

Background and Aims

Early intervention of audiological services is suggested to benefit patient outcomes via mitigation of risk associated with untreated audiological conditions such as BPPV and dementia (Gans, 2011; Liao, Chang, Chen, & Kao, 2015; Livingston & Costafreda, 2023; Oghalai et al., 2000). The importance of audiological assessment and treatment delivered in a Primary Care (PC) setting has been identified in recent Welsh Health Circulars (2020; 2018). The documents highlight the importance of delivering PC audiology in line with nationally agreed service specifications. Potential benefits of a PC audiology service include:

- Alleviate GP and Practice Nurse time
- Improve timely patient access to audiological care
- Full utilisation of specialist audiologists
- Reduction in inappropriate audiology and ENT referrals
- Reduce referrals for Secondary Care audiology services
- Improved audiology-GP communication

Between March 2022 and March 2023, Cardiff & Vale UHB Audiology delivered a pilot audiology service operating out of the Cardiff West GP cluster consisting of 6 GP practices. Outcomes regarding these appointments were audited for the present poster. The audit aims were to evaluate the benefits of a PC audiology service based on completed actions and patient outcomes and to compare PC 'Did Not Attend' (DNA) rates to Secondary Care (SC). Descriptive statistics regarding presenting complaints, completed actions, and appointment outcomes were produced, and a chi-square test of contingencies was used to compare likelihood of DNA in PC versus SC.

Results

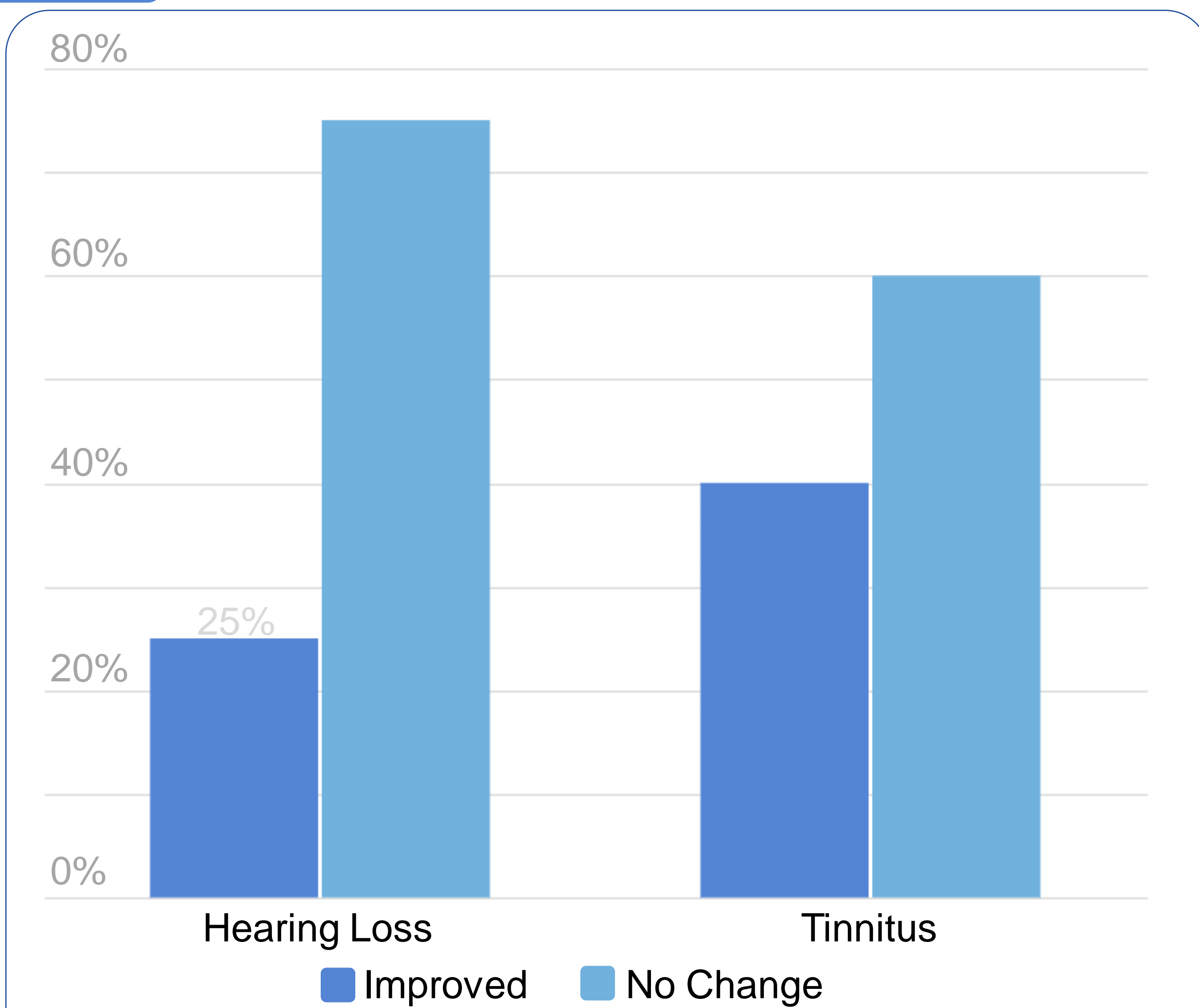


Figure 1. Percentage of patients presenting with hearing loss or tinnitus whose symptoms resolved after successful dewax.

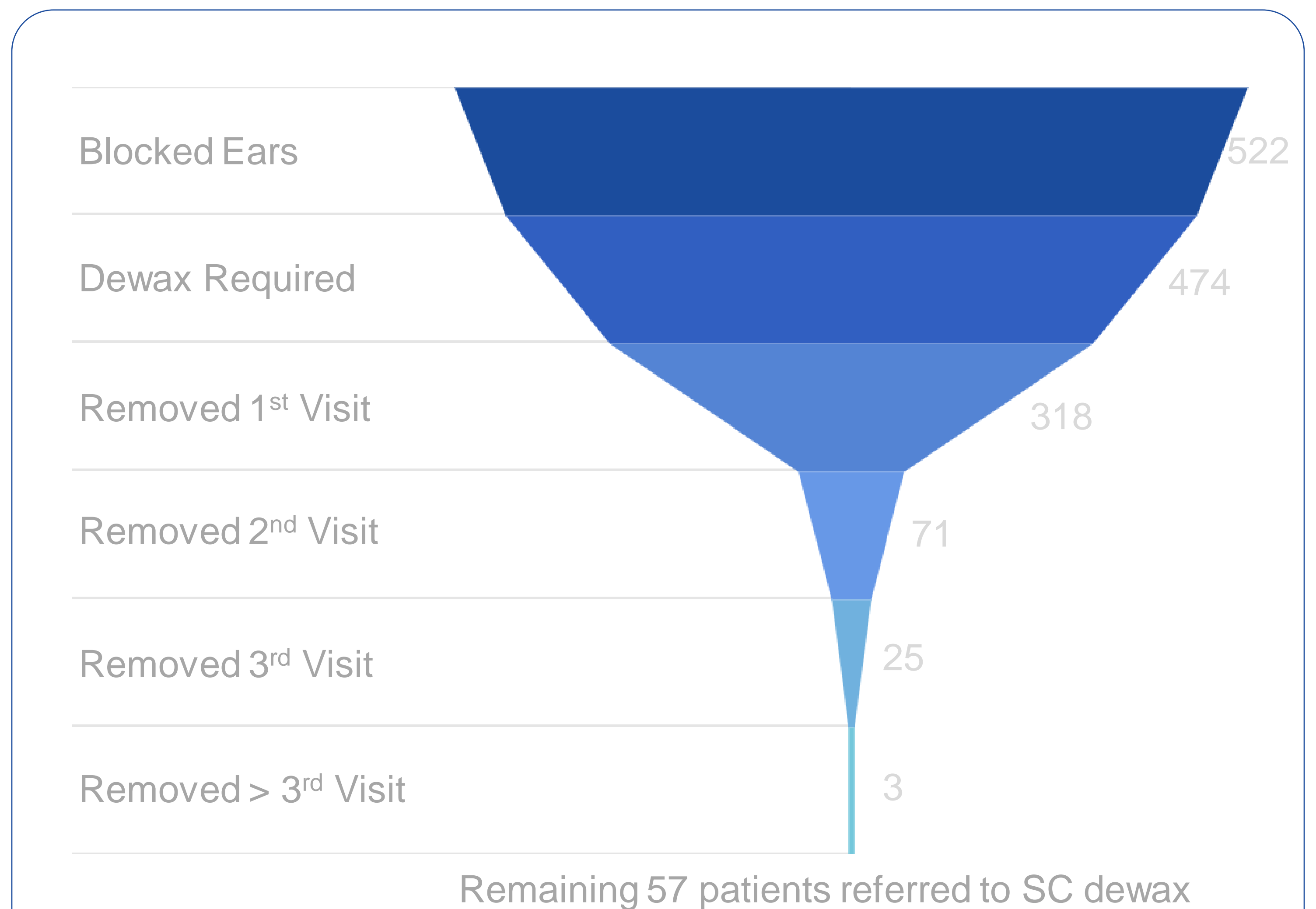


Figure 2. Patient numbers through the dewax stream in PC

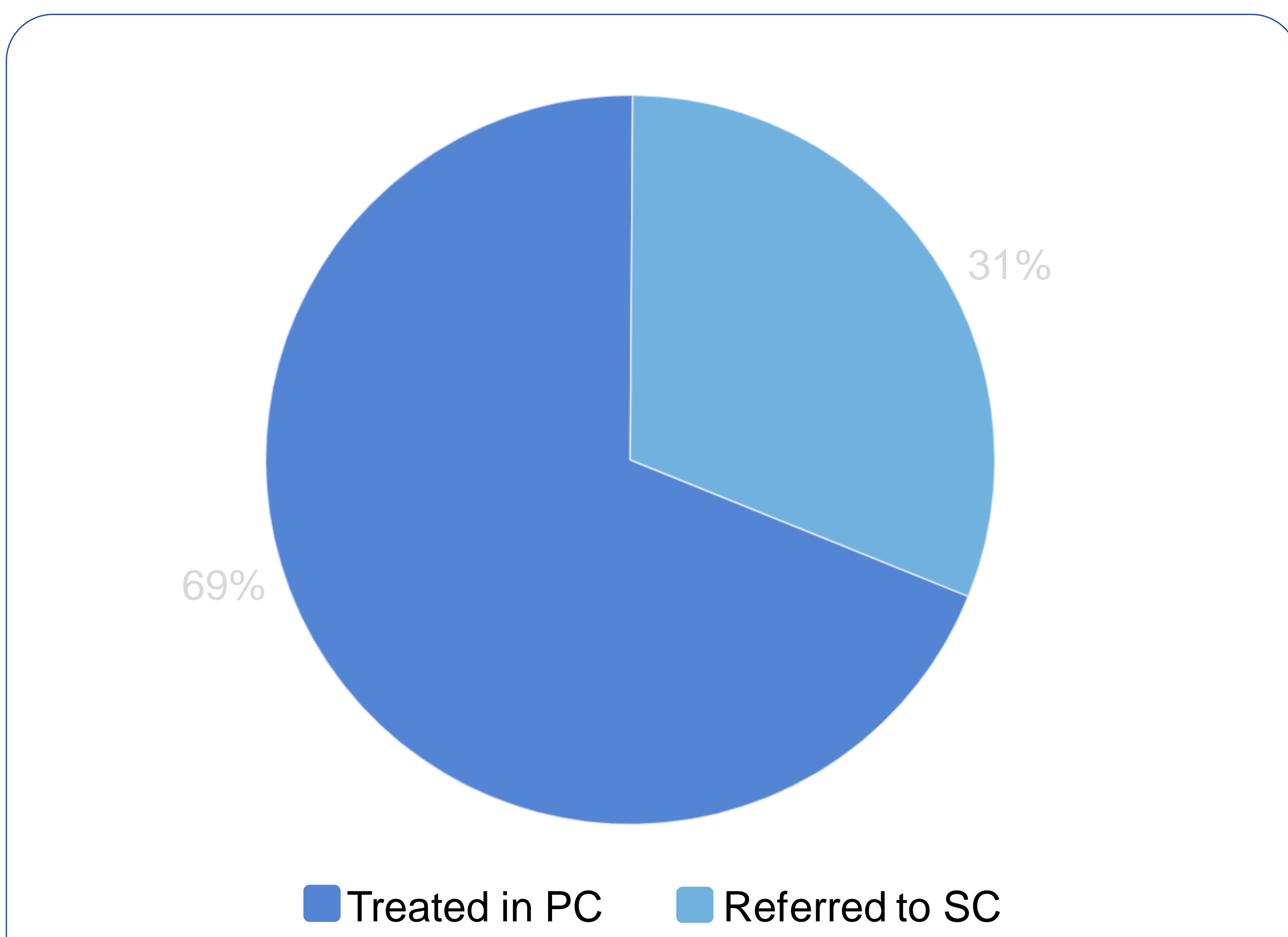


Figure 3. Proportion of patients treated and reviewed in PC alone compared to those requiring referral to SC vestibular services

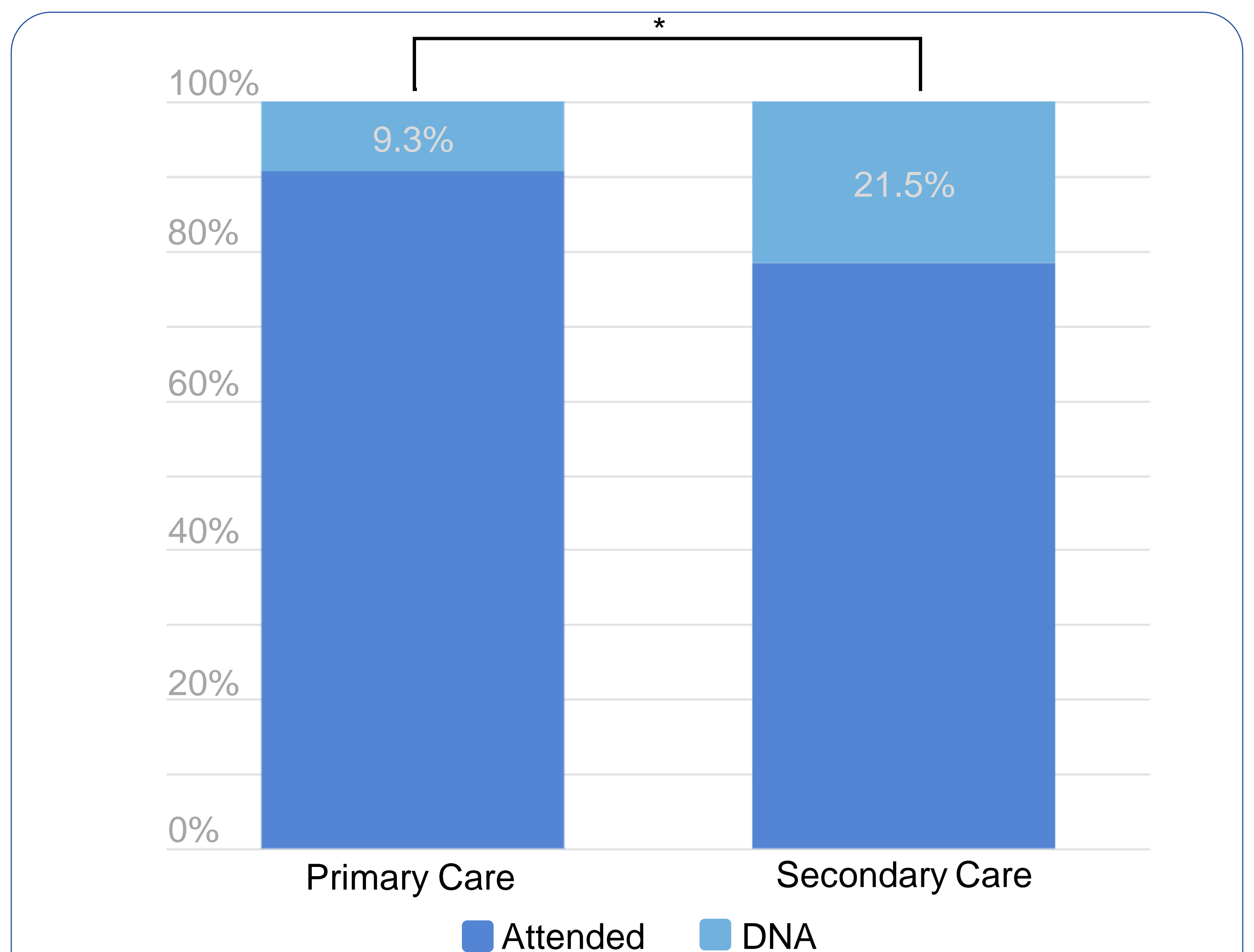


Figure 4. Comparison of DNA rates for PC vs SC. PC DNA rate significantly lower ($\chi^2 (1, N = 2634) = 76.18, p < 0.001, \phi = .17$).

Discussion & Next Steps

The data presented above indicates a successful PC audiology service as evidenced by a significant proportion of wax removal appointments being completed in the community and associated improvements in secondary symptoms for some. Additionally, 7 out of 10 patients presenting with BPPV were treated and reviewed in the community. These outcomes alleviate pressure on secondary care services and significantly improve referral to treatment times by cutting out the waiting time between initial presentation and assessment in an SC Audiology service. Critically, data collected in the present audit indicates that patients are less likely to fail to attend an appointment in the PC service. Data regarding the potential reasons for this were not collected but it is possible this is due the convenience of attending a community-based service rather than a SC centre or due to the minimal wait time facilitated by the PC service. Based on 2022/23 cost analyses, a reduction in direct referral DNA rates from 21.5% to 9.3% would represent a cost saving of £12,871.68.

Data regarding outcomes from SC referrals made by Audiologists in the PC service have not yet been collected. A subsequent audit may aim to include such data to identify whether there is any improvement in appropriateness of referrals made by Audiologists compared to previous years before the PC pilot.

The above data has been presented and utilised in a business case to secure funding to permanently provide a PC Audiology service in the Cardiff West cluster and to expand the service to cover the remaining GP clusters in the CAV UHB region.

References

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- Oghalai, J. S., Manolidis, S., Barth, J. L., Stewart, M. G., & Jenkins, H. A. (2000). Unrecognized benign paroxysmal positional vertigo in elderly patients. *Otolaryngology—Head and Neck Surgery*, 122(5), 630-634. https://doi.org/10.1016/S2468-2667(23)00058-0