LOCO-RISE: Long COVID Rehabilitation In Scotland: an Evaluation

AIMS

This study evaluated the implementation and impact of different models of Long COVID community rehabilitation in four Scottish health boards. The overarching aim was to provide responsive, evidence-based recommendations to the NHS in Scotland about how to most effectively deliver community rehabilitation for people with Long COVID. People with Long COVID contributed to the design and conduct of the study, as well as the interpretation of findings.

KEY FINDINGS

- Community rehabilitation services have much to offer people with Long COVID, but their delivery is complex and presents multiple challenges.
- There are several patient, GP and service-level barriers to accessing community rehabilitation for Long COVID.
- There is a need for greater understanding by the public and healthcare professionals of the potential role of community rehabilitation in the management of Long COVID.
- Long COVID community rehabilitation services require adequate planning, publicity and resource to be available and accessible to people with Long COVID.
- Dedicated Long COVID services may be better for delivering Long COVID rehabilitation than attempting to integrate Long COVID rehabilitation in pre-existing services

WHAT DID THE STUDY INVOLVE?

Between October 2021 and April 2023 we undertook the following:

1. Interviews with 27 people with Long COVID, 45 rehabilitation professionals, and 22 NHS staff involved in Long COVID strategic planning. Participants were sampled from four Scottish health boards chosen for geographic and demographic spread, and variation in Long COVID service delivery models. Interviews took place over four rounds to capture evolution of service delivery during the study period.
2. Interviews with 11 people living with Long COVID and 13 GPs from the same four health boards on one occasion, to explore barriers to accessing community rehabilitation.
3. Measurement of Health-related quality of life and other clinical and service-related outcomes in 90 people receiving community rehabilitation for Long COVID.

WHAT WERE THE RESULTS AND WHAT DO THEY MEAN?

This is the first study to comprehensively evaluate models of Long COVID rehabilitation in Scotland. We identified two main models of service delivery which we named *integrated* (i.e., delivered within existing community rehabilitation services) and *dedicated* (i.e., new services developed specifically to deliver Long COVID rehabilitation).

Both models of service delivery were influenced by contextual factors including funding and staffing, clarity (or otherwise) of referral routes and pathways, and knowledge and confidence of rehabilitation staff.

Facilitators to Long COVID rehabilitation included clear and proactive communication about the availability of services, enhanced public awareness of services, and an engaged, motivated, and confident group of rehabilitation staff to deliver the service. These were most evident in *dedicated Long COVID services.* A trend towards larger improvements in quality of life was observed in dedicated compared with integrated services; however, the sample size was not large enough to detect statistically significant results.

Barriers to Long COVID rehabilitation included managerial and organisational uncertainty and inertia, most evident in *integrated services*. These barriers led to poorly publicised services, resulting in low numbers of people with Long COVID successfully accessing community rehabilitation, and large numbers of people with Long COVID feeling frustrated by a system they found challenging to navigate.

WHAT WERE THE RESULTS AND WHAT DO THEY MEAN?

A key finding at the start of this study was that fewer people with Long COVID were receiving community rehabilitation than we had anticipated. This finding could be attributed to demand-capacity issues which were driven by two mechanisms. *Dedicated services* that were well publicised soon received referrals that outstripped rehabilitation capacity, resulting in long waiting lists. In contrast, *integrated services* that were fearful of not being able to meet capacity, and were therefore not actively publicised, received very few referrals.

Referral rates between November 2021 and October 2022 are displayed in Figure 1. Health boards (HB) 1 & 2 received few referrals throughout the 12-months; these were integrated Long COVID services. Health board 3 began as an integrated service and launched (and advertised) a dedicated service in May 2022, resulting in a steep increase in referrals. Health board 4, the only dedicated service for the full 12-month period, saw the largest number of referrals.

Figure 1: Long COVID Referrals by Health Boards
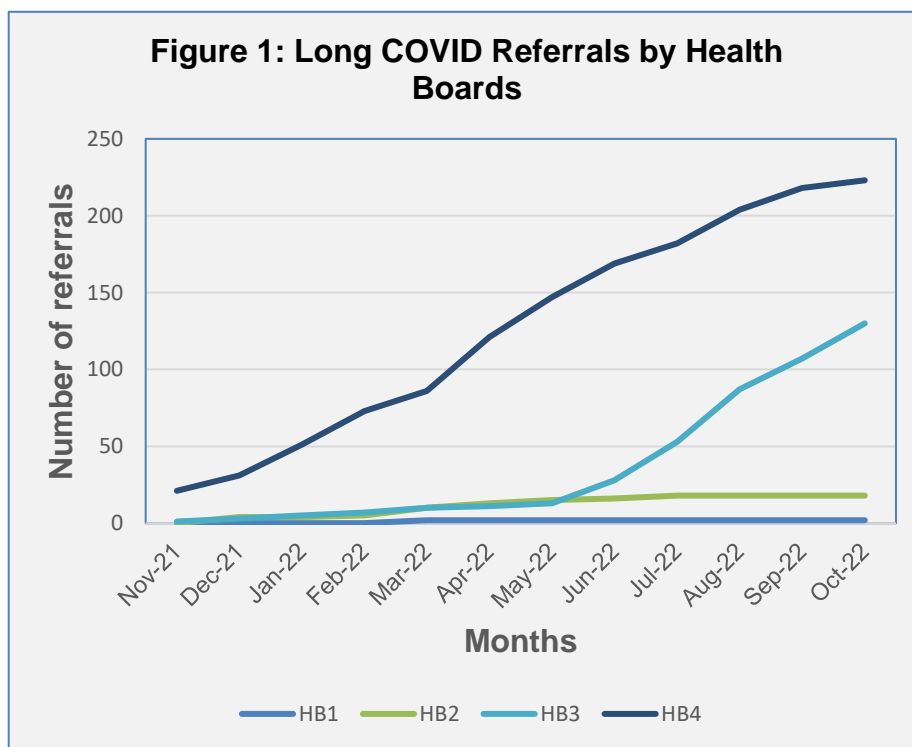
Long COVID rehabilitation is complex and variations in service delivery taking account of local contextual factors are recommended. Our findings suggest that *dedicated Long COVID rehabilitation services* are better at enabling and delivering community rehabilitation for Long COVID than those integrated within existing rehabilitation services. Further research on the outcomes of dedicated Long COVID rehabilitation services is required, along with research on the appropriateness and impact of self-management for people with Long COVID.

WHAT IMPACT COULD THE FINDINGS HAVE?

The findings can be used to enhance Long COVID service delivery and patient outcomes through the following recommendations:

Patients: Referral to community rehabilitation should be considered for people with Long COVID who experience moderate to severe difficulties undertaking everyday activities.

Policy: The development and sustained delivery of co-located, dedicated rehabilitation teams should be enabled. The development of long-term condition teams that focus on symptoms, not diagnoses, that could support people with Long COVID and other conditions, should be considered.

Practice: Dedicated Long COVID rehabilitation services should be co-designed, and actively promoted to people with Long COVID and those who refer. They should also provide staff with development and support to enhance their confidence in providing rehabilitation for people with Long COVID.

HOW WILL THE OUTCOMES BE DISSEMINATED?

Findings were presented during and at the end of the study to healthcare professionals and people with Long COVID via two widely advertised online workshops. Three journal articles are planned, and the findings will be presented at relevant national and international conferences. We are working with researchers and people with Long COVID to identify further Long COVID research priorities.

CONCLUSION

Community rehabilitation appears to be useful for some people with Long COVID.
Community rehabilitation for Long COVID has many complexities and challenges.
Creating a dedicated Long COVID community rehabilitation service appears more effective than attempting to integrate Long COVID community rehabilitation within existing services.
Further research on community rehabilitation for people with Long COVID is indicated.

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