The ‘where’ of care: mapping physiotherapy use in Canada in relation to physiotherapist distribution

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Background & Rationale

- Increasing and diverse service needs of an aging population and those with chronic conditions in Canada
- Rural and remote populations have difficulty in accessing care and improving health
Rationale & Research Objective

- Mapping the geographical distribution of physiotherapists in relation to utilization at a health region level would help to highlight where access to physiotherapy service delivery could be optimized.

- Objective:
  - To analyze how variations in the distribution of physiotherapists at health region levels are associated with self-reported physiotherapy use across Canada.
Research Data Sources & Methods

**Canadian Community Health Survey (CCHS)**

*In the past 12 months, have YOU2 seen, or talked to: ...a physiotherapist about ^YOUR1 physical, emotional or mental health? (Yes/ No)*

(outside of being an overnight patient in a hospital)

% of PT Use
Physiotherapy Use (% by Health Region)
Physiotherapy Use across Canadian Health Regions
Number of Physical Therapists per 10,000 people

Physiotherapy Ratio (per 10,000 people)
- 0.7 - 2.5
- 2.6 - 5.0
- 5.1 - 7.5
- 7.6 - 10.4
Number of Physiotherapists per 10,000 people
PT Use vs. PT Distribution Ratio

R = 0.581, p < 0.001
PT Use vs. PT Distribution Ratio
PT Use vs. PT Distribution Ratio - Western Canada

<table>
<thead>
<tr>
<th>Utilization</th>
<th>High (H)</th>
<th>Medium (M)</th>
<th>Low (L)</th>
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<tbody>
<tr>
<td>High (H)</td>
<td>0</td>
<td>1</td>
<td>10</td>
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<tr>
<td>Medium (M)</td>
<td>1</td>
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<td>5</td>
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<tr>
<td>Low (L)</td>
<td>4</td>
<td>7</td>
<td>3</td>
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Results

- Across 103 health regions:
  - 13.5% have high use/high PT distribution ratio;
  - 16.5% have a low use/low PT distribution ratio;
  - 5.8% have high use/low PT distribution ratio;
  - 2.9% have low use/high PT distribution ratio.

- Health regions that have both low use and low distribution of physiotherapists tend to be in more rural, remote or northern parts of the provinces and those with high use and high distribution ratios tend to be in more urban areas.
Considerations

- PTs working in hospitals or academic setting not included in analysis
- Unable to determine reason for PT use, number of visits, or FTE of PTs
- Survey does not include Indigenous people living on reserves
- Territories not included due to data suppression issues
Conclusions

- Findings highlight potential inequities and gaps in geographical access to PT services in Canada.

- Provide insight into which regions/areas are in need of increased PT services:
  - May be applicable to health service delivery planning and advocacy efforts
Future Directions

- Our ongoing research is examining the distribution of physiotherapy services relative to population health ‘need’ factors (i.e. low income, senior population) and other health professionals.

- Innovative recruitment/retention efforts AND innovative health service delivery models are needed in underserved areas.
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