

# Virtual rehabilitation program for seniors with frailty shows promise, according to new research

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Virtually delivered rehabilitation for seniors living with frailty is a feasible way for delivering care, shows new research led by researchers from McMaster University and the Geras Centre for Aging Research.

The study, published in *Pilot and Feasibility Studies*, defines [frailty](#), a consequence of aging, as a decline in function and physiological reserve in multiple bodily systems.

Frailty impacts approximately 1.5 million [older adults](#) in Canada, and frail seniors account for a large proportion of users of rehabilitation programs and home care services. The findings of the study disprove concerns that virtual programming would not be effectively delivered to older adults.

"Virtually delivered care is an alternative to in-person programs, especially with long wait lists for in-person services, and could help prevent a decline in [bodily functions](#) in people living with frailty," said first author Chinenye Okpara, a Ph.D. candidate at McMaster's Department of Health Research Methods, Evidence, and Impact.

"Another benefit of virtually delivered care is that we can reach more people at the same time when running sessions such as physiotherapy or exercise classes, which are typically conducted on a one-to-one basis when delivered in-person."

Researchers ran the [pilot project](#) from August 2020 to November 2021, when the COVID-19 pandemic was at its peak and seniors were encouraged to stay home. Investigators recruited 72 participants from a wait list of more than 200 for the study and split participants into either a virtual care group or control group. Over a 12-week period, those receiving virtual care received twice-weekly live-streamed exercise sessions, one phone call a week from student volunteers, medication review consultations and nutrition counseling via videoconference and

protein supplementation. The [control group](#) only received once-weekly calls from volunteers.

The results showed that strong adherence to the virtual program made it a feasible option for delivering care to older adults, with 81% of participants in the virtual care group attending the [exercise classes](#), above a predicted 75% adherence rate.

"With the growing population of older adults in Canada, health care needs to develop new, innovative models that support older adults being able to live in their own homes," said Alexandra Papaioannou, professor in the Department of Medicine at McMaster University and principal investigator of the study. "Our model on virtual frailty rehabilitation resulted in improvements such as being able to cross the street, rise from the chair without needing assistance and allow people to remain in their own homes with the support of their families and the health care system."

The authors say that more evidence of the program's effectiveness is needed, which can only be obtained by a larger-scale trial conducted in a post-pandemic setting.

**More information:** Chinenye Okpara et al, The Geras virtual frailty rehabilitation program to build resilience in older adults with frailty during COVID-19: a randomized feasibility trial, *Pilot and Feasibility Studies* (2023). [DOI: 10.1186/s40814-023-01346-7](https://doi.org/10.1186/s40814-023-01346-7)

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