Issue: Exercise in Long-Term Care Released: November 2017

## **Exercise Interventions for Long-Term Care in Newfoundland & Labrador**

Isabelle J. Dionne, PhD., David Diamond, Stephen Bornstein, PhD., David Speed, PhD., Pablo Navarro



The Issue

The Question

The Results

Our provincial healthcare system asked CHRSP to report on interventions involving physical activity and exercise programming with a view to improving daily functioning among frail elderly residents within Long-Term Care (LTC) facilities in Newfoundland & Labrador.

"What exercise-based interventions have been shown to be effective in improving the day-to-day functioning of physically frail elderly in long-term care (LTC) facilities?"

The vast majority of the research literature looks at exercise for community-dwelling seniors—not for people in LTC. Moreover, there is a lack of evidence for *frail elderly* populations and the body of evidence that does address this population is of low quality. As a result, the conclusions in this study relate primarily to *non*-frail elderly populations.

Population: Intervention/ Outcome	Strength of Evidence	Population: Intervention/Outcome	Strength of Evidence
<b>Non-</b> Frail Elderly: Step Training for improving falls rate	Strong Body of Evidence showing intervention is effective	Frail Elderly: Multifactorial Interventions for improving gait Non-Frail Elderly: Physical Rehabilitation for improving mobility; Step Training to improve singleleg balance, risk of falls and TUG	Weak or Very Weak Body of Evidence showing intervention is effective
Non- Frail Elderly: Physical Rehabilitation for improving Activities of Daily Living (ADL) Barthel scores	Moderate Body of Evidence showing intervention is effective	Non-Frail Elderly: Physical Rehabilitation for Timed Up-and-Go and Walking Speed	Moderate Body of Evidence showing intervention makes no difference

The Local Context Frailty is a key criterion for determining the suitability of exercise interventions; however, across the province, there is no consistent approach to assessing frailty; indeed, there may be substantial differences between populations deemed "frail" in different long-term care facilities within the province. This lack of a uniform definition presents implementation challenges for any exercise intervention.

Exercise activities now supported by physiotherapists in LTC are generally individually-tailored for some residents. Implementing individually-tailored exercise programs for larger numbers of residents in LTC across the province, and with sufficient frequency and duration to be effective, would require additional human resources, notably physiotherapists, recreational therapists, kinesiologists, and/or nursing staff.

Group delivery of step-training programs, which may be effective for *non-frail* elderly, might be less costly than one-on-one programs, but this approach presents its own set of logistical challenges, including space and equipment requirements.

To promote healthier aging, two other kinds of programs may be worth investigating—exercise programming for seniors still living in the community, and function-focused care that encourages more movement by seniors in LTC in their activities of daily life.

Read the full report here: www.nlcahr.mun.ca/chrsp

