Do patients retain their family doctor after entering long-term care? A population-based retrospective cohort study.

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INTRODUCTION

What is Relational Continuity of Care (CoC)?

*A therapeutic relationship between a patient and one or more providers that spans various health care events and results in accumulated knowledge of the patient and care consistent with the patient’s needs*

Why is CoC important?

• Improves patient-provider satisfaction
• Lower healthcare costs, and reduces ED and acute care utilization
• Particularly beneficial to patients with complex needs (ie. elderly)
• Elderly (65+) project to make up 20% of Canada’s population by 2024

Why did we conduct this study?

• Retaining care from the same family doctor is a key aspect of CoC
• Gap in knowledge: no literature on this subject pertaining to LTC residents and the community-to-LTC transition

OBJECTIVES

Determine the proportion of LTC residents who retain care provision from their community family doctors.

Describe LTC resident, physician and facility characteristics associated with retention of the family doctor.

METHODS

Cohort created using linked ICES databases:

Ontarians aged 60 and over
• First admission into an Ontario LTC home
• Admitted between April 1st, 2014 – March 31st, 2017

Exclusions:
• OHP ineligible, discharged home during 180 days, death within 120 days, unadministered RAI-MDS assessment at index

Primary Outcome:

“Care Retained” = OHP billing by same GP during step 3 (days 0-90 AND 91-180)

“Care NOT Retained” = No/partial OHP billing during step 3

Secondary Outcome – assessment of covariates:

• LTC Resident: age, sex, language, rurality, income, physical/cognitive health, number of chronic/prevalent conditions
• Physician: sex, country of medical education, years since graduation, panel size, rural practice, LTC practice
• Facility: number of beds, community rurality, distance from GP clinic

RESULTS – LTC Resident Characteristics

(1) Less than 1 in 8 LTC residents retain their family doctors in the LTC home
(2) Residents with greater physical/cognitive impairment have lower retention
(3) Residents with dementia have lower retention

Figure 1. Proportion of Ontario residents entering LTC between 2014-2017 who retained their community family doctor.

Table 1. LTC Resident factors influencing family doctor retention in LTC

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR (95%CI)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (ref = 5 years)</td>
<td>0.78 (0.67-0.91)</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Sex (ref = male)</td>
<td>0.70 (0.60-0.82)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>CPS (ref = 0)</td>
<td>1.02 (1.01-1.03)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Dementia (ref = no)</td>
<td>0.80 (0.67-0.92)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Table 2. Physician factors influencing family doctor retention in LTC

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR (95%CI)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (ref = female)</td>
<td>0.90 (0.83-0.98)</td>
<td>0.0159</td>
</tr>
<tr>
<td>Rural Practitioner (ref = no)</td>
<td>1.70 (1.51-1.90)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>LTC experience (ref = no)</td>
<td>2.64 (2.45-2.85)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Table 3. Geographic factors influencing family doctor retention in LTC

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR (95%CI)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Rurality</td>
<td>2.23 (1.78-2.79)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>LTC co-clinic distance (ref = 0-10km)</td>
<td>0.87 (0.77-0.99)</td>
<td>0.0036</td>
</tr>
<tr>
<td>Rural/Rural</td>
<td>1.04 (0.95-1.15)</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Table 4. Retention and LTC co-clinic Distance

<table>
<thead>
<tr>
<th>Family Doctor Retained</th>
<th>Family Doctor NOT Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural/Rural</td>
<td>12.2 ± 4.8 km</td>
</tr>
<tr>
<td>Median (IQR)</td>
<td>7.7 (3.8-15.9) km</td>
</tr>
</tbody>
</table>

Table 5. Proportion of LTC residents who retained their family doctors stratified by Ontario Local Health Integration Network (LHIN) Sub-Regions.

<table>
<thead>
<tr>
<th>LHIN Sub-Region</th>
<th>Proportion of LTC residents who retained their family physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ottawa East &amp; South East</td>
<td>0.49%</td>
</tr>
<tr>
<td>Ottawa West</td>
<td>0.49%</td>
</tr>
<tr>
<td>Ottawa South</td>
<td>0.50%</td>
</tr>
<tr>
<td>Ottawa Central</td>
<td>0.51%</td>
</tr>
<tr>
<td>Ottawa North</td>
<td>0.51%</td>
</tr>
</tbody>
</table>

Figure 2. Percentage of LTC residents who retain their family doctors compared to their Activities of Daily Living (ADL) and Cognitive Performance Scale (CPS) scores. Scores are formulated from 0-6, where 0 indicates minimal impairment and 6 indicates total dependence on personnel.

Figure 3. Percentage of LTC residents who retain their family doctors as a function of their dementia diagnosis at LTC entry.

Figure 4. Percentage of LTC residents who retained their family doctor according to another practice pattern. LTC experience was defined as having billed an LTC CHIMP fee code in the past year. Rural doctors practice in communities of <10,000.

CONCLUSIONS

Physician retention into LTC is low in Ontario – less than 1 in 8 residents retain their community doctor

Factors influencing retention:

• Resident Health
• Healthier patients tend to keep their doctors
• Geography
• Shorter LTC-to-clinic distances and rural facilities are linked to greater retention

ACKNOWLEDGEMENTS

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REFERENCES