

This review includes:

- Impact on productivity and informal caregiving
- Patient agency and social support.
- A rapid review of long-term care
- Effects of cardiorespiratory rehabilitation programmes
- Experiences of accessing healthcare services

Kia ora koutou katoa.

Meri Kirihimete me ngā mihi o te Tau Hou!
Merry Christmas and a Happy New Year!

Welcome to the 'Long COVID Literature Review' by Te Hikuwai Rangahau Hauora | The Health Services Research Centre. We aim to bring you monthly summaries of interesting literature concerning Long COVID. We prioritise Aotearoa New Zealand and Indigenous research and publications determined to be high-quality, evidence-based research.

Impact of Long COVID on productivity and informal caregiving

(Kwon et al., 2023)

[Find abstract here.](#)

SUMMARY:

This study measures and values productivity losses and informal care receipt among patients with Long COVID referred to specialised Long COVID services in the United Kingdom (UK). Among 366 patients, over half (51.7%) had to reduce work hours or were no longer engaged in paid work due to Long COVID. On average, participants' monthly income dropped by a quarter (24.5%), and those with Long COVID for longer than two years saw a more considerable decline (41.5%). Economic values of productivity losses and informal care receipt were extrapolated to the UK national level using the Long COVID prevalence data provided by the Office for National Statistics. Specifically, only individuals who self-reported symptoms impacting their daily activities by "a lot" were used, as it was assumed those referred to specialist services were representative of this subpopulation. The study estimated that the total loss of productivity for people with significant Long COVID symptoms was around £277.7 million [NZD 579.9 million] (95%CI: £196.3 to £359.2 million) per month and £5.7 billion [NZD 11.9 billion] (95%CI: £3.8 to £7.6 billion) in total across the UK. Caregivers, mostly partners or spouses (58.8%), provided informal care values of £218.2 million [NZD 455.8 million] (95%CI: £122.4 to £314.2 million) per month and £4.8 billion [NZD 10.0 billion] (95%CI: £2.6 to £7.0 billion) in total. For informal care, each hour of informal caregiving was valued at £20 per hour, as it was assumed that in the absence of informal care, individuals would purchase private care as a substitute.



Long Covid Support
AOTEAROA

[Long COVID Support Aotearoa](#)



Navigating ME/CFS and Long COVID

[ME Support](#)

COMMENT:

This study shows that the economic impact of productivity loss and informal caregiving costs are significant. While we cannot directly apply these findings to Aotearoa New Zealand, it is crucial not to ignore the study's implications. To tackle these losses, we should invest in effective return-to-work processes for those with Long COVID and ensure proper and funded support (i.e., caregiving) is in place.

LONG COVID REVIEW

Journey mapping Long COVID: Agency and social support for long-hauling

(Figueiredo et al., 2024)

[Find abstract here.](#)

SUMMARY:

This study explores the experiences of fourteen people living with Long COVID in Australia and highlights the importance of patient agency and social support in their Long COVID journey. Patient agency refers to the ability to interpret situations, make deliberate choices, engage in coping strategies and attach meaning to actions. Social support is the interactions or relationships that provide individuals with assistance or a feeling of care/love. From the use of interviews, short video diaries and daily measures over a 3-month period, this study identified four clusters to capture patient agency and social support as factors influencing a person's empowerment throughout their Long COVID journey. The four clusters are as follows:

Cluster A: High agency and high support;

Cluster B: Low agency and high support;

Cluster C: High agency and low support; and

Cluster D: Low agency and low support.

From these findings, the healthcare system can implement screening tools to rapidly assess the clusters of those with Long COVID are in and develop tailored support programmes that leverage high agency and social support and help transition those with low agency and social support to clusters with more agency and support. This may, in turn, influence the success of healthcare interventions as high-agency and high-support individuals perform an active role in their treatment and will use their support networks to maintain new routines. Proposed interventions for the four clusters should be adaptable and flexible; this study proposes recommendations for each group.

COMMENT:

This study supports a person-centred approach, highlighting the interplay of patient agency and social support in an individuals' Long COVID journey. The identified clusters in this study can serve as guides for delivering supportive interventions.

Long COVID in long-term care: A rapid realist review

(Fyffe et al., 2023)

[Find abstract here.](#)

SUMMARY:

This review aims to determine the underlying mechanisms that drive successful interventions for Long COVID in long-term care and the contexts in which the interventions produce the intended outcome. Out of 21 articles, the underlying mechanisms associated with enhanced outcomes for long-term care for those with Long COVID included: **(1) Awareness:** Recognising the effects of Long COVID on long-term care residents, as symptoms can change, and various factors may make conditions worse. Care processes should be developed to improve awareness, such as encouraging a learning culture, and resources should be allocated to recognise the additional services needed over an extended period for Long COVID residents. **(2) Accountability:** Healthcare providers should work together to be accountable and ensure transparency and patient-centred care. A comprehensive assessment should be undertaken, and healthcare staff should recognise the diversity of symptoms associated with Long COVID by implementing tailored non/pharmacological interventions, strategies and environmental adjustments to optimise residents' quality of life. **(3) Vigilance:** Regular monitoring is essential to track patient health changes early on. Tools like the UK National Early Warning (NEWS) help track essential parameters and trigger a more in-depth assessment if the tool score changes. **(4) Empathetic listening:** A cultural shift from a task-based culture to a relational one, involving active or reflective listening will establish trusting relationships with patients and families. This study highlights care aids play a pivotal role in observing residents' health journeys.

COMMENT:

This review identifies awareness, accountability, vigilance and empathetic listening as key mechanisms underlying holistic, person-centred long-term care.

LONG COVID REVIEW



[Complex Chronic Illness Support](#)



<https://www.lcregistry.auckland.ac.nz/>

For more literature concerning Long COVID, you can visit [‘Lit COVID’](#), a website library for tracking up-to-date scientific information about COVID-19 and Long COVID.

Effects of cardiorespiratory rehabilitation program on submaximal exercise in patients with Long-COVID-19 conditions: A systematic review of randomized controlled trials and recommendations for future studies

(Ghram et al., 2023)

[Find abstract here.](#)

SUMMARY:

This review assessed the effects of cardiorespiratory Rehabilitation Programmes (CRRPs) on the six-minute walk test (6MWT) outcomes in Long COVID patients by analysing randomised controlled trials (RCTs). CRRPs involve a team of healthcare professionals working together to promote functional improvement and facilitate a return to daily activities. The team can include primary care physicians, specialists, therapists, nutritionists and others. The 6MWT assesses exercise capacity by measuring how far an individual can walk within six minutes. This review included six RCTs with 715 participants, where CRRPs included exercises, such as breathing, stretching and strength training. Most studies found that patients who participated in CRRPs had better 6MWT outcomes compared to those before the programme or in control groups. Only one study reported no difference between 6MWT measures in both cases and controls before and after the programme. This review provides considerations related to the design and implementation of CRRPs, which can significantly influence patient outcomes. In brief, CRRPs should be evidence-based, personalised to patients and regularly checked to ensure they meet patients’ goals and achieve positive outcomes. A comprehensive approach addressing physical and psychological aspects is vital for CRRPs to improve patients’ quality of life, exercise ability and overall health.

COMMENT:

A comment from Fy Dunford, a Cardiorespiratory physiotherapist (paraphrased), on submaximal performance, specifically the 6-minute walk test (6MWT): The 6MWT is commonly used in the cardiorespiratory field and is internationally accepted. We use this test in our Clinic, but it’s often challenging to standardise the distance for most of our patients, who are seen in their homes. Therefore, the provision of such a test then falls to “within Clinic” and is conducted on only those well enough to come into the Clinic. If Long COVID services were funded, this would be a good opportunity to explore 6MWT within Aotearoa New Zealand.

LONG COVID REVIEW

“None of us are lying”: An interpretive description of the search for legitimacy and the journey to access quality health services by individuals living with Long COVID

(Brehon et al., 2023)

[Find abstract here.](#)

SUMMARY:

This study aimed to understand the experiences of people living with Long COVID, looking at their needs and the quality of services available to them. Three key themes were generated from 56 interviews. **(1) Riding the Long COVID rollercoaster:** Participants spoke about the uncertain and unstable trajectory of symptoms that significantly impacted their activities of daily life, work, and sleep. Some managed independently, but many felt like a burden when needing help. Supportive employers helped with flexible return-to-work plans. However, those with unsupportive employers often had to look for alternative forms of work or stop working altogether. **(2) Transitioning from symptoms to services – (in)ability to access care:** Participants didn't always know what services were available, and if health professionals did not understand the condition or suggest additional services, participants often went no further within the system. Those with Long COVID had to self-advocate for their healthcare, which contributed to fatigue or exhaustion as they had limited energy to expend. Logistical issues, like wait times and transportation, also made accessing healthcare services challenging, with many patients preferring virtual or in-home care. Many participants discussed the repercussions of having lower incomes and being unable to afford healthcare services. Financial distress was further exacerbated if participants were the primary providers and were unsure whether they could return to work. **(3) Improving the quality of Long COVID services by illuminating key lessons:** Many participants spoke about how healthcare providers had limited knowledge of Long COVID treatment and rehabilitation and advocated for more education. Healthcare providers should validate, listen to, and support patients' experiences, and multidisciplinary clinics should offer psychological support to help alleviate distress associated with chronic illnesses.

COMMENT:

Many suggestions are centred around healthcare providers, highlighting the importance of investing in our general practitioners as they are the first point of contact in the healthcare system. Doing so will help providers to better recognise, manage or refer individuals with Long COVID to the most appropriate care.



If you or your family member has Long COVID and are interested in being involved in future Long COVID research, please contact us at:



longcovid@vuw.ac.nz



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