Understanding Patient Needs and Priorities in a Community-Based Long COVID Rehabilitation Program: A Mixed-Methods Study

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INTRODUCTION

- The World Health Organization defines long COVID conditions as new, recurring, or lingering symptoms that persist for at least 12 weeks following a COVID-19 infection that cannot be attributed to an alternative diagnosis.
- Long COVID affects multiple organ systems and can severely impair physical, cognitive, and mental health. More than 200 symptoms have been documented.
- Globally, prevalence estimates of long COVID vary widely.
- In Canada, approximately 19% of adults with COVID-19 reported experiencing persistent symptoms lasting at least three months after acute infection.
- Healthcare systems worldwide have developed interdisciplinary models of care to address long COVID.
- In 2022, Alberta Health Services funded a community-based rehabilitation program designed for individuals experiencing moderate to severe functional impairments resulting from COVID-19.
- This program was delivered virtually and offered multidisciplinary rehabilitation services.

Objectives: This study aimed to explore patients' perspectives on the content and structure of the rehabilitation program and to identify key priorities for the design of future programs.

METHODS

We conducted a retrospective mixed-methods analysis of survey data from 110 participants collected via REDCap upon program closure in September 2024.

A qualitative descriptive design was used to capture patients' experiences with the program. Quantitative data on satisfaction were analyzed using descriptive statistics across 26 content elements and 18 structural components. Open-ended responses were analyzed thematically, with inductive coding to ensure that themes reflected participants' perspectives.

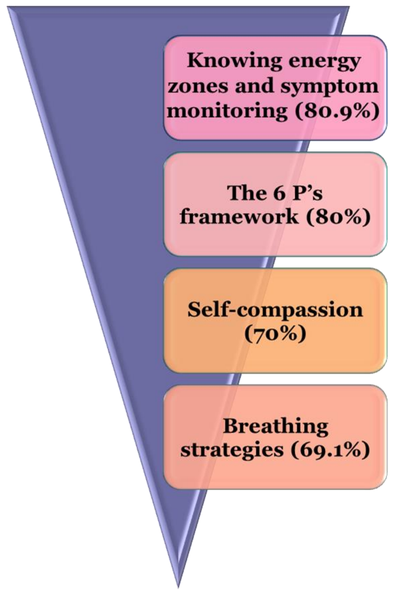
RESULTS

Participant Characteristics:

- Majority were female (71.8%)
- Most lived in urban areas (84.6%);
- Primary referral source: family physicians (58.1%)
- Mean age: 61.1 years (SD = 11.1)

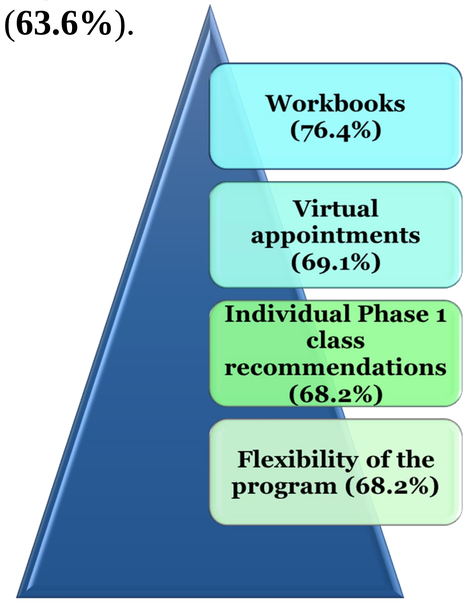
The most useful Program content:

Energy zones and symptom monitoring (**80.9%**); The 6 P's (pacing, planning, prioritizing, problem-solving, positioning, permission) framework (**80%**); Self-compassion strategies (**70%**).



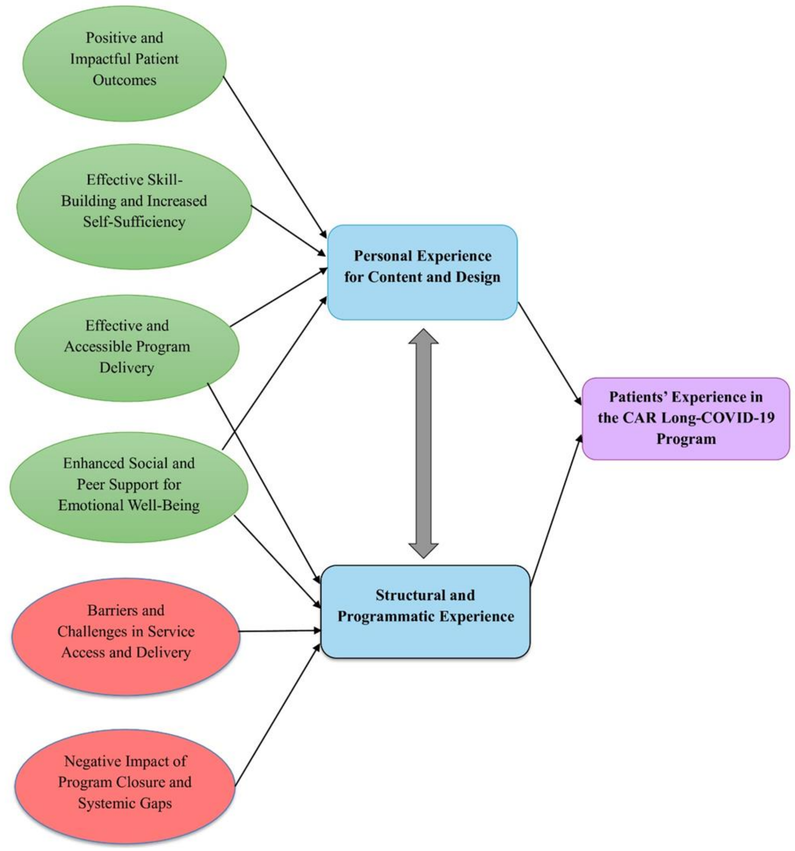
Most valued structural components:

Workbooks (**76.4%**); Virtual appointments (**69.1%**); Individual Phase 1 class recommendations (**68.2%**); Flexibility of the program (**68.2%**); Clinician-run groups (**63.6%**).



RESULTS

Thematic analysis revealed six key themes: **(1)** Positive and Impactful Patient Outcomes; **(2)** Effective Skill-Building and Increased Self-Sufficiency; **(3)** Effective and Accessible Program Delivery; **(4)** Enhanced Social and Peer Support for Emotional Well-Being; **(5)** Barriers and Challenges in Service Access and Delivery **(6)** Negative Impact of Program Closure and Systemic Gaps.



CONCLUSIONS

- ❑ The program successfully delivered patient-centered rehabilitation using evidence-based virtual care. However, findings underscore the need to enhance accessibility, continuity of care, and support for marginalized populations.
- ❑ The study identified the most valued and effective elements of the program's content and structure from the patient perspective.
- ❑ These insights can inform the design of effective and sustainable rehabilitation programs for long COVID and other chronic conditions in Alberta and other jurisdictions.

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