An exploration of regional variations across a set of potential quality indicators for seriously-ill home care clients in Ontario

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Quality Indicators (QIs)

- Decision support tools that can identify potential areas for improvement in health care
  - Not definitive measures of quality

- Provide rates of health outcomes which should be avoided

- QI rates are typically expressed as a proportion
  - Used at population level
Quality Indicators for Seriously-ill Clients in Canada

- **What we have:**
  - A set of *home care* quality indicators developed by interRAI
  - A base of literature on the development of QIs for seriously-ill individuals

- **What’s next:**
  - Development of a reliable and validated set of QIs for use in seriously-ill populations in Ontario
    - Developed with interRAI tools
    - Capture relevant areas of importance for seriously-ill clients
Research Objectives

- Develop a list of preliminary quality indicators for seriously-ill home care clients in Ontario
  - Consultations with subject matter experts in the field of palliative care and by using existing interRAI data.

- Examine the regional variations in the rates of the QIs across Ontario
Assessments

Care planning

Resource allocation

Health index scales

Quality indicators
Resident Assessment Instrument – Home Care (RAI-HC)

- Assessment tool to aid in decision making and guide care provided in the home

- Mandated in Ontario as of 2002

- Includes:
  - Demographic characteristics
  - Functional ability
  - Caregiver distress
  - Health index scales
    - Measures for cognitive impairment, depression, pain, IADL & ADL impairment
  - Diagnoses
Methods

• Identification of seriously-ill individuals from RAI-HC data
  • Prognosis of 6 months or less
  • Level of health instability indicated by the CHESS scale

• Development of a list of preliminary quality indicators for seriously-ill individuals
  • Relevant domain areas from the literature
  • RAI-HC items
  • Subject matter expert consultations

• Examined the rates of the revised QIs across Ontario
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Not Seriously-ill</th>
<th>Seriously-ill</th>
<th>Odds ratio (95% Confidence interval)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=249,905</td>
<td>N=14,312</td>
<td></td>
</tr>
<tr>
<td>Age (85+)</td>
<td>47.9</td>
<td>48.9</td>
<td>1.01 (0.96-1.07)</td>
</tr>
<tr>
<td>Cognitive Performance Scale (scored from 0-6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate/ Severe Impairment (2+)</td>
<td>57.6</td>
<td>79.0</td>
<td>2.77 (2.66-2.89)</td>
</tr>
<tr>
<td>Activities of Daily Living Self-performance Hierarchy Scale (scored from 0-6)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Moderate/severe impairment (2+)</td>
<td>20.5</td>
<td>42.5</td>
<td>2.87 (2.77-2.97)</td>
</tr>
<tr>
<td>Instrumental Activities of Daily Living Inventory Scale (scored from 0-21)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate/severe impairment (14+)</td>
<td>58.6</td>
<td>80.6</td>
<td>2.95 (2.83-3.08)</td>
</tr>
<tr>
<td>Diagnoses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnosis of Cancer</td>
<td>13.2</td>
<td>32.0</td>
<td>3.09 (2.97-3.20)</td>
</tr>
<tr>
<td>Diagnosis of Congestive Heart Failure</td>
<td>15.4</td>
<td>25.6</td>
<td>1.88 (1.81-1.96)</td>
</tr>
</tbody>
</table>
Subject Matter Expert Consultations

- 20 Subject Matter Experts
- Experts from Canada, the United States, and Belgium

![Diagram showing engagement with key stakeholders: Nurses/Nurse Practitioners, Researchers, Physicians, Home care professionals.](image-url)
Table 2: Quality Indicator Rates for Ontario

<table>
<thead>
<tr>
<th>Quality Indicator</th>
<th>Overall Rate in Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of shortness of breath</td>
<td>66.2%¹</td>
</tr>
<tr>
<td>Prevalence of falls</td>
<td>49.0%²</td>
</tr>
<tr>
<td>Prevalence of daily pain</td>
<td>46.6%</td>
</tr>
<tr>
<td>Prevalence of caregiver distress</td>
<td>41.7%</td>
</tr>
<tr>
<td>Prevalence of negative mood</td>
<td>26.9%</td>
</tr>
<tr>
<td>Prevalence of inadequate pain control by medication</td>
<td>22.8%</td>
</tr>
<tr>
<td>Prevalence of social isolation</td>
<td>21.1%</td>
</tr>
<tr>
<td>Prevalence of constipation</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

¹ Risk adjusted for: cognitive impairment, COPD, CHF, cancer
² Risk adjusted for: cognitive impairment, ADL impairment, vision impairment, Parkinson’s disease
Figure 1: Comparison of the Quality Indicator Rates of the North West LHIN and the Central LHIN of Ontario
Take Home Messages

• Seriously-ill home care clients are experiencing high rates of negative health outcomes

• Quality indicators are not a definitive measure of quality, but one of the first steps to identify potential quality issues

• Quality indicator rates differ across regions of the province

• interRAI data are valuable to aid in the flagging of potential quality issues at the population level
Thank you for your attention ~

Questions?

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