COVID-19: updates on follow-up & long-term effects

July 2nd 2020

**STRATEGY UNIT RAPID SCAN**

**Title:** REHABILITATION NEEDS AND POST-ICU RECOVERY FOR SEVERE COVID-19 PATIENTS: RAPID SCAN 2: UPDATED 26th JUNE

Source: The Strategy Unit | Published online 26th June 2020

‘Emerging evidence explores increased concerns regarding potential neurological complications of COVID-19. A BMJ editorial highlights the need to shift the research focus to studies on living with this disease. Other commentaries cover cognitive rehabilitation, cardiac rehabilitation, and paediatric inflammatory syndrome temporally related to Covid-19’.

View the updated tracker for latest evidence: <https://www.strategyunitwm.nhs.uk/covid19-and-coronavirus#evidence>, which updates: [Rapid scan 2: rehabilitation needs and post-ICU recovery for severe COVID-19 patients](https://www.strategyunitwm.nhs.uk/sites/default/files/2020-05/20200513%20Evidence%20rapid%20scan%202%20-%20Rehab.pdf) (13th May).

**guidance & position statements**

**Title:** Responding to COVID-19 and Beyond: Framework for assessing early rehabilitation needs following treatment in intensive care

Source: Intensive Care Society | Published online June 24th, 2020

Framework includes 'PICUPS tool' and 'PICUPS data collection sheet and rehab prescription' documents.  Download the framework, tools and collection sheets at:
<https://www.ics.ac.uk/ICS/ICS/GuidelinesAndStandards/Framework_for_assessing_early_rehab_needs_following_ICU.aspx>

**Title**: Rehabilitation needs of people affected by the impact of COVID-19: guidance

Source: Welsh Government | Published online June 17th, 2020

This guidance focuses on the rehabilitation needs of people who have been directly and indirectly affected by Covid-19, while recognising that rehabilitation is also a core component of the majority of essential and specialist services as set out in the Essentials Services Framework.

<https://gov.wales/rehabilitation-needs-people-affected-impact-covid-19-guidance>

**Title**: Clinical guide for the management of critical care for adults with COVID-19 during the Coronavirus pandemic, version 3 (for info)

Source: Intensive Care Society | Published online June 22nd, 2020

This clinical guidance provides contemporary information on the care of critically ill adult patients with COVID-19 to practising clinicians at the bedside. Version 3 updates the previous NHS England guideline published on 8th April 2020.

<https://icmanaesthesiacovid-19.org/clinical-guide-for-the-management-of-critical-care-for-adults-with-covid-19-during-the-coronavirus-pandemic>

**Title:** Guidance on screening and active monitoring for post-traumatic stress disorder (PTSD) and other mental health consequences in people recovering from severe covid-19 illness

Source: COVID Trauma Response Working Group Rapid Guidance | Published online June 24th 2020

‘In this paper we describe the principles of screening and active monitoring for PTSD and other stress-related adverse mental health outcomes in survivors of severe COVID-19 illness. We make specific recommendations on translating these principles into practice and give guidance as to how and when these should be implemented’.

View full-text: <https://232fe0d6-f8f4-43eb-bc5d-6aa50ee47dc5.filesusr.com/ugd/6b474f_733283bf71ce4295b915dffa86886280.pdf>

**research papers**

**Title:** Effects of Rehabilitation Interventions on Clinical Outcomes in Critically Ill Patients: Systematic Review and Meta-Analysis of Randomized Controlled Trials

Source: Critical Care Medicine | Published online July 2020

Objectives: To assess the impact of rehabilitation in ICU on clinical outcomes. Data Sources: Secondary data analysis of randomized controlled trials published between 1998 and October 2019 was performed in accordance with Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. Conclusion: Rehabilitation interventions in critically ill patients do not influence mortality and are safe. Protocolized physical rehabilitation significantly shortens time spent on mechanical ventilation and in ICU, but this does not consistently translate into long-term functional benefit. Stable patients with lower Acute Physiology and Chronic Health Evaluation II at admission (<20) and prone to protracted ICU stay may benefit most from rehabilitation interventions

View abstract (contact Library for full-text): <https://journals.lww.com/ccmjournal/Abstract/2020/07000/Effects_of_Rehabilitation_Interventions_on.16.aspx>

**Title**: Neurological and neuropsychiatric complications of COVID-19 in 153 patients: a UK-wide surveillance study

Source: The Lancet Psychiatry | Published online June 25th 2020.

Concerns regarding potential neurological complications of COVID-19 are being increasingly reported, primarily in small series. Larger studies have been limited by both geography and specialty. Comprehensive characterisation of clinical syndromes is crucial to allow rational selection and evaluation of potential therapies. The aim of this study was to investigate the breadth of complications of COVID-19 across the UK that affected the brain.

To our knowledge, this is the first nationwide, cross-specialty surveillance study of acute neurological and psychiatric complications of COVID-19. Altered mental status was the second most common presentation, comprising encephalopathy or encephalitis and primary psychiatric diagnoses, often occurring in younger patients. This study provides valuable and timely data that are urgently needed by clinicians, researchers, and funders to inform immediate steps in COVID-19 neuroscience research and health policy.

Full-text: [https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(20)30287-X/fulltext](https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366%2820%2930287-X/fulltext)

TITLE: PERSONALIZED RECOVERY OF SEVERE COVID19: REHABILITATION FROM THE PERSPECTIVE OF PATIENT NEEDS

Source: European Journal of Clinical Investigation| Published online June 19th 2020

After long term hospitalization or ICU treatment, COVID‐19 patients are severe functionally impaired. They experience not only physical weakness but may also suffer from problems on the pulmonary, physical, psychosocial and cognitive domain. These domains interact and the impact on participation varies between patients. Therefore aftercare should be costumized to the patients individual needs. In this article we present a patient centered model to tailor treatment in the view of the Dutch health care system. This model can be helpful to determine the appropriate treatment for each patient at the right time in the right setting.

View full text: <https://onlinelibrary.wiley.com/doi/10.1111/eci.13325>

**Title:** Chronic pain after COVID-19: implications for rehabilitation

Source: British Journal of Anaesthesia, 31st May 2020

The treatment needs of COVID-19 survivors are not yet fully appreciated. Although initially assumed to be a respiratory disease, it is now clear that it affects a variety of systems. Multi-organ failure can occur, with reports of cardiac, renal, haematological, and neurological effects in the acute stages. It is likely, therefore, that these survivors will have significant multi-domain impairment requiring ongoing support. There has been a recent ‘call to action’ amongst the rehabilitation community to act quickly to ensure adequate resources to provide early phase, multidisciplinary interventions to promote physical and psychological recovery.

We can perhaps learn from previous studies of critical care survivorship, which has been relatively neglected until recently. This complex challenge has been termed post-intensive care syndrome (PICS). It incorporates the cognitive, physical, and psychological dysfunction reported after ICU discharge that can have profound effects on quality of life. Chronic pain is often part of this, but how this additional co-morbidity affects critical care survivors is poorly understood. Estimates of chronic pain prevalence after ICU vary from 14% to 77% depending on timescale, method of measurement, and population.  Pain also appears to be an important factor affecting ability to return to work and quality of life up to 5 year after discharge.  It is likely that those surviving critical illness with COVID-19 will be at particular risk of developing chronic pain. There are a number of reasons why this may be the case…

Full-text:[https://www.bjanaesthesia.org.uk/article/S0007-0912(20)30403-7/fulltext](https://www.bjanaesthesia.org.uk/article/S0007-0912%2820%2930403-7/fulltext)

**Title:** BEYOND ACUTE CARE: WHY COLLABORATIVE SELF-MANAGEMENT SHOULD BE AN ESSENTIAL PART OF REHABILITATION PATHWAYS FOR COVID-19 PATIENTS (Letter)

Source: Journal of Rehabilitation Medicine, Vol 52 Issue 5, published online 22nd June 2020

Thomas W. Wainwright and Matthew Low; From the Orthopaedic Research Institute, Bournemouth, University, and Physiotherapy Department, The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust, UK.

Our healthcare systems are currently consumed in responding to the acute care needs of patients with COVID-19. However, there will be subsequent stresses to our healthcare systems over the longer term. These include, handling the rehabilitation burden of COVID-19 patients post-acute care; managing emergency (and eventually non-emergency) non-COVID conditions within restricted resources; and managing the interrupted care of patients with long-term chronic conditions. These will be provided by a workforce with the collective fatigue and psychological effects of the acute pandemic…

Planning for the implementation of self-management where it is not currently a routine component of rehabilitation pathways needs to start now. The benefits to patients must be introduced and promoted. In each local context, it will require a whole system approach, where it is clearly articulated how the COVID-19 rehabilitation pathway will be managed. This will be essential in helping our communities recover from the pandemic.

View full-text: <https://www.medicaljournals.se/jrm/content/abstract/10.2340/16501977-2685> (click on ‘pdf’ – top right).

**Title:** Long-term Pulmonary Consequences of Coronavirus Disease 2019 (COVID-19): What We Know and What to Expect

Source: Journal of Thoracic Imaging; July 2020

Over the last couple of months, the clinical and imaging features of COVID-19 pneumonia have been discussed in numerous publications, and the major imaging findings of the disease have been described in detail. However, the post-recovery course of the disease, including its physical and psychological sequela, is not yet clear.2,3 The long-term effect of COVID-19 on lung parenchyma and pulmonary function remains an outstanding question. Although it is too early to completely answer this question, our limited observations demonstrate significant pulmonary sequela of the disease in some of the survivors.

Full-text: <https://journals.lww.com/thoracicimaging/Fulltext/2020/07000/Long_term_Pulmonary_Consequences_of_Coronavirus.11.aspx>

**Title:** COVID-19: Understanding and Mitigating Trauma in ICU Survivors

Source: Psychological Trauma: Theory, Research, Practice & Policy, July 2020

The spread of coronavirus disease 2019 (COVID-19) has placed many individuals in need of critical care, with a high proportion of hospitalized patients being admitted to intensive care units (ICU) to treat acute outcomes of COVID-19 (e.g., respiratory failure via mechanical ventilation). The ICU is known to be a setting where individuals are at a high risk of experiencing significant psychological difficulties, and patients with COVID-19 are particularly susceptible to such experiences, which can impact their recovery process (e.g., post-intensive care syndrome). This article seeks to highlight the intersection between critical care related to trauma and COVID-19 and point providers toward opportunities for anticipating and managing secondary effects in effort to promote psychological adaptation.

Full-text: <https://doi.apa.org/fulltext/2020-45467-001.html>

**on-going research**

TITLE: POST CRITICAL CARE SUPPORT FOR PATIENTS DISCHARGED AFTER COVID-19: LIVE QUESTIONNAIRE

Source: NIHR Policy Research Programme | Published online June 29th 2020

This brief survey, funded by the NIHR Policy Research Programme rapid COVID-19 scheme, explores practices of routine follow-up of patients discharged from critical care, and how practices are changing during the COVID-19 pandemic. It should take you around 5-6 minutes to complete. All information provided will be confidential and will not be identifiable in any reports from this work. If you are willing to participate in a follow-up interview to provide more detail, please include your contact details at the end of the questionnaire.

If you are an ICU lead, or if you manage follow-up services for patients after discharge from a stay in critical care, please complete the survey: <https://york.qualtrics.com/jfe/form/SV_eDjZQOXbktTHEKF>

**news items & SERVICE DEVelopments in the uk**

**Title:** WALES’ FIRST REHABILITATION PROGRAMME FOR COVID-19 PATIENTS

Source: Aneurin Bevan University Health Board | Published online June 24th 2020

‘This week we’ve launched Wales’ first Rehabilitation Programme for COVID-19 patients. Held at the Geraint Thomas National Velodrome of Wales, it involves a total of 40 patients, formerly ventilated & identified by a Multi-Disciplinary Team assessment…’

<https://twitter.com/AneurinBevanUHB/status/1275762565939945478>

**TITLE:** REMOTE PULMONARY REHAB PROGRAMME

Source: ImpACT & Respiratory Team | Published online 29th June 2020
[Improving Adult Respiratory Care Together] MDT working across Southern Derbyshire & Erewash supporting people with lung conditions

‘Today we have started assessments for our remote #pulmonaryrehab programme. Here are our fantastic fitness instructors with a taste of the programme’
<https://twitter.com/ImpACTplus_team/status/1277546804129783808>

**TITLE:** CRITICAL CARE FOLLOW-UP VIDEO: VIRTUAL TOUR OF CRITICAL CARE UNIT

Source: The Princes Alexandra Hospital NHS Trust; Published online: 1st July 2020

‘Pre-COVID, any survivor coming to our Follow Up Clinic would be given an opportunity to visit the Critical Care Unit. As we will now be using video calls for our clinic, we made this video to help survivors fill in some of the gaps they may have.’

Watch the YouTube video: <https://twitter.com/RehabCritical/status/1278101439584374784>

Title: Virtual physio sessions help COVID-19 patient recover

Source: North Tees and Hartlepool NHS Foundation Trust, 21st May 2020

‘A local businessman is back walking his dog after recovering from COVID-19, thanks to video physiotherapy sessions from North Tees and Hartlepool NHS Foundation Trust’.

<https://www.nth.nhs.uk/news/virtual-physio-sessions-help-covid-19-patient-recover/>

**patient information:**

Title: COVID-19: COPING AFTER A HOSPITAL STAY

Source: Dr Will Curvis, Clinical Psychologist, Lancaster University

Advice to support coping following hospital admission due to COVID-19, discussing fatigue, cognitive problems and emotional problems (including low mood, anxiety and PTSD).

‘This booklet focuses on difficulties related to COVID-19 that are more to do with the brain or the mind. This booklet will provide information on common emotional experiences following a admission in hospital. This booklet also discusses problems with memory, attention and other thinking skills that you may notice after being in hospital for a long period of time’.

Download from: <https://www.researchgate.net/publication/342241825_COVID-19_-_Coping_after_hospital_stay> (download pdf button top right of screen)

**TITLE:** COVID-19 PATIENT REHABILITATION GUIDE

Source: Liverpool Heart and Chest Hospital NHS Foundation Trust
<https://www.lhch.nhs.uk/media/7300/covid19-rehabilitation-guide.pdf>

**Title:** COVID-19 patient rehabilitation booklet: Information for patients

Source: Leeds Teaching Hospitals NHS Trust; 26th June 2020
View booklet: <http://flipbooks.leedsth.nhs.uk/LN004864.pdf>

**TITLE:** COVID-19 REHABILITATION HANDBOOK

Source: University Hospitals Plymouth NHS Trust

‘This handbook has been created to give you a framework that you can use with your team of health care professionals and your loved ones to support your recovery after COVID-19’.

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We

[TRFT Library & Knowledge Service](https://www.trftlibraryknowledge.com/) aim to bring together the latest guidelines, research and news on Covid-19 through our [Covid-19 portal](https://www.trftlibraryknowledge.com/coronavirus.html). For daily updates on Covid-19 visit our '[Latest Health](https://trfthealthweeklydigest.wordpress.com/)' newsfeed, or use the hashtag [#covid19rftlks](https://twitter.com/hashtag/covid19rftlks?src=hashtag_click) to see our latest tweets on Covid-19 research, guidelines and news.

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