

# Hand Therapy Led Clinics

## A change to post operative management following surgery

Stephanie Tawse, Jude Boyd, Annette Leong

**“Excuse me, how long will I have to wait?”**

**“How much longer? I’ve been here for 3 hours!”**

These are the familiar cries of frustrated patients waiting in Out Patient Clinics.

Outpatient services in Australia and internationally are being strained as the increasing patient demand outstrips current health service capacity.

At Maroondah Hospital, an acute hospital in outer eastern Melbourne, increasing presentations to the Plastic Surgery outpatient clinics were resulting in:

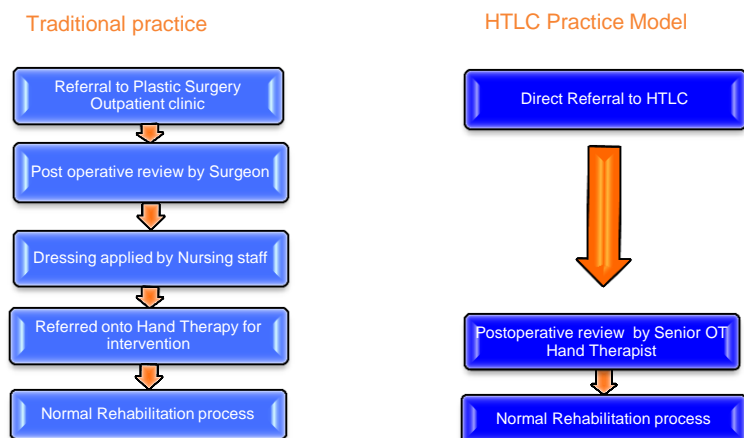
- Overbooked clinics
- Long waiting times
- Dissatisfied patients
- Patients leaving the clinics before receiving the recommended treatment
- Dissatisfied staff – Doctors, Nurses and Occupational Therapy(OT) Hand Therapists



To meet the growing demand of hand injury and hand surgery presentations, Eastern Health’s Plastic Surgery unit and Occupational Therapy (Hand Therapy) service have collaborated to develop an alternative model of care.

Hand Therapy Led Clinics (HTLC) have been established to allow patients who meet select criteria to be referred directly to the Senior OT Hand Therapist, following hand surgery. The post operative management of these patients are managed independently by the Senior OT Hand Therapist utilising guidelines approved by the Plastic Surgeons.

### Establishing a new model of care – Hand Therapy Led Clinics



### Methodology

- Prospective non-randomised trial divided into 2 groups – pre and post intervention;
  - Pre-intervention (16 weeks) in which patients are seen as per traditional practice
  - Post Intervention
  - Post-intervention (16 weeks) in which patients have their routine post surgical review completed by the Senior OT Hand Therapist

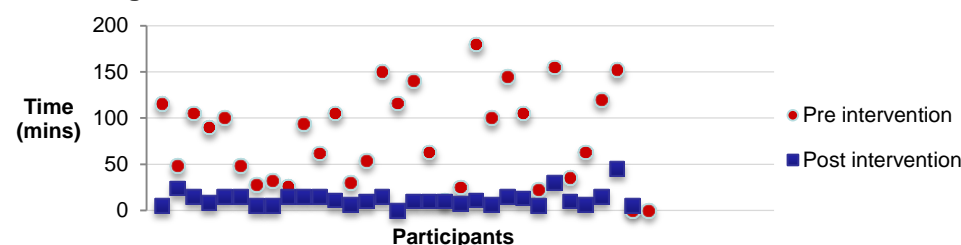
### Demographic data

	Pre Intervention	Post Intervention
Gender ; Male	20	16
Female	10	16
Age range	22-74	23-82
Diagnoses:		
Tendon	9	4
Fracture	9	13
Carpal Tunnel	5	8
Trigger Finger	2	7
Other	5	0
Total	30	32

### Results

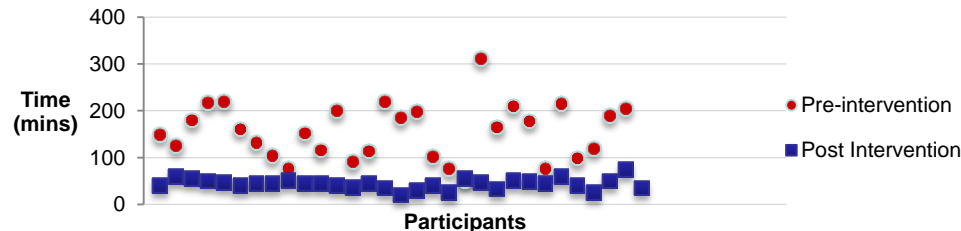
- Primary Outcome Measures:
  - Waiting time in clinic
  - Total time in clinic
  - Functional outcome (Quick DASH)
- Secondary Outcome Measures:
  - Patient satisfaction
  - Complication rate

#### Waiting time in clinics



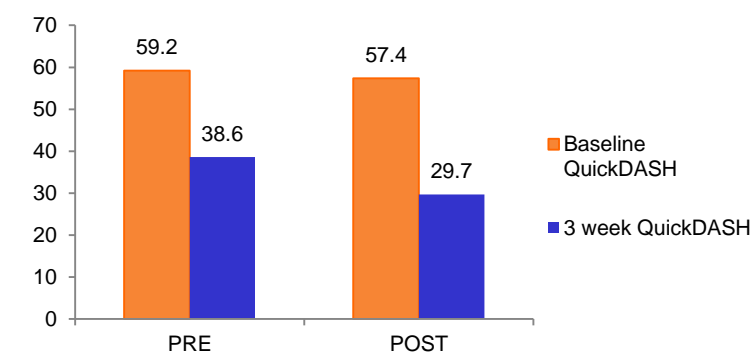
Measured from the time patients arrived, until first seen by a clinician. Average time spent waiting to see a clinician post operatively reduced from 84 minutes to 12 minutes (95% confidence interval 54-90 minutes,  $p < 0.01$ ).

#### Total time in clinic



Measured from arrival time to time left Hand Therapy. Average total length of time spent at the initial outpatient post-operative appointment reduced from 155mins (2.6hrs) to 43minutes (95% confidence 89-133 mins,  $p < 0.01$ ).

### Functional Outcome



Functional outcome was assessed using the Quick DASH (Disability of the Arm, Shoulder and Hand) questionnaire, which measures change in physical function and symptoms for those with a musculoskeletal disorder. Analysed using 2 Way Anova, it was noted that participants in the HTLC group were no worse off by not seeing a surgeon for their review ( $p = 0.19$ ).

### Patient satisfaction

Analysing the data using Mann-Whitney U-test, there was no statistically significant difference in patient satisfaction between the 2 groups, however clinically the patients who were referred directly to HTLC were slightly happier.

### Complication Rate

No adverse events reported and no difference in the rate of post-operative complications between groups. Which suggests that patients are not disadvantaged by attending HTLC.

### Conclusion: Achieving, Sustaining & Advancing HTLC

• The introduction of Hand Therapy Led Clinics created efficiencies by improving patient flow. In providing a direct pathway to Hand Therapy and reducing the number of Plastic Surgery clinic presentations for this patient group, this model in turn enables greater access for other patients to the outpatient clinics.

• HTLCs have been embedded in service delivery at Maroondah Hospital. The support and collaboration with the Head of Plastic Surgery and the Plastic Surgical team has been crucial to the ongoing success of HTLCs.

• The achievement of this model has led the way in developing further advanced practice Hand Therapy roles across the other hospitals within the healthcare service. Eastern Health is now exploring direct referrals to Hand Therapy from the Emergency Department as part of a collaborative funded project with the Department of Health and Human Services (DHHS) and other Victorian health services.

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