

# Analysing the impact of Primary Care Audiology services on adult accessibility to Swansea Bay University Health Board Audiology services: A cross-sectional study

## Background

The way in which audiology services are delivered in Wales is changing. Primary Care Audiology (PCA) services give patients direct access to an audiologist without needing a referral from a healthcare professional. Between 2016 and 2022 PCA services have been rolled out across Swansea Bay University Health Board (SB UHB) over three distinct phases. This study aimed to investigate the impact of introducing PCA services by comparing utilisation of the PCA pathway vs the traditional secondary care pathway over time.

## Methods

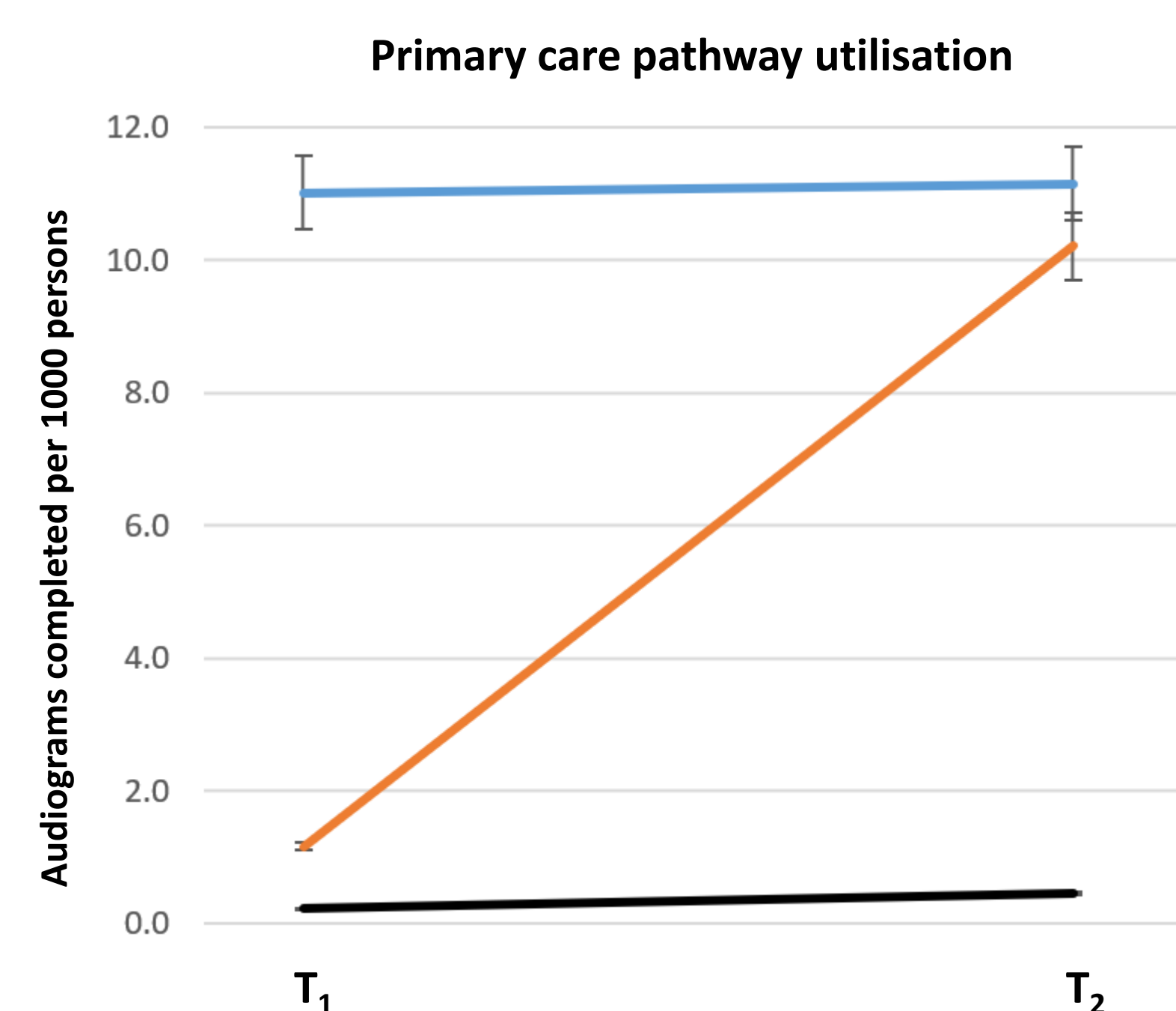
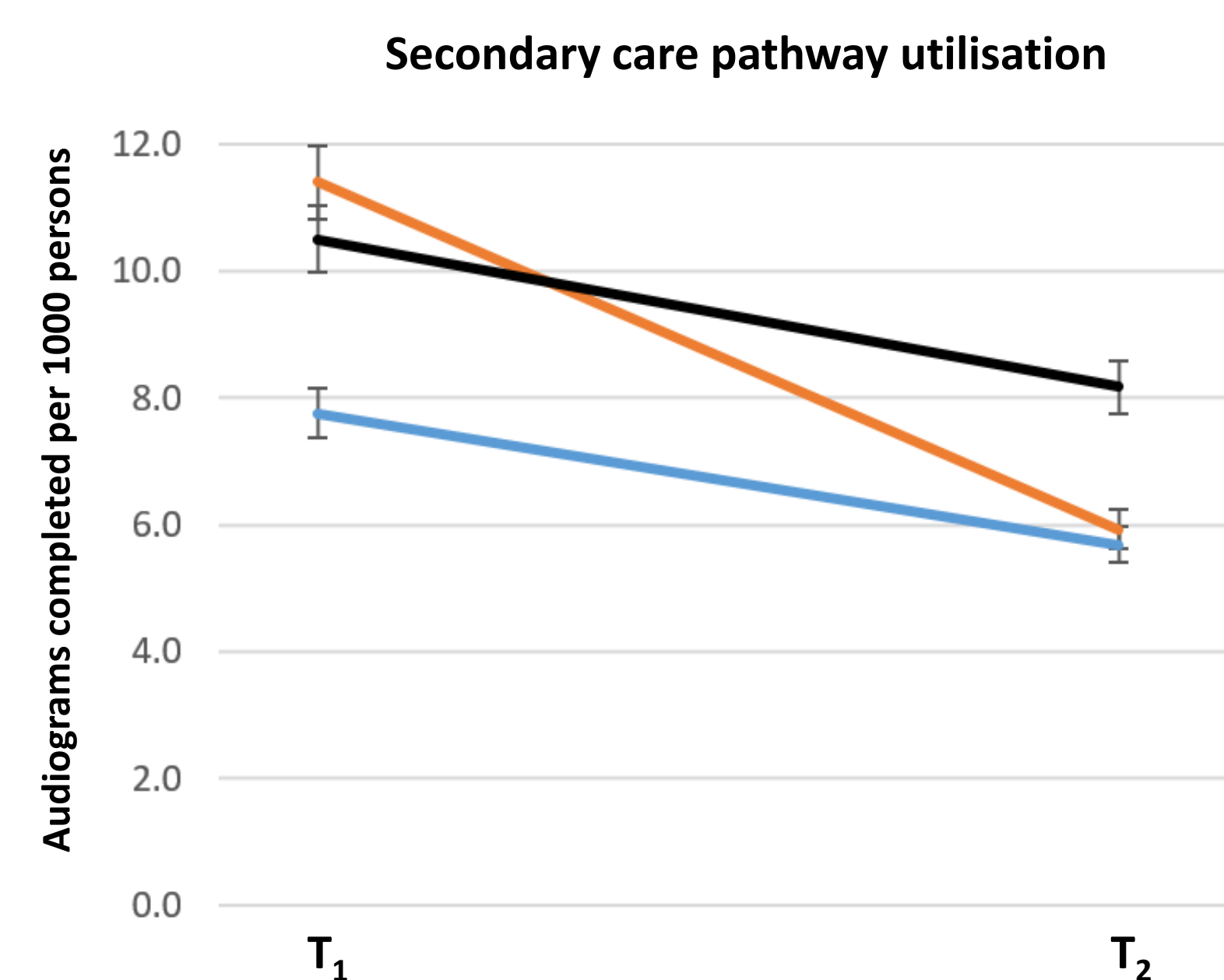
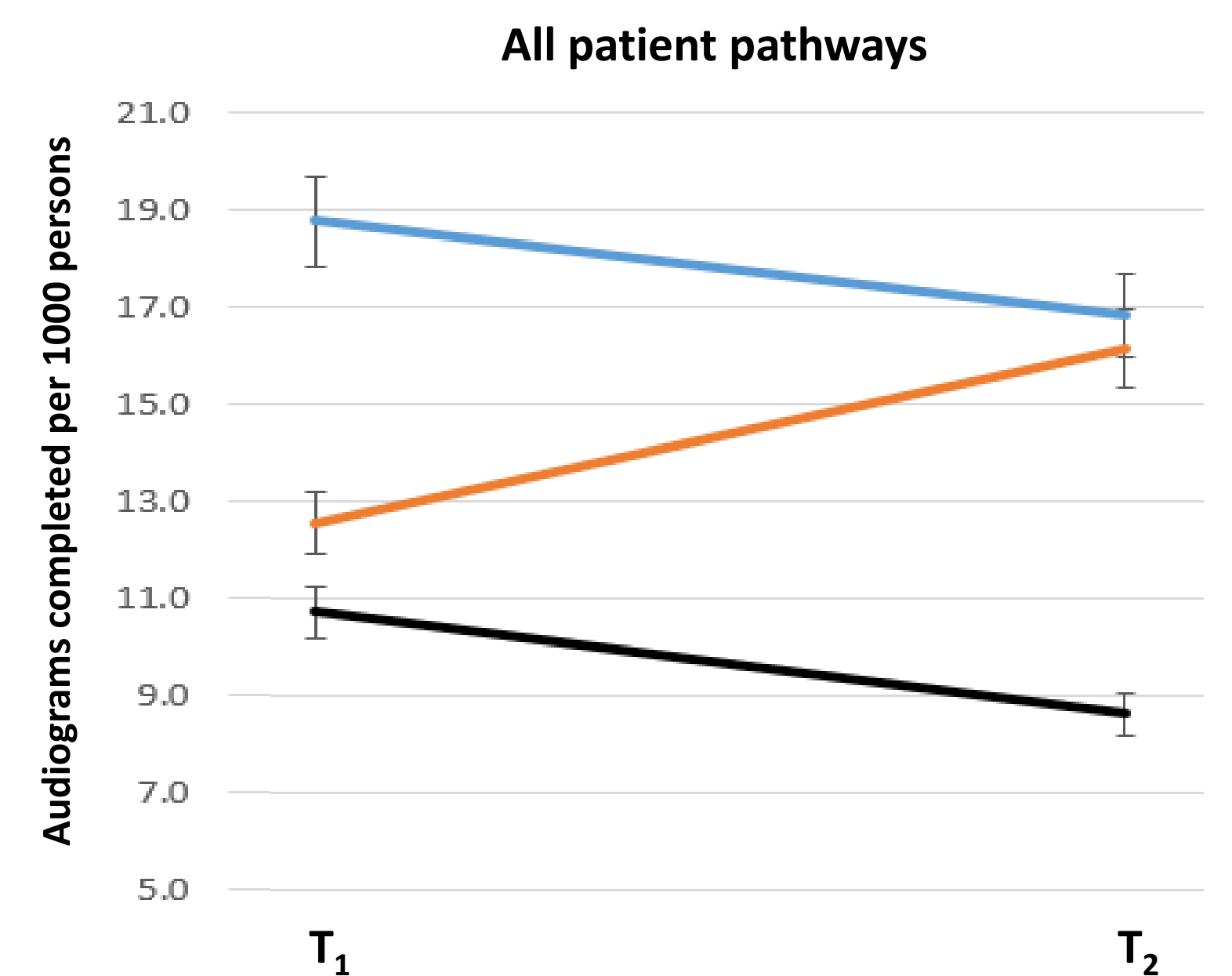
All adults (aged > 18) that completed a hearing assessment with the SB UHB Audiology department during two time periods were grouped by date of audiogram, pathway accessed, and availability of PCA services. Time periods  $T_1$  (01/01/2019-30/12/2019) &  $T_2$  (01/07/2021-30/06/2022) captured the expansion of PCA services after the COVID-19 pandemic, creating three unique populations depending on whether PCA services were available at  $T_1$  &  $T_2$  ( $P_A$ : Yes-Yes,  $P_B$ : No-Yes,  $P_C$ : No-No).

## Results

8898 patient entries met the criteria for this study. Total completed hearing assessments decreased by 7.2% ( $p < 0.01$ ) between  $T_1$  &  $T_2$ . Analysis by population revealed a decrease of 11.2% & 22.2% over time for populations A and C ( $p < 0.01$ ) respectively. Whereas, an increase of 26.6% was observed for population B ( $p < 0.01$ ). Hearing assessments completed via the traditional secondary care pathway decreased over time across all three populations ( $p < 0.01$ ). A decrease of 0.8% in the number of hearing assessments completed via the PCA pathway for population A was not significant ( $p > 0.05$ ).

## Conclusions

There is an unmet need for adult audiology services in Wales. Whilst increasing capacity results in more adults completing hearing assessments, patients now face new barriers when accessing audiology services through the traditional secondary care pathway after the COVID-19 pandemic. The PCA model seems to address these new, unidentified barriers and may offer the most effective approach to increasing service provision.



Population A (Blue)  
Population B (Orange)  
Population C (Black)

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