

CARE OF PEOPLE WITH POST-ACUTE COVID-19

LEGEND

- EBR:** Evidence-Based Recommendation
CBR: Consensus-Based Recommendation
PP: Practice Point

BACKGROUND

People who have been infected with COVID-19 sometimes experience ongoing or new symptoms after the acute infection is over. [1-7] A range of symptoms have been reported in both adults and children, with variation in the duration of symptoms and clinical history. [1-7] For instance, symptoms may be experienced by people who had either mild or severe COVID-19. [2] Some symptoms may subside gradually with self-directed care alone, while other symptoms may require care from a health professional or new symptoms may arise.

Post-acute COVID-19 or 'long COVID', describes the variety of symptoms that may arise in the weeks or months following acute COVID-19. [8]

Our understanding of risk of the illness and effective management approaches is still emerging. However, many of the symptoms reported in post-acute COVID-19 have common features with symptoms that are regularly managed in primary care and we can draw on current best-practice approaches to guide care.

The following recommendations provide guidance for the assessment and management of symptoms post-acute COVID-19. These recommendations will be updated as new evidence emerges.

Goals of Care

COMMUNICATION

Due to the broad range of effects of post-acute COVID-19, a biopsychosocial approach to care, within the local context, is important. Validate the patient's experience and offer information about the symptoms that they are experiencing, including management options. **PP** [Taskforce]

COORDINATED CARE

The primary health care team is well placed to coordinate person-centred care and should remain a central point in the care team along with the person's carer or significant other. Best practice would include a multidisciplinary team. This could be accessed through community health, rehabilitation programs or post-COVID-19 clinics, where these are available. **PP** [Taskforce]
Use case conferences to facilitate coordinated care. **PP** [Taskforce]

ACCESS TO CARE

This flowchart should be applied after considering features of the individual, their preferences and the context in terms of rurality/remoteness, public health responses and proximity to rehabilitation or higher-level care. For those needing active rehabilitation involving a larger centre or specialist care could be considered. Use of virtual care, including telehealth, should be considered. **PP** [Taskforce]

Assessment

MANAGING RISK OF INFECTION

- Confirm all the criteria for release from isolation have been met for both the person and any others/associates presenting with them.
- Ensure appropriate personal protective equipment (PPE) is worn if:
 - the criteria for release from isolation have not been met;
 - there has been recent close contact with a confirmed positive case of COVID-19;
 - there are clinical symptoms suggestive of potential re-infection. **PP** [NSW HealthPathway]

WHAT IS THE PROBABILITY DIAGNOSIS?

- Confirm that the person had COVID-19 (by checking that they had a PCR positive test), or is likely to have had COVID-19 (by checking that they have had symptoms consistent with a SARS-CoV-2 infection and/or known contact with a positive case or high risk setting). Document details of the acute illness.
- Check the current symptoms and ask the person about their concerns, functioning and wishes in terms of their needs.
- Assess whether the current symptoms are likely to be related to acute COVID-19.
- Assess whether the symptoms may be related to, or are exacerbated by, comorbid conditions. **PP** [Taskforce/ NSW HealthPathway]

ASSESSMENT OF RED FLAGS

Exclude red flag symptoms that could indicate the need for emergency assessment for serious complication of COVID-19. Red flag symptoms include severe, new onset, or worsening breathlessness or hypoxia, syncope, unexplained chest pain, palpitations or arrhythmias, new delirium, or focal neurological signs or symptoms. **PP** [NSW HealthPathway]

In some people, symptoms may indicate ongoing or worsening acute COVID-19. If goals of care include active disease management, please see recommendations for the treatment of COVID-19 in our [living guidelines](#). **EBR** [Taskforce]

SYMPTOMS AND SIGNS THAT HAVE BEEN DESCRIBED POST ACUTE COVID-19

Investigate symptoms as per usual care. **CBR**[Taskforce].

The following symptoms and signs have been described by people post acute COVID-19 [1-7]:

Pulmonary symptoms

- Shortness of breath
- Cough

Neurological symptoms

- Fatigue
- Headache
- Cognitive dysfunction
- Sleep disturbance
- Loss of smell
- Paraesthesia

Renal disease

Thromboembolism

Psychological symptoms

- Anxiety
- Depression
- Mood swings
- Note that fatigue and sleep disturbance may also indicate the emergence of a mental health condition

Cardiac symptoms

- Chest pain

Musculoskeletal symptoms

- Non-specific pain
- Myalgia

Fever

- Low grade fevers

Reduced activity and functional level

Reduced nutritional status and weight loss

Post-intensive care syndrome (PICS)

- PICS refers to one or more of the following symptoms that people experience following the receipt of care in an ICU. Symptoms may include anxiety, depression, cognitive impairment, memory loss, muscle weakness, dysphagia and reduced quality of life. [9,10]

In some people, both adults and children, symptoms corresponding to a multisystem inflammatory syndrome [CDC 2021] have been reported. [7]

This list of symptoms and signs will be updated as new evidence emerges.

- If red flags are present, arrange an emergency assessment of the patient in hospital. **PP** [Taskforce]
- At present, we do not have evidence to recommend interventions that are effective for managing, therefore use clinical guidelines to manage symptoms. **PP** [Taskforce]
- Begin rehabilitation during the acute illness as appropriate. **PP** [Taskforce]
- Develop a management plan with the person addressing their main symptoms, problems, or risk factors, and an action plan. **PP** [Taskforce]
- Consider individual factors and access issues in determining location for further treatment or rehabilitation e.g. home-based, telehealth or face-to-face options. **PP** [Taskforce]
- Consider using a chronic disease plan, mental health care plan or other enhanced care plan to facilitate access to multidisciplinary care. **PP** [Taskforce]
- Use local and regional protocols or health pathways to determine optimal referral pathways. **PP** [Taskforce]
- Consider the implications and support required for returning to pre-injury work or education. **PP** [adapted NICE]

Sources

Centres for Disease Control And Prevention (CDC). Multisystem Inflammatory Syndrome in Adults (MIS-A). <https://www.cdc.gov/mis-c/mis-a.html> Accessed 4 March 2021.

National COVID-19 Clinical Evidence Taskforce – Australian guidelines for the clinical care of people with COVID-19. <https://app.magicapp.org/#/guideline/L4Q5An>

NICE - COVID-19 rapid guideline: managing the long-term effects of COVID-19. <https://www.nice.org.uk/guidance/ng188/chapter/5-Management>

NSW Health - Post-COVID-19 Conditions. <https://sydney.communityhealthpathways.org/783098.htm>

Western Victoria - Post-COVID-19 Conditions. <https://westvic.communityhealthpathways.org/783098.htm>

References

1. **Chopra V, Flanders SC, O'Malley M, et al.** Sixty-day outcomes among patients hospitalized with COVID-19. *Annals of Internal Medicine*;0;0[Epub ahead of print 11 November 2020]. doi: <https://doi.org/10.7326/M20-5661>
2. **Tenforde MW, Kim SS, Lindsell CJ, et al.** Symptom duration and risk factors for delayed return to usual health among outpatients with COVID-19 in a multistate health care systems network - United States, March-June 2020. *MMWR Morb Mortal Wkly Rep.* 2020;69(30):993-998. 2020 Jul 31. doi: <http://dx.doi.org/10.15585/mmwr.mm6930e1external icon>
3. **Michelen M, Manoharan L, Elkheir N, et al.** Characterising long-term covid-19: a rapid living systematic review medRxiv 2020.12.08.20246025; doi: <https://doi.org/10.1101/2020.12.08.20246025>
4. **Taquet M, Geddes JR, Husain M et al.** Six-month neurological and psychiatric outcomes in 236,379 survivors of COVID-19. medRxiv 2021.01.16.21249950; doi: <https://doi.org/10.1101/2021.01.16.21249950>
5. **Buonsenso D, Munblit D, De Rose C et al.** Preliminary evidence on long COVID in children. Medrxiv. doi: <https://doi.org/10.1101/2021.01.23.21250375>
6. **Ayoubkhani D, Khunti K, Nafilyan N et al.** Epidemiology of post-COVID syndrome following hospitalisation with coronavirus: a retrospective cohort study. medRxiv 2021.01.15.21249885; doi: <https://doi.org/10.1101/2021.01.15.21249885>
7. **Bajaj R, Sinclair HC, Patel K et al.** Delayed-onset myocarditis following COVID-19. *The Lancet - Respiratory Medicine.* 2021 19 Feb doi: [https://doi.org/10.1016/S2213-2600\(21\)00085-0](https://doi.org/10.1016/S2213-2600(21)00085-0)
8. **Nalbandian, A., Sehgal, K., Gupta, A. et al.** Post-acute COVID-19 syndrome. *Nat Med* 27, 601–615 (2021). doi: <https://doi.org/10.1038/s41591-021-01283-z>
9. **Hatch R, Young D, Barber V et al.** Anxiety, Depression and Post Traumatic Stress Disorder after critical illness: a UK-wide prospective cohort study. *Crit Care* 22,310 (2018). <https://doi.org/10.1186/s13054-018-2223-6>
10. **Oeyen SG, Vandijck DM, Benoit DD, et al.** Quality of life after intensive care: a systematic review of the literature. *Crit Care Med.* 2010 Dec; 38(12):2386-400. doi: [10.1097/CCM.0b013e3181f3dec5](https://doi.org/10.1097/CCM.0b013e3181f3dec5)