



## Integrated speech pathology telehealth service for swallowing rehabilitation: A feasibility study

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### BACKGROUND & AIM:

- Accurate and timely intervention by a speech pathologist (SP) is required to optimise dysphagia (swallowing disorder) rehabilitation
- Research has confirmed that dysphagia intervention via synchronous telehealth (videoconferencing) offers patient & service benefits (Burns et al., 2017, Collins et al., 2017)
- To enhance patient home practice a new multi-media software application, ReSwallow, was developed to support personalised exercise prescription and remote clinician monitoring
- **Study aim:** To trial and evaluate a new dysphagia telerehabilitation service, combining **synchronous (videoconferencing) telehealth** with the new **asynchronous (ReSwallow) telehealth application**.

### METHODS:

- Patients trialed the telerehabilitation service for 4-weeks.
- Service involved: 1) completing a clinician-prescribed “ReSwallow” home practice program via an iPad and 2) attending weekly videoconferencing sessions with their SP (via the QH Telehealth Portal) to review their swallowing function and inform changes to the ReSwallow program

### RESULTS:

- 10 patients with dysphagia and 3 RBWH SPs participated in the trial
- All participants completed training in use of the ReSwallow program and the QH videoconferencing platform prior to commencing the trial
- All 10 patients completed the 4-week telerehabilitation trial

### Clinical outcomes:

- All patients accessed their daily swallowing exercise program via ReSwallow
- 9/10 (90%) patients exhibited stable/improved swallowing function (diet/fluid prescription) during the trial period. No adverse events were reported

### Service outcomes:

- Review of patient swallowing status and modifications to the patient’s ReSwallow program could be completed within routine 30-minute telehealth appointments
- Videoconferencing sessions were conducted effectively. Only 5 sessions were converted to phone.

### Consumer feedback and satisfaction:

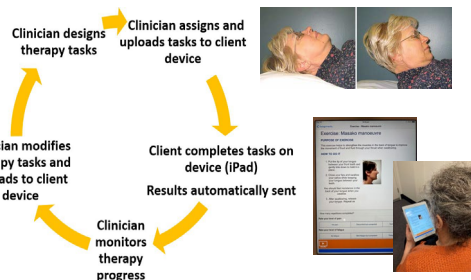
- High satisfaction was reported by both patients and SPs for the telerehabilitation service
- Patients reported the multi-media instructions supported accurate practice and they liked that their SP could monitor their performance and modify their exercise program between sessions
- SPs reported benefits of using recorded practice for patient reviews and exercise adjustment

### CONCLUSIONS:

- An integrated telerehabilitation model combining videoconferencing sessions with a remotely monitored home practice application is feasible and acceptable to support swallowing rehabilitation.

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### ReSwallow program prescribed by SP



### Videoconferencing sessions with SP

