

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.

## An uncertain picture



The long term course of covid-19 is unknown. This graphic presents 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 conjunction with covid-19 treatment. Refer to condition specific guidance, available in the associated article by Greenhalgh and colleagues

## Safety netting and referral

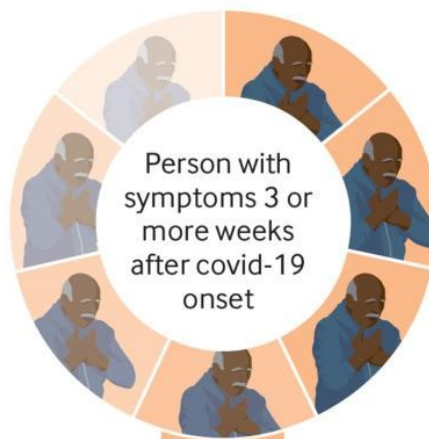
The patient should seek medical advice if concerned, for example:

- Worsening breathlessness
- PaO<sub>2</sub> < 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 pneumonia
- ➔ **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 patient has persistent breathlessness following review



## Clinical assessment

**Full history**  
From date of first symptom

**Current symptoms**  
Nature and severity

### Examination, for example:

- Temperature
- Heart rate and rhythm
- Blood pressure
- Respiratory examination
- Functional status
- Pulse oximetry
- Clinical testing

If indicated

Assess comorbidities

Social and financial circumstances

## Investigations

Clinical testing is not always needed, but can help to pinpoint causes of continuing symptoms, and to exclude conditions like pulmonary embolism or myocarditis. Examples are provided below:

### Blood tests

- Full blood count
- Electrolytes
- Liver and renal function
- Troponin
- C reactive protein
- Creatine kinase
- D-dimer
- Brain natriuretic peptides
- Ferritin – to assess inflammatory and prothrombotic states

### Other investigations

- Chest x ray
- Urine tests
- 12 lead electrocardiogram

## Social, financial, and cultural support

Prolonged covid-19 may limit the ability to engage in work and family activities. Patients may have experienced family bereavements as well as job losses and consequent financial stress and food poverty. See the associated article by Greenhalgh and colleagues for a list of external resources to help with these problems

## Medical management

Symptomatic, such as treating fever with paracetamol

Optimise control of long term conditions

Listening and empathy

Consider antibiotics for secondary infection

Treat specific complications as indicated

## Self management

Daily pulse oximetry

Attention to general health

Rest and relaxation

Self pacing and gradual increase in exercise if tolerated

Set achievable targets

- Diet
- Sleep
- Quitting smoking
- Limiting alcohol
- Limiting caffeine

## Mental health

In the consultation:

- Continuity of care
- Avoid inappropriate medicalisation
- Longer appointments for patients with complex needs (face to face if needed)

In the community:

- Community linkworker
- Patient peer support groups
- Attached mental health support service
- Cross-sector partnerships with social care, community services, faith groups