



The Royal Australasian College of Physicians

Guiding Principles for Telehealth Consultations in Rehabilitation Medicine

September 2016

Contents

Guiding Principles for Telehealth Consultations in Rehabilitation Medicine	0
Contents	1
Acknowledgements	2
Introduction	3
Guiding principles	3
General principles	3
Prior to the telehealth consultation	4
During the telehealth consultation	5
After the telehealth consultation	5
Appendix A - Case studies	6
Appendix B – Glossary of key terms1	0
Appendix C - Useful resources/further reading1	1

Acknowledgements

This Position Statement has been developed by a Working Party comprised of five Fellows of the Australasian Faculty of Rehabilitation Medicine (AFRM) of The Royal Australasian College of Physicians (RACP) with support from the RACP Policy & Advocacy Unit:

Dr Jeremy Christley, FAFRM - Chair Dr Peter Anastassiadis, FRACP, FAFRM Dr Cynthia Bennett, FAFRM A/Prof Chris Poulos, FAFRM Dr Robin Sekerak, FAFRM Ms Claire Celia, Senior Policy Officer

This document is aimed primarily at rehabilitation medicine physicians who are interested in or are already undertaking consultations via videoconference. It will also be of interest to other clinicians and staff supporting patients and physicians during telehealth consultations. The guiding principles outlined in this document provide general guidance to safely undertake telehealth consultations in rehabilitation medicine including guidance for 'unsupported' telehealth consultations¹. This information is applicable to all settings and is not country-specific.

This document does not provide detailed information about the following topics which are best addressed by local guidelines and policies:

- Technology requirements
- Billing and remuneration
- Security and recording methods
- Consent process
- The provision of therapies by telehealth

¹ 'Unsupported' telehealth consultations refer to consultations via videoconference where no local clinician(s) are located with the patient at the time of the consultation.

Introduction

The Australasian Faculty of Rehabilitation Medicine (AFRM) identified a need to develop a set of guiding principles aimed specifically at the delivery of rehabilitation medicine via telehealth to ensure these video consultations are delivered appropriately and safely.

Rehabilitation medicine is a very 'hands-on' specialty and although many rehabilitation medicine physicians have an interest in delivering services via telehealth consultations, some may find the prospect daunting due to not being physically located with the patient at the time of the consultation.

These Guiding Principles aim to support rehabilitation medicine physicians in delivering telehealth consultations to patients with limited access to rehabilitation medicine in rural and remote areas in particular. These principles also provide guidance on undertaking unsupported telehealth consultations when there are no local clinician(s) with the patient at the time of the consultation.

As well as using these Guiding Principles in conjunction with local policy and guidelines on telehealth, the RACP and AFRM recommend that physicians participate in training to gain the technical and contextual knowledge to conduct telehealth consultations more effectively.

In addition to the medical skills and knowledge needed to provide specialist medical advice, physicians should be familiar with the best ways to use telehealth. Physicians and other health professionals can access the RACP's free Continuing Professional Development e-learning module, *RACP Introduction to Telehealth*, to gain the skills needed to use telehealth effectively. Further information including case studies and articles on telehealth is available from the RACP Telehealth website: http://www.racptelehealth.com.au/ and from the Australian College of Rural and Remote Medicine (ACCRM) eHealth website: http://www.ehealth.acrrm.org.au/.

Guiding principles

General principles

- Patients should receive the same quality of care regardless of whether the consultation is delivered face to face or via telehealth.
- In circumstances where no alternatives exist, a telehealth consultation will be better than no consultation at all to enable patients to access timely care.
- Telehealth consultations should not be used to replace current referral or assessment and treatment pathways.
- The information included in the referral to the rehabilitation medicine physician should:
 - o clearly outline the purpose of the consultation;
 - o provide information as to the suitability of a telehealth consultation;
 - o provide guidance as to whether assistance at the patient-end/practice site is required; and
 - o if such assistance is needed, the level of assistance should be specified.
- Telehealth consultations may not be appropriate in all cases. There should be a triage process to determine if an initial consultation can be carried out by telehealth. This triage

² The Royal Australasian College of Physicians (RACP) (2013), Introduction to Telehealth Continuing Professional Development (CPD) Module. Available online: http://www.ehealth.acrrm.org.au/about-racp [last accessed 03/08/16]

process needs to be undertaken by the treating clinician and careful consideration should be aiven to³:

- o patient safety and well-being
- o clinical needs of patient
- o clinical effectiveness of telehealth consultation
- patient preference
- o need for and availability of appropriate clinical assistance at the patient-end
- If the need for clinical assistance at the patient-end has been identified, those providing it should have the appropriate skills and training to perform necessary assessments and examinations. Rehabilitation medicine physicians should ensure local clinicians assisting them have the skills required to undertake clinical assessments on their behalf. Ideally, rehabilitation medicine physicians should offer on-site training to local physicians 'to maximise the trust in and consistency of the assessment processes'.4
- Telehealth consultations need to be carried out with a camera and microphone at both sites (i.e. the patient-end and the remote specialist-end). The internet connections at both ends (physician-end and patient-end) need to have sufficient bandwidth to guarantee reasonable transmission of video signal and sound.
- Reasonable privacy needs to be ensured at both sites: clinicians and patients need to ensure that they use a quiet room and that they will not be disturbed during the telehealth consultation.

Prior to the telehealth consultation

- There should be a clearly documented policy/protocol adopted by all clinicians involved regarding who is responsible for the ongoing care of the patient, follow-up of recommendations and authority to make clinical decisions.
- An assessment as to how much of the 'information/ assessment/ or intervention can be done 'live' and what needs to be completed prior to the telehealth session' needs to be undertaken jointly by the rehabilitation medicine physician located remotely and the referring clinician at the patient-end.⁵
- There should be an appropriate mechanism in place to arrange investigations and management at the patient-end. The rehabilitation medicine physician needs to ensure all preparatory tests and assessments have been undertaken prior to the telehealth consultation in order to maximise the benefit of the online consultation.
- The rehabilitation medicine physician should confirm that they have received all relevant patient information from local clinicians.
- The rehabilitation medicine physician should also check with the clinician(s) at the patientend that the patient has received information about 'the purpose, importance, benefits, risks and possible costs, if applicable, associated with the proposed telehealth consultation to assist the patient to make properly informed decisions about their health.'6
- The remote rehabilitation medicine physician and local clinician(s) should also discuss and agree to the protocol for keeping a record of the consultation. Patient information and the consultation record need to be available at both sites. In instances where local clinicians are

Guidelines for Sub-acute Services Offering Digital Telehealth Network Consultations, p.6

³ South Australia Department of Health, Statewide Rehabilitation Clinical Network (July 2013), Guidelines for Sub-acute Services Offering Digital Telehealth Network Consultations, p.4

⁴ South Australia Department of Health, South Australia Telehealth Reference Group (October 2013), Guidelines for Clinical Services Offering Digital Telehealth Network Consultations, p.12

South Australia Department of Health, Statewide Rehabilitation Clinical Network (July 2013), Guidelines for Sub-acute Services Offering Digital Telehealth Network Consultations, p.9.

⁶ South Australia Department of Health, Statewide Rehabilitation Clinical Network (July 2013),

located at the patient-end during the telehealth consultation, both the rehabilitation medicine physician and local clinicians should produce a record of the consultation. If the telehealth consultation is unsupported, the rehabilitation medicine physician should ensure that their consultation record is shared with relevant local clinicians.

During the telehealth consultation

- At the very start of the telehealth consultation, all those present should identify themselves
 to confirm their identity. If a local clinician is present at the patient-end, they should ask the
 patient to confirm their name, address and date of birth. If the telehealth consultation is
 unsupported, the rehabilitation medicine physician should ask the patient to confirm this
 information.
- The patient should be informed of the purpose and limitations of the consultation at the start of the consultation..
- The telehealth consultation should focus on the rehabilitation medicine physician providing a
 direct service to the patient in the same way as a face-to-face consultation would. This is
 applicable where there are one or more local clinicians present at the patient-end during the
 telehealth consultation.
- At the end of the telehealth consultation, the rehabilitation medicine physician should provide a verbal summary to confirm the diagnosis (where possible) and ongoing management which may include diagnostic investigations, procedures and/or medications.⁷
- All clinicians present need to summarise the follow-up action for which they are responsible
 as the final step in the telehealth consultation to make it explicitly clear which clinician will be
 responsible for which specific follow-up action.⁸
- If the telehealth consultation is unsupported, the rehabilitation medicine physician must ensure clear communication of information regarding diagnosis (where possible) and ongoing management/follow-up is provided to the local clinician(s). The patient should be informed of this process at the time of the telehealth consultation.

After the telehealth consultation

• A written consultation report should be provided to the referring clinician in a timely manner after the consultation. The report can also be provided to the patient if appropriate.

To ensure ongoing improvements in the delivery of the service, it is recommended that
patients/carers are provided with and asked to complete an evaluation form at the end of the
consultation.

South Australia Department of Health, Statewide Rehabilitation Clinical Network (July 2013),
 Guidelines for Sub-acute Services Offering Digital Telehealth Network Consultations, p.10
 South Australia Department of Health, Statewide Rehabilitation Clinical Network (July 2013),
 Guidelines for Sub-acute Services Offering Digital Telehealth Network Consultations, p.10

Appendix A - Case studies

Using telehealth to aid in therapeutic assessment

WJ is a 58 year old lady from a rural town in New South Wales who had a previous stroke resulting in spasticity affecting her arm that was interfering with her hand function. WJ was able to access specialist care via telehealth through the rural stroke service

An occupational therapist was present at WJ's side during the telehealth consultation at the local health centre with the rehabilitation medicine physician located in the regional centre. The occupational therapist and the rehabilitation medicine physician had a pre-consultation discussion in regards to functional issues and relevant assessments. The occupational therapist was able to demonstrate the degree of spasticity and muscle groups involved to the rehabilitation medicine physician. A plan to treat with botulinum toxin A was developed with WJ and the therapy and goals of treatment were established at the telehealth consultation. WJ was required to attend the regional centre to receive the botulinum toxin A injections.

Her ongoing progress was monitored by the rehabilitation medicine physician remotely via telehealth. The outcome was positive for WJ as she was able to receive high quality care and timely local follow-up with the occupational therapist present. Without telehealth, WJ would have found it difficult to access specialist care in her area. The consultation, treatment planning and treatment processes were able to be repeated 12 months later when the patient required further treatment.

Lessons learnt

The telehealth consultation was set up with a health professional with appropriate skills at the patient end and goals of the telehealth consultation were established at the onset which led to a positive outcome for the patient.

Case Study with potential pitfalls for a new service

A new telehealth rehabilitation service was set up to provide rehabilitation services to a rural health service from a metropolitan service. It was set up as a visiting service by a rehabilitation physician every 2 weeks with telehealth consultations and case conferences in the intervening period. Day to day care was to be managed by the local treating doctor, however, no formal guidelines were set up prior to the service commencing.

DJ, an 82 year old lady who lives in the rural area had a total hip replacement in a metropolitan orthopaedic unit and returned to the rural centre for rehabilitation.

The rehabilitation medicine physician carried out an assessment of the patient by telehealth upon her arrival, a rehabilitation nurse was present at the patient side. During this telehealth consultation, the rehabilitation nurse advised the rehabilitation medicine physician that the patient's hip wound was oozing and reddened in appearance. The rehabilitation medicine physician requested the local treating doctor be asked to inspect the wound and arrange a wound swab as well as a full blood count and inflammatory markers. The rehabilitation medicine physician also requested close nursing

observations and temperature monitoring of the patient.

Following the telehealth consultation the local doctor reviewed the wound and considered that its appearance was satisfactory and that it did not require any further action. The patient subsequently reported significant pain in her leg to the rehabilitation nurse and allied health team members and became febrile. Oral antibiotic treatments were then commenced by the local doctor after a midstream urine sample.

The rehabilitation medicine physician visited the rural centre a week later on a scheduled face to face visit. On review, the rehabilitation medicine physician assessed that the patient's hip wound had broken open and was oozing serous fluid. The patient was febrile and had a white cell count raised beyond baseline. The rehabilitation medicine physician organised for the patient to be transferred to the metropolitan centre under the orthopaedic team. The patient was found to have multi-resistant organism infection requiring antibiotics and later hip prosthesis removal.

Lessons learnt

In this case, a clear policy by clinicians involved regarding who was responsible for the ongoing care of the patient, follow-up of recommendations and authority to make clinical decisions had not been developed prior to the commencement of the service. This contributed to the delay in ordering appropriate investigations and the patient receiving timely care.

Provision of wound photographs could have been of benefit for the telehealth consultation and the need for these could have been considered during the planning of the service.

Telehealth consultation for the management of a patient with Spinal Cord Injury (SCI)

A 35 year old man sustained a cervical spinal cord injury while mountain biking. He denied loss of consciousness but reported seeing "stars" when his head struck the ground. He was unable to move any of his limbs or feel sensation below his clavicles. MRI at the local hospital demonstrated a central cervical cord contusion without bony fracture or soft tissue evidence of ligamentous injury.

He was referred to the regional spinal rehabilitation unit for outpatient follow up through the outreach clinic. The referral received the day prior to his planned discharge indicated that he was walking and had experienced a "full recovery" with the exception of weakness in the left hand. When the referring house officer was contacted and asked about bowel and bladder function, assurances were given that the patient was moving his bowels and that he had voided after the catheter was removed the day prior. A teleconference was scheduled with the rehabilitation medicine consultant, the referring ward charge nurse and the patient to discuss spinal cord injury (SCI) and to ensure he was safe for discharge. Due to the referring hospital's desire to discharge the patient and his desire to return home the teleconference was scheduled for later that day.

Upon questioning by the rehabilitation medicine consultant, it was clear that the man had not recovered to the extent portrayed by the house officer. The patient reported "pins and needles" and

weakness in the left hand and arm interfering with fine motor activities. He was walking with a frame but had difficulty holding onto the frame with the left hand. He also noted he was "stepping higher" to ensure his left foot cleared the floor. Bowels were opening, but without awareness or regularity. He was voiding frequently and with urgency. No post void residuals had been measured. His home had several steps in but once indoors all living space was on the ground floor. He did not need to access his upstairs office. He was never tested for concussion. He complained of an occasional headache and felt quite fatigued however, these symptoms were improving. Sleep was normal; he felt his mood was "good" but he was very concerned about getting back home and to work.

At the time of referral the wait time for rehab admission was at least 7 days. He and the consultant agreed that he would be safe to return home after several aspects of his condition were confirmed and managed. He would be admitted from home for a brief stay when a bed was available. The patient felt this would allow him to see his young children and organise his work. The charge nurse agreed to ensure each concern was addressed and to report back to the consultant the following day.

The following day the charge nurse reported that three post-void residuals were over 180mls; an indwelling catheter was placed. Bowel accidents continued but he was able to safely use a standard toilet. The physiotherapist provided an AFO and cleared him for use of a single forearm crutch on level surfaces and stairs with assistance. The occupational therapist provided him with a shower seat after his wife brought in measurements of the shower space. A SCI bowel programme was initiated. As his concussion symptoms were diminishing and the "pins and needles" did not interfere significantly, no further recommendations regarding his head injury or pain were made. If persistent, the symptoms would be addressed during the rehab admission. The district nurse was to be available if needed. He was to be admitted to the rehabilitation unit in10 days to address all SCI concerns, to improve mobility and general function and to improve bowel and bladder function.

The telehealth consultations with the outcomes and plan were documented by the consultant. Copies were sent to the patient, the acute hospital ward and the GP. The man returned for a 3 week inpatient rehabilitation programme with good results and with on-going SCI rehabilitation service follow-up, community therapy and other supports in the community established prior to discharge.

Lessons learnt:

Pressure for acute hospital beds, wait lists for specialist rehabilitation beds and patients determined to quickly return home can often lead to failure in the community post SCI. Availability of the rehabilitation medicine consultant allowed better patient and local healthcare provider understanding of the complex physical and medical conditions of SCI. In this case, awareness of the problems and a comprehensive plan facilitated via telehealth consultations, as well as flexibility around admission, resulted in optimal patient outcomes and satisfaction.

Telehealth consultations can be key to preventing future complications and poor outcomes for patients who would not otherwise have access to specialist services in their local area.

Telehealth consultations to manage dialysis and ongoing care plan for an SCI outpatient

A regional spinal rehabilitation service received a request from a community healthcare provider and a funder case manager for review of pressure area and dialysis care plan for an outpatient based rurally approximately 4 hours' drive from the nearest metropolitan area.

Two telehealth consultations were held: one with just the patient, the funder case manager and the rehabilitation medicine consultant; the second was attended by the patient, family, community nurse, physiotherapist, rehabilitation consultant and SCI clinical nurse specialist (CNS). The rehabilitationmedicine consultant also liaised with the renal physician located at the patient's home hospital regarding the challenges of positioning off the pressure wound during dialysis. All involved including the renal doctor and the community team provided positive feedback and reported a good outcome with pressure wound management.

Lessons learnt

Telehealth consultations can ensure appropriate patient care when specialist medical intervention would otherwise not be available locally. In addition, the use of telehealth consultations between specialist physicians and local health providers can facilitate improved local health provider knowledge and management of complex diagnoses.

Appendix B – Glossary of key terms

Patient-end: the end of the video consultation where the patient is located.

Patient-end clinician: the healthcare provider (for example, GP, nurse, Aboriginal health worker, therapist) who is with the patient during the telehealth consultation to offer in-person support. This practitioner must have appropriate clinical skills to assess and manage the consultation.

Specialist-end: the end of the video consultation where the specialist rehabilitation medicine physician is located.

Telehealth: usually defined as the provision of health care from a distance through phone contact, videoconference or email. *Please note these Guiding Principles were developed specifically for the delivery of rehabilitation medicine consultations conducted via videoconference.* However, they may also be relevant to the delivery of consultations via other technologies.

Telerehabilitation: this is a broad term which may refer to the provision of a range of therapies by videoconference, some of which are not delivered by rehabilitation medicine physicians. Therefore, for the purpose of these Guiding Principles, this term has not been employed as this document refers specifically to the delivery of specialist medical services by rehabilitation medicine physicians.

Unsupported consultation: a telehealth consultation where there is no local clinician with the patient during the videoconference.

Appendix C - Useful resources/further reading

- American Telemedicine Association (2010), *A Blueprint for Telerehabilitation Guidelines*. Available online: [last accessed 09/09/15]
- Australian College of Rural & Remote Medicine (ACRRM), eHealth website: http://www.ehealth.acrrm.org.au/ [last accessed 13/09/16]
- Australian Physiotherapy Association (2009), Position Statement: Telerehabilitation and Physiotherapy. Available online: https://www.physiotherapy.asn.au/DocumentsFolder/Advocacy_Position_Telerehabilit

ation_2009.pdf [last accessed 13/09/16]

- Flinders University and Government of South Australia (2014), Toolkit for providing home-based tele-rehabilitation services using an ipad. Available online: http://www.flinders.edu.au/faculty-health-sciences-files/telehealth/TOOL%20KIT%20FOR%20PROVIDING%20HOME%20BASED%20TELE%20-%20Docs%20version%2029_9_14v2%20%28electronic%20version%29PDF.pdf [last accessed 13/09/16]
- New South Wales Agency for Clinical Innovation (2015), Guidelines for the use of Telehealth for Clinical and Non Clinical Settings in NSW. Available online: http://www.aci.health.nsw.gov.au/ data/assets/pdf_file/0010/258706/ACI-telehealth-guidelines.pdf [last accessed 13/09/16]
- New South Wales Agency for Clinical Innovation (2014), Telehealth Resource Package.
 Available online: http://www.aci.health.nsw.gov.au/ data/assets/pdf_file/0003/189201/ACI-Telehealth-Resource-Package.pdf [last accessed 13/09/16]
- South Australia Department of Health, South Australia Telehealth Reference Group (October 2013), Guidelines for Clinical Services Offering Digital Telehealth Network Consultations
- South Australia Department of Health, Statewide Rehabilitation Clinical Network (July 2013), Guidelines for Sub-acute Services Offering Digital Telehealth Network Consultations. Available
 - online: http://www.sahealth.sa.gov.au/wps/wcm/connect/97db9d0042632bfebce5beb44d317729 [last accessed 13/09/16]
- The Royal Australasian College of Physicians (RACP) Telehealth website: http://www.racptelehealth.com.au/ [last accessed 13/09/18]
- The Royal Australasian College of Physicians (RACP) (2013), Introduction to Telehealth Continuing Professional Development (CPD) Module. Available online: http://www.ehealth.acrrm.org.au/about-racp [last accessed 13/09/16]
- The Royal Australasian College of Physicians (2013), *Telehealth Guidelines and Practical Tips*: http://www.racptelehealth.com.au/wp-content/uploads/2013/02/Telehealth-Guidelines-and-Practical-Tips.pdf [last accessed 13/09/16]