Best practice management of the hemiplegic upper limb: Utilising telehealth to provide education to clinicians in regional Victoria

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Background: Clinicians at the Royal Melbourne Hospital have undertaken a number of initiatives and research projects to enable best practice management for neurological patients at risk of hemiplegic upper limb complications. This has included the development and provision of an evidence-based upper limb management course. The course has been successfully implemented on nine occasions, with positive feedback from the physiotherapy and occupational therapy participants. However, the metropolitan location for the course appears to be a limitation to access for regional clinicians.

Objectives: The aims of the project were to develop, implement and evaluate an upper limb management course for regional clinicians using telehealth videoconferencing technologies. This involved the use of regional clinical 'champions' to deliver the practical components within the course.

Methods: This project involved modifying the implementation of a pre-existing upper limb management course for delivery to a regional setting. The project involved consultation with key stakeholders, the identification and training of clinical 'champions', a focus group with the clinical champions prior to implementation, and feedback from the course participants immediately following the course and after a 3-month period. Participant feedback was compared to feedback obtained from prior courses run on-site at the Royal Melbourne Hospital.

Clinician numbers	Regional Site 1	Regional Site 2	Regional Site 3	Total
'Champions'	2	6	4	12
Participants	7	23	21	51
Discipline of participants	Physiotherapy	Occupational Therapy	Allied Health Assistant	Nursing
	26 (51%)	18 (35%)	6 (12%)	1 (2%)
Grade level of participants	Grade 3	Grade 2	Grade 1	Other
	3	18	22	7 (1 NA)

Fig. 1 Rating of telehealth presentations

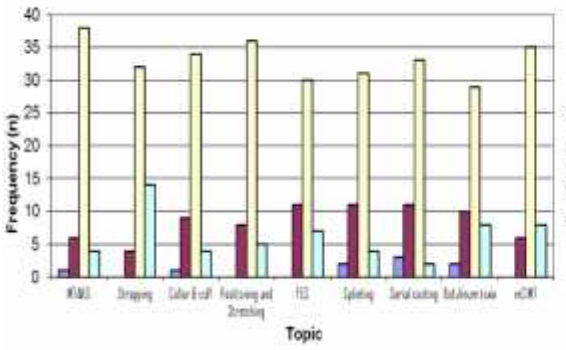
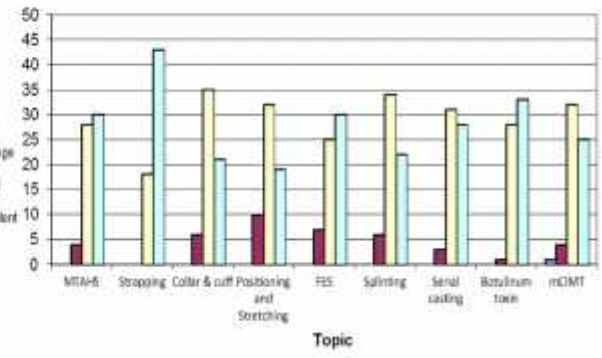


Fig. 2 Rating of face to face presentations



Results: The upper limb management course was successfully implemented simultaneously at three regional sites and involved the training of 12 clinical 'champions' and 51 course participants. Participant feedback suggested a high level of satisfaction with the telehealth course; however, several scores were lower than those obtained from prior face-to-face courses.

Three month evaluation data demonstrated strong satisfaction with the course materials and format, and increased confidence with the assessment and management of hemiplegic upper limbs. It also demonstrated a change in use of risk assessment and management modalities, all of which align with the evidence that was presented and may indicate a change in practice as a result of the course.

SIGNIFICANCE TO ALLIED HEALTH

- This study highlights the challenge of delivering clinical education via telehealth for allied health clinicians, in particular PT and OT where practical skill, in addition to theoretical knowledge, is important.
- The practical components and skill development were reliant on the 'champions' to deliver and limited any feedback the experts could provide towards the participants' performance.
- Face-to-face delivery of the course was rated more positively compared to the telehealth version by participants and the expert educators in regards to quality for most of the presentations.

These findings provide further opportunity to modify the course, to better meet the needs of regional physiotherapists and occupational therapists. A phase 2 study is currently underway.