

FACING THE IMPACT OF POST-COVID-19 CONDITION (LONG COVID) ON HEALTH SYSTEMS

Fact sheet accompanying the Opinion by the Expert Panel on effective ways of investing in health (EXPH)

AN EMERGING BURDEN ON HEALTH SYSTEMS

Post-COVID-19 condition (also referred to as long COVID) poses a potentially significant burden to health systems. It affects at least 10% of patients who were ill with COVID-19. There is a lack of appropriate clinical pathways and treatments for the condition. While it is well known that certain illnesses have longer-term consequences (e.g. influenza or polio), the consequences of long COVID seem more varied and harder to define compared to other conditions.

Current research indicates that multiple non-mutually exclusive mechanisms are implicated, with various risk factors. The uncertainty about this condition highlights the need for an assessment of various aspects of health systems which may not yet be fit for purpose to face the emerging burden from long COVID, including the role of patients as co-creators of therapeutic interventions, the patient pathways and referral within health systems, research and updates in practice guidelines, and surveillance processes.

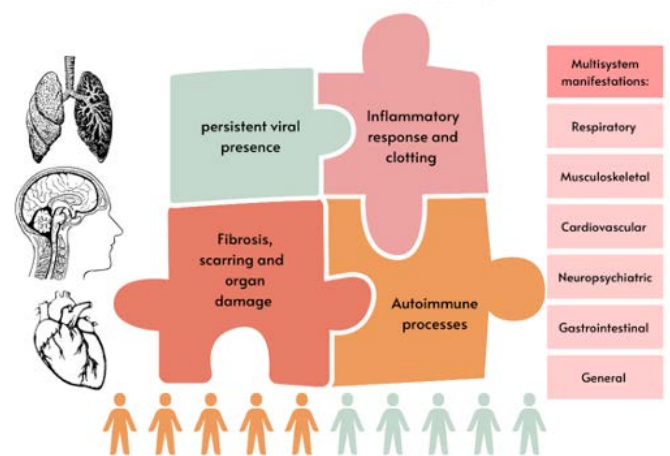
HOW CAN HEALTH SYSTEMS TACKLE THE PROBLEM?

Our health systems need to guarantee equitable access to healthcare and provide responsive, efficient, stigma-free, socially and financially protective coverage for patients suffering from this condition in all its forms. To this end, health systems will have to adapt:

- For the **health workforce**, prevention and support for long COVID needs to be increased – for instance with the recognition of long COVID as an occupational hazard.
- For **patients**, a wider strategy for prevention, diagnosis, models of care, and rehabilitation services need to emerge.

There are many obstacles to developing, implementing and sustaining such efforts. Structural barriers, procedural barriers in service delivery, financial barriers, information barriers, issues with access to medicines, professional/human resources barriers and issues associated with working across many different disciplines, all need to be overcome. Dedicated services, with the required training and coordination schemes, could minimise biases and maximise access to treatment.

Potential health conditions underlying Long COVID



WHAT IS POST COVID-19 CONDITION, ALSO KNOWN AS LONG COVID?

Post-COVID-19 condition occurs in individuals with a history of probable or confirmed SARS-CoV-2 infection, usually three months from the onset of COVID-19 with symptoms that last for at least two months and cannot be explained by an alternative diagnosis. Common symptoms include fatigue, shortness of breath, cognitive dysfunction but also others which 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 for children.

World Health Organisation

PUBLIC HEALTH SURVEILLANCE SHOULD BE ADAPTED TO MEASURE THE IMPACT OF LONG COVID

Public disease surveillance is essential and includes four main elements: data collection, data processing, information distribution and actions supported by data. Given the multiple facets of long COVID, surveillance systems should build on what already exists. This monitoring should be broad and should allow following the evolution of long COVID cases over time to understand its trajectory.

RECOMMENDATIONS



Research on long COVID should, as far as possible, be explicitly co-produced with people living with the condition. This should also focus on the co-creation of potential therapeutic interventions, as well as patient pathways.

A dialogue based on mutual respect will benefit all parties: patients with long COVID, the health professionals from whom they seek care, the health system directors and managers who are tasked with organising and financing such care, as well as the research community.



Health systems need to embed research on long COVID at all levels of care including rehabilitation, identifying incentives that can be applied and barriers that can be removed to facilitate the development of health facilities as settings for research and health workers as users of it.

There is an urgent need to understand better the long-term burden of long COVID. This will only happen if those responsible for health systems prioritize the generation and uptake of knowledge.

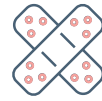
As long as there is uncertainty about the most appropriate way to manage long COVID and treatment options, all patients should be given the opportunity to participate in clinical trials, of both specific therapeutic agents and packages of care, such as different forms of rehabilitation. It is also important to ensure that new findings are shared, validated, and acted upon.



Long COVID should be recognized as one of many complex chronic conditions that, in many patients, will co-exist with others, calling for models of care that are co-ordinated in primary care, with mechanisms to ensure rapid referral to specialist teams while avoiding placing patients in “long COVID siloes”.

This emphasises the importance of adopting the principle of person-centred care. Given that many patients with long COVID will have other health disorders, an effective response should be coordinated by a team with oversight of the patient's care. However, that team will require specialist support from time to time.

These will inevitably require multidisciplinary teams including physiotherapists, occupational therapists, nurses, psychologists, speech and language therapists, physicians and social workers. However, it is equally important to have robust assessment criteria to ensure that patients that have problems better managed elsewhere, for example by primary care or medical specialists, are appropriately referred.



Research on long COVID, and especially on potential treatments, needs to be done at sufficient scale to provide definitive answers that take account of any heterogeneity within the population and the contexts in which they are situated.

Given the diversity of patient population, research on interventions should answer not just the question of what works, but what works in what circumstances. Aiming to a harmonization of definitions, establishing valid measurement tools, definition of outcomes, and ensuring coordination within different research projects are also essential points to be considered.



As COVID-19 infection is the cause of long COVID, measures to combat it, including vaccination and reducing transmission, must remain a priority.

Despite evidence that initial and booster vaccination reduces the risk of long COVID in adults, there remains a substantial number of people who have not yet been vaccinated.

It is important to maintain momentum in vaccination campaigns, extending coverage to those who remain unvaccinated and emphasizing the importance of boosters.

Non-pharmaceutical interventions such as improved ventilation and installation of air filtration are effective in reducing the transmission of airborne respiratory viruses. This could be a positive legacy of the pandemic.



A coordinated programme of surveillance systems should be established, including data from each member state, using consistent case definitions and methodologies, and encompassing the impact of this condition on health, employment, and the economy.

It may be difficult to achieve a stand-alone survey that can monitor continuously the prevalence and impact of long COVID in all EU Member States. Nonetheless, we call for, at least, a series of surveys with waves repeated at relatively short intervals for at least the next three years.

An important prerequisite will be to ensure that those involved in undertaking the survey use a set of diagnostic criteria consistent with those being used more widely. This would logically follow the WHO's lead.

In a broader sense, publishing long COVID statistics more regularly alongside the infection and recovery statistics, ideally also accessible to non-specialist users. Such information easily available to citizens and journalists, will keep awareness that long COVID exists and requires attention from everyone.



Publications Office
of the European Union

About the Expert Panel on Effective Ways of Investing in Health: The Expert Panel's mission is to provide sound and independent advice in the form of opinions in response to questions (mandates) submitted by the Commission on matters related to health care. The opinions of the Expert Panel present the views of the independent scientists who are members of the Expert Panel. They do not necessarily reflect the views of the European Commission. For more information and to read the opinions in full: [Opinions | Public Health \(europa.eu\)](#)