



#### **Project Title**

Audiology Telecare in Changi General Hospital

#### **Project Lead and Members**

- Deng Jing
- Savitha Kamath

#### **Organisation(s) Involved**

Changi General Hospital

#### **Healthcare Family Group Involved in this Project**

Medical

#### **Applicable Specialty or Discipline**

Audiology

#### **Project Period**

Start date: Jun 2020

Completed date: Feb 2023

#### Aims

Tele-audiology option was introduced, providing hearing aid services to patients remotely at the comfort of their own homes. It is time-saving and cost-saving, and more importantly it minimizes potential exposure to Covid-19.

#### Background

See poster appended/ below

#### Methods

See poster appended/ below



#### CHI Learning & Development (CHILD) System

#### Results

See poster appended/ below

#### Conclusion

See poster appended/ below

#### **Project Category**

Technology

Digital Health, Telehealth, Tele-consultation

#### Keywords

Hearing Aid, Tele-consult, Tele-audiology

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## ABSTRACT

# Audiology Telecare in Changi General Hospital

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## **INTRODUCTION**

During Covid-19 pandemic period, hearing aid service has been disrupted due to Covid regulations. Patients who required this service experienced longer waiting time to see audiologist as compared to usual. Typically, patients fitted with hearing aids need fine-tuning a few times to reach optimal setting. The standard of care for these patients was compromised. Hence, tele-audiology option was introduced, providing hearing aid services to patients remotely at the comfort of their own homes. It is time-saving and cost-saving, and more importantly it minimizes potential exposure to Covid-19.

### **METHODOLOGIES**

Fifty existing Changi General Hospital hearing aid users aged 23 to 96 were recruited based on their preference for teleaudiology follow-up from June 2020 to Feb 2023. These participants or their family members should at least own a smart phone with internet access and should be tech-savvy to some extent.

Success of the session is defined as being able to fine-tuning hearing aids remotely and address patient's concerns within designated appointment period (60 minutes). The result of the success rate was analysed by Microsoft Excel.

## RESULTS

Out of 50 patients recruited, 40 of them completed at least one tele-audiology review. Among them, 29 patients (72.5%) had a successful initial session while the rest only had successful review during second or subsequent attempts with reasons listed in the figure below. Thirty (75%) of the participants chose to continue tele-appointment as the only or one of the review options.

## **CONCLUSION**

Although the success of tele-audiology is dependent on various factors, the program can be further optimized and improved upon, allowing for better distribution of hospital resources and eventually benefiting a large group of patients who prefer to minimize hospital trips. Audiologists in all of Singapore who want to implement tele-audiology in their own setting can easily adapt the methods and results from this project. Possible future collaborations include working with nursing homes, day care centres etc to provide remote support for residents with hearing aids without the need to bring them to a hospital.

## FIGURES/ DIAGRAMS (Optional)

Reason for Patients with Unsuccessful Connection during First Tele-review

