WHO activities for post COVID-19 condition

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WEDNESDAY 17 AUGUST 2022, 1:30 – 3:30 Central European Time
IHME estimates that **3.92 billion** individuals were infected with SARS-CoV-2 through the **end of 2021** and that **3.7% (144.7 million : 55 – 313)** developed PCC as defined by the WHO case definition.

- Three symptom clusters: **fatigue, cognitive problems and shortness of breath.**
- **Females** and those with more severe COVID-19 with more episodes.
- Median duration **4 months** (IQR 3.84-4.20) in community infections and **9 months** (IQR 2.31 – 8.72) in hospitalized patients.
- **15.1% (21 million)** had persistent symptoms **12 months.**
- Average disability weight equivalent to severe neck pain, Crohn’s disease, and long-term consequences from traumatic brain injury.
Post COVID-19 condition

Milestones

- 9 February 2021: Webinar 1: Expanding our understanding: Recognition
- 15 June 2021: Webinar 2: Expanding our understanding: Research
- 6 October 2021: Webinar 3: Expanding our understanding: Rehabilitation
- 1 March 2022: Webinar 4: Expanding our understanding: Neurology and mental health
- 17 August 2022: Webinar 5: Expanding our understanding: Children and young people

May 2020: 1st publication with guidance on post COVID-19 condition
September 2020: ICD published Post COVID-19 condition
Feb 2021: post COVID-19 CRFs and platform
6 October 2021: WHO published Post COVID-19 clinical case definition
December 2021: WHO SC met to discuss update to clinical guidelines
January 2022: 1st GDG for rehabilitation guidelines
May 2022: WHO SC for Post COVID-19 case definition for children and young people
June 2022: Post COVID-19 core outcome set (COS) published
Post COVID-19 condition
WHO new updated website

- Post COVID-19 case definition
- Webinar recordings
- Clinical management guidelines & tools
- Research publications
- COVID-19 clinical platform
- Resources for health workers
- Resources for families

https://www.who.int/teams/health-care-readiness/post-covid-19-condition
Stress importance for integration of care into primary care and using an integrated, multidisciplinary care model.
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 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.
Post COVID-19 condition
Priority research questions (February 2022)

- **Natural history**
  - adults, children, pregnant women
  - clinical characteristics (symptom clusters)
  - risk factors
  - variations by regions, variant circulation
  - Impact of treatments for acute disease

- **Pathophysiology**
  - viral persistence
  - immune dysregulation
  - thrombotic

- **Clinical interventions**
  - pharmacologic interventions
  - rehabilitation interventions

- **Impact of COVID-19 vaccination**

- **Mid- & long- term complications**
  - cardiac, metabolic, neurologic, gastrointestinal

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

A core outcome set for post-COVID-19 condition in adults for use in clinical practice and research: an international Delphi consensus study


Methods
Multi-step study:
1. Reviewed outcomes reported in studies of post COVID-19 condition to develop a list
2. Outcomes were grouped using the COMET taxonomy to present in a consensus process
3. A two-round online international modified Delphi consensus process, 3 stakeholder groups to prioritize outcomes:
   - people with post COVID-19 condition and their carers
   - health care professionals and researchers
   - health care professionals and researchers with post COVID-19 condition
4. International consensus meeting to finalize the core outcome set

Results
1535 participants from 71 countries, representing 6 continents were involved in the modified Delphi process (1148 participated in both rounds)
11/24 outcomes met consensus after the two Delphi rounds and consensus meeting

Next steps
Determine which instruments best measure these outcomes

Panel: COS for adults with post-COVID-19 condition

Physiological or clinical outcomes
1. Cardiovascular functioning, symptoms, and conditions
2. Fatigue or exhaustion
3. Pain
4. Nervous system functioning, symptoms, and conditions
5. Cognitive functioning, symptoms, and conditions
6. Mental functioning, symptoms, and conditions
7. Respiratory functioning, symptoms, and conditions
8. Post-exertion symptoms

Life impact outcomes
9. Physical functioning, symptoms, and conditions
10. Work or occupational and study changes

Survival
11. Survival

Outcome from previous COS
12. Recovery*

COS=core outcome set. *Outcome was included in a previously published COS for COVID-19* and, owing to its relevance to post-COVID-19 condition, was automatically included in this COS.
Post COVID-19 condition

Ongoing activities

WHO living guideline on COVID-19 clinical management: GRADE based

- Rehabilitation interventions: under review by GRC
- Systematic reviews to update chapter on post COVID-19 condition:
  - impact of vaccination
  - pharmacologic interventions
Post COVID-19 condition

Ongoing WHO activities

- Rehabilitation interventions
- Clinical management of children
- Pharmacologic interventions
- COVID-19 vaccination

August | September | October | November | December

Considerations:
Timeline from systematic review to publishing/update of guideline is 8-10 weeks.
Post COVID-19 condition
Ongoing activities

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

- **Core outcomes set for adults**: how to measure (under development, Delphi methodology)
- **Core outcomes set for children**: what and how to (under development, Delphi methodology)
- **Post COVID-19 case definition for children**: under development (meeting September 2022)
  - Systematic review completed: 60 studies (39 cohort, 15 cross-sections, 6 case series)
  - Expert consensus meeting planned for **13 September 2022** with 30 experts and advocates invited from around the world
WHO Global Clinical Platform initiative launched in May 2020.

Member States, health care facilities and research networks were invited to share patient-level anonymized clinical data of people hospitalized with confirmed or suspected COVID-19 using standardized data collection tools.
WHO CALL to ACTION: 
Post COVID-19 Condition

Member States, health care facilities and research networks were invited to collect anonymized, individual-level clinical data from individuals recovered from acute COVID-19 using a standardized POST-COVID-19 case report form (CRF) and share data with WHO Global Clinical Platform.

Platform outputs will inform evidence-based guidance and public health policies and interventions on clinical management of post COVID-19 at the country, regional and global levels

1. Characterize regional variations and temporal trends in clinical phenotypes, clinical care, therapeutics, outcomes, reinfections, variants, vaccination
2. Derive risk factors associated with mortality, severity, and ICU admission globally and by region
3. Characterize clinical phenotypes, clinical care and therapeutics, interventions, risk factors in subpopulations (i.e. children, pregnant women, people living with HIV, TB, etc)
4. Describe mid- and long-term sequelae of patients discharged from hospitals or managed at home

https://www.who.int/teams/health-care-readiness-clinical-unit/covid-19
Case Report Form (CRF): Post COVID-19 Condition

Eligible populations: people discharged from hospital after acute COVID-19 or managed at home
WHO Global Clinical Platform for COVID-19

629 729 hospitalized cases from 50 countries (June, 2022)

https://www.who.int/teams/health-care-readiness/covid-19/data-platform
Conclusion
Opportunities to increase recognition, research and care

Increase uptake of standardized tools for clinical care and research (case definition, COS, CRFs).

Increase recognition in all care settings and multi-disciplinary care delivery models rooted in primary care.

Better understand pathophysiology to identify possible treatments and test those treatments in robust clinical trials.

Ensure all populations are represented along the way:

- Children
- Pregnant women
- Immunosuppressed
- Patients from Low Middle-Income Countries (LMIC)
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+ Numerous other WHO employees and staff, patients and patient partners and global experts
Thank you

For more information please visit our Post COVID-19 condition website

https://www.who.int/teams/health-care-readiness/post-covid-19-condition