



## Poster # 28

**Title of poster:** Wait times for home-based rehabilitation: The impact on rehospitalisation.  
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### Abstract

Home-based rehabilitation services are part of Ontario's home care strategy for safe hospital discharge and to reduce (re)hospitalization through prevention and maintenance. An estimated 78% of home care clients do not receive any rehab, wait times can be as long as 3 months and the longest waiting is experienced by elderly with chronic disorders. Data on hospital utilization among elderly receiving home-based rehab and the impact of waiting for such services are sparse. These data are extremely important in Ontario where close to 60% of home care clients are elderly, over half are admitted post-hospital discharge and the number awaiting long-term care placement at home is growing. Our study seeks to determine How do wait times for home-based rehabilitation affect (a) emergency room use and (b) hospital (re)admission?

**Methods:** The proposed project uses a retrospective cohort study design. The cohort includes individuals over the age of 65 who have been newly admitted to Ontario's 14 Community Care Access Centres (CCAC) home care programs from 2009-2013. Data will be abstracted from province-wide datasets held at the Institute for Clinical Evaluative Sciences (ICES). The primary outcome is hospital utilization. Demographic information, medical history and rates of hospitalization and emergency department visits will be analyzed. Survival analysis will be used to take account of the duration of the wait time to a hospital encounter (event). The analysis looks at the total time a client is at risk for a hospital encounter and allows us to determine: 1. if returning to hospital occurs later for clients that received rehab versus did not receive rehab; and 2. the impact that wait time for rehab has on time-to-event. The analysis also permits us to control for multiple potential confounders known to impact rehospitalization.

**Results:** This provincial study builds upon a pilot study conducted in 2012-3. Results from the pilot were based on 1029 patients'  $\geq 65$  years of age admitted to home care following a discharge from two hospitals in southeastern Ontario. The pilot found that home-based rehab was offered to 43.8% of these home care clients. Average wait times from home care admission to first rehab visit was 28 days for clients that were re-hospitalized compared to 13 days for those that were not. Survival analysis showed that physiotherapy was effective in delaying re-hospitalization, despite wait times of slightly over 3 weeks. Wait time for occupational therapy was over 4 weeks, and was associated with a high proportion re-hospitalized (37.4%). The majority of clients returning to hospital presented with pain, fever, dehydration, dyspnoea, pneumonia, nausea, polypharmacy, delirium, angina, COPD and renal failure.

**Relevance:** The study is an extensive examination of wait times for Ontario home-based rehabilitation and its impact on elderly clients. The survival analysis will include all clients over

the age of 65 regardless of their assessed clinical and home care needs or length of stay on home care. This analytical strategy, study design and inclusion criteria will provide results that are meaningful to decision makers at local, regional and provincial levels when discussing resources, clinical pathways and processes. Results delineated by diagnosis and case mix groupings will also inform physicians and rehabilitation therapists' triage process and practice.

