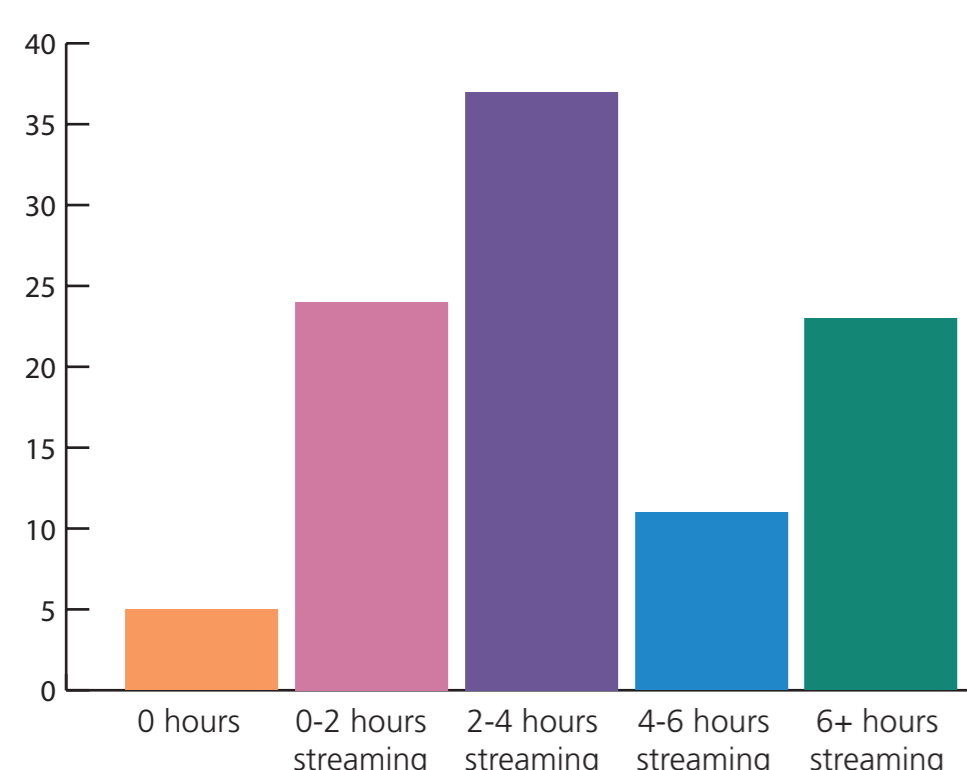
In comparison to using your cochlear implant with your old hearing aid and your new bimodal system, how is the quality of your listening experience?



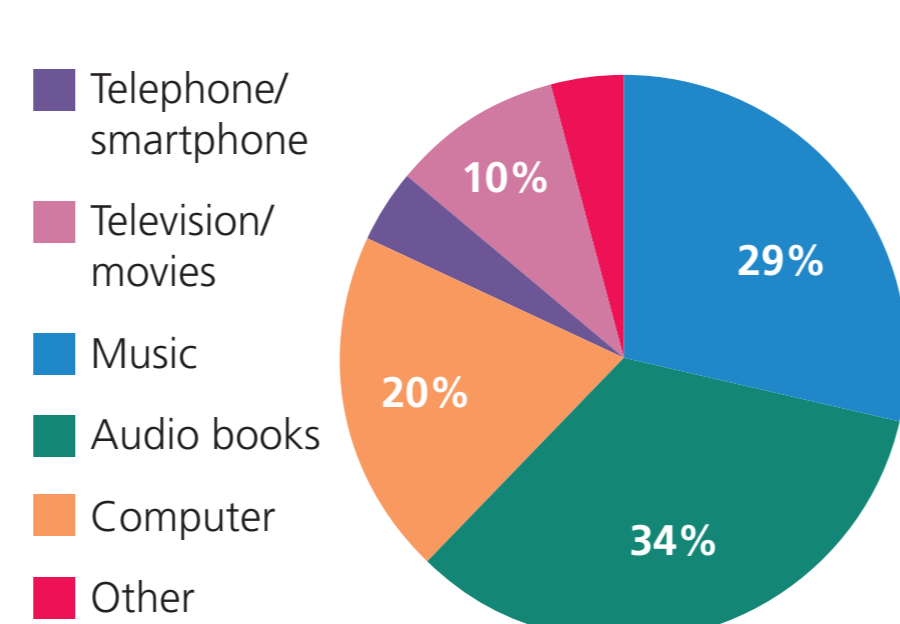
How satisfied are you with your new bimodal hearing solution?



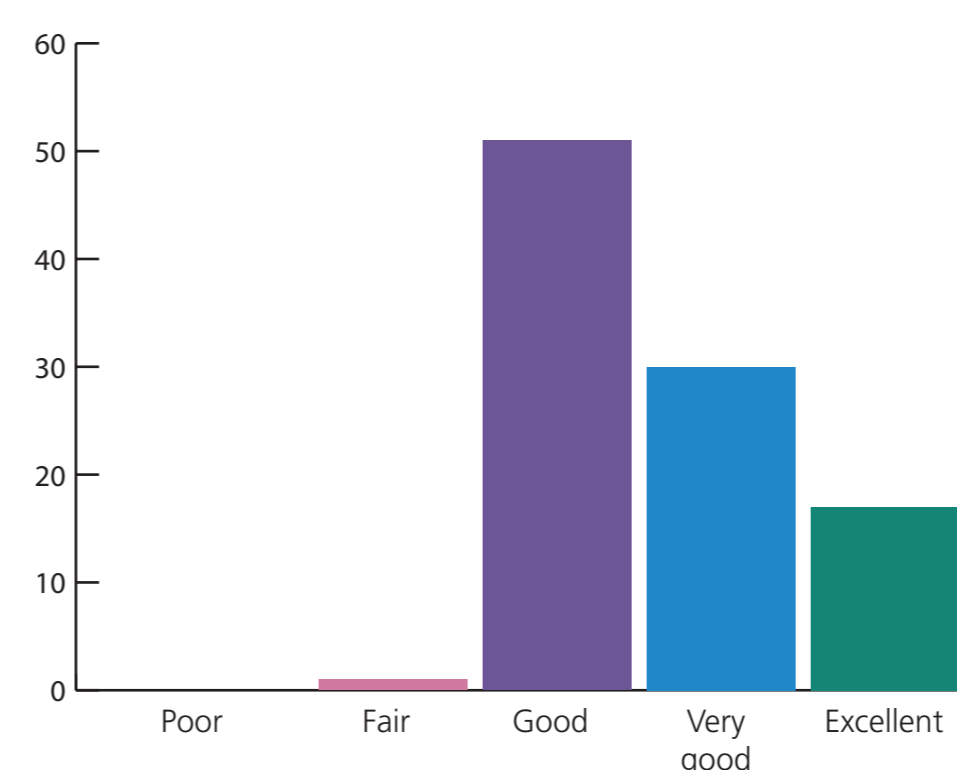
How many hours today have you streamed technology to your bimodal system?



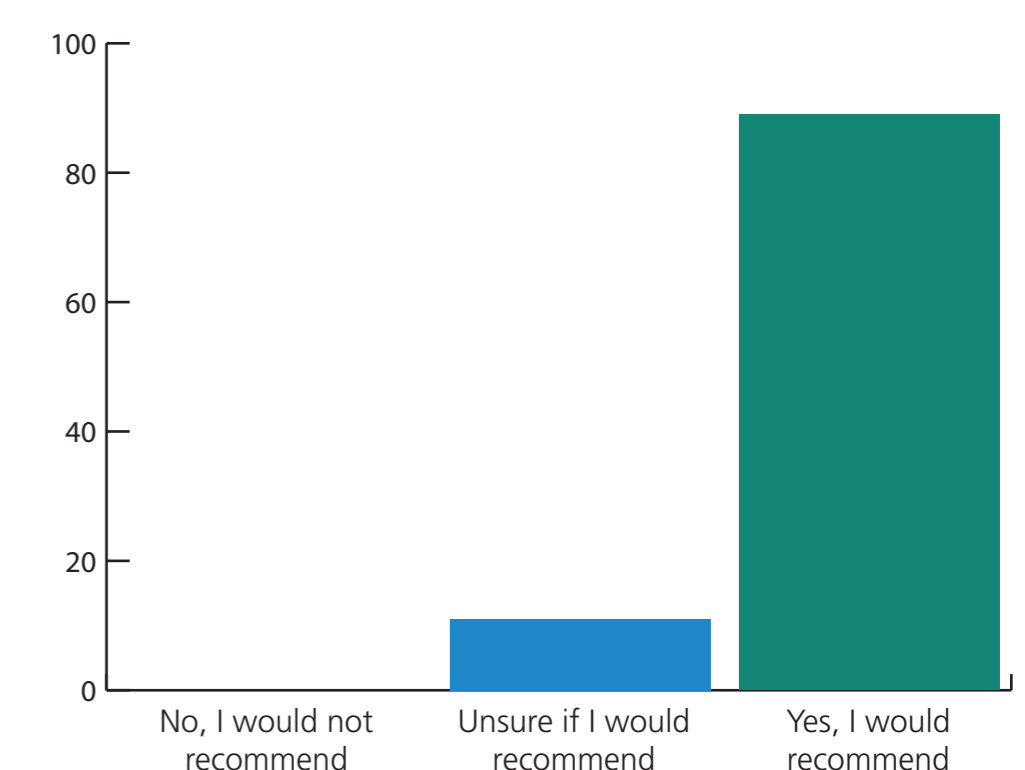
What technology are you streaming today?



How is the sound quality of what you are streaming?



Would you recommend your new bimodal system to a friend or relative?



Clinician's experiences:

"Once we had received training, fitting the hearing aids and pairing them to the CI was very straightforward."

"The software was nice to use and gives you the option of either keeping things simple or exploring the more advanced features. Linking the HA with the CI and then pairing with the patients phone was seamless."

"The bimodal fitting flows created by Cochlear and GN hearing ensure you can follow a step-by-step fitting guide that gives you confidence to ensure the best outcomes."

Conclusion

10 participants were fitted bimodally by the Cochlear Implant Team. With training and use of the bimodal fitting flow, staff felt confident in carrying out the fittings in the clinic.

- 47% used the same amount of effort to listen with their new bimodal system whilst 1/4 found it more effortful and the remaining 1/4 less effortful.
- 2/3 of participants reported their bimodal system to have a very positive impact on their QoL.
- 70% reported better or much better quality of listening experience.
- 3/4 of participants were very much satisfied with their bimodal system.
- 95% of participants streamed daily.
- The majority of participants streamed phone calls, television, movies and music.
- All study participants reported the sound quality of their streaming to be good, very good or excellent.
- 89% would recommend their new bimodal system to friends and family.

Recommendations

CI departments should consider fitting patients bimodally to provide the optimal hearing experience for their patients.

If the hearing aids could be included in a bundle with the CI it would be much easier for Departments to order.

Participant follow ups were done via text message/email. Offering a face to face review may improve patient outcomes further.

Acknowledgements

We would to thank the following people for their help in this study, Megan Quilter, GN Hearing A/S, Kate Pick, GN Hearing UK LTD, and Anne Small, Cochlear Europe Ltd.

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- Smart bimodal hearing solution (cochlear.com)

Prudent healthcare in practice: integration of audiology services into primary care

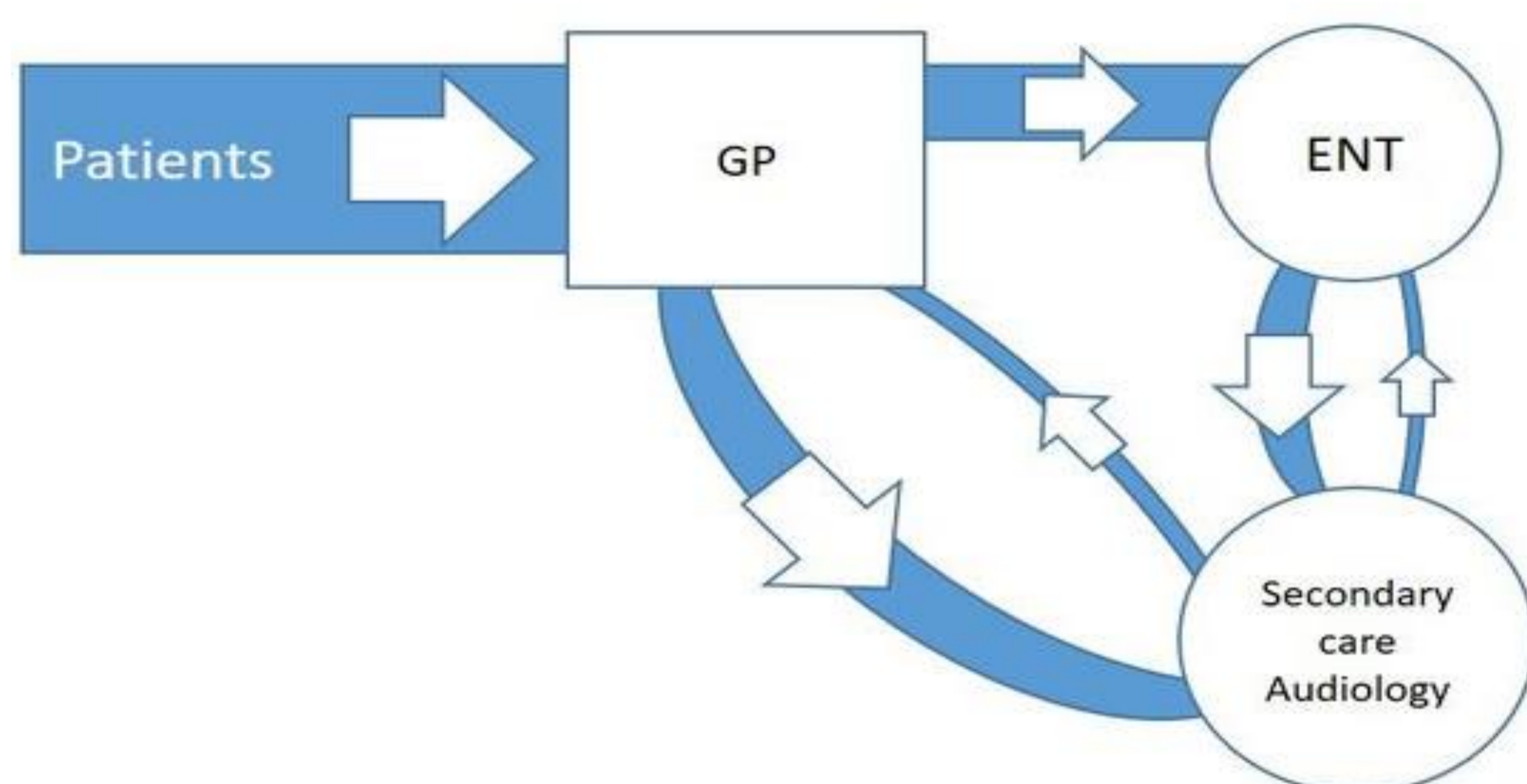
Jack Allum (jack.allum@wales.nhs.uk), Tim Loescher, & Nicola Phillips
Swansea Bay University Health Board

Introduction

The way National Health Service (NHS) Wales services are provided is changing ^{1, 2}. Primary care (PC) services are in the process of being transformed to integrate services historically considered secondary care into community settings through the formation of multidisciplinary team (MDT) PC clusters.³ Trials to provide audiology services in PC settings have taken place throughout Wales.⁴ This poster outlines the approach taken by Swansea Bay University Health Board to implement PC audiology services.

The Swansea Bay PC audiology model replaces the general practitioner (GP) with an advanced audiology practitioner (AAP) as the first point of contact for patients with concerns about hearing, tinnitus or wax (figure 1). With routine wax removal being the most common request, these patients are triaged to an associate audiologist who works in parallel with an AAP. This parallel working model allows audiology to deliver a first contact hearing and tinnitus service alongside an efficient and modern integrated wax removal pathway (Figure 1).

A) Traditional ear / hearing pathway



B) Swansea Bay Primary Care audiology pathway

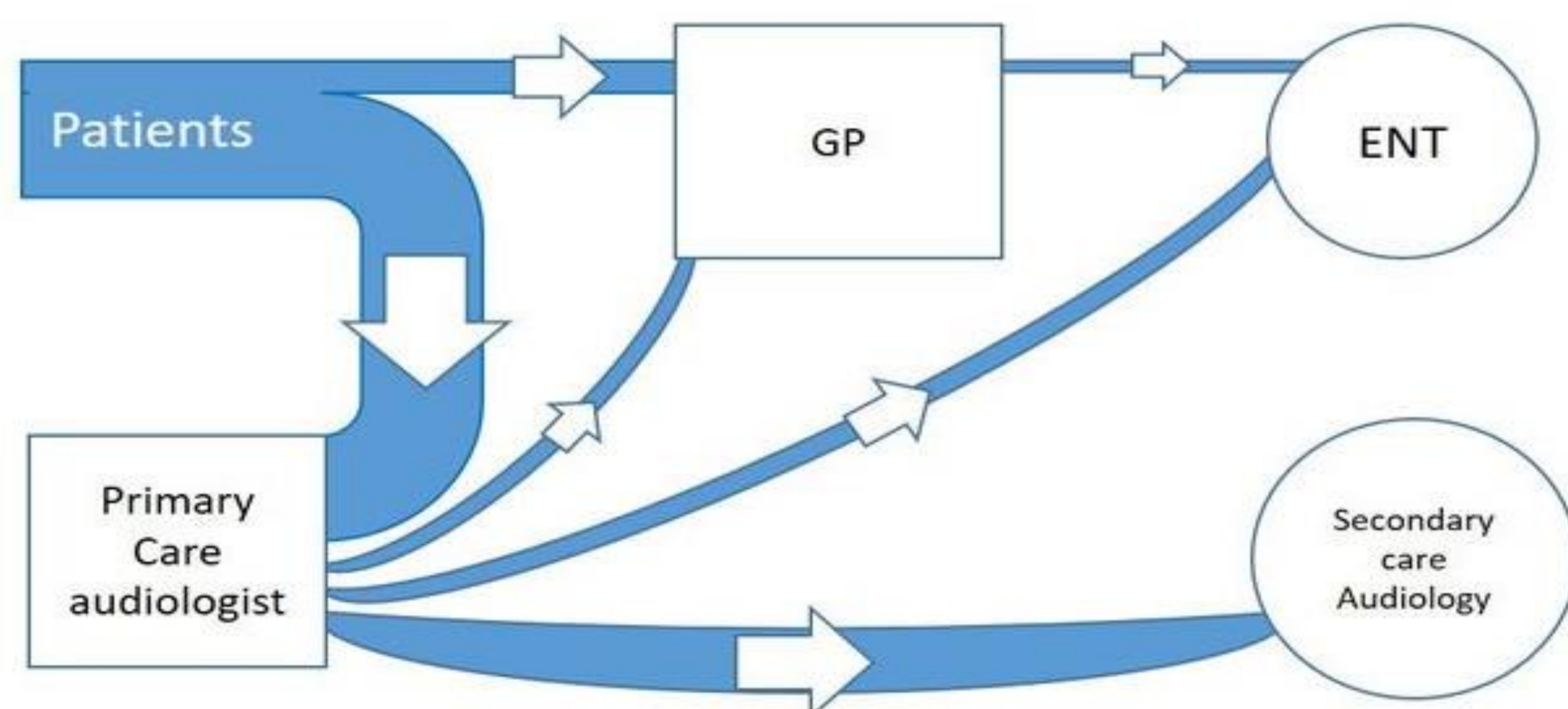


Figure 1. Comparison of the former Swansea Bay University Health Board adult hearing loss pathway with the primary care audiology pathway.

Clinical outcomes of care

Analysis of patient outcomes in 2021 revealed;

- 87% of cases seen through the Swansea Bay PC audiology pathway were managed by the audiology department
- 5% of patients required a consultation with the GP
- 3% generated an ENT referral.

These statistics remained consistent over time with little variation compared with pre-pandemic patient outcomes (Figure 2).

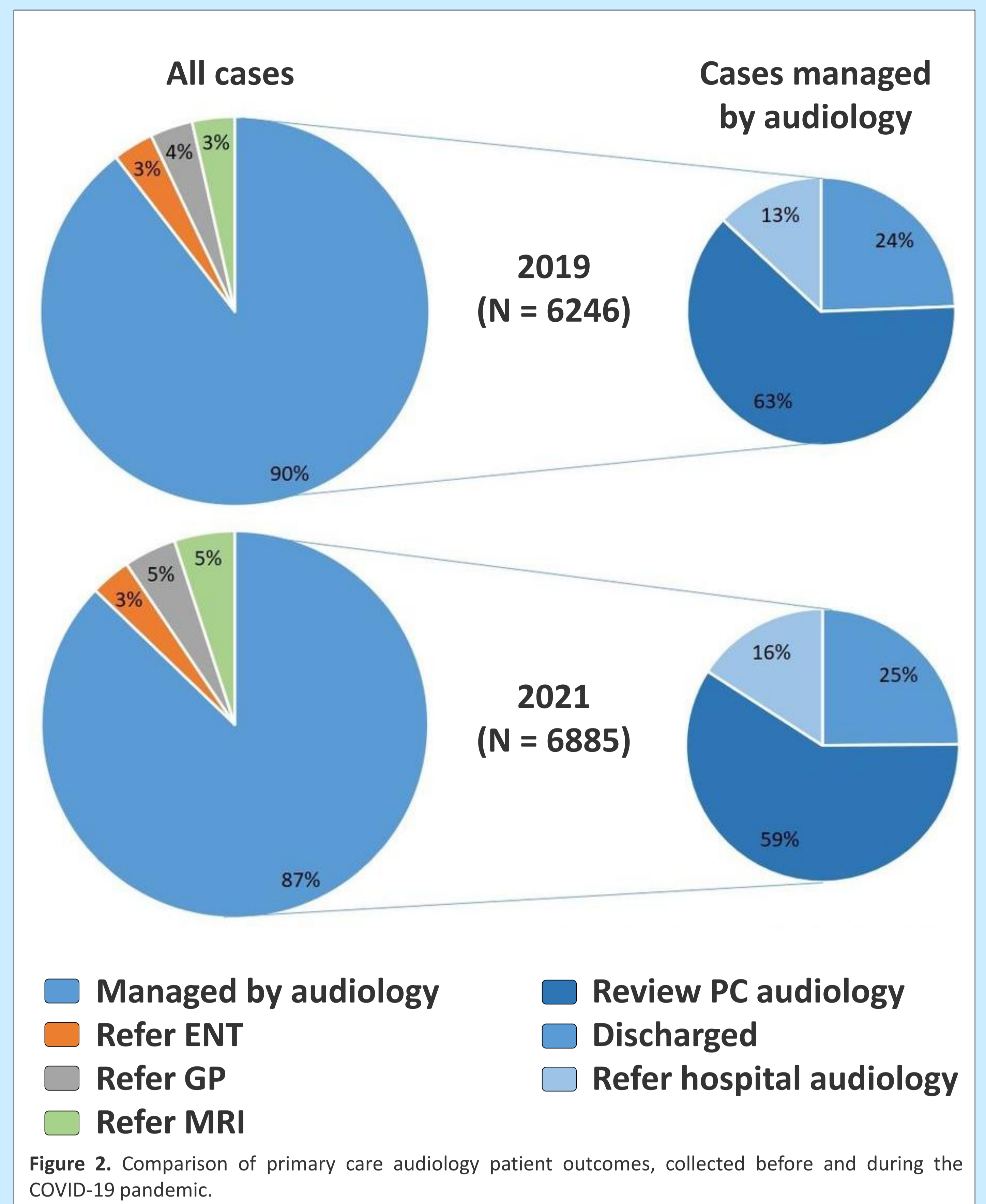


Figure 2. Comparison of primary care audiology patient outcomes, collected before and during the COVID-19 pandemic.

Future developments

PC audiology services have scope to increase the services that can be offered and further reduce demand on GPs and ENT departments as the role of the healthcare scientist develops and expands. For example;

- Benign paroxysmal positional vertigo diagnosis and treatment
- Prescribing topical antibiotics for ear infections
- Complex wax removal

Limitations

There are currently no validated Patient-reported outcome measures (PROMs) for PC audiology services. Having a validated PROM for PC audiology services would enable patients to participate in the evaluation of this service in line with value-based healthcare principles.⁵

Discussion

The Swansea Bay PC audiology pathway has been shown to improve patient accessibility to audiology services whilst simultaneously reducing demand on GPs, practice nurses and ENT consultants. This increases GP and ENT consultant availability enabling them to see patients with more complex health conditions. With continued development of the AAP role, the percentage of patients requiring GP or ENT referral will likely decrease further.

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Option to reduce ABR referral rates from NHSP

Esther Tomkins (Advanced Paediatric Audiologist)

Introduction

NHSP

- Completed within first 4-5 weeks after birth¹
- All babies with no clear response must be referred for diagnostics by 44 weeks gestation or within 4 weeks of screen completion²
- "ideally the screen should be completed before discharge from hospital", both AOAEs and AABRs²
- Where this is not achievable an outpatients appointment (OPA) is arranged²

UHCW Background

- Change in equipment in 2015, referral rates for diagnostic ABR from NHSP significantly increased to an unsustainable level (suspected this was due to increased sensitivity to ward noise)
- A change in protocol was agreed where if AOAEII and/or AABR were required this would be as an OPA
- It is acknowledged it is preferable to complete the screen fully whilst an inpatient², due to the local 6 hour discharge target, this is difficult to achieve where AOAE II or AABRs are required (based on minimum of 5 hours between AOAE I and II).

Aim

- To investigate retrospectively whether the change in pathway was a success in reducing demand for neonatal diagnostic ABR tests (following the introduction of the new screening equipment).

Methods

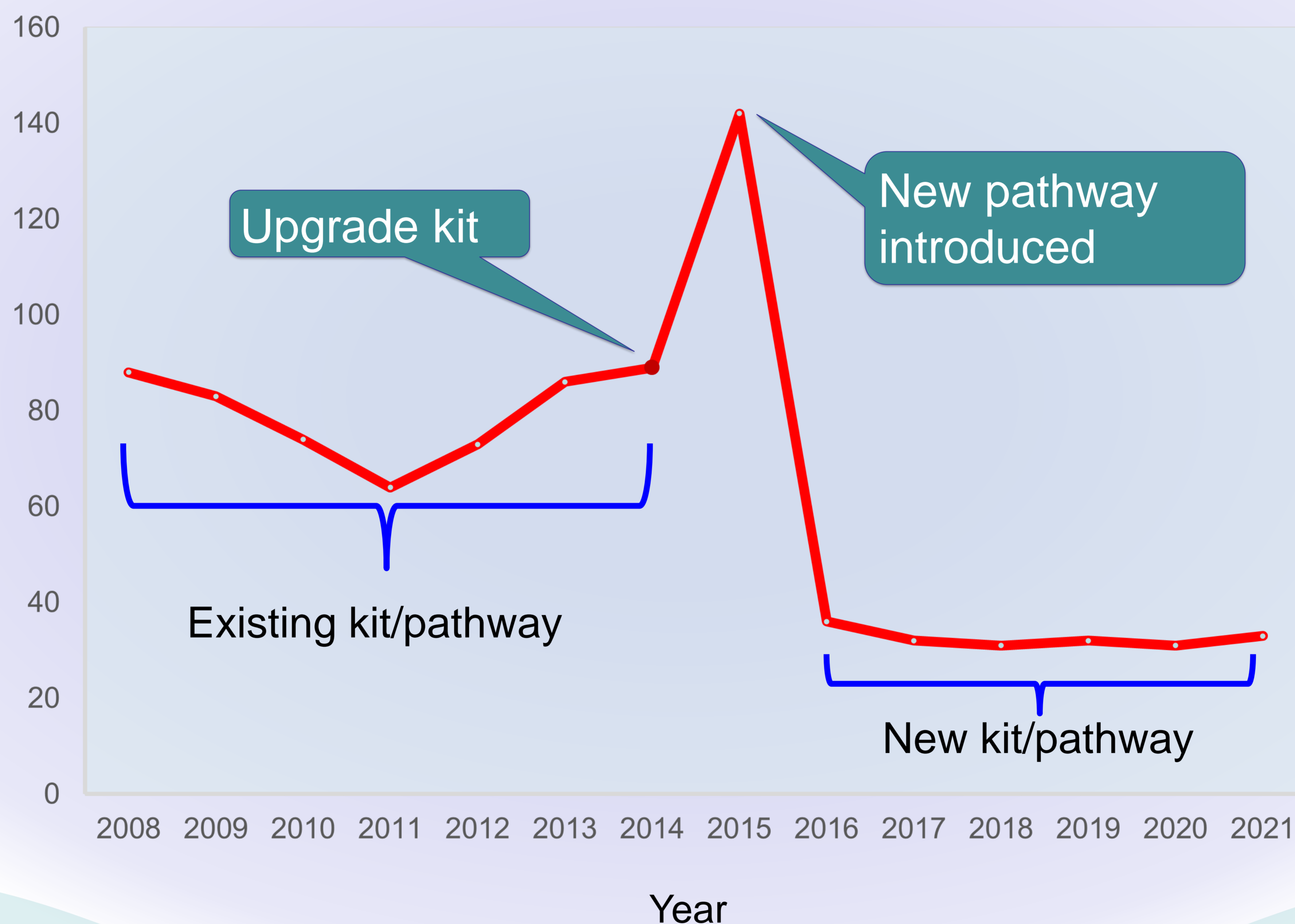
Retrospective data analysis of diagnostic audiology neonatal referral rates

Compare referral rates for same quarter each year (Aug – Oct) 2008 - 2021

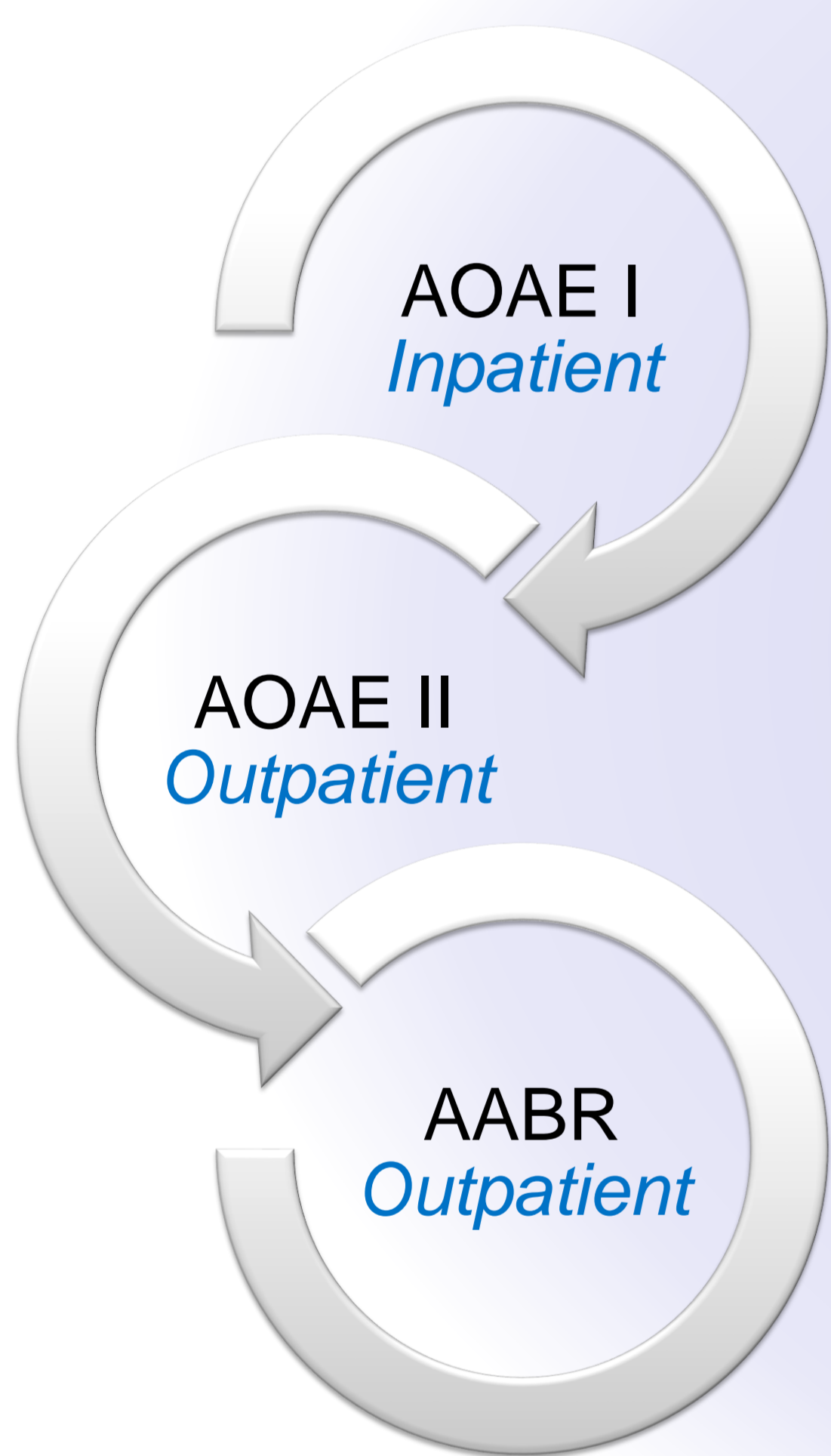
2008-2014 → Existing equipment and pathway
2015 → Changed to new screening equipment
2016-2021 → New pathway implemented

Results

Referral rate from NHSP for a 3 month period per year



New Pathway



Results

When AOAEII & AABR completed at OPA...

Referral Rates

- Reduced significantly with the change in pathway
- Lower than before the change and more stable

Demand

- Reduced for Neonatal Diagnostic ABR tests after the change

Resources

- Efficient and effective use of staff and pathway resources

Discussion

New kit more sensitive to ward noise, resulting in sudden and unsustainable increase in ABR demand

When the local pathway was amended, the referral rate significantly decreased

Change in pathway did not impact the coverage rate of NHSP and still met the KPI targets

Potentially reduced parental anxiety associated with onward referral for diagnostic test

Does this reduction warrant further investigation to NHSP recommended protocols?

Need to investigate OPA DNA rate to check this does not impact on TFU referrals for OPA screening non-attendance

Conclusion

New pathway maintains NHSP coverage with a steady referral rate for Neonatal Diagnostic ABRs; resulting in effective and efficient use of resources whilst reducing parental anxiety.

Organising Departmental Service Improvement using the Project Management Tool Trello

Bridget Akande

St Thomas' Hearing Implant Centre, London

Email: gst-tr.hearingimplants@nhs.net

Introduction

Given the tight scheduling requirements of NHS Audiology departments, lean project management strategies offer a way to deliver service development goals without impacting clinic delivery.

St Thomas' Hearing Implant Centre has been trialling a resource called Trello since October 2021 to improve the efficiency of introducing service development ideas.

Trello has supported our existing service improvement meetings by allowing us to visualise task completion, track project progress easily and increase staff engagement in service development.

Method

A member of the trust's transformation team provided information and training on Trello and facilitated the first few sessions. Our process now schedules fortnightly 20 minute virtual huddles within the adult implant team.

Within huddles:

- Team members suggest service Improvement ideas, which are recorded as tickets.
- Tickets are graded and allocated into categories depending on their complexity. These categories are: new ideas, quick wins, plan-do-study-act, escalations/risks and sustaining the work.
- At the end of each huddle there is an opportunity to record any celebrations since the last meeting.

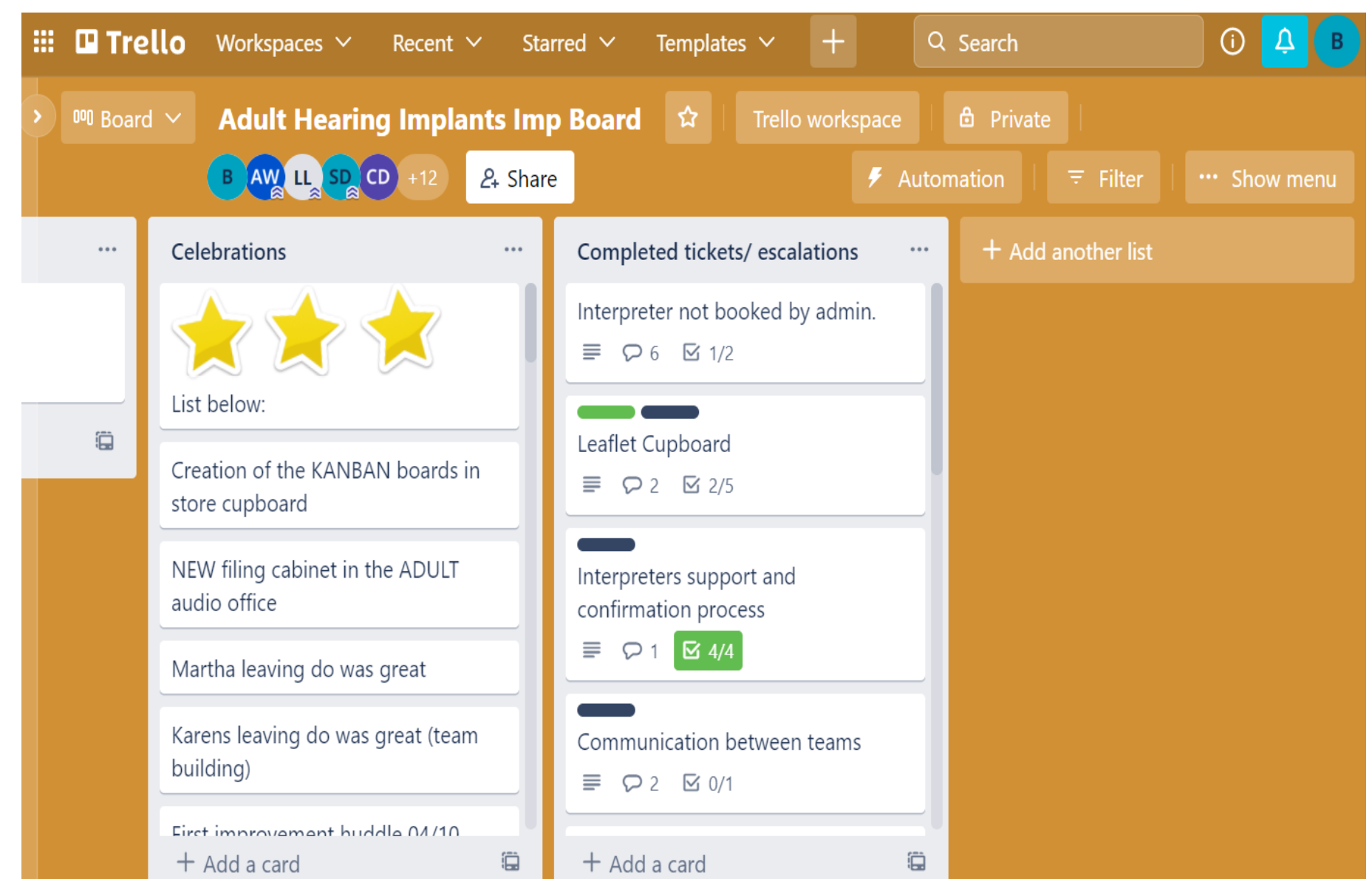
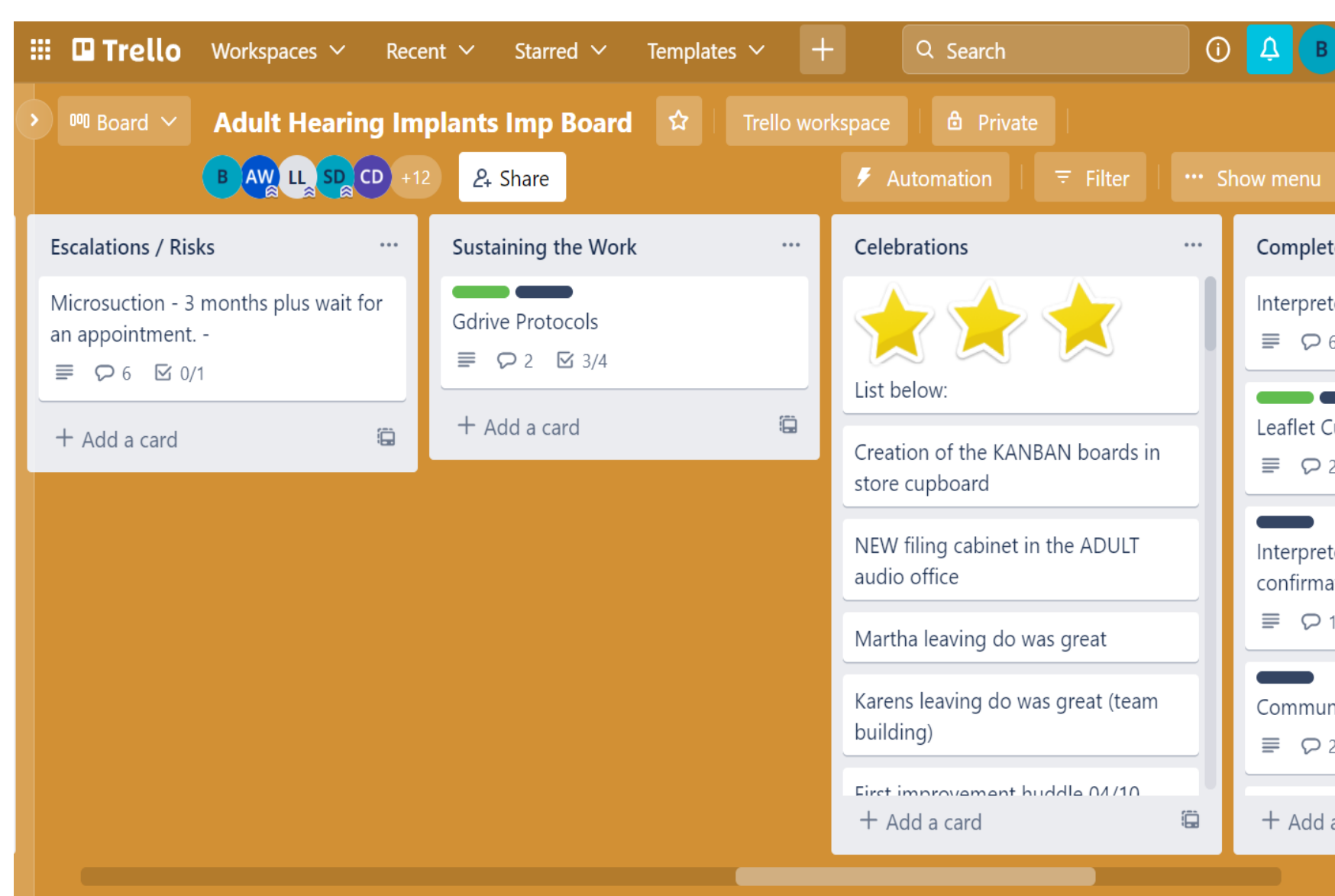
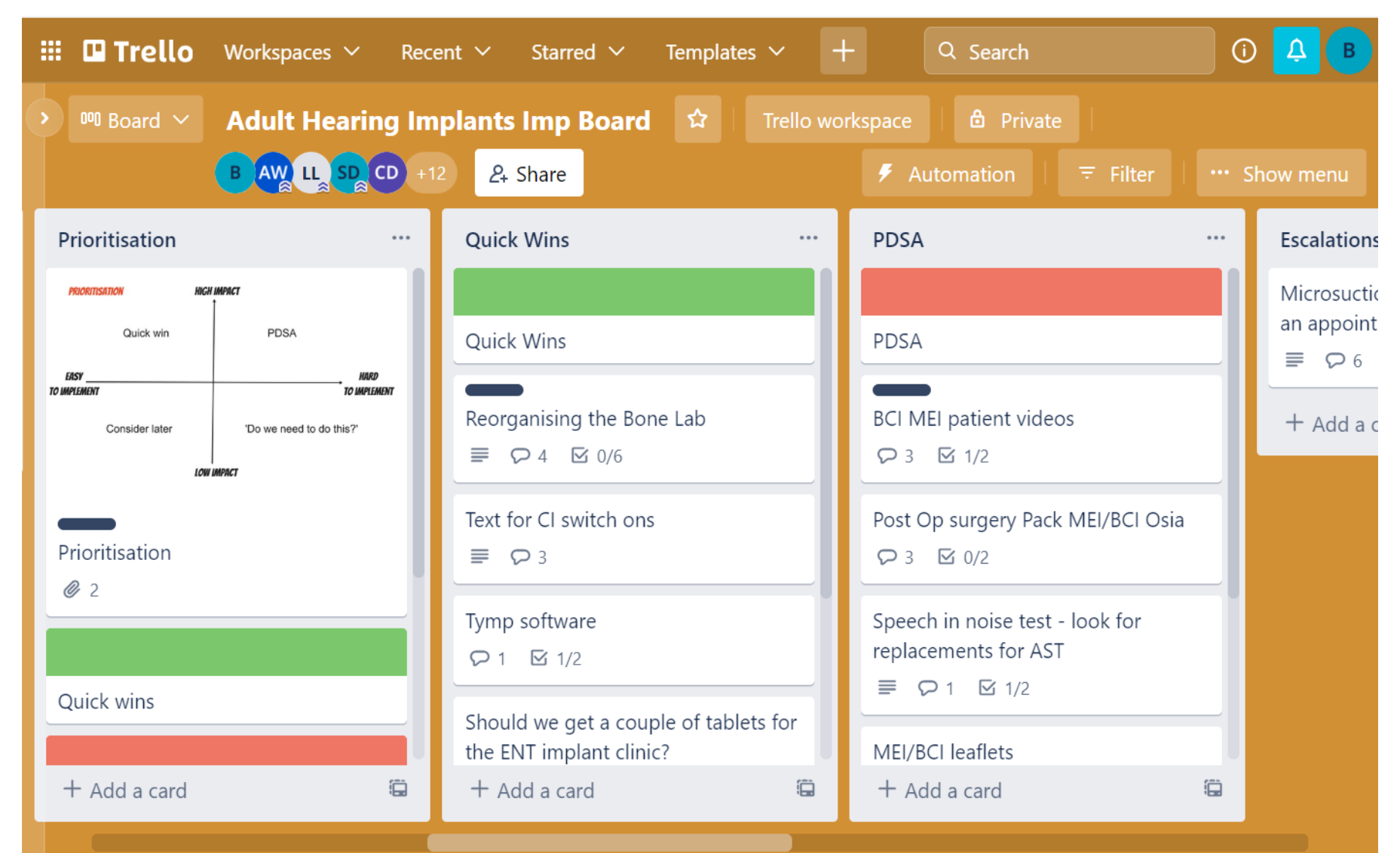
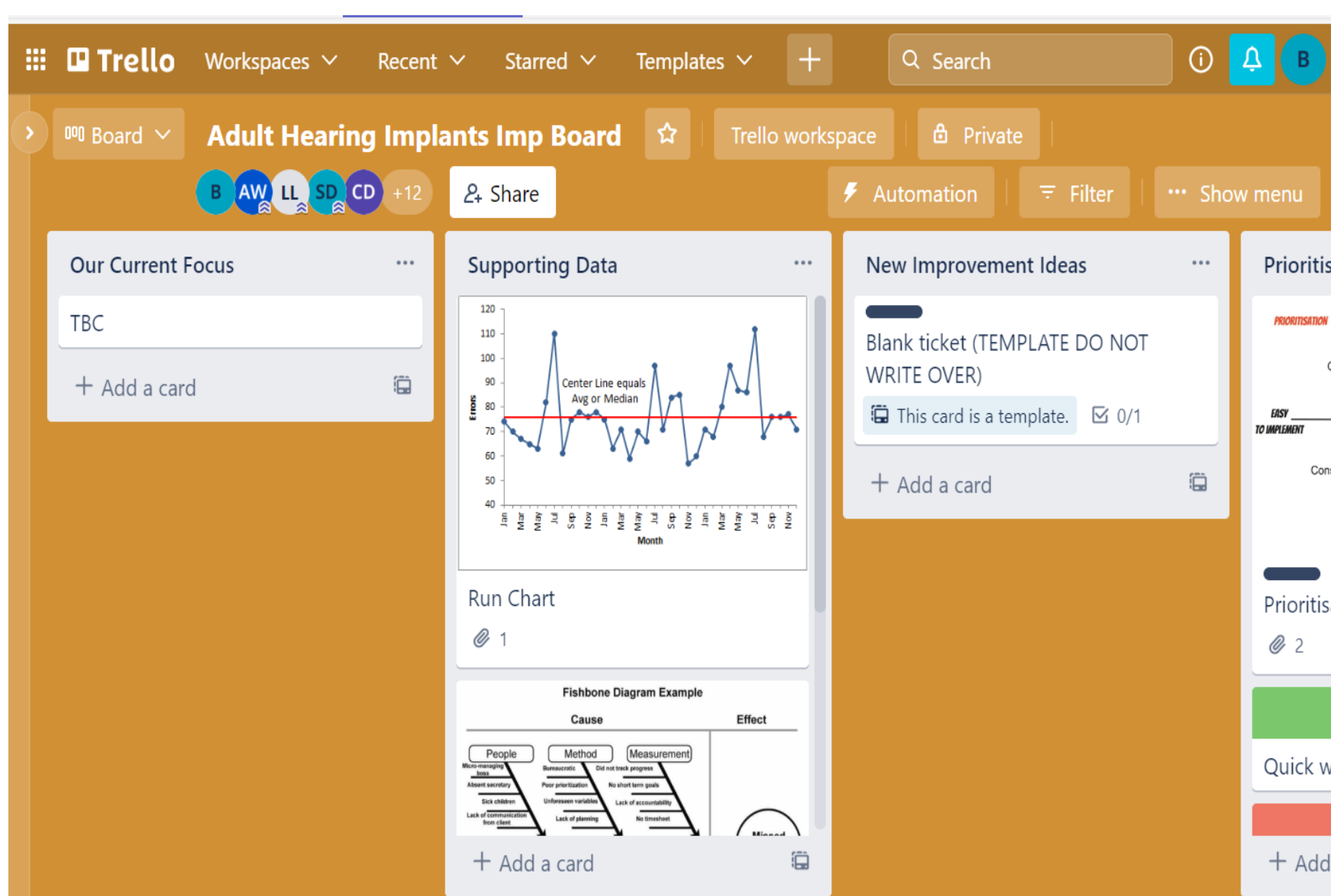


Figure 1: Trello board screenshots

Results

By using Trello for the past 8 months, we've been able to complete the following percentage of actions in each category; sustaining the work: 75%, escalaton/risks: 33%, PDSA: 40% and quick wins: 18.75%. Overall, 17 tasks were completed.

Conclusion

Our Team has found Trello particularly useful for small improvement ideas 'quick wins' which would not otherwise be discussed or implemented.

Identified positives include:

- Short time per meeting
- Clear visualisation of progress
- Improved staff engagement and morale

Areas for improvement include the integration of use with our existing service improvement meetings for longer or more complex projects

- References**
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