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

25th February 2021

**research papers**

**Title:** **SEQUELAE IN ADULTS AT 6 MONTHS AFTER COVID-19 INFECTION**

**Source**: JAMA Network Open 2021;4(2):e210830, 19 Feb 2021 (Research Letter)

A longitudinal prospective cohort of adults with laboratory-confirmed severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection was enrolled at the University of Washington with a concurrent cohort of healthy patients in a control group …

Discussion: In this cohort of individuals with COVID-19 who were followed up for as long as 9 months after illness, approximately 30% reported persistent symptoms. A unique aspect of our cohort is the high proportion of outpatients with mild disease. Persistent symptoms were reported by one-third of outpatients in our study, consistent with a previously reported study, in which 36% of outpatients had not returned to baseline health by 14 to 21 days following infection. However, this has not been previously described 9 months after infection.

Consistent with existing literature, fatigue was the most commonly reported symptom. This occurred in 14% of individuals in this study, lower than the 53% to 71%2-4 reported in cohorts of hospitalized patients, likely reflecting the lower acuity of illness in our cohort. Furthermore, impairment in HRQoL has previously been reported among hospitalized patients who have recovered from COVID-19; we found 29% of outpatients reported worsened HRQoL.

Notably, 14 participants, including 9 non-hospitalized individuals, reported negative impacts on ADLs after infection. With 57.8 million cases worldwide, even a small incidence of long-term debility could have enormous health and economic consequences.

Study limitations include a small sample size, single study location, potential bias from self-reported symptoms during illness episode, and loss to follow-up of 57 participants. To our knowledge, this study presents the longest follow-up symptom assessment after COVID-19 infection. Our research indicates that the health consequences of COVID-19 extend far beyond acute infection, even among those who experience mild illness. Comprehensive long-term investigation will be necessary to fully understand the impact of this evolving viral pathogen.

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2776560?utm_source=silverchair&utm_campaign=jama_network&utm_content=covid_weekly_highlights&utm_medium=email>

**Title:** **IDENTIFYING PATIENTS AT RISK OF POST-DISCHARGE COMPLICATIONS RELATED TO COVID-19 INFECTION**

**Source**: Thorax; Feb 2021

SARS-CoV-2 infection is a multisystem disease with post-discharge sequelae. We report early follow-up data from one UK hospital of the initial 200 hospital inpatients with slow recovery from the condition. At 4 weeks post-discharge, 321/957 survivors (34%) had persistent symptoms. A structured outpatient clinical assessment protocol was designed, and outcomes from the first 200 patients seen 4–6 weeks post-discharge are presented here. In 80/200 (40%), we identified at follow-up a cardiorespiratory cause of breathlessness, including persistent parenchymal abnormality (64 patients), pulmonary embolism (four patients) and cardiac complications (eight patients). These findings occurred both in patients who had intensive care unit (ICU) admissions and those who had been managed on the ward, although patients requiring ICU admissions were more likely to have a significant cardiorespiratory cause found for their breathlessness, risk ratio 2.8 (95% CI 1.5 to 5.1).

<https://thorax.bmj.com/content/early/2021/02/04/thoraxjnl-2020-215861>

**Title:** **RISK FACTORS FOR LONG-TERM CONSEQUENCES OF COVID-19 IN HOSPITALISED ADULTS IN MOSCOW USING THE ISARIC GLOBAL FOLLOW-UP PROTOCOL: STOPCOVID COHORT STUDY**

**Source**: Medrxiv Preprint Server, 19th Feb 2021

[**This article is a preprint and has not been peer-reviewed [what does this mean?]. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice.**](https://www.medrxiv.org/content/what-unrefereed-preprint)

Background The long-term sequalae of COVID-19 remain poorly characterised. In this study, we aimed to assess long-standing symptoms (LS) (symptoms lasting from the time of discharge) in previously hospitalised patients with COVID-19 and assess associated risk factors.

Methods This is a longitudinal cohort study of adults (≥18 years of age) with clinically diagnosed or laboratory-confirmed COVID-19 admitted to Sechenov University Hospital Network in Moscow, Russia. Data were collected from patients discharged between April 8 and July 10, 2020. Participants were interviewed via telephone using Tier 1 ISARIC Long-term Follow-up Study CRF and the WHO CRF for Post COVID conditions. Reported symptoms were further categorised based on the system(s) involved. Additional information on dyspnoea, quality of life and fatigue was collected using validated instruments. Multivariable logistic regressions were performed to investigate risk factors for development of LS categories.

Findings Overall, 2,649 of 4,755 patients discharged from the hospitals were available for the follow-up and included in the study. The median age of the patients was 56 years (IQR, 46–66) and 1,353 (51.1%) were women. The median follow-up time since hospital discharge was 217.5 (200.4-235.5) days. At the time of the follow-up interview 1247 (47.1%) participants reported LS. Fatigue (21.2%, 551/2599), shortness of breath (14.5%, 378/2614) and forgetfulness (9.1%, 237/2597) were the most common LS reported. Chronic fatigue (25%, 658/2593) and respiratory (17.2% 451/2616) were the most common LS categories. with reporting of multi-system involvement (MSI) less common (11.3%; 299). Female sex was associated with LS categories of chronic fatigue with an odds ratio of 1.67 (95% confidence interval 1.39 to 2.02), neurological (2.03, 1.60 to 2.58), mood and behaviour (1.83, 1.41 to 2.40), dermatological (3.26, 2.36 to 4.57), gastrointestinal (2.50, 1.64 to 3.89), sensory (1.73, 2.06 to 2.89) and respiratory (1.31, 1.06 to 1.62). Pre-existing asthma was associated with neurological (1.95, 1.25 to 2.98) and mood and behavioural changes (2.02, 1.24 to 3.18) and chronic pulmonary disease was associated with chronic fatigue (1.68, 1.21 to 2.32).

Interpretation 6 to 8 months after acute infection episode almost a half of patients experience symptoms lasting since hospital discharge. One in ten individuals experiences MSI. Female sex is the main risk factor for majority of the LS categories. chronic pulmonary disease is associated with a higher risk of chronic fatigue development, and asthma with neurological and mood and behaviour changes. Individuals with LS and MSI should be the main target for future research and intervention strategies.

Funding This study is supported by Russian Fund for Basic Research and UK Embassy in Moscow. The ISARIC work is supported by grants from: the NIHR Health Protection Research Unit (HPRU) in Emerging and Zoonotic Infections at University of Liverpool in partnership with Public Health England (PHE), in collaboration with Liverpool School of Tropical Medicine and the University of Oxford [award 200907], Wellcome Trust and Department for International Development [215091/Z/18/Z], and the Bill and Melinda Gates Foundation [OPP1209135], EU Platform for European Preparedness Against (Re-) emerging Epidemics (PREPARE) [FP7 project 602525] This research was funded in part, by the Wellcome Trust. The views expressed are those of the authors and not necessarily those of the DID, NIHR, Wellcome Trust or PHE.

Evidence before this study Evidence suggests that COVID-19 may result in short- and long-term consequences to health. Most studies do not provide definitive answers due to a combination of short follow-up (2-3 months), small sample size, and use of non-standardised tools. There is a need to study the longer-term health consequences of previously hospitalised patients with COVID-19 infection and to identify risk factors for sequalae.

Added value of this study To our knowledge, this is the largest cohort study (n=2,649) with the longest follow-up since hospital discharge (6-8 months) of previously hospitalised adult patients. We found that 6-8 months after discharge from the hospital, around a half (47.1%) of patients reported at least one long-standing symptom since discharge. Once categories of symptoms were assessed, chronic fatigue and respiratory problems were the most frequent clusters of long-standing symptoms in our patients. Of those patients having long-term symptoms, a smaller proportion (11.3%) had multisystem involvement, with three or more categories of long-standing symptoms present. Although most patients developed symptoms since discharge, a smaller number of individuals experienced symptom beginning symptom appearing weeks or months after the acute phase. Female sex was a predictor for most of the symptom categories at the time of the follow-up interview, with chronic pulmonary disease associated with chronic fatigue-related symptoms, and asthma with a higher risk of neurological symptoms, mood and behaviour problems.

Implications of all the available evidence The majority of patients experienced long-lasting symptoms 6 to 8 months after hospital discharge and almost half reported at least one long-standing symptom, with chronic fatigue and respiratory problems being the most frequent. A smaller number reported multisystem impacts with three or more long-standing categories present at follow-up. A higher risk was found for women, for chronic pulmonary disease with chronic fatigue, and neurological symptoms and mood and behaviour problems with asthma. Patterns of the symptom development following COVID-19 should be further investigated in future research.

<https://www.medrxiv.org/content/10.1101/2021.02.17.21251895v1>

**Title:** **POSTTRAUMATIC STRESS DISORDER IN PATIENTS AFTER SEVERE COVID-19 INFECTION**

**Source**: *JAMA Psychiatry.*Published online February 18, 2021 (Research Letter)

Posttraumatic stress disorder (PTSD) may occur in individuals who have experienced a traumatic event. Previous coronavirus epidemics were associated with PTSD diagnoses in post-illness stages, with meta-analytic findings indicating a prevalence of 32.2% (95% CI, 23.7-42.0).1 However, information after severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is piecemeal. We aimed at filling this gap by studying a group of patients with coronavirus disease 2019 (COVID-19) who sought treatment at the emergency department, most of whom required hospitalization, eventually recovered, and were subsequently referred to a post-acute care service for multidisciplinary assessment …

Discussion: This cross-sectional study found a PTSD prevalence of 30.2% after acute COVID-19 infection, which is in line with findings in survivors of previous coronavirus illnesses compared with findings reported after other types of collective traumatic events (Figure).3-5 Associated characteristics were female sex, which has been extensively described as a risk factor for PTSD,1,3,5 history of psychiatric disorders, and delirium or agitation during acute illness. In the PTSD group, we also found more persistent medical symptoms, often reported by patients after recovery from severe COVID-19.

<https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2776722?utm_source=silverchair&utm_campaign=jama_network&utm_content=covid_weekly_highlights&utm_medium=email>

**Title:** **DO PATIENTS WITH COVID-19 BENEFIT FROM REHABILITATION? FUNCTIONAL OUTCOMES OF THE FIRST 100 PATIENTS IN A COVID-19 REHABILITATION UNIT**

**Source**: Archives of Physical Medicine and Rehabilitation; Feb 2021

Abstract: OBJECTIVE To determine the benefits associated with brief inpatient rehabilitation for Covid-19 patients. DESIGN Retrospective chart review. SETTING A newly created specialized rehabilitation unit in a tertiary care medical center PARTICIPANTS: Consecutive sample of the first 100 patients with Covid-19 infection admitted to rehabilitation. INTERVENTION Inpatient rehabilitation for post-acute care Covid-19 patients MAIN OUTCOME MEASURES: Measurements, at admission and discharge, comprised a Barthel Activities of Daily Living Index (including baseline value before Covid-19 infection), time to perform 10 sit-to-stands with associated cardio-respiratory changes, and grip strength (dynamometry). Correlations between these outcomes and the time spent in ICU were explored. RESULTS Patient characteristics upon admission to rehabilitation were: men 66%, age 66±22 years, mean delay from symptom onset 20.4±10.0 days, BMI 26.0±5.4 kg/m2, hypertension 49%, diabetes 29%, with 26% having >50% pulmonary damage on CT-scans. Mean length of rehabilitation stay was 9.8±5.6 days. From admission to discharge, the Barthel index (/100) increased from 77.3±26.7 to 88.8±24.5 (p<0.001), without recovering baseline values (94.5±16.2; p<0.001). There was a 37% improvement in sit-to-stand frequency (0.27±0.16 to 0.37±0.16 Hz; p<0.001), a 13% decrease in post-test respiratory rate (30.7±12.6 to 26.6±6.1; p=0.03), and a 15% increase in grip strength (18.1±9.2 to 20.9±8.9 kg; p<0.001). At both admission and discharge, Barthel score correlated with grip strength (rho=0.39-0.66; p<0.01), which negatively correlated with time spent in ICU (rho=-0.57 to -0.49, p<0.05). CONCLUSIONS Inpatient rehabilitation for Covid-19 patients was associated with substantial motor, respiratory and functional improvement, especially in severe cases, even though there remained mild persistent autonomy loss upon discharge. Following acute stages, Covid-19, primarily a respiratory disease, might convert into a motor impairment correlated with the time spent in intensive care.

<https://pubmed.ncbi.nlm.nih.gov/33548208/>

**Title:** **COVID-19: PATIENT CHARACTERISTICS IN THE FIRST PHASE OF POST-INTENSIVE CARE REHABILITATION**

**Source**: Archives of Rehabilitation Research and Clinical Translation; Feb 2021 ; p. 100108

Abstract: Objective To describe clinical characteristics of post-ICU COVID-19 patients, admitted for inpatient rehabilitation. Design A cross-sectional design. Setting Inpatient rehabilitation care in the Netherlands. Participants All post-ICU COVID-19 patients admitted to the rehabilitation centre between April 2 and May 13, 2020 were invited to participate in the study. Included were patients above 18 years old, needing inpatient rehabilitation after ICU treatment for COVID-19.InterventionNot applicable. Main outcomes measures The following information was collected in the first week of inpatient rehabilitation care: 1. Demographics, 2. ICU-stay parameters, 3. Medical, physical and functional characteristics, 4. Self-reported symptoms. Results Sixty patients participated with the mean age of 59.9 and the majority being men(75%). Most important findings for rehabilitation: in the first week after discharge to the rehabilitation centre 38.3% of all patients experienced exercise-induced oxygen desaturation, in 72.7% muscle weakness was present in all major muscle groups and 21.7% had a reduced mobility in one or both shoulders. Furthermore 40% suffered from dysphagia and 39.2% reported symptoms of anxiety. Conclusion Post-ICU COVID-19 patients, display physical and anxiety symptoms as reported in other post-ICU patient groups.

However this study showed some remarkable clinical characteristics of post-ICU COVID-19 patients. Rehabilitation programs need to anticipate on this. Long-term follow-up studies are necessary.

<https://www.sciencedirect.com/science/article/pii/S2590109521000082>

**Title:** **ROLE AND IMPACT OF INTERDISCIPLINARY REHABILITATION IN AN ACUTE COVID-19 RECOVERY UNIT**

**Source**: Journal of the American Geriatrics Society; Feb 2021

<https://agsjournals.onlinelibrary.wiley.com/doi/epdf/10.1111/jgs.17060>

**Title:** **INNOVATIVE CARE DELIVERY OF ACUTE REHABILITATION FOR PATIENTS WITH COVID-19: A CASE REPORT**

**Source**: Physical Therapy; Feb 2021; vol. 101 (no. 2)

Abstract: OBJECTIVE The novel coronavirus 2019 (COVID-19) has impacted acute rehabilitation delivery by challenging the reliance on in-person care and the standard practice of delivering separate physical and occupational therapy services. Health care systems are rapidly developing innovative models of care that provide essential acute rehabilitation services while mitigating viral spread. We present 2 case reports to illustrate how we used technology and COVID-19-specific decision-making frameworks to deliver acute rehabilitation. METHODS We iteratively developed 2 decision-making models regarding care delivery and discharge planning in the context of the challenges to delivering care in a pandemic. We leveraged use of video communication systems installed in all COVID-19 rooms to reduce the number of in-room providers and frequency of contact. Two patients were admitted to the hospital with symptomatic COVID-19 (males, ages 65 and 40 years).RESULTS With the use of a video communication system and the decision-making frameworks for care delivery and discharge planning, we avoided 7 in-person sessions. Both patients demonstrated functional gains and were discharged home. CONCLUSION The 2 case reports highlight the innovative use of a technology and COVID-19-specific decision-making processes to provide patient-centered care given the challenges to care delivery during the COVID-19 pandemic. IMPACT The use of technology and decision-making models allows for delivery of safe acute rehabilitation care that minimizes contact, conserves personal protective equipment, and prepares for COVID-19 surges. The discussion points raised have applicability to patients without COVID-19 and other health care systems. Future research is needed to determine the effectiveness, costs, and downstream effects of our novel approach to acute rehabilitation for patients with COVID-19.

<https://academic.oup.com/ptj/article/101/2/pzaa204/6031810>

**Title: EFFECTIVENESS OF PULMONARY REHABILITATION IN COVID-19 RESPIRATORY FAILURE PATIENTS POST-ICU**

**Source**: Respiratory Physiology & Neurobiology; Feb 2021 ; p. 103639

Abstract: INTRODUCTION Some COVID-19 patients develop respiratory failure requiring admission to intensive care unit (ICU). We aim to evaluate the effects of pulmonary rehabilitation (PR) post-ICU in COVID-19 patients. METHODS Twenty-one COVID-19 patients were evaluated pre- and post-PR and compared retrospectively to a non-COVID-19 group of 21 patients rehabilitated after ICU admission due to respiratory failure. RESULTS PR induced greater 6-min walking distance improvement in COVID-19 patients (+205 ± 121 m) than in other respiratory failure patients post-ICU (+93 ± 66 m). The sooner PR was performed post-ICU, the better patients recovered. CONCLUSIONS PR induced large functional improvements in COVID-19 patients post-ICU although significant physical and psychosocial impairments remained post-PR.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7879818/>

**Title:** **COMPREHENSIVE REHABILITATION TREATMENT FOR SUB ACUTE COVID-19 PATIENTS: AN OBSERVATIONAL STUDY**

**Source**: Physical Therapy; Feb 2021; vol. 101 (no. 2)

Background: COVID-19 is a respiratory infection but it should be considered as a systemic illness with increasing interest on the survivors sequelae and their management. Considering multi-organ disabilities, a comprehensive rehabilitation provided in sub-acute phase could be considered a suitable setting for these patients. Aim: Objective of this article is to report the features and rehabilitative outcomes of patients requiring rehabilitation due to disabilities related to severe Covid -19 infection. Design: Longitudinal Observational Study. Setting: Rehabilitation Department in General Hospital. Population: Patients showing multiple disabilities due to severe Covid 19 infection.

Methods: 39 consecutive patients were admitted to a rehabilitation ward transferred from ICU or Medical wards. Barthel Index and Functional Ambulation Categories were scored as disabilities measures. Data regarding comorbidity, rehabilitation course; swabs; procedures in acute phase; non-respiratory manifestations; dysphagia, mental confusion; PaO2/FiO2; oxygen supplementation have been collected to admission and discharge. For all patients a comprehensive rehabilitation treatment, have been provided.

Results: Functional outcome is good with a statistical significant improvements in BI and FAC scores. 38 were discharged at their home. Mean LOS in acute wards was 46 days. Mean LOS in rehabilitation was 20 day. 11 patients still had tracheostomy at admission, none at discharge and all dysphagic patients recovered a normal oral feeding. The change in PaO2/FiO2 and the reduction of the oxygen supplementation testify a good recovery of pulmonary function.

Conclusions: Our results show a consistent recovery with little caregiver burden at discharge. Fast relocation from ICU makes beds available which are very valuable during pandemic. Comprehensive rehabilitation treatment provided in sub-acute phase for patients still positive for SARS-CoV-2, would be desirable as it seem to be an effective setting. In this setting a strong medical assistance must be ensured.

Clinical rehabilitation impact: The activation of comprehensive rehabilitation settings able to assist sub acute patients still positive would be desirable as it could be a very efficient Healthcare Systems answer to the catastrophic pandemic, decompressing acute hospital as well. Furthermore contagious patients with swabs positivity affected by other kind of disabilities (i.e. Stroke, Femur Fracture) can be treated avoiding to loose the early rehabilitation.

<https://pubmed.ncbi.nlm.nih.gov/33541042/>

**Title:** **CHELSEA PHYSICAL ASSESSMENT TOOL FOR EVALUATING FUNCTIONING IN POST-INTENSIVE CARE UNIT COVID-19 PATIENTS**

**Source**: Journal of Medical Virology; Feb 2021

By this letter, we aimed to address the need of an adequate assessment of functional status in post‐intensive care unit (ICU) coronavirus disease 2019 (COVID‐19) patients. COVID‐19 patients are at risk for post-intensive care syndrome, with an impaired functional status. Physical and Rehabilitation Medicine (PRM) physicians have to face both acute and post-acute COVID‐19 patients and provide them with an adequate respiratory and neuromotor rehabilitation plan. To date, specific assessment tools are warranted to provide information regarding COVID‐19 patients' functioning. Chelsea Critical Care Physical Assessment Tool (CPAx) is a bedside assessment tool specifically designed to assess function in post‐ICU patients and has demonstrated validity, reliability, and responsiveness in critical care population. Taken together, we retain that the CPAx, due to its characteristics, might be used by PRM physicians for assessing functioning in post‐ICU COVID‐19 patients.

<https://onlinelibrary.wiley.com/doi/10.1002/jmv.26867>

**Title:** **MIDTERM FUNCTIONAL SEQUELAE AND IMPLICATIONS IN REHABILITATION AFTER COVID19. A CROSS-SECTIONAL STUDY**

**Source**: European Journal of Physical and Rehabilitation Medicine; Feb 2021

Background: To date, COVID-19 has been mainly investigated concerning the acute and subacute phase implications and management. Meanwhile, few studies focused on the mid-term sequelae, which still remain largely unknown. Aim: To assess the physical performance of COVID-19 survivors at 3 to 6 months from Hospital discharge. Design: A cross-sectional study focused on mid-term functional outcomes evaluation in COVID-19 survivors. Setting: Outpatients who had been previously hospitalized due to COVID-19 from March to May 2020 at the University Hospital of Novara (Italy). Population: We enrolled 204 patients, of which 60% were men, with the mean age of 57.9 years.

Methods: Patients firstly underwent the Short Physical Performance Battery test (SPPB), which is composed of a series of physical tests assessing the lower limb function and the functional status of the subjects. Subsequently, based on SPPB results, patients' cardiorespiratory fitness performance was further investigated. Patients with normal SPPB score (SPPB > 10) underwent the 2-Minute Walking test (2MWT) whereas, in order to safely test the cardiorespiratory function, in patients with abnormal SPPB score (SPPB ≤ 10) the 1-Minute-Sit-to-Stand Test (1MSTST) was performed. It should be noted that the 1MSTST can be safely performed even by subjects with compromised walking ability.

Results: Overall, 66 patients (32% of our sample) showed an impaired physical performance at 3 to 6 months after hospital discharge. In particular, 29 patients presented an SPPB score ≤ 10, and the 1MSTST confirmed this status in the whole group (100%) compared to the reference values for age and sex. Besides, among patients with a normal SPPB score, 37 showed a lower sex- and age-matched 2MWT score. Finally, a significant association between Intensive Care Unit hospitalization or mechanical ventilation and physical impairment was observed together with a significant association between the walking ability (measured with SPPB and 2MWT) and the number of comorbidities.

Conclusions: A residual physical and functional impairment was observed in COVID-19 survivors at mid-term evaluation after hospitalization. Clinical rehabilitation impact: Considering the current COVID-19 epidemiology, we might expect a tremendous burden of disability in the next future. Thus, an appropriate clinical rehabilitation pathway must be implemented.

<https://pubmed.ncbi.nlm.nih.gov/33565741/>

**Title:** **CONSTRUCT VALIDITY OF THE POST-COVID-19 FUNCTIONAL STATUS SCALE IN ADULT SUBJECTS WITH COVID-19**

**Source**: Health and Quality of Life Outcomes; Feb 2021; vol. 19 (no. 1); p. 40

Background. An increasing number of subjects are recovering from COVID-19, raising the need for tools to adequately assess the course of the disease and its impact on functional status. We aimed to assess the construct validity of the Post-COVID-19 Functional Status (PCFS) Scale among adult subjects with confirmed and presumed COVID-19.

Methods. Adult subjects with confirmed and presumed COVID-19, who were members of an online panel and two Facebook groups for subjects with COVID-19 with persistent symptoms, completed an online survey after the onset of infection-related symptoms. The number and intensity of symptoms were evaluated with the Utrecht Symptom Diary, health-related quality of life (HrQoL) with the 5-level EQ-5D questionnaire, impairment in work and activities with the Work Productivity and Activity Impairment questionnaire and functional status with the PCFS Scale.

Results. 1939 subjects were included in the analyses (85% women, 95% non-hospitalized during infection) about 3 months after the onset of infection-related symptoms. Subjects classified as experiencing ‘slight’, ‘moderate’ and ‘severe’ functional limitations presented a gradual increase in the number/intensity of symptoms, reduction of HrQoL and impairment in work and usual activities. No differences were found regarding the number and intensity of symptoms, HrQoL and impairment in work and usual activities between subjects classified as experiencing ‘negligible’ and ‘no’ functional limitations. We found weak-to-strong statistical associations between functional status and all domains of HrQoL (r: 0.233–0.661). Notably, the strongest association found was with the ‘usual activities’ domain of the 5-level EQ-5D questionnaire.

Conclusion. We demonstrated the construct validity of the PCFS Scale in highly-symptomatic adult subjects with confirmed and presumed COVID-19, 3 months after the onset of symptoms.

<https://hqlo.biomedcentral.com/articles/10.1186/s12955-021-01691-2>

**Title:** **REHABILITATION AND COVID-19: A RAPID LIVING SYSTEMATIC REVIEW BY COCHRANE REHABILITATION FIELD UPDATED AS OF DECEMBER 31ST, 2020 AND SYNTHESIS OF THE SCIENTIFIC LITERATURE OF 2020**

**Source**: European Journal of Physical and Rehabilitation Medicine; Feb 2021

Abstract: BACKGROUNDCOVID-19 infection significantly increased mortality risk and the burden of disability in most survivors, regardless of symptom severity at onset. The rehabilitation needs of people infected are receiving growing attention, as evidenced by the increasing number of publications, including those addressing the chronic consequences of infection. OBJECTIVES This rapid living systematic review reports the evidence published in November and December 2020 and summarises the entire body of literature on rehabilitation in COVID-19 patients published in 2020.METHODSThis update was performed using the methodology reported by the second edition conducted by Cochrane Rehabilitation REH-COVER Action. We searched PubMed, Embase, CINAHL, Scopus, Web of Science, and PEDro databases. Papers related to COVID-19 and rehabilitation were retrieved and summarised descriptively. RESULTST he search retrieved 4441 studies. After the removal of duplicates and the screening for title and abstract, we retained 105 studies. Of these, we included 54 in the qualitative synthesis of this update. According to OCEBM 2011 Levels of Evidence Table, most studies (64.8%) fall within the category of Level 4 evidence. Up to 40.7% of papers included COVID-19 patients in the post-acute phase. In 2020, our rapid living systematic review included 230 studies; most of these (73.9%) were Level 4 studies, 25.7% were Level 3, and only one study was Level 2. The evidence level improved over time. While most studies (44.8%) included patients with acute COVID-19, we observed a gradual increase in the number of reports about chronic symptoms and the long-term consequences of the infection. CONCLUSIONS The update of the rapid living systematic review by Cochrane Rehabilitation Field demonstrates an increase in the level of evidence of studies addressing the rehabilitation needs associated with COVID-19 infection. Although most studies are still case reports/series, there is a trend towards conducting prospective investigations of the early natural history of the disease (first months post- onset). High-quality-level studies on the efficacy of rehabilitation, and long-term monitoring of the disease and its sequelae are yet to emerge.

<https://pubmed.ncbi.nlm.nih.gov/33599442/>

**Title:** **OUTCOMES OF A COVID-19 RECOVERY PROGRAM FOR PATIENTS HOSPITALIZED WITH SARS-COV-2 INFECTION IN NEW YORK CITY: A PROSPECTIVE COHORT STUDY**

**Source**: PM & R : the Journal of Injury, Function and Rehabilitation; Feb 2021

Abstract: INTRODUCTION In the Spring of 2020, New York City was an epicenter of COVID-19. The post-hospitalization needs of COVID-19 patients were not understood and no outpatient rehabilitation programs had been described. OBJECTIVE We implemented a program across two hospital campuses to treat patients discharged home with persistent COVID-19 symptoms. We evaluated if a virtual rehabilitation program would lead to improvements in strength and cardiopulmonary endurance when compared with no intervention. DESIGN Prospective cohort study SETTING: Academic medical center PATIENTS: We treated 106 patients discharged home with persistent COVID-19 symptoms between April-July 2020. 44 patients performed virtual physical therapy (VPT); 25 patients performed home physical therapy (HPT); 17 patients performed independent exercise program (IE); and 20 patients did not perform therapy. INTERVENTIONS All patients were assessed by physiatry. VPT sessions were delivered via secure HIPAA-compliant telehealth platform 1-2 times/week. Patients were asked to follow up 2 weeks after initial evaluation. MAIN OUTCOME MEASURES Primary study outcome measures were the change in lower body strength, measured by the 30-second sit-to-stand test; and the change in cardiopulmonary endurance, measured by the 2-minute step test. RESULTS At the time of follow up, 65% of patients in the VPT group and 88% of patients in the HPT group met the clinically meaningful difference (CMD) for improvement in sit-to-stand scores, compared with 50% and 17% of those in the IE group and no-exercise group (p=0.056). 74% of patients in the VPT group and 50% of patients in the HPT, IE and no-exercise groups met the CMD for improvement in the step test (p=0.12). CONCLUSIONS Virtual outpatient rehabilitation for patients recovering from COVID-19 improved lower limb strength and cardiopulmonary endurance, while a home physical therapy program improved lower limb strength. Virtual rehabilitation seems to be an efficacious method of treatment delivery for recovering COVID-19 patients.

<https://pubmed.ncbi.nlm.nih.gov/33599057/>

**Title:** **POST-COVID-19 ARTHRITIS: A CASE REPORT AND LITERATURE REVIEW**

**Source**: Clinical Rheumatology; Feb 2021

Abstract: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV2) is the novel pathogen responsible for the coronavirus disease 19 (COVID-19) outbreak. Researchers and clinicians are exploring the pathogenetic mechanisms of the viral-induced damage and growing interest is focusing on the short-term and long-term immune-mediated consequences triggered by the infection. We will focus on post-SARS-CoV2 infection arthritis which may arise as a new pathological condition associated with COVID-19. In this article, we describe a case of acute oligoarthritis occurring 13 days after a SARS-CoV2 severe pneumonia in a middle-aged Caucasian man and we go over a brief review of the current available literature. We hypothesize that molecular mimicry might be the basic immunological mechanism responsible for the onset of COVID-19-related arthritis based on the current knowledge of SARS-CoV2 and on the known pathogenetic mechanism of viral-induced arthritis.

<https://pubmed.ncbi.nlm.nih.gov/33587197/>

**Title:** **ESTABLISHING A PEER SUPPORT PROGRAM FOR SURVIVORS OF COVID-19: A REPORT FROM THE CRITICAL AND ACUTE ILLNESS RECOVERY ORGANIZATION**

**Source**: American Journal of Critical Care; 15th Feb 2021

Estimates from the coronavirus disease 2019 (COVID-19) pandemic suggest that about 20% of adults with COVID-19 are hospitalized, and in approximately 20% of those, severe acute respiratory failure develops that requires life-support treatments such as invasive mechanical ventilation. Results of research from before the COVID-19 pandemic suggest that most of these adults with critical illness will survive to hospital discharge. Survival, for many, will come with a legacy of new or worsening deficits in physical, mental, or cognitive health in the months to years after hospital discharge. Post–intensive care syndrome has become the agreed-upon term for these new or worsening health problems that can persist beyond an acute hospitalization for serious illness.

The psychosocial outcomes in survivors of critical illness include high rates of clinically significant anxiety, depression, and posttraumatic stress symptoms. Related, many survivors are unable to return to work and thereby suffer financial consequences that further the distress of survivors and their loved ones ; income loss by both the survivor and family members who curtail work to serve as caregivers may contribute further to their collective psychological distress.

The multiple challenges of providing recovery-focused care in the intensive care unit (ICU) during the pandemic, along with the stigma and social isolation unique to COVID-19 survivors, may contribute to a high level of psychological distress in COVID-19 survivors.15 Urgent innovation is needed to mitigate psychosocial distress among COVID-19 survivors. In this review, we leverage the growing expertise within the Critical and Acute Illness Recovery Organization (CAIRO), an international multidisciplinary organization committed to improving the quality of life of patients and families after critical illness, to (1) define peer support and provide a vision for its potential role in COVID-19 recovery and (2) summarize key strategies for developing and sustaining a peer support program during the pandemic.

<https://aacnjournals.org/ajcconline/article/doi/10.4037/ajcc2021675/31287/Establishing-a-Peer-Support-Program-for-Survivors>

**Title:** **POST-COVID-19 SYMPTOM BURDEN: WHAT IS LONG-COVID AND HOW SHOULD WE MANAGE IT?**

**Source**: Lung; 2021 Feb 11;1-7

The enduring impact of COVID-19 on patients has been examined in recent studies, leading to the description of Long-COVID. We report the lasting symptom burden of COVID-19 patients from the first wave of the pandemic. All patients with COVID-19 pneumonia discharged from a large teaching hospital trust were offered follow-up. We assessed symptom burden at follow-up using a standardised data collection technique during virtual outpatient clinic appointments. Eighty-six percent of patients reported at least one residual symptom at follow-up. No patients had persistent radiographic abnormalities. The presence of symptoms at follow-up was not associated with the severity of the acute COVID-19 illness. Females were significantly more likely to report residual symptoms including anxiety (p = 0.001), fatigue (p = 0.004), and myalgia (p = 0.022). The presence of long-lasting symptoms is common in COVID-19 patients. We suggest that the phenomenon of Long-COVID may not be directly attributable to the effect of SARS-CoV-2, and believe the biopsychosocial effects of COVID-19 may play a greater role in its aetiology.

<https://pubmed.ncbi.nlm.nih.gov/33569660/>

**Title:** **PATIENT-REPORTED OLFACTORY RECOVERY AFTER SARS-COV-2 INFECTION: A 6-MONTH FOLLOW-UP STUDY**

**Source**: International Forum of Allergy & Rhinology; Feb 2021

Long‐term results about smell recovery after SARS‐CoV‐2 infection are missing and it remains unclear how many COVID‐19+ patients may suffer from permanent smell impairment.

The aim of this study was to assess olfactory dysfunction (OD) in a cohort of COVID‐19+ patients to characterize long‐term patterns of olfactory recovery and identify predictors of poor olfactory restoration.

<https://onlinelibrary.wiley.com/doi/10.1002/alr.22775>

**Title: UPDATE TO LIVING SYSTEMATIC REVIEW ON PREDICTION MODELS FOR DIAGNOSIS AND PROGNOSIS OF COVID-19**

**Source**: BMJ 2021;372:n236, 3rd Feb 2021

This living systematic review by Wynants and colleagues (BMJ 2020;369:m1328) has been updated. For the latest update, visit doi:[10.1136/bmj.m1328](https://www.bmj.com/lookup/doi/10.1136/bmj.m1328). The latest version of this living systematic review critically appraises 232 prediction models for diagnosis and prognosis of coronavirus disease 2019 (covid-19), of which 87 were added in the latest update. Summary statistics on study characteristics, model availability, and model quality are also presented. All extracted data per model are publicly available at <https://www.covprecise.org/living-review/>. The quality of published prediction models is gradually improving but all models remain at high or unclear risk of bias, suggesting that their reported performance is likely optimistic and might not be met if these models are applied in daily medical practice. This update shows two promising prediction models (the Jehi et al diagnostic model and the prognostic 4C Mortality Score), both derived from large databases, which should be validated by independent researchers.

<https://www.bmj.com/content/372/bmj.n236>

**Title: ANXIETY AND DEPRESSION SYMPTOMS AFTER VIROLOGICAL CLEARANCE OF COVID-19: A CROSS-SECTIONAL STUDY IN MILAN, ITALY**

**Source**: Journal of medical virology; Feb 2021; vol. 93 (no. 2); p. 1175-1179

Abstract Prevalence of anxiety or depression was investigated in 105 coronavirus disease 2019 (COVID-19) patients at 1 to 3 months from virological clearance by hospital anxiety and depression scale (HADS-A/D). 30% of patients displayed pathological HADS-A/D, 52.4% showed persistent symptoms. Pathological patients with HADS-A/D more commonly reported symptom persistence, even after adjustment for age, gender, and disease severity. Psychological assessments should be encouraged in COVID-19 patients' follow-up.

<https://pubmed.ncbi.nlm.nih.gov/32841387/>

**Title: THE "POST-COVID" SYNDROME: HOW DEEP IS THE DAMAGE?**

**Source**: Journal of Medical Virology; Feb 2021; vol. 93 (no. 2); p. 673-674

We congratulate Halpin and colleagues1 on their work to identify residual symptoms in patients with microbiological recovery from COVID‐19. The prevalence of residual symptoms in their cohort is much higher than estimates of 35% among out‐patient, 2 but comparable with recent cohorts of hospitalized patients (87%).3

<https://pubmed.ncbi.nlm.nih.gov/32852801/>

**Title: EVALUATING THE IMPACT OF COVID-19 ON MALE REPRODUCTION**

**Source**: Reproduction (Cambridge, England); Feb 2021; vol. 161 (no. 2)

Abstract Invasion or damage of the male reproductive system is one of the reported outcomes of viral infection. Current studies have documented that SARS-CoV-2, which causes COVID-19, can damage the male reproductive system in large part by inflammatory damage caused by a cytokine storm. However, whether SARS-CoV-2 can infect the human testis directly and enter semen is controversial. Other adverse effects of SARS-CoV-2 on male reproduction are also of concern and require comprehensive evaluation. Here, we analyze the invasiveness of SARS-CoV-2 in the testis and examine reported mechanisms by which SARS-CoV-2 interferes with male reproduction. Long-term implications of SARS-CoV-2 infection on male reproduction are also discussed. It should be emphasized that although COVID-19 may induce testicular damage, a substantial decrease in male reproductive capacity awaits clinical evidence. We propose that there is an urgent need to track male COVID-19 patients during their recovery. The development of suitable experimental models, including human reproductive organoids,

<https://pubmed.ncbi.nlm.nih.gov/33434886/>

**Title:** **SARS-COV-2 INFECTION AFFECTS THE LOWER URINARY TRACT AND MALE GENITAL SYSTEM: A SYSTEMATIC REVIEW**

**Source**: Journal of Medical Virology; Feb 2021

Abstract: PubMed, Scopus, and ISI Web of Knowledge databases were searched to identify studies published up to December 2020 on the involvement of urinary and male genital systems in COVID-19. Sixteen studies involving a total of 575 patients (538 males and 37 females) were included in this systematic review. The COVID-19 phase was available for 479 patients: 426 in the acute and 53 in the recovery phase. De novo lower urinary tract symptoms (LUTS) were observed in 43 patients and deterioration of pre-existing LUTS in 7. Bladder hemorrhage was observed in 3 patients and acute urinary retention in one. Regarding male genital system, scrotal discomfort was observed in 8 patients, swelling in 14, pain in 16, and erythema in one; low flow priapism was observed in 2 patients. Ultrasound examination identified acute orchitis in 10 patients, acute epididymitis in 7, and acute epididymo-orchitis in 16. A case-control study reported that patients with moderate COVID-19 show a significant reduction in sperm concertation, total number of sperms per ejaculate, progressive motility, and complete motility. Contrary to what known from the first studies on the subject, this review also including subsequent studies give evidence of an involvement of lower urinary tract and male genital system in COVID-19.

<https://onlinelibrary.wiley.com/doi/abs/10.1002/jmv.26883>

**Title:** **PERSISTENT BRAINSTEM DYSFUNCTION IN LONG-COVID: A HYPOTHESIS**

**Source**: ACS Chemical Neuroscience; Feb 2021; vol. 12 (no. 4); p. 573-580

Abstract: Long-COVID is a post-viral illness that can affect survivors of COVID-19, regardless of initial disease severity or age. Symptoms of long-COVID include fatigue, dyspnea, gastrointestinal and cardiac problems, cognitive impairments, myalgia, and others. While the possible causes of long-COVID include long-term tissue damage, viral persistence, and chronic inflammation, the review proposes, perhaps for the first time, that persistent brainstem dysfunction may also be involved. This hypothesis can be split into two parts. The first is the brainstem tropism and damage in COVID-19. As the brainstem has a relatively high expression of ACE2 receptor compared with other brain regions, SARS-CoV-2 may exhibit tropism therein. Evidence also exists that neuropilin-1, a co-receptor of SARS-CoV-2, may be expressed in the brainstem. Indeed, autopsy studies have found SARS-CoV-2 RNA and proteins in the brainstem. The brainstem is also highly prone to damage from pathological immune or vascular activation, which has also been observed in autopsy of COVID-19 cases. The second part concerns functions of the brainstem that overlap with symptoms of long-COVID. The brainstem contains numerous distinct nuclei and subparts that regulate the respiratory, cardiovascular, gastrointestinal, and neurological processes, which can be linked to long-COVID. As neurons do not readily regenerate, brainstem dysfunction may be long-lasting and, thus, is long-COVID. Indeed, brainstem dysfunction has been implicated in other similar disorders, such as chronic pain and migraine and myalgic encephalomyelitis or chronic fatigue syndrome.

<https://pubs.acs.org/doi/10.1021/acschemneuro.0c00793>

**Title:** **THE HEALTH AND SOCIAL NEEDS OF PATIENTS DISCHARGED FROM THE EMERGENCY DEPARTMENT WITH SUSPECTED COVID-19**

**Source**: Public Health Reports (Washington, D.C.) Feb 2021

Abstract: Health-related social needs (HRSNs), such as food or housing insecurity, are important drivers of disparities in outcomes during public health emergencies. We describe the development of a telehealth follow-up program in Boston, Massachusetts, for patients discharged from the emergency department after coronavirus disease 2019 (COVID-19) testing to identify patients with worsening clinical symptoms, to screen for unmet HRSNs, and to deliver self-isolation counseling and risk-reduction strategies for socially vulnerable people. We prioritized telephone calls to patients with public health insurance and patients without primary care physicians. In the first 43 days of operation, March 30-May 12, 2020, our intervention reached 509 patients, with 209 (41.1%) patients reporting an HRSN, most commonly related to food, housing, or utilities. Thirty-one (6.1%) patients required assessment by a clinician for clinical worsening. This public health intervention may be useful for other institutions developing programs to address the social and health needs of patients discharged with suspected COVID-19.

<https://journals.sagepub.com/doi/full/10.1177/0033354920982579>

**Title: NEUROLOGICAL ASSOCIATIONS OF SARS-COV-2 INFECTION: A SYSTEMATIC REVIEW**

**Source**: CNS & Neurological Disorders Drug Targets; Feb 2021

Abstract: BACKGROUND The current ongoing COVID-19 pandemic has compelled us to scrutinize major outbreaks in the past two decades, severe acute respiratory syndrome (SARS), in 2002, and Middle East respiratory syndrome (MERS), in 2012. We aimed to assess the associated neurological manifestations with SARS CoV-2 infection. METHODS In this systematic review, a search was carried out by key-electronic databases, controlled vocabulary, and indexing of trials to evaluate the available pertinent studies which included both medical subject headings (MeSH) and advance electronic databases comprising of PubMed, Embase, Scopus, Cochrane Central Register of Controlled Trials (CENTRAL). Peer-reviewed studies published in English and Spanish were considered which reported data on the neurological associations of individuals with suspected or laboratory-confirmed SARS-CoV-2 infection. Outcomes were nervous signs or symptoms; symptom severity; and diagnoses. FINDINGS Our search identified 45 relevant studies, with 21 case reports, 3 case series, 9 observational studies, 1 retrospective study, 9 retrospective reviews, and 2 prospective reviews. This systematic review revealed that most commonly reported neuronal presentations involved headache, nausea, vomiting and muscular symptoms like fibromyalgia. Anosmia and ageusia, defects in clarity or sharpness of vision (error in visual acuity), and pain may occur in parallel. Notable afflictions in the form of anxiety, anger, confusion, post-traumatic stress symptoms, and post-intensive care syndrome were observed in individuals who were kept in quarantine and those with long-stay admissions in healthcare settings. SARS CoV-2 infection may result in cognitive impairment. Patients with more severe infection exhibited uncommon manifestations, such as acute cerebrovascular diseases (intracerebral haemorrhage, stroke), rhabdomyolysis, encephalopathy, Guillain-Barré syndrome.INTERPRETATIONSARS-CoV-2 patients experience neuronal presentations varying with the progression of the infection. Healthcare professionals should be acquainted with the divergent neurological symptoms and to curb misdiagnosis and limit long term sequelae. Health-care planners and policymakers must prepare for this eventuality, while the ongoing studies increase our knowledge base on acute and chronic neurological associations of this pathogen.

<https://pubmed.ncbi.nlm.nih.gov/33593267/>

**Title: SHORT-TERM NEUROPSYCHIATRIC OUTCOMES AND QUALITY OF LIFE IN COVID-19 SURVIVORS**

**Source**: J Intern Med, 2021 Feb 3.

Background: The general medical impacts of coronavirus (COVID-19) are increasingly appreciated. However, its impact on neurocognitive, psychiatric health and quality of life (QoL) in survivors after the acute phase is poorly understood. We aimed to evaluate neurocognitive function, psychiatric symptoms, and QoL in COVID-19 survivors shortly after hospital discharge.

Methods: This was a cross-sectional analysis of a prospective study of hospitalised COVID-19 survivors followed-up for 2 months after discharge. A battery of standardised instruments evaluating neurocognitive function, psychiatric morbidity, and QoL (mental and physical components) was administered by telephone.

Results: Of the 229 screened patients, 179 were included in the final analysis. Among survivors, the prevalence of moderately impaired immediate verbal memory and learning was 38%, delayed verbal memory (11.8%), verbal fluency (34.6%), and working memory (executive function) (6.1%), respectively. Moreover, 58.7% of patients had neurocognitive impairment in at least one function. Rates of positive screening for anxiety, depression, and post-traumatic stress disorder were 29.6%, 26.8%, and 25.1%, respectively. In addition, 39.1% of the patients had psychiatric morbidity. Low QoL for physical and mental components was detected in 44.1% and 39.1% of patients, respectively. Delirium and psychiatric morbidity were associated with neurocognitive impairment and female gender was related with psychiatric morbidity.

Conclusion: Hospitalised COVID-19 survivors showed a considerable prevalence of neurocognitive impairment, psychiatric morbidity, and poor QoL in the short-term. It is uncertain if these impacts persist over the long-term.

<https://pubmed.ncbi.nlm.nih.gov/33533521/>

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**Title: NIH LAUNCHES NEW INITIATIVE TO STUDY “LONG COVID”**

**Source**: NIH, 23rd February 2021

In December, Congress provided $1.15 billion in funding over four years for NIH to support research into the prolonged health consequences of SARS-CoV-2 infection. A diverse team of experts from across the agency has worked diligently over the past few weeks to identify the most pressing research questions and the areas of greatest opportunity to address this emerging public health priority. Today we issued the first in a series of [Research Opportunity Announcements (ROAs)](https://covid19.nih.gov/funding/open-funding-opportunities) for the newly formed NIH PASC Initiative. Through this initiative, we aim to learn more about how SARS-CoV-2 may lead to such widespread and lasting symptoms, and to develop ways to treat or prevent these conditions. We believe that the insight we gain from this research will also enhance our knowledge of the basic biology of how humans recover from infection, and improve our understanding of other chronic post-viral syndromes and autoimmune diseases, as well as other diseases with similar symptoms.

<https://www.nih.gov/about-nih/who-we-are/nih-director/statements/nih-launches-new-initiative-study-long-covid>

**Title: RESEARCHERS INVESTIGATE WHAT COVID-19 DOES TO THE HEART**

**Source**: JAMA Medical News & Perspectives, 10th Feb 2021

The first sign of heart damage was in their blood. In early case reports from Wuhan, China, where the novel coronavirus emerged, an unexpected number of patients hospitalized with the respiratory infection had elevated levels of cardiac troponin, a marker of myocardial—heart muscle—injury. Next came the echocardiograms suggesting functional abnormalities in many patients’ hearts. Soon it was obvious that myocardial injury heralded poor prognosis for patients hospitalized with coronavirus disease 2019 (COVID-19)…

<https://jamanetwork.com/journals/jama/fullarticle/2776538>

**Title: WE NEED TO DO MORE TO UNDERSTAND CHRONIC VOCAL SYMPTOMS OF COVID-19**

**Source**: BMJ Opinion 19th Feb 2021

The three of us have developed significant and enduring vocal symptoms (10+ months) after contracting covid-19 infection early in 2020*.*None of us were hospitalised, and we have struggled for answers for this ongoing symptom. This lesser known sequelae has not been recognised as a common complication. Yet we, two doctors and a voice artist who connected through online long covid groups, have suffered notable distress and disability through this symptom and wish to raise the profile of vocal issues that are being experienced in long covid to the medical community.

<https://blogs.bmj.com/bmj/2021/02/19/we-need-to-do-more-to-understand-chronic-vocal-symptoms-of-covid-19/>

**Title: LONG COVID: ‘IT’S A YEAR SINCE I’VE FELT LIKE MYSELF’**

**Source**: The Guardian, 20th February 2021

There is fresh hope for those still suffering the effects of the virus after 12 months with £18.5m of new funding and 70 new NHS clinics.

<https://www.theguardian.com/society/2021/feb/20/long-covid-still-suffering-effects-virus-months-nhs-clinics>

**Title: COMMUNITY NURSING FACES ‘REHABILITATION DISASTER’ AS COVID LEAVES THOUSANDS IN NEED**

**Source**: BMJ Opinion 19th Feb 2021

Tens of thousands of [coronavirus](https://www.independent.co.uk/topic/coronavirus) survivors needing long-term care are heaping pressure on Britain’s stretched community services, threatening a crisis that experts warn could dwarf that seen in hospitals over the past 12 months.

As many as 100,000 intensive care patients, including up to 15,000 Covid-19 survivors, will need long-term community nursing care after being discharged from hospitals during the past 12 months, The Independent has been told.

This will be on top of an as yet unknown number of Covid patients from the 350,000 treated on general wards since the pandemic began, as well as tens of thousands of people who were sick without going to hospital but have been left with debilitating symptoms of long Covid.

<https://www.independent.co.uk/news/health/coronavirus-nhs-community-nursing-long-covid-b1801458.html>

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[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.

We also produce a range of subject-specific news feeds to ensure our clinical and professional teams stay up to date with developments in their work areas. Please visit our [website](http://www.trftlibraryknowledge.com/) for more information

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