

# Multidisciplinary rehabilitation communication and referral

for patients diagnosed with, or recovering from COVID-19

## Information for acute care physicians and allied health

This document provides guidance to acute care physicians and allied health professionals on referring people who are diagnosed with, or are recovering from COVID-19 to multidisciplinary rehabilitation assessment and management.

### Scope

This document provides information for:

- acute care physicians including, but not limited to, ICU physicians, respiratory physicians and emergency department clinicians
- allied health practitioners and other clinicians providing rehabilitation in the acute setting, or in cardiac and/or pulmonary rehabilitation in the outpatient setting.

It outlines the criteria, method and communication expectations for referring people diagnosed with, or recovering from COVID-19 for assessment by rehabilitation medicine and multidisciplinary rehabilitation management.

### What is multidisciplinary rehabilitation?

Rehabilitation medicine can offer a wide range of services that have been shown to improve patient outcomes and decrease length of hospital stay.<sup>1</sup>

Multidisciplinary rehabilitation teams are led by rehabilitation medicine physicians who coordinate and prioritise a process of care by nurses, doctors and allied health therapists. They also coordinate medical liaison with other specialist clinical teams (e.g. respiratory, intensive care specialists, neurology, vascular, cardiac, etc.) as well as oversee ongoing management of comorbidities as required.

The settings in which these services are provided include:

- in-reach, where an acute hospital inpatient is provided rehabilitation in conjunction with ongoing acute care needs
- inpatient and outpatient rehabilitation, involving transfer to a rehabilitation facility or home
- telerehabilitation and rehabilitation in the home for patients recovering from moderate or severe COVID-19 in the home.

The impact that timely referral can have to patient flow, health economics, patient outcomes and the release of acute and ICU beds should not be underestimated in the COVID-19 setting; and is well established in longitudinal studies in NSW.<sup>2</sup>

Multidisciplinary rehabilitation regularly and easily integrates with existing single therapy disciplines on acute wards, such as physiotherapists delivering early pulmonary or reconditioning rehabilitation. This coordinated care assists clinicians delivering single therapy care to complement their services with other disciplines of allied health (e.g. speech pathologists and occupational therapists), with care delivery coordinated by rehabilitation physicians according to the [Principles to support rehabilitation care](#).<sup>3</sup>

### Applicability

- For those people diagnosed with moderate to severe COVID-19 being managed in the ward environment or in the intensive care unit.
- For those who have been diagnosed with, or are recovering from extra-pulmonary complications of COVID-19, or those with persistent symptoms who are being managed in the community.
- For those with disabilities and/or multiple comorbidities living in the community under lockdown or quarantine conditions who have high risk factors for developing moderate to severe COVID-19 should they become infected. This is the concept of prehabilitation.<sup>4-7</sup>

### Referrals

There are a number of criteria to consider for referring COVID-19 patients for a multidisciplinary rehabilitation medicine assessment, these may include two or more of the following.

- Anyone who has spent more than seven days on a ventilator or is expected to be ventilated for more than seven days.<sup>8,9</sup>
- Inability to mobilise independently.
- Inability to self-care, feed, dress, wash and toilet without assistance.
- Evidence of malnutrition (greater than 10% of weight loss and/or a BMI less than 18.5–20kg/m<sup>2</sup>), or those who have received parenteral nutrition.<sup>10</sup>
- Swallowing and/or communication impairment.
- Intercurrent acute stroke, acute myocardial infarct, acute limb ischemia venous thromboembolism and/or acute requirement for haemodialysis.
- Critical care myopathy and/or neuropathy, including Guillain Barre Syndrome.
- New onset of dyspnoea and/or oxygen de-saturation (pulse oximetry below 92% (88% for COPD) on room air after 5m walk).<sup>11</sup>
- Persisting cognitive impairment in a person with no evidence of cognitive impairment pre-COVID-19 diagnosis (MMSE<26/30 when the CAM delirium screening tool is negative).
- Pain significantly impacting function at a VAS >4.<sup>12</sup>
- Any patient with pre-existing disability, including those with developmental disability, neuromuscular disability and intellectual disabilities.
- When a single discipline therapist requests more intensity of therapy or inpatient/in-reach multidisciplinary rehabilitation to improve patient outcomes.
- When clinically, the patient appears unlikely to recover to pre-morbid level of function by the time of planned discharge.

### Ongoing communication

Rehabilitation medicine services include ongoing communication strategies with the referring acute teams and the preparation of virtual care teams and community services to continue care in the home for those with ongoing symptoms. Types of communication include:

- written discharge summaries
- phone contact with GPs
- email and online communication with virtual care clinics
- direct phone or online contact with rehabilitation in the home teams and telerehabilitation teams for the purposes of transfer of care.

## How to refer

Processes for referral for a rehabilitation medicine assessment will vary between and within LHDs but will include referrals to rehabilitation medicine team members made by phone, text, email, online and face to face.

In the event that your hospital does not have a rehabilitation medicine service on site, contact can be made to the ACI Rehabilitation Community of Practice secretariat Ms Louise Sellars on 0409 382 268, to identify the closest local services.

## Methodology

This document was developed by members of the Rehabilitation Community of Practice Executive group in consultation with directors of rehabilitation services, rehabilitation physicians and other rehabilitation clinicians working in both the public and private sectors. Document authors identified and reviewed relevant published research. Searches using Twitter between 1 August and 15 September 2020 were conducted using hashtags #covidrehab, #rehabilitation, #LongCovid and #rehab.

The rationale for the communications and referral documents comes from five key sources:

- existing international guidelines on rehabilitation for those suffering from COVID-19<sup>1,13-19</sup>
- research regarding early rehabilitation for a variety of conditions that cause temporary or permanent disability<sup>20-22</sup>
- existing Agency for Clinical Innovation documents regarding models of care for rehabilitation<sup>23,24</sup>
- limited evidence for early rehabilitation following COVID-19<sup>25-31</sup>
- research on the use of early rehabilitation for patients in ICU.<sup>9,32-43</sup>

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