

## **Project Title**

Telepractice Adoption in Speech and Language Therapy during COVID-19 Circuit Breaker Period: Benefits and Challenges

## **Project Lead and Members**

Project lead: Yee Kaisin

Project members: Peh Hui Peng, Winnie Chong, Jaymie Chai, Lee Jia Ling, Cheryl Lee, Chermaine Chiok

## **Organisation(s) Involved**

Singapore General Hospital

## **Project Period**

Start date: May 2020

Completed date: July 2020

## **Aims**

1. Describe the changes in use of telepractice by speech therapists (STs) in Singapore during Covid-19
2. Understand the perceived benefits and barriers to adoption of telepractice by STs in Singapore

## **Background**

Past surveys on telepractice show high interest but low uptake of this modality amongst speech therapists in India and Hong Kong. However, the underlying barriers and clinicians' experiences in adopting telepractice are not well understood. The COVID-19 pandemic has accelerated the adoption of telepractice in allied health services over in-person sessions in Singapore, especially during the Circuit Breaker (CB) period. This study aims to understand the perceived value, barriers and benefits of telepractice by Speech Therapists (STs) in Singapore, particularly during their transition to conform with CB restrictions.

## Methods

A cross-sectional survey of STs in Singapore was conducted through convenience sampling. The survey comprised of 21 multiple choice, yes/no questions, with 11 open-ended follow-up questions. Survey responses were electronically captured and analysed using descriptive statistics. Responses to open-ended questions were thematically analysed.

## Results

Among the 114 STs practising in Singapore who completed the survey, 67.5% provided telepractice services during CB period. Of these, 72.7% reported changes in their use of telepractice due to CB restrictions, including starting telepractice, and increasing the frequency and range of caseload in telepractice. There was an increase in STs providing teleservices in most practice areas, most markedly in the areas of language impairment (+97%) and social communication disorder (+84%).

Key perceived benefits of telepractice were: 1. Easy access to services (94.7%), 2. Timely continuity of care (79.8%), 3. Increased frequency of therapy (69.3%) and 4. Client participation within a familiar environment (69.3%). However, only 30.7% believe that telepractice has similar or better outcomes than in-person therapy.

Speech therapists who were providing telepractice were more likely to think of telepractice as an appropriate platform for their clients ( $\chi^2(3)=14.45$ ,  $p=0.002$ , Cramer's  $V=0.358$ ) although the majority of STs (78.4%), regardless of whether they were providing telepractice or not, still believed that in-person therapy is of better overall quality. 82.5% felt in-person visits were more appropriate for their clients, with 95.6% regarding some of their clients (e.g. young children, those with swallowing difficulties) unsuitable for telepractice. Other perceived barriers were clients' lack of access to technology, therapists' lack of resources, and clients' and therapists' lack of understanding and negative opinion of the efficacy of telepractice.

## Lessons Learnt

- Covid-19 accelerated the use of telepractice by STs in Singapore but there are still significant perceived barriers from both clinicians and clients in adopting it as a long-term mode of service delivery.
- Telepractice is perceived to be less effective than face-to-face sessions; this was also reflected among STs in a similar study in Hong Kong (Fong et. al., 2020). More resources can be made available on the evidence base for telepractice or training in carrying out assessments and therapy via telepractice in local institutions can possibly enhance clinicians' confidence in its effectiveness.
- Client selection for telepractice is important even in crisis situations so this may continue to guide the type of services as well as the population that may be better served by telepractice. Sharing of best practices among clinicians across institutions may help in improving the use of telepractice for different populations.
- Time and cost validation studies can be carried out to validate clinicians' perception of telepractice in actual clinical practice. These can help to identify practical considerations and/or solutions for the use of telepractice even after the pandemic.

## Conclusion

While telepractice ensures continuity of care where in-person care is disrupted, barriers exist in its application across all areas of speech therapy practice. Adequate support must be provided for speech therapists and their clients to ensure that quality of care is maintained despite the change in therapy delivery mode.

## Additional Information

Singapore Allied Health Conference (SAHC) 2021 - Best Oral Presentation: Future Ready Workforce

## Project Category

Care & Process Redesign, Care Continuum, Applied Research, Technology

**Keywords**

Care & Process Redesign, Care Continuum, Applied Research, Technology, Allied Health, Speech Therapy, Telehealth, Telepractice, COVID-19, Pandemic

**Name and Email of Project Contact Person(s)**

Name: Peh Hui Peng

Email: [peh.hui.peng@sgh.com.sg](mailto:peh.hui.peng@sgh.com.sg)

# TELEPRACTICE ADOPTION IN SPEECH THERAPY DURING COVID-19 CIRCUIT BREAKER

## BENEFITS AND CHALLENGES

Yee Kaisin, Peh Hui Peng, Winnie Chong, Jaymie Chai, Lee Jia Ling, Cheryl Lee, Chermaine Chiock  
Speech Therapy Department, Singapore General Hospital



### AIMS

Describe the changes in use of telepractice by speech therapists (STs) in Singapore during COVID-19 circuit breaker (CB) period.

Understand the perceived benefits and barriers to adoption of telepractice by STs in Singapore.



### METHODS

Anonymous online survey of STs in Singapore through convenience sampling in May - June 2020.

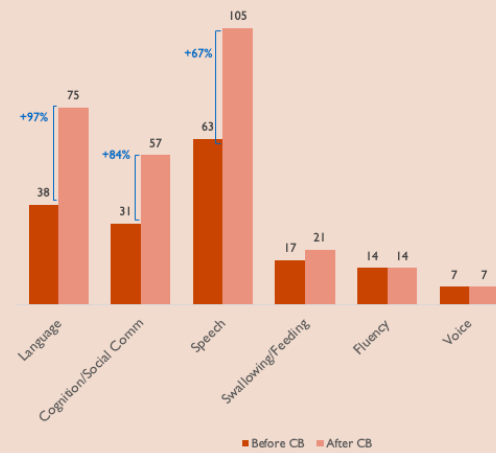
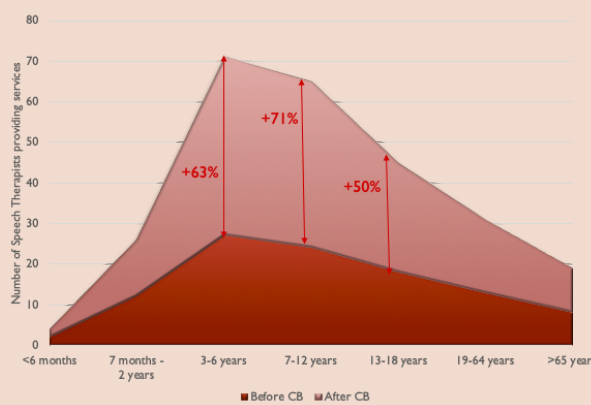
Analysis using descriptive statistics and content analysis for open-ended questions

### KEY CHANGES IN USE OF TELEPRACTICE

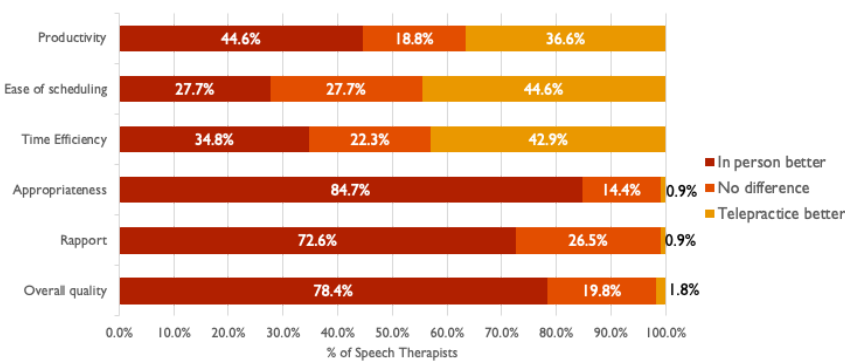
**114** speech therapist respondents

**68%**

provided telepractice during circuit breaker



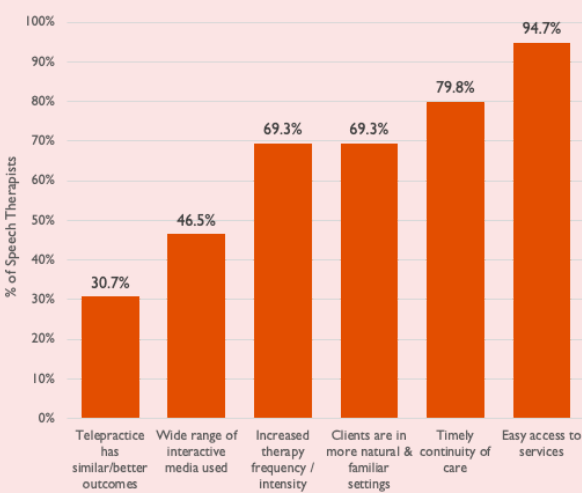
### PERCEIVED EFFICACY OF TELEPRACTICE



Telepractice enhances efficiency and convenience.

Face-to-face sessions are more appropriate and of better quality.

### PERCEIVED BENEFITS OF TELEPRACTICE



#### Key benefits:

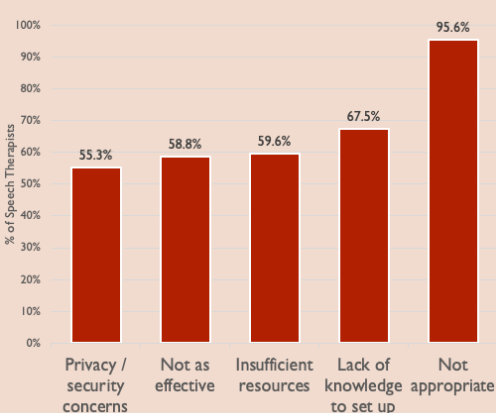
- Facilitates easy access to services
- Affords timely continuity of care



#### Other benefits:

- Saves time and money
- Caregivers are more involved
- Client being at home helps development of individualised strategies

### PERCEIVED BARRIERS OF TELEPRACTICE



#### Key barriers:

- Not suitable for some clients
- STs or clients lack technical knowledge



#### Other barriers:

- Implementation workflow are complicated
- Clients have a negative perception of tele-therapy

### LESSONS LEARNT



COVID-19 circuit breaker measures accelerated the use of telepractice by STs but there were still significant perceived barriers from both clinicians and clients.

Client selection for telepractice is important even in crisis situations.

To enhance clinicians' confidence in telepractice, we need a good evidence base, training, and sharing of best practices across institutions.