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# Occupational therapy-led orthopaedic hand telehealth service

Initiative Type

Model of Care

Status

Sustained

Added

08 December 2021

Last updated

15 December 2021

URL

<https://cnxp3cuvtvrn68yjaibaht5ywrxspj7m.clinicalexcellence.qld.gov.au/improvement-exchange/occupational-therapy-led-orthopaedic-hand-telehealth-service>

## Summary

Occupational therapy staff specialising in hands are responsible for the rehabilitation and care of certain diagnostic groups post upper limb orthopaedic surgery in the expanded scope of practice model. Occupational therapy consultations replace consultations with the orthopaedic surgeons at Townsville University Hospital (TUH) at orthopaedic clinics, particularly for follow up wound reviews.

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Patients are offered consultations, when clinically suitable, delivered by telehealth within the patient's home, or arranged at the closest health facility.

The occupational therapy-led orthopaedic hand telehealth service was established in December 2019.

### Key dates

Jul 2019

Jun 2020

### Implementation sites

Townsville Hospital and Health Service

## Key Contacts

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## Aim

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- to implement an expanded scope occupational therapy hand therapy post-operative service
  - to reduce number of appointments patients must attend at the orthopaedic outpatient clinic, thereby reducing travel times and waiting time
  - increase number of telehealth appointments in hand therapy using Queensland Health technology (Queensland Health Telehealth Portal or PEXIP)
  - delegation of tasks to an allied health assistant using the Calderdale Framework.

## Benefits

- reduction in travel, waiting time and cost -patients did not have to take leave to attend appointments
- streamlined service for patients with a hand injury at the TUH
- reduced duplication of hand therapy and surgical outpatient appointments.

## Background

A traumatic hand injury can result in stiffness, pain and loss of range of motion. It can affect work, leisure and day to day activities (Kingston 2014). Travelling back to the treating hospital for both surgical and rehabilitation appointments can be disruptive on work and family routines. Follow up appointments that are organised at the hospital facility can often be poorly coordinated, delayed or cancelled. Moreover, patients are often booked in multiple sessions in the same week which compounds the disruption (Kingston 2014). Orthopaedic clinic appointments - specifically review appointments - have a higher rate of failure to attend (FTA) than new appointments. Data from the Townsville Hospital and Health Service (THHS) indicates that for every orthopaedic FTA, 65% of people who fail to attend do so for review appointments. Furthermore, 20-25% of new and review appointments each month were for patients who lived in rural or remote areas. Queensland Health's advanced clinical practice and expanded scope of practice framework recognises the potential for occupational therapists and physiotherapists in clinical areas such as hand therapy. Models of care that use allied health professional practice to their full extent can ensure better access to services by improving service delivery, increasing workforce productivity and enhancing patient experience (Nancarrow 2013). Expanded scope tasks for occupational therapists who specialise in hand injuries include wound management and intervention to maintain skin integrity and reduce infection risk. Hand therapists with the clinical knowledge and experience can also perform non-complex wound debridement and simple wound management such as the removal of sutures (Queensland 2014). Telehealth has been proven to be an effective alternative for individuals who cannot access face to face healthcare for the management of musculoskeletal conditions. Telehealth is not simply a temporary stop-gap but can be a sustainable alternative mode in which individuals can safely access healthcare regardless of their location (Cottrell and Russell 2020).

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## Solutions Implemented

A series of stages using the PDSA cycle were designed to implement components of the telehealth clinic in stages.

- Stages 1 and 2: Development of guidelines for the Occupational Therapy Led Post-Op and Telehealth Service and the clarification of the diagnoses and clinical escalation protocols
- Stage 3: Implementing telehealth for rural and remote and local cohort and delegation of tasks to allied health assistant
- Stages 4 and 5: The expanded scope model during COVID-19 and embedding the model into day to day practice.

## Evaluation and Results

Fifty Nine patients were seen as part of the expanded scope of practice model of care between December 2019 and June 2020. Average attendance at surgical outpatients for those patients who received intervention from hand therapy reduced to one appointment episode of care. Telehealth appointments rose from 16 in the six months prior to the implementation of the model of care to 95 in the six months after the introduction of the model of care. This sharp rise in the use of telehealth in April and May can be attributed to COVID-19. Telehealth appointments have declined since May 2020 however remain higher than prior to the implementation of the project. Survey feedback from patients who received their care via telehealth highlights the reduced travel, waiting time and cost. Telehealth is seen as a convenient option and worked well with working times and schedules. Patients did not have to take sick leave to attend appointments. A combination of telehealth with face to face would be helpful for appointments that required hands-on treatment and assessment. Regardless, telehealth is viewed as a good option for times when face to face is not possible. Patients involved in the expanded scope model of care felt confident with the treating therapist and the care provided. There was little to no waiting time in comparison to waiting time at surgical clinics. The therapist was knowledgeable and able to answer questions regarding surgery, hand therapy, wounds and wound management. When required, the therapist was able to contact the orthopaedic surgeon to schedule an extra appointment. One patient reported there was no need for additional surgical clinic appointments as all concerns were properly addressed through hand therapy.

## Lessons Learnt

Factors that have been identified as critical success factors for this project:

- Support from hospital service group executive to implement the model, particularly when entrenched referral processes from other members of the multidisciplinary team are difficult to change.

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- Consistent support and encouragement of staff members involved in implementing the expanded scope model to 'take charge' of patient care to guide the way forward for other multidisciplinary staff members.
  - This is not a 'one size fits all' model. Each patient must be assessed for their suitability to be part of the expanded scope, depending on their clinical situation.
  - A successful telehealth service requires a level of flexibility. Enforcing strict time slots for telehealth clinics often does not fit with both local and rural/ remote health patients.
  - Telehealth is viewed as a valuable option by patients and works successfully as part of a range of treatment modalities.

## References

Cottrell MA, Russell TG (2020). Telehealth for Musculoskeletal Physiotherapy. *Musculoskeletal Science and Practice*, 48: p1-6

Kingston, G. A. (2014). Occupational therapy and/or physiotherapy services following a traumatic hand injury for people who live in rural and remote locations. (PhD), James Cook University, Townsville.

Queensland Health Allied Health Professions Office of Queensland (2014). Ministerial Taskforce on Health Practitioner Expanded Scope of Practice. Brisbane: Queensland Government Retrieved from <https://www.health.qld.gov.au/ahwac/html/hpminitaskforce.asp>

Nancarrow, S. A., Roots, A., Grace, S., Moran, A. M., & Van Niekerk-Lyons, K. J. (2013). Implementing large-scale workforce change: learning from 55 pilot sites of allied health workforce redesign in Queensland, Australia. 11(1), 66.