

# TELEPRACTICE DYSPHAGIA SERVICE MODEL FOR RURAL HOSPITAL INPATIENTS: A 9-YEAR RETROSPECTIVE EVALUATION OF SERVICE OUTCOMES

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## BACKGROUND

Dysphagia, or swallowing difficulties, can lead to aspiration pneumonia, resulting in increased adverse outcomes, length of stay and healthcare burden<sup>1,2</sup>. Aspiration pneumonia is considered an avoidable hospital readmission with improved clinical management<sup>3</sup>. In April 2015, the West Moreton Health Speech Pathology department implemented a telepractice dysphagia service model to improve service access and clinical management across four rural hospitals within the health service.

## AIM

Primary aim: To evaluate the effectiveness, efficiency and safety of the West Moreton Health Speech Pathology Rural Telepractice Dysphagia Service Model

Secondary aim: To explore the nature of current service provision to rural hospitals

## METHODS

Over a nine-year period, a total of 306 patient charts were identified as referrals to the rural telepractice dysphagia service across four rural hospitals. Of these, 110 charts were excluded as the referrals did not result in formal speech pathology input, and seven charts were unable to be located. Therefore, a total of 189 charts were included in the retrospective review for this study.

The chart review involved manual extraction of service outcome data and a review of clinical incidents. Data extraction included:

- patient demographics and medical admission information
- speech pathology referral information
- nature of speech pathology service provided
- assessment outcomes
- re-referral to speech pathology within same admission and re-admission to hospital for dysphagia-related complications

## RESULTS

### Efficiency

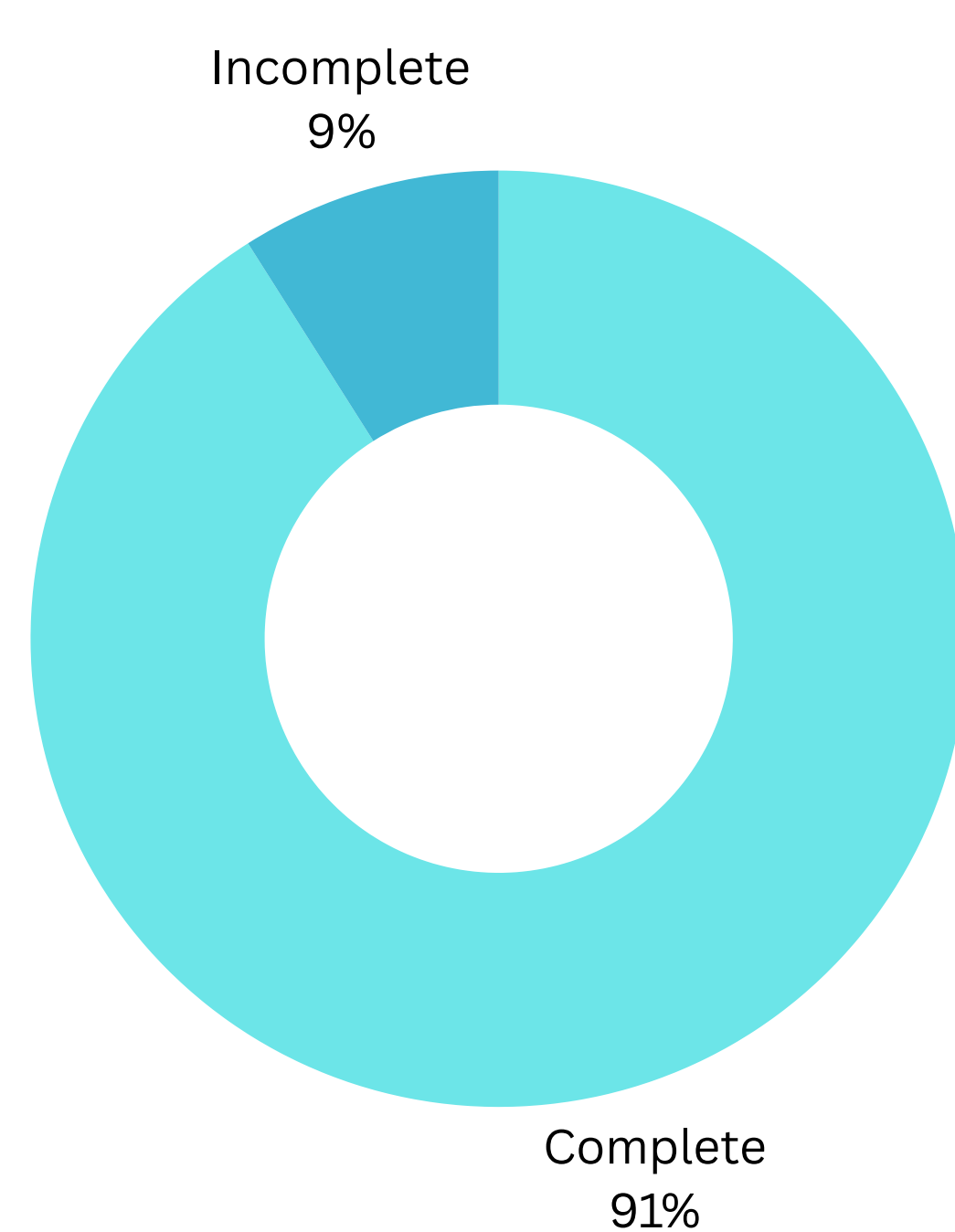
- First contact within 24 hours: 95.77%
- No. of contacts: mean 1.87 (SD = 1.34)
- Dysphagia diagnosis: 53.44%
- Changed clinical recommendation: 72.49%
- Received instrumental assessment: 4.23%

### Effectiveness / suitability

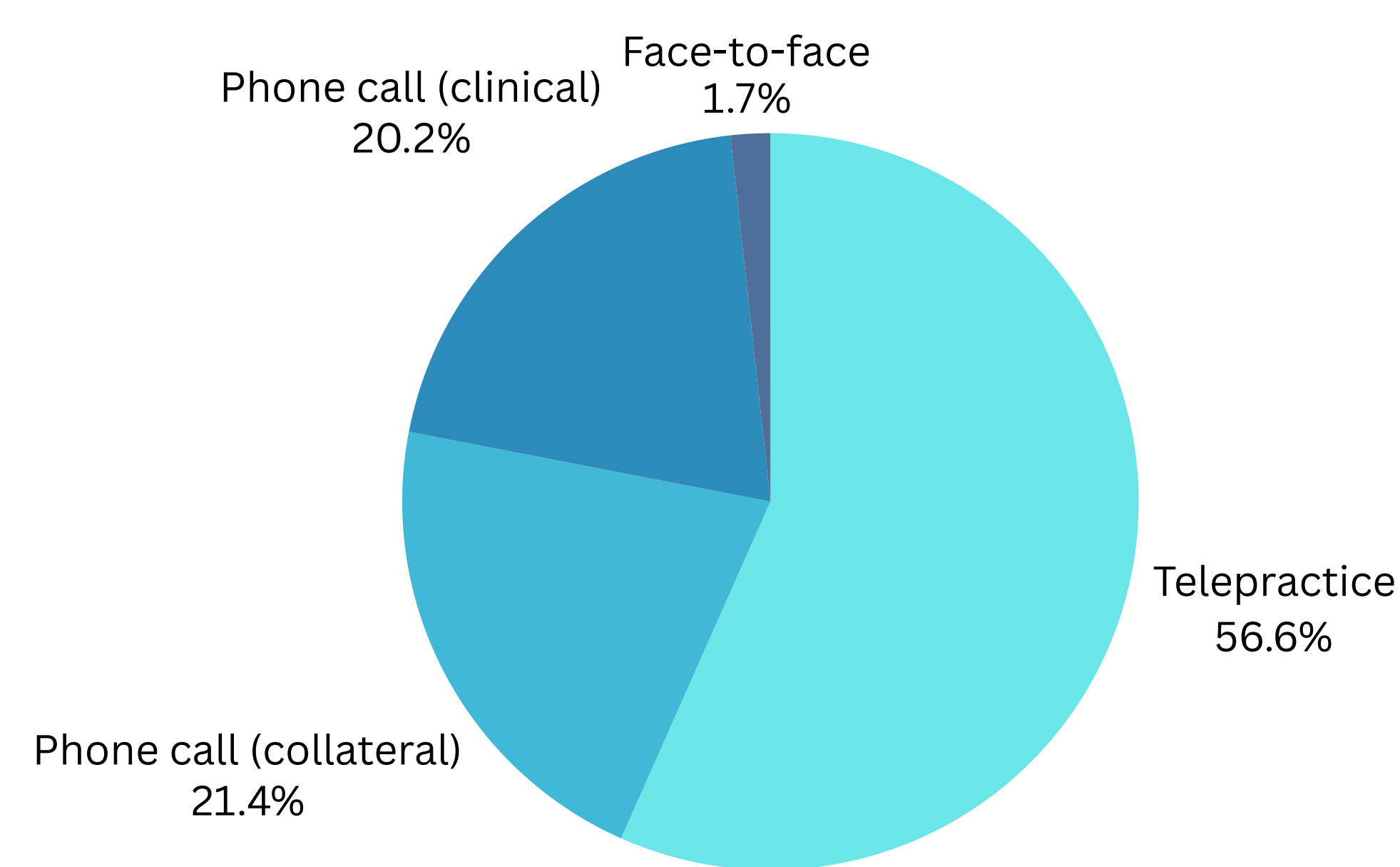
- Required face-to-face contact (telepractice unsuitable): 5.82%
- Re-referral to speech pathology post discharge: 4.23%
- Re-admission related to dysphagia: 8.47%

### Safety

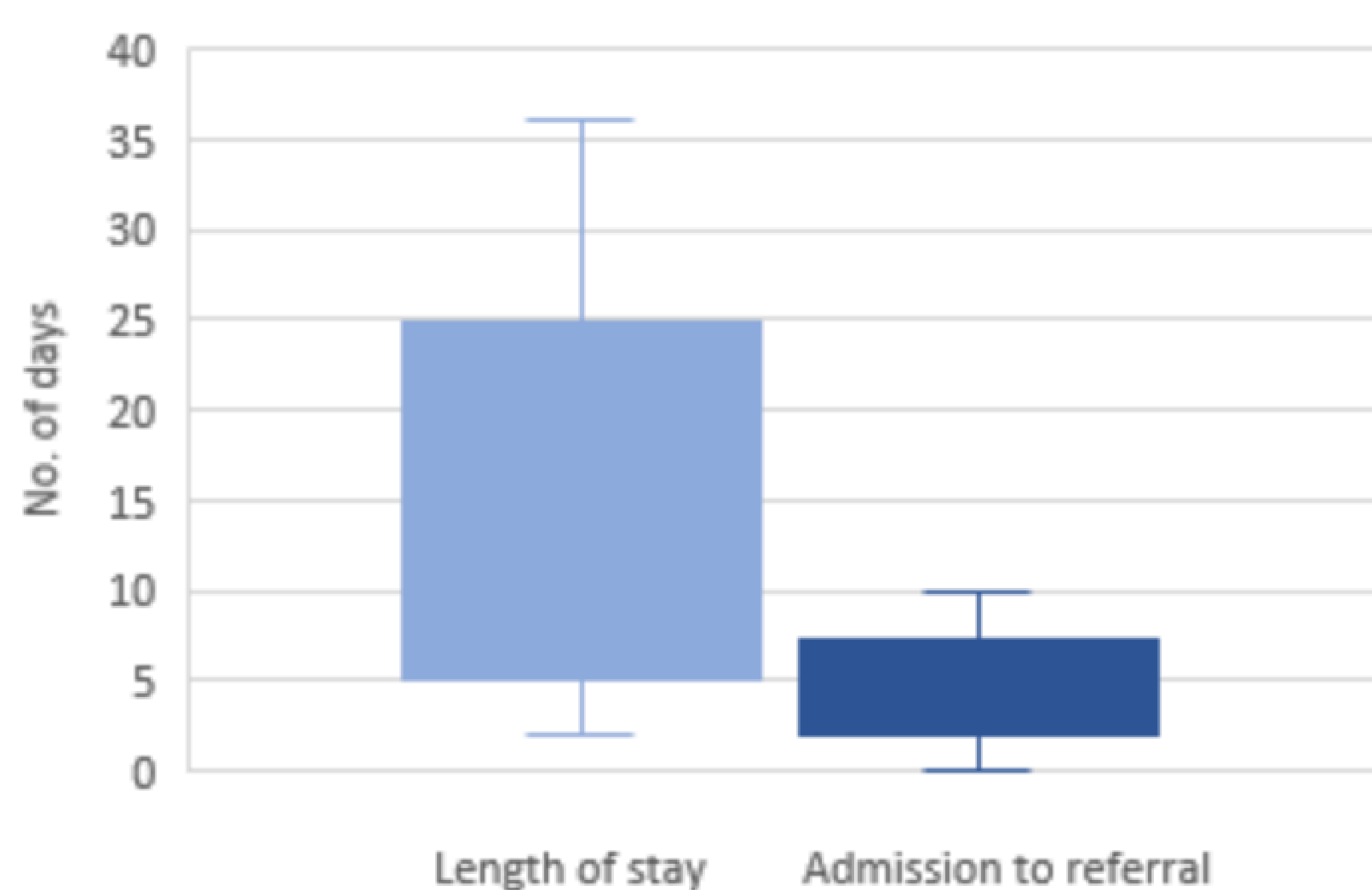
- Clinical incident: 3.17%



Telepractice completion rate



Type / nature of initial contact (within 24 hours)



Length of stay and referral time frame

## FUTURE DIRECTIONS

- Aiming to reduce follow-up collateral phone calls by improving the quality of initial referrals – supported by the introduction of integrated electronic medical records at rural hospitals
- Improving the rate of completed telehealth sessions as the first clinical contact within 24 hours
- Commencement of phase 2 of the study to explore stakeholder perspectives on the acceptability of the telepractice dysphagia service

## REFERENCES

1. Ficke B., Rajasurya, V., Sanghavi, K., & Cascella, M. (2023). Chronic Aspiration. National Library of Medicine. <https://www.ncbi.nlm.nih.gov/books/NBK560734/>
2. Sanivarapu, R., Vaqar, S., & Gibson, J. (2024). Aspiration Pneumonia. National Library of Medicine. <https://www.ncbi.nlm.nih.gov/books/NBK470459/>
3. Australia Commission on Safety and Quality in Health Care. (2019). Avoidable Hospital Readmissions: Report on Australian and International indicators, their use and the efficacy of interventions to reduce readmissions. [https://www.safetyandquality.gov.au/sites/default/files/2019-08/d19-8961\\_acsqhc\\_avoidable\\_hospital\\_readmissions\\_literature\\_review\\_on\\_australian\\_and\\_international\\_indicators\\_july\\_2019.pdf](https://www.safetyandquality.gov.au/sites/default/files/2019-08/d19-8961_acsqhc_avoidable_hospital_readmissions_literature_review_on_australian_and_international_indicators_july_2019.pdf)