

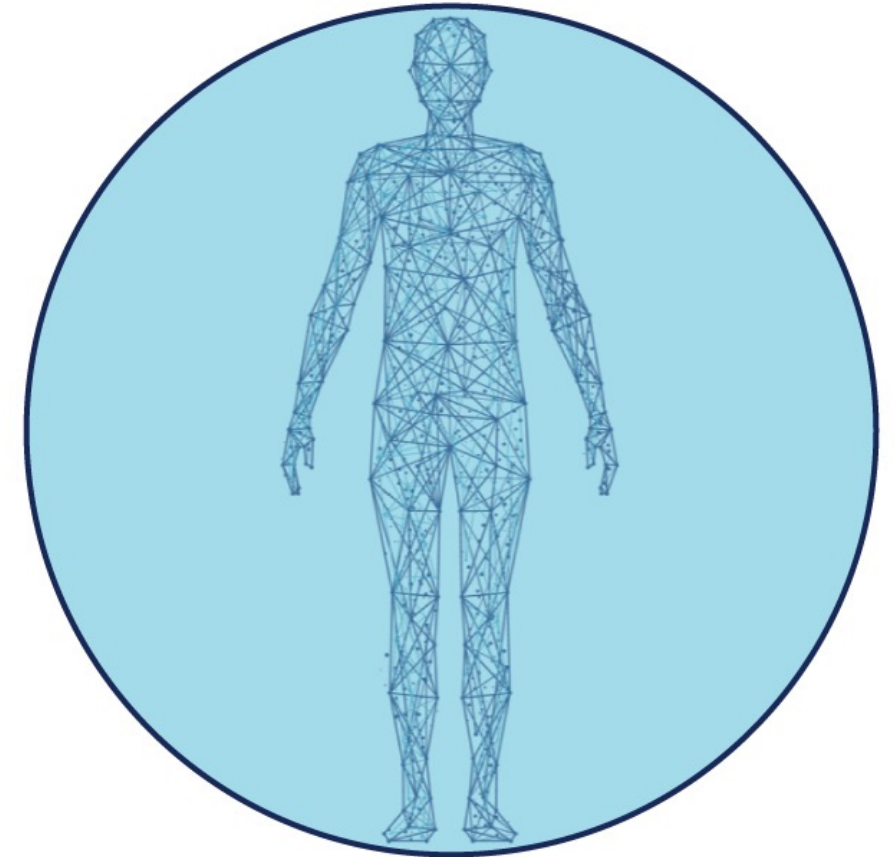
Expanding our understanding of post COVID-19
condition web series:

WHO activities for post COVID-19 condition

Dr Janet Diaz
Unit Head, Clinical Management
WHO Health Emergencies Programme

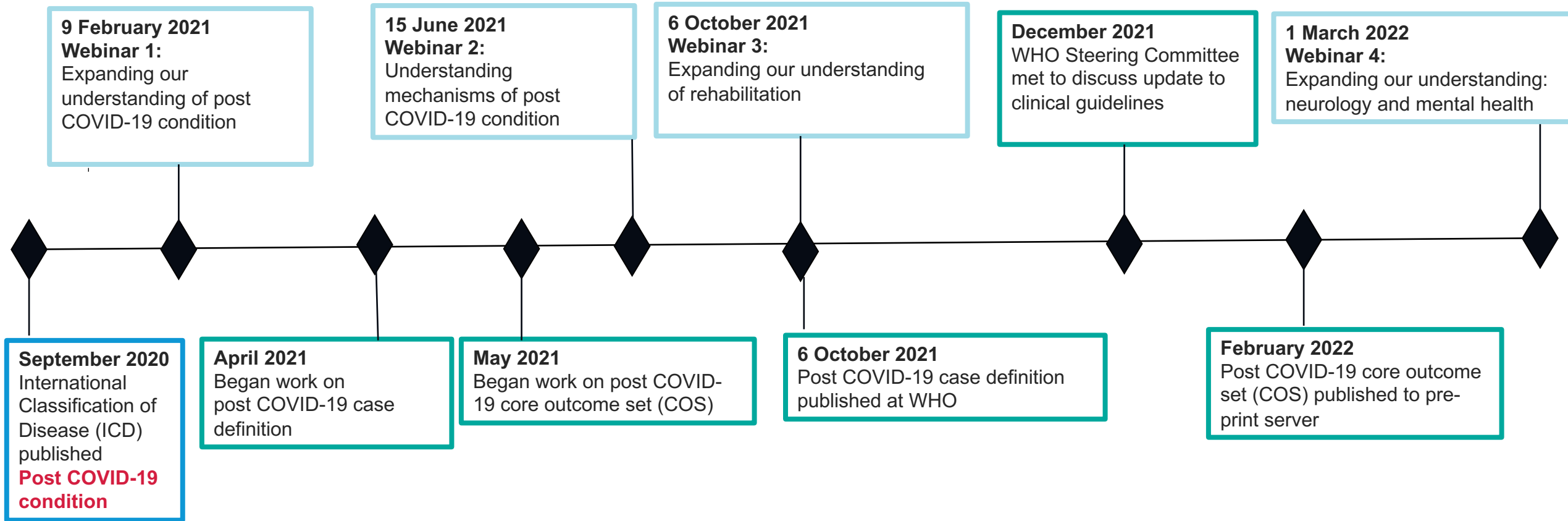
TUESDAY 1 MARCH 2022

1:30–3:30 pm Central European Time



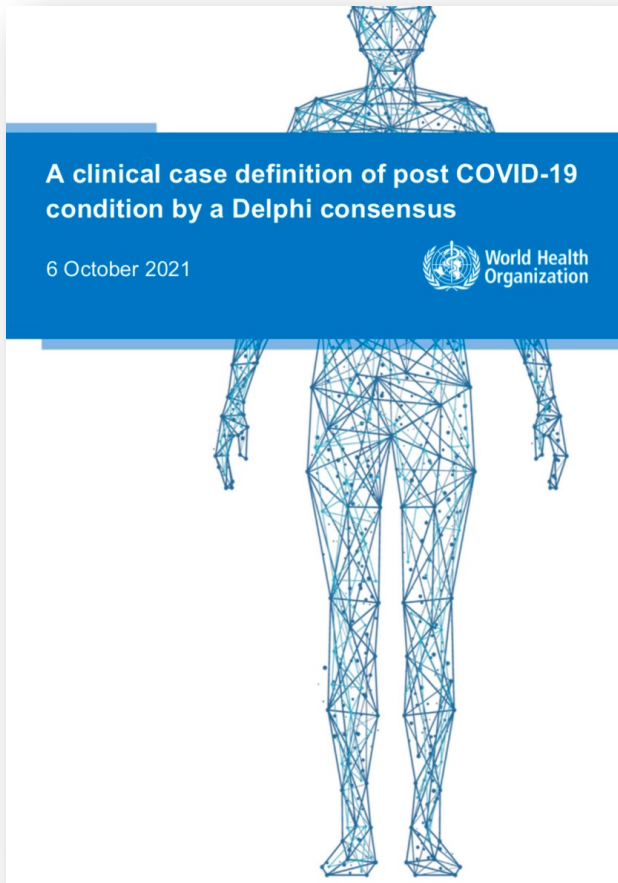
Post COVID-19 condition

Milestones



Post COVID-19 condition

A clinical case definition by a Delphi consensus



Post COVID-19 condition occurs in individuals with a history of probable or confirmed SARS-CoV-2 infection, **usually 3 months** from the onset of COVID-19 with symptoms and that **last** for at **least 2 months** and **cannot be explained by an alternative diagnosis**.

Common symptoms include fatigue, shortness of breath, cognitive dysfunction but also others and generally have an impact on **everyday functioning**.

Symptoms may be **new** onset following initial recovery from an acute COVID-19 episode or **persist** from the initial illness. Symptoms may also **fluctuate** or **relapse** over time.

* A separate definition may be applicable to children

Published by WHO 6 October 2021

<https://apps.who.int/iris/bitstream/handle/10665/345824/WHO-2019-nCoV-Post-COVID-19-condition-Clinical-case-definition-2021.1-eng.pdf>

Published in *Lancet Infectious Diseases* 21 December 2021

[https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(21\)00703-9/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(21)00703-9/fulltext)

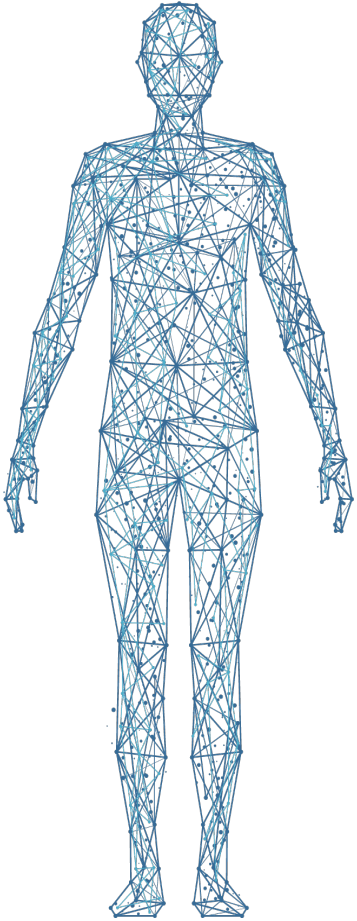
Post COVID-19 condition

The case for one clinical case definition

- One name and definition will simplify our global common understanding and communication.
- Allows physicians, patients, epidemiologists, ministers of health, policy-makers, governments to be aligned in their understanding and informed to make policy decisions.
- Enables researchers to aggregate data in a consistent and reliable manner and to conduct interventional studies using common enrolment criteria, case record form and core outcome sets.

Post COVID-19 condition

Expanding our understanding of post COVID-19 condition web series



- **Webinar 1: Recognition and burden of disease (9 February 2021)**

<https://www.who.int/news-room/events/detail/2021/02/09/default-calendar/webinar-post-covid-19-condition>

- Description of global cohorts with post COVID-19 condition
- Working groups described clinical descriptors, laboratory diagnostics and research priorities
- Not all patients with COVID-19 have full resolution of symptoms, with some having emergence of new ones over time

- **Webinar 2: Research (15 June 2021)**

<https://www.who.int/news-room/events/detail/2021/06/15/default-calendar/expanding-our-understanding-of-post-covid-19-condition-webinar-2>

- Considered potential mechanisms for post COVID-19 condition
- Inflammation, immune dysregulation, coagulation/vasculopathy, viral persistence, autonomic dysfunction, endocrine/metabolic, maladaptation of the ACE-2 pathway

- **Webinar 3: Rehabilitation (6 October 2021)**

<https://www.who.int/news-room/events/detail/2021/10/06/default-calendar/expanding-our-understanding-of-post-covid-19-condition-web-series-rehabilitation-care>

- Introduction of rehabilitation to reduce physical, cognitive and mental health complications of post COVID-19 condition
- Review of interventions for rehabilitation and models of care that may be used in patients with post COVID-19 condition

Post COVID-19 condition

Emerging evidence

- Approximately 10–20% of people experience persistent or new onset of symptoms after 12 weeks following SARS-CoV-2 infection
 - Occurs irrespective of initial disease severity
 - Emerging evidence shows the following may be at increased risk
 - Female gender
 - Poor general health
 - Poor pre-pandemic mental health
 - Overweight or obese
 - Asthma
 - Non-white ethnic minority (protective)
 - Emerging evidence shows symptoms of post COVID-19 condition may be mitigated in those vaccinated pre- and post-infection
- Under recognized condition now gaining wider recognition
- Limitations in the literature
 - Our understanding is mostly from resource-rich countries where most studies are ongoing



Post COVID-19 condition

Clinical management guidelines

COVID-19 Clinical management

Living guidance
25 January 2021



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.

Remarks:

Recognition

- All patients (and their caregivers) with COVID-19 should be counselled to monitor for resolution of signs and symptoms. If any one or more of these persist, or patient develops new or changing symptom, then to seek medical care according to national (local) care pathways.
- This includes counselling about acute life-threatening complications, such as pulmonary embolism, myocardial infarction, dysrhythmias, myopericarditis and heart failure, stroke, seizures and encephalitis (54,258) for which they should seek emergency care.
- Patients with severe and critical COVID-19 may develop post-intensive care syndrome (PICS), with a range of impairment including (but not limited to) physical deconditioning, cognitive, and mental health symptoms. See Chapter 19. Rehabilitation for patients with COVID-19 for more details on PICS.

Management

- National (local), coordinated care pathways should be established that can include primary care providers (i.e. general practitioners), relevant specialists, multidisciplinary rehabilitation professionals, mental health and psychosocial providers, and social care services.
- Management should be tailored according to patient needs and be coordinated.
- Management interventions include addressing promptly life-threatening complications. For non-life-threatening complications, management may entail education, advice on self-management strategies (i.e. breathing techniques, pacing), caregiver support and education, peer-to-peer groups, stress management, stigma mitigation and home modification; prescription of rehabilitation programmes, and/or specialty management.
- See Chapter 19. Rehabilitation for patients with COVID-19 for recommendations regarding screening, assessment and rehabilitation interventions to facilitate onward referrals for inpatient, outpatient, or community-based follow up, to ensure continuity during transitions of care.

<https://www.who.int/publications/i/item/WHO-2019-nCoV-clinical-2021-2>

Post COVID-19 condition

Ongoing activities

WHO living guideline on COVID-19 clinical management

- **Systematic reviews to update chapter on post COVID-19 condition:** on going
 - multi-disciplinary models of care
 - vaccination
 - pulmonary rehabilitation
 - cognitive behavioural therapy
- **Rehab interventions interim guidance:** on going

WHO clinical characterization & research working group on post COVID-19 condition

- **Core outcomes set for adults:** under review at Lancet Respiratory Medicine
 - https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4020142
- **Core outcomes set for children:** in development (coordination meeting held 22 December 2021)
- **Post COVID-19 case definition for children:** methods approach being agreed upon

Post COVID-19 condition

Priority research questions

- **Natural history**
 - adults, children, pregnant women
 - clinical characteristics
 - risk factors
 - association with disease severity
 - differences in HIC vs LMIC
- **Pathophysiology**
 - viral persistence
 - immune dysregulation
 - thrombotic
- **Treatments**
 - impact of acute treatments
 - R&D of post COVID interventions
- **Impact of COVID-19 vaccination**



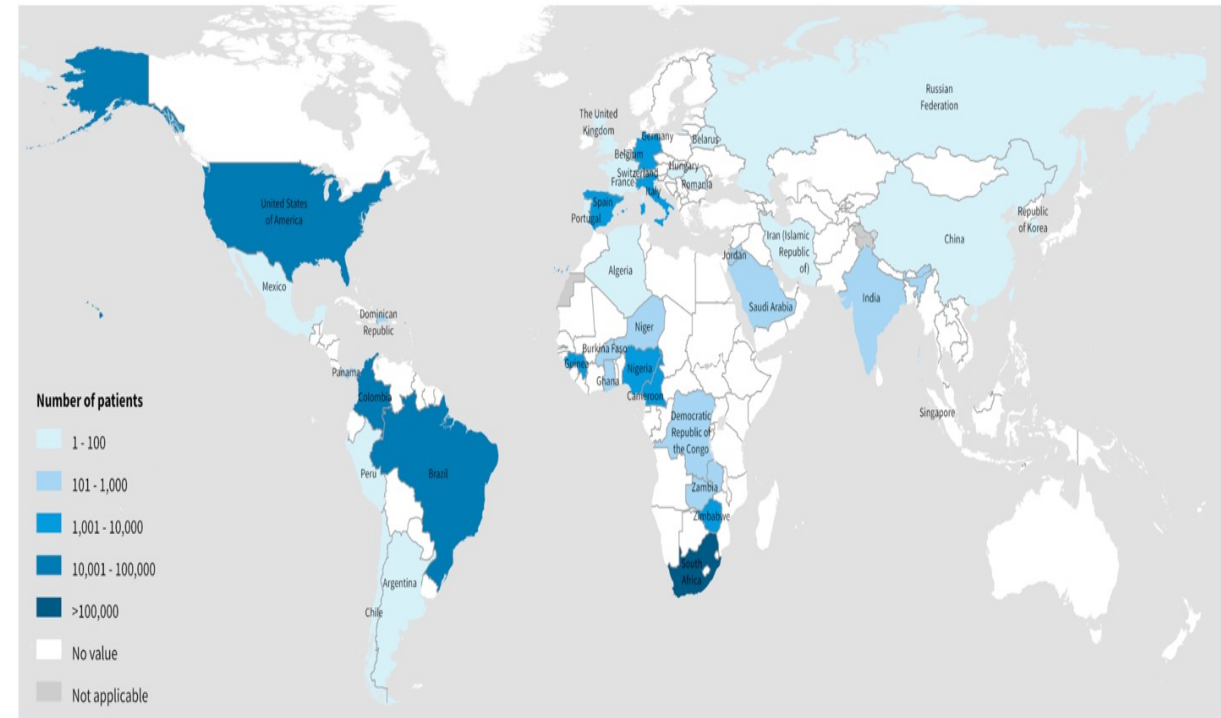
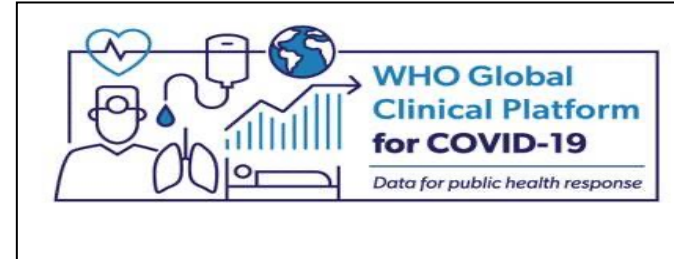
24–25 February 2022 13:00–18:00 Central European Time

<https://www.who.int/news-room/events/detail/2022/02/24/default-calendar/covid-19-global-research-and-innovation-forum-an-invitation-to-the-research-community>

Post COVID-19 condition

Clinical Data Platform

- WHO has launched a Global Clinical Platform for COVID-19
 - Uses **anonymized, individual-level data** from **hospitalized patients** with COVID-19
 - CRF 4: Describes mid- and long-term sequelae of patients discharged from hospitals or managed at home



COVID-19 clinical care pathway

COVID-19 CLINICAL CARE PATHWAY



Confirm Assess Respond Evaluate



CONFIRM
SARS-CoV-2 infection



ASSESS
symptoms, risk factors and severity



RESPOND
with appropriate care and treatment



EVALUATE
clinical response and recovery



Acknowledgements

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For more information:

+ WHO COVID-19 Clinical Platform:
COVID_ClinPlatform@who.int

+ Post COVID-19 condition & CRF:
kuppallik@who.int