COMPLEX NEEDS OF PATIENTS FOLLOWING COVID-19: AN INTEGRATED APPROACH

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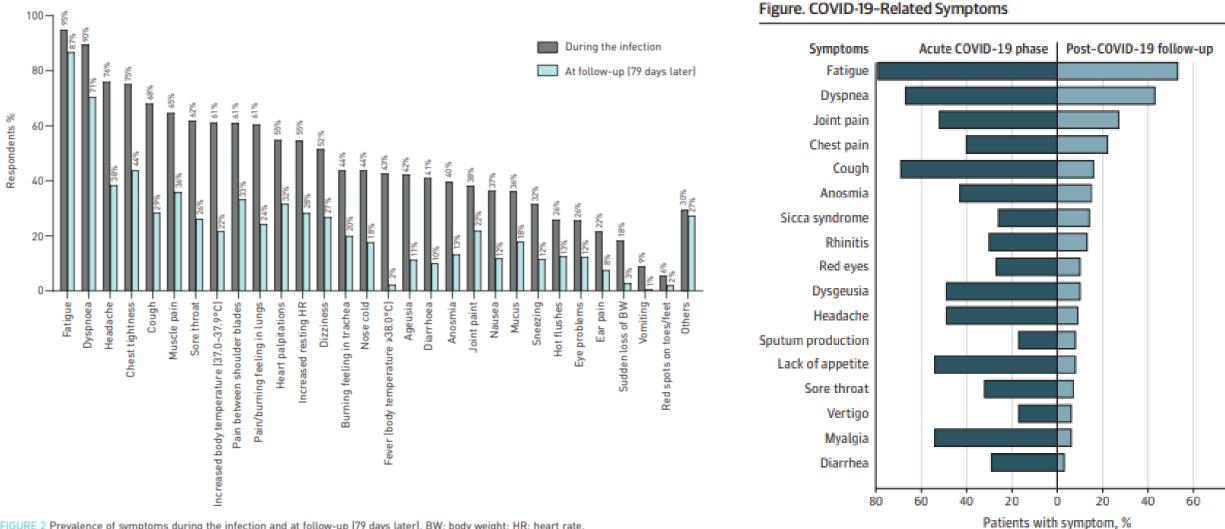


FIGURE 2 Prevalence of symptoms during the infection and at follow-up (79 days later). BW: body weight; HR: heart rate.

Goërtz et al., 2020

Carfì, Bernabei, & Landi, 2020

80

REHABILITATION NEED

International task force suggest that COVID-19 survivors with a need for rehabilitative interventions at 6-8 weeks following hospital discharge (e.g. multiple treatable traits) should receive a comprehensive rehabilitation programme

Those with pre-existing/ongoing lung function impairment at 6-8 weeks following hospital discharge should receive a comprehensive pulmonary rehabilitation programme consistent with established international standards

Spruit et al., 2020

"Pulmonary rehabilitation is a comprehensive intervention based on a thorough patient assessment followed by patient tailored therapies that include, but are not limited to, exercise training, education, and behaviour change, designed to improve the physical and psychological condition of people with chronic respiratory disease and to promote the long-term adherence to health-enhancing behaviours"

Spruit et al., 2013



Figure. COVID-19-Related Symptoms

Dyspne: Joint nai Chest pair Coug Anosmia Sicca syndrome Rhiniti Red eves Dysgeusia Headache production of appetite Sore throat Vertigo Myalgia Diarrhe:

Acute COVID-19 phase | Post-COVID-19 follow

20 40

Patients with symptom, %

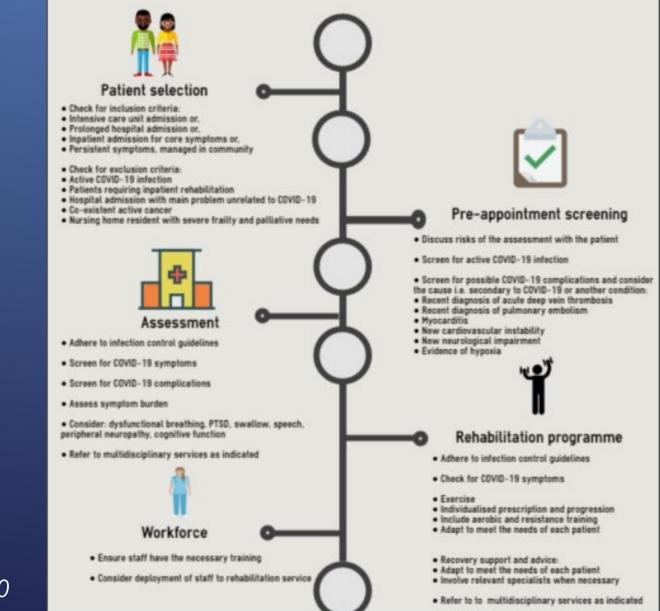
Appendix 1: V1.1 16/9/2020

British Thoracic Society

Additional considerations include;

- **Dysfunctional breathing** may require referral to a physiotherapist with specialist skills in this area.
- **Speech and swallowing problems** may require a referral to a Speech and Language Therapist.
- New shoulder problems as a consequence of proning may require referral to a musculoskeletal specialist.
- **Peripheral neuropathy** may require referral to the Peripheral Nerve Injury Unit.
- Symptoms suggestive of **PTSD** may require referral to a psychologist.
- Lack of taste/appetite may require a referral to the dietitian.
- Fatigue may benefit from referral to an occupational therapist, or physiotherapist with expertise in post viral fatigue syndrome.
- **Cognitive function** may be disrupted and an onward referral may be indicated for a more detailed assessment.

Flow diagram for delivering outpatient rehabilitation to COVID-19 survivors



Singh et al., 2020

RESOURCES





COVID-19 Recovery and Rehabilitation

An interactive e-learning resource for healthcare staff, exercise professionals and carers working with people recovering from COVID-19

This programme is in partnership with...



Health Education England, 2020

RESOURCES

Aims of post COVID rehabilitation

- Support full recovery
- Support symptom management
- <u>Support return to economic</u> productivity

Greenhalgh et al., 2020

thebmj Visual summary 🌰

Post-acute covid-19 appears to be a multi-system disease, sometimes occurring after a relatively mild acute illness. Clinical management requires a whole-patient perspective. This graphic summarises the assessment and initial management of patients with delayed recovery from an episode of covid-19 that was managed in the community or in a standard hospital ward.

The long term course of covid-19 is unknown. ? This graphic presesents an approach based on evidence available at the time of publication. However, caution is advised, as patients may present atypically, and new treatments are likely to emerge

Managing comorbidities

Many patients have comorbidities including diabetes. hypertension, kidney disease or ischaemic heart disease. These need to be managed in conjuntion with covid-19 treatment, Refer to condition specific guidance, available in the associated article by Greenhalgh and colleagues

The patient should seek medical advice if concerned, for example: Worsening breathlessness PaO₂ < 96% Unexplained chest pain New confusion Focal weakness Specialist referral may be indicated, based on clinical findings, for example: Respiratory if suspected

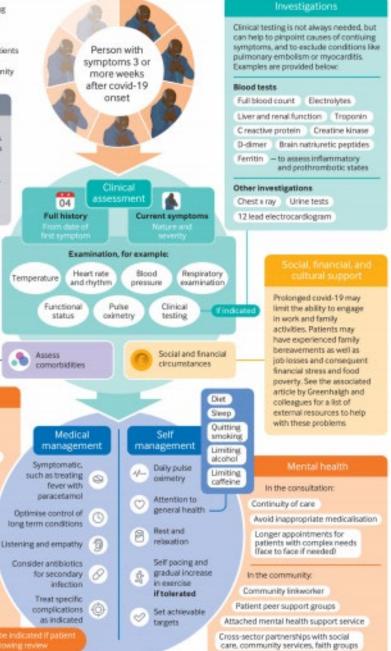
- pulmonary embolism, severe oneumonia Cardiology if suspected myocardial infarction.
- pericarditis, myocarditis or new heart failure Neurology if suspected

neurovascular or acute neurological event

Pulmonary rehabilitation may be indicated if paties

"Long covid" in primary care

Assessment and initial management of patients with continuing symptoms



CSP COVID-19 Rehabilitation Standards

Community rehabilitation: physiotherapy service delivery

CSP STANDARD [RS3]

1. Needs assessment, rehabilitation planning and review

- 2. Personalised rehabilitation
- 3. Self-management
- 4. Communication and information
- 5. Coordinated rehabilitation and care pathways
- 6. Evaluation, audit and research
- 7. Personal Protective Equipment and infection control

CSP, 2020

September 2020

ASSESSMENT

- Pre-existing co-morbidities.. and are they stable?
- ► New diagnoses made at or following COVID-19 and stability
- 'Red flag' symptoms, consider checklist including:
- PE/DVT
- Cardiovascular instability / signs of myocarditis
- Neurological diagnoses
- Development of fibrosis
 - Safe to commence rehabilitation now? Further investigations?
 - Expectations re: goals in timeframe

PRACTICALITIES

Face-to-face

- New risk assessment and SOPs different patient group
- Infection prevention and control team screening/temperature checking
- ► Signage
- Social distancing and PPE
- Redistribution of exercise equipment to allow for single patient use
- Cleaning protocols
- Safety and well-being of staff

PRACTICALITIES

Remote

- New risk assessment and SOPs
- ► Selection of patients
- Digital platforms and resources
- Components of rehabilitation
- Outcome measures and evaluation
- Upskilling workforce
- Safety and well-being of staff

1)	Screen for access to equipment required for the programme e.g. access to the appropriate technology, ability to use it, access to a telephone.	
2)	Ensure the patient has access to the necessary exercise equipment.	
3)	Screen for safe exercise environment.	
4)	Screen for balance impairment.	
5)	Explain risks and benefits of remotely supervised pulmonary rehabilitation.	
6)	Explain adverse signs and symptoms associated with exercising remotely .	
7)	Explain what to do if the patient becomes unwell.	
8)	Obtain consent in line with local standard operating procedure.	



Statement and considerations for the remote delivery of pulmonary rehabilitation services during the COVID-19 pandemic: PART 1

'in press' (Gardiner et al., 2020)

YES

Singh et al., 2020

NO



Chartered Society of Physiotherapy @thecsp

Find out how the CSP is championing the need for rehabilitation and physiotherapy services to be supported to continue - amid worrying warnings about the loss of rehab space.



10:00 AM · Dec 6, 2020 · Hootsuite Inc.



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