

Understanding the Symptom & System Navigation Experiences of Hospitalized vs. Non-Hospitalized Persons with Long COVID: A Random, Cross-Sectional Survey

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Introduction

- Long COVID (LC) involves continued or new chronic symptoms 3 months after acute SARS-CoV-2 infection. In Canada, the LC prevalence is estimated as 17.2%.¹
- LC symptoms are varied, multisystem and significantly impact function, quality of life, and return to work.² Common LC symptoms include anosmia, anxiety, cognitive problems, exercise intolerance, fatigue, headaches, impaired sleep and shortness of breath.
- There are limits to identifying LC with low self-selection bias and challenges to monitoring recovery outcomes post-COVID. We require more evidence to determine the relationships between previous hospitalization and LC.

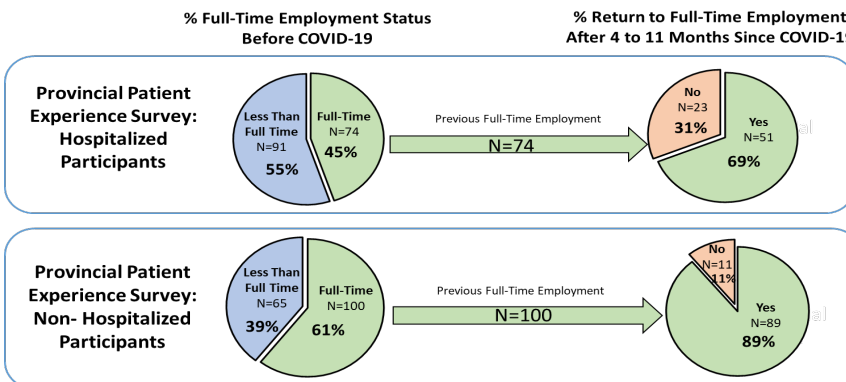
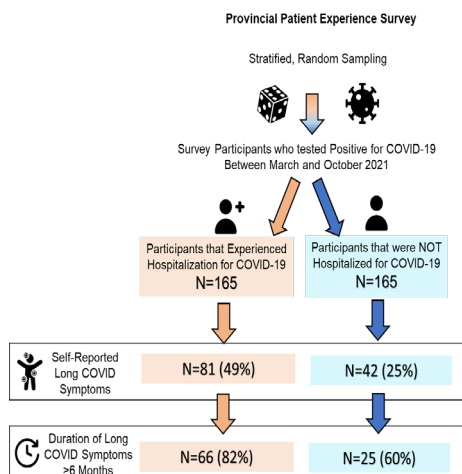
Aims

To compare the experience and self-reported symptoms of, and health service use for, long COVID in previously hospitalized and non-hospitalized adults in a community-based, cross-sectional telephone survey.

Methods

- Cross-sectional, provincial, observational study using a telephone patient experience survey between March to October 2021.
- Participants: random sample of adults (≥ 18 years) recovering from laboratory-confirmed COVID-19. The sampling frame was based on hospitalization status during the study window (50% hospitalized, 50% non-hospitalized) and geographical location (60% metropolitan-urban residence, 40% regional-urban/rural).
- Survey was co-designed with patient/family advisors, clinicians, as well as administrative, operational and system leadership; and was further refined via cognitive interviews (n=5). Survey questions included closed, multiple-response and open-ended questions about experience of symptoms, impact on daily activities and return to work and system utilization.

Results



More **previously-hospitalized respondents visited a family doctor** for LC symptoms compared to non-hospitalized respondents (hospitalized: n=109 (66.1%); non-hospitalized: n=25 (15.2%), (p<0.0001)). **Previously-hospitalized respondents reported more referrals to specialty healthcare providers** for LC symptoms (hospitalized: 45 (27.3%); non-hospitalized: 6 (3.6%)) (p<0.001).

Comparable respondents in both groups accessed care services that did not require a referral to manage their LC symptoms (hospitalized: (31 (18.8%), non-hospitalized 20 (12.1%), (p=0.20)).

Conclusions

- Persons hospitalized with COVID-19 may have increased risk of developing LC and require additional follow-up care post-discharge.
- The persistence and impact of LC symptoms on the activities of daily living have significant implications for return to work, with changes in employment status up to 13 months post-acute infection. LC productivity implications must be considered.



References

- Statistics Canada, *Associations between Longer-term Symptoms after COVID-19 and Sociodemographics, Health Characteristics, Period of Infection, and Vaccination Status in Canadian Adults, January 2020 to August 2022*. 2023: Ottawa, ON
- Krysa, J.A., et al., *Understanding the Experience of Long COVID Symptoms in Hospitalized and Non-Hospitalized Individuals: A Random, Cross-Sectional Survey Study*. Healthcare (Basel), 2023. 11(9).

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