

Evaluating the Provincial Home Dementia Care Program in the Eastern Health Region

Objective

The objective of the pilot evaluation was to evaluate the impact of participation in the Provincial Home Dementia Care Program (PHDCP) in the Eastern Health Region on client's acute health care utilization, long-term care (LTC) admission, and caregiver self-efficacy.

Practice Points

1. Frailty identification and comprehensive geriatric assessment by an interdisciplinary team (provided by the PHDCP) can successfully support frail older adults living with dementia in the community.
2. Optimized care for frail older adults living with dementia provided by the PHDCP has a potential to impact acute health care utilization and rates of long-term care admission. In this study a significant reduction in ER visits was seen.
3. Optimized care for frail older adults living with dementia provided by the PHDCP can impact caregiver self-efficacy. Specifically, knowledge about dementia and confidence and comfort managing the symptoms of dementia improved for caregivers with family members enrolled in the program.

Methods

1. Pilot project took place between May of 2019 and October of 2021. Referrals to the program were made by primary care or specialist physicians for individuals with a confirmed or provisional diagnosis of some form of dementia, living in the Eastern Health region.
2. Clients were screened for Frailty using the Rockwood Clinical Frailty Scale, and a Comprehensive Geriatric Assessment to develop care plan. Case management was provided by geriatric nurse practitioners.
3. An informal caregiver survey was conducted with program clients (N=86) from November 2020 – January 2021 to evaluate self-efficacy (confidence) based on the Caregiver Confidence in Sign/Symptom Management (CCSM) scale.

4. Baseline data was collected retrospectively and included patient demographics collected from the provincial electronic medical record (EMR). The primary outcome was admission to long term care. Secondary outcomes included emergency room presentations over a 6-month period; acute care admissions over a 1-year period; acute care admissions resulting from falls over a 1-year period; rate of clients able to die at home; and caregiver self-efficacy.
5. A total 279 clients were accepted into the program during the pilot program and were screened for frailty. Of these clients, 263 received comprehensive geriatric assessment and individualized care plans. Outcome data provided through NLCHI was available for 170 clients. Data in this report is based on this sample.

Results

Table 1. Demographic Characteristics of Clients Enrolled in the Provincial Home Dementia Program

| Clients Enrolled N = 170 | Age | Sex (%) | Location (%) |
|-----------------------------|-------------|--------------------------|--------------------------|
| | 81 (51–101) | Male (49) Female (51) | Urban (85) Rural (15) |

- Average age of clients was 81 years however, there was a noticeable gap in the range (51–101). There was no notable difference in the sex of clients, however the majority resided in an urban location (85%).

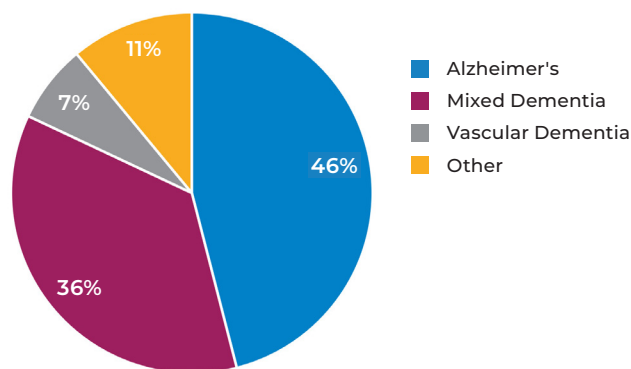


Figure 1. Clients Enrolled in the Program by Diagnosis of Dementia

- Most clients were diagnosed with Alzheimer's type dementia (46%), followed by mixed dementia (36%).

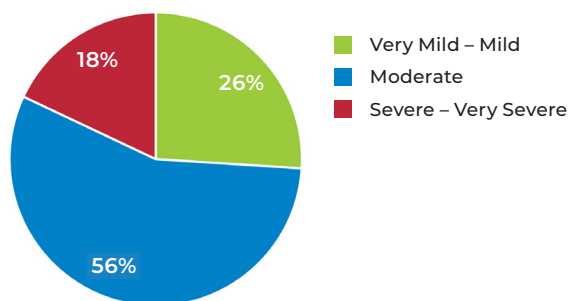


Figure 2. Clients Enrolled in the Program by Frailty Score

- The majority of clients were living with moderate frailty (56%) while 18% were living with severe to very severe.

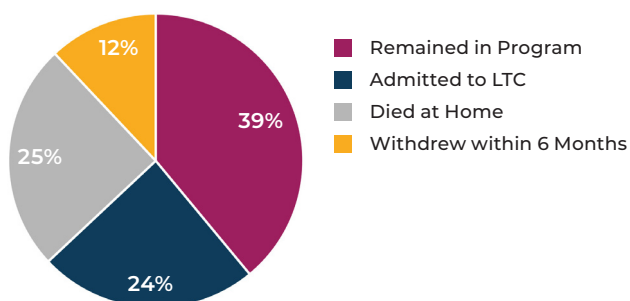


Figure 3. Clients Disposition at 1-Year Follow-Up

- After 1-year follow-up, the majority of clients were able to remain at home (39% still in the program, 25% died at home). 12% of clients withdrew from the program within 6 months.
- The rate of LTC admission among PHDCP clients was found to be 28% lower than the provincial CIHI average in people aged ≥ 65 years and 40% lower than all clients in the high to very high needs categories assessed by RAI-HC in NL.

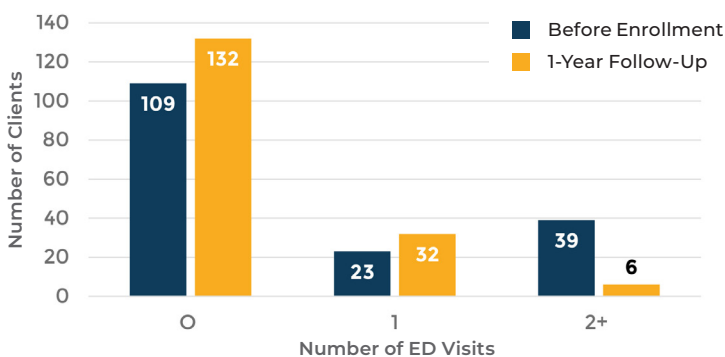


Figure 4. Number of Emergency Department Visits of Clients before Enrollment and at 1-year Follow-Up

- There was a statistically significant reduction in Emergency Department (ED) visits ($p=0.027$). Before enrollment, 62 clients (36%) had experienced 1 or more ED visit within the past 6 months. At follow-up, 38 clients (22%) had experienced 1 or more ED visit within the past 6 months.

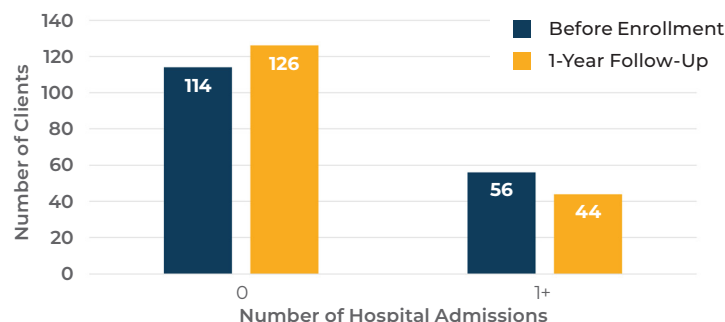


Figure 5. Number of Hospital Admissions of Clients Before Enrollment and at 1-Year Follow-Up

- Before enrollment, 56 (33%) clients had experienced 1 or more hospital admissions within the last year. At follow up, 44 (26%) clients had experienced 1 or more hospital admission within the last year.

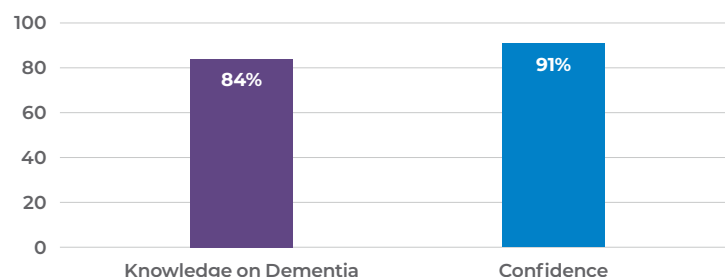


Figure 6. Impact of the Program on Caregiver Self-Efficacy

- 84% indicated that the PHDCP has increased their knowledge about dementia. 91% reported increased confidence and comfort managing the medical symptoms of dementia.

Conclusions

- The PHDCP was successful in reducing the use of ED visits and hospital admission among clients enrolled in the program.
- Caregiver self-efficacy improved for those whose family members were involved.
- Integrating this program in the proposed Comprehensive Provincial Frail Elderly Program proposed by the Health Accord should be considered.