COVID-19
Clinical management

Living guidance

25 January 2021

World Health Organization

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This document is the update of an interim guidance originally published under the title “Clinical management of COVID-19: interim guidance, 27 May 2020".

WHO continues to monitor the situation closely for any changes that may affect this interim guidance. Should any factors change, WHO will issue a further update. Otherwise, this interim guidance document will expire 2 years after the date of publication.

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WHO reference number: WHO/2019-nCoV/clinical/2021.1

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Web annex: GRADE recommendations – additional information
https://apps.who.int/iris/bitstream/handle/10665/338871/WHO-2019-nCoV-clinical-web_annex-2021.1-eng.pdf

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Foreword and summary

The *Strategic preparedness and response plan* outlines the World Health Organization (WHO) strategic objectives to end the COVID-19 pandemic and assists national stakeholders with developing a structured approach to their response. The WHO's main objectives for COVID-19 are to:

1) supress transmission;
2) provide optimized care for all patients; and save lives
3) minimize the impact of the epidemic on health systems, social services and economic activity.

To achieve these objectives, the WHO *Operational considerations for case management of COVID-19 in health facility and community* describes key actions that should be taken in different scenarios: no cases; sporadic cases; clusters of cases; and community transmission, in order to enable delivery of clinical and public health services in a timely fashion.

The guidance in this document is based on the above strategic priorities, and is intended for clinicians involved in the care of patients with suspected or confirmed COVID-19. It is not meant to replace clinical judgment or specialist consultation but rather to strengthen frontline clinical management and the public health response. Considerations for special and vulnerable populations, such as paediatric patients, older people and pregnant women, are highlighted throughout the text.

In this document we refer to the **COVID-19 care pathway (Annex 1).** This describes a coordinated and multidisciplinary care pathway that a patient enters after s/he is **screened for COVID-19 and becomes a suspect COVID-19 case,** and follows the continuum of their care until release from the pathway. The objective is to ensure delivery of safe and quality care while stopping onwards viral transmission. All others enter the health system in the non-COVID-19 pathway. For the most up-to-date technical guidance related to the COVID-19 response, visit WHO Country & Technical Guidance *(1).*

Basic psychosocial support skills are at the core of any clinical intervention for COVID-19. Such skills are indispensable for all involved in the COVID-19 clinical response, whether they identify as mental health and psychosocial providers or not. Basic psychosocial skills are essential for supporting the emotional well-being of people who have COVID-19, those who have lost someone to COVID-19, or are family members and carers who are caring for someone with COVID-19 or have recovered from COVID-19.

Summary: what is this living guidance?

Clinical questions: What is the clinical management of patients with COVID-19?

Target audience: The target audience is clinicians and health care decision-makers.

Current practice: Current practice to treat COVID-19 is variable reflecting large-scale uncertainty. Numerous clinical trials are underway looking at various interventions that will inform clinical practice. Providing trustworthy guidance that is comprehensive and holistic for the optimal care of COVID-19 patients, throughout their entire illness, is necessary. The previous version of the *Clinical management of COVID-19* provided recommendations that can be applied when caring for patients during the COVID-19 care pathway. This guideline now also includes information on caring for COVID-19 patients after their acute illness.

Updates to this guidance: The panel made the following new recommendations:

- A conditional recommendation to use clinical judgment, including consideration of patients' values and preferences and local and national policy if available, to guide management decisions including admission to hospital and to the intensive care unit (ICU), rather than currently available prediction models for prognosis when caring for patients with COVID-19 of any severity assessed in a clinic or hospital (very low certainty).

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- A conditional recommendation for use of pulse oximetry monitoring at home as part of a package of care, including patient and provider education and appropriate follow-up, in symptomatic patients with COVID-19 and risk factors for progression to severe disease who are not hospitalized (very low certainty).
- A conditional recommendation for the use of awake prone positioning in patients with severe COVID-19 that are hospitalized requiring supplemental oxygen or non-invasive ventilation (low certainty).
- A conditional recommendation to use thromboprophylaxis dosing of anticoagulation rather than intermediate or therapeutic dosing in patients hospitalized with COVID-19, without an established indication for higher dose of anticoagulation (very low certainty).
- A conditional recommendation for the use of existing care bundles (defined as three or more evidence-informed practices delivered together and consistently to improve care) chosen locally by hospital or ICU and adapted as necessary for local circumstances in patients with critical COVID-19 (very low certainty).
- Best practice statement: patients who have had suspected or confirmed COVID-19 (of any disease severity) who have persistent, new or changing symptoms should have access to follow-up care (see the new Chapter 24. Care of COVID-19 patients after acute illness).

For chapters without new recommendations, each responsible technical unit (member of steering committee) reviewed the chapter and provided narrative updates to reflect new literature searches. Two technical units used expert panel reviews to review and update their chapters (neurological and mental manifestations [Chapter 17] and rehabilitation [Chapter 19]).

How this guideline was created: This living guideline is an innovation from WHO, driven by the urgent need for global collaboration to provide trustworthy and evolving COVID-19 guidance informing policy and practice worldwide. An international Guideline Development Group (GDG) of content experts, clinicians, patients, ethicists and methodologists produced recommendations following standards for trustworthy guideline development using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach. No conflict of interest was identified for any panel member. WHO has partnered with the non-profit MAGIC (Making GRADE the Irresistible Choice) Evidence Ecosystem Foundation for support through their publication platform that facilitates continued updating.

The latest evidence: The evidence included in this guidance update includes six rapid reviews on specific topics that can be found in Annex 3. No conflict of interest was identified for any external contributors.

Understanding the recommendations: When moving from evidence to recommendations, the panel made five conditional recommendations based primarily on low to very low certainty evidence.

- For suggested use of clinical judgment rather than available prediction models, the panel considered the evidence in favour of prognostic models in patients with COVID-19 to be of very low certainty, lack validation studies, and lack evidence of the impact of using models on decision-making and patient outcomes.
- For suggested use of pulse oximetry monitoring at home, the panel felt the potential benefits would outweigh the potential harms, especially if used in patients that were symptomatic and at risk for severe disease; but only as part of a larger package of care including education and follow-up.
- For suggested use of awake prone positioning in hospitalized patients with severe COVID-19, the panel emphasized the low certainty evidence of reduction in mortality, downgraded from higher certainty evidence for mechanically ventilated critically ill patients with acute respiratory distress syndrome (ARDS) and the limited harm with the experience thus far from different resource settings.
- For suggested use of existing care bundles, the panel emphasized the low to very low certainty evidence of reduction in mortality and possible administrative burdens for implementation; but if the hospital or ICU selected among existing care bundles and adapted them to local circumstances that would take into account contextual factors of resource considerations and increase feasibility.

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