MEASURING THE JOB STICKINESS OF COMMUNITY NURSES IN ONTARIO (2004–2010): Implications for Policy & Practice

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Over the past two decades, many healthcare systems have witnessed a shift of care from hospitals to the community. The trend will continue with the emphasis on primary healthcare and community-based health services. Such changes in the healthcare setting generated changes in the size and distribution of the workforce. Evidence-based strategic human resources planning entails:

- observing the numbers of nurses in various sectors/subsectors of employment &
- understanding the relative attractiveness of those sectors/subsectors
Background

- Considerable governmental investments and policy changes in Ontario have led to the development of various community subsectors with a changing distribution of nurses within them (CCACs, Community mental health, etc.)

  - Example: Research evidence revealed that, between 1993 and 2003, the hospital sector in Ontario witnessed a considerable reduction in its nursing workforce, contrasted by a rapid growth in the number of community employed nurses (Alameddine et al., 2006)

  - Such a trend was confirmed by more recent statistics reported by CNO. Specifically, the community nursing workforce grew from 14,052 (13.3%) nurses in 2001 to 23,168 (18.4%) nurses in 2010
Objective and Questions

• Objective: Examine the retention of community nurses across time (2004–10) and draw comparisons by sector/subsector, nurse group and work status
  – Over the period of 2004–2010, was there an active movement of nurses between the hospital and community sectors of employment in Ontario? What was the absolute direction of this movement?
  – Within the community sector, how did the stickiness level of nurses working in various subsectors employing nurses in Ontario change between 2004 and 2010?
  – How did the stickiness of community nurses vary by work status and nurse type?
Stickiness

• We use the concept of ‘stickiness’ to examine the shift of nurses to and from the community sector and assess the relative ability of the various community subsectors in Ontario to retain their nurses.

• Stickiness is defined as the transition probability that a nurse working in a particular sector/subsector of employment in year “t” was still working in that sector/subsector in year “t + 1”.

• Stickiness has been found to be a useful proxy measure of the relative attractiveness of the various subsectors of nursing employment over time (Alameddine et al., 2006).
## Overview of Community Subsectors in Ontario

<table>
<thead>
<tr>
<th>Community Sub-sector</th>
<th>Definition*</th>
<th>2010 absolute (relative) distribution</th>
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<tbody>
<tr>
<td><strong>Nursing/ Staffing Agency</strong></td>
<td>An agency that provides a range of nursing services to support client care in the community and in healthcare facilities. Services are delivered in homes, hospitals and other settings such as schools and retirement homes</td>
<td>5,129 (22.1%)</td>
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<td><strong>Public Health Unit/ Department (PH)</strong></td>
<td>An official health agency established by a group of urban or rural municipalities to develop and provide comprehensive community healthcare programs</td>
<td>4,371 (18.9%)</td>
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<tr>
<td><strong>Community Care Access Center (CCAC)</strong></td>
<td>An organization providing simplified service access to visiting professional and personal support health services at home and in schools, long-term-care placement, service planning and case management, and information and referrals to other long-term-care services, including volunteer-based community services</td>
<td>3,362 (14.5%)</td>
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<td><strong>Physician’s Office/Family Practice Unit</strong></td>
<td>A group or solo practice that provides episodic or continuing, comprehensive primary care</td>
<td>4,037 (17.4%)</td>
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<tr>
<td><strong>Community Health Center (CHC)</strong></td>
<td>A not-for-profit, community-governed organization providing primary health care, health promotion &amp; community development services, using multi-disciplinary teams of health providers</td>
<td>1,960 (8.5%)</td>
</tr>
<tr>
<td><strong>Community Mental Health Program</strong></td>
<td>A community program that is not hospital bed–based and that serves people with mental health or addiction problems, or both</td>
<td>746 (3.2%)</td>
</tr>
<tr>
<td><strong>Hospice</strong></td>
<td>An organization whose mission is to help people with life-threatening illnesses live at home or in a home-like setting</td>
<td>296 (1.3%)</td>
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<td><strong>Other Community</strong></td>
<td>Community sector employers not listed above (e.g., independent health facilities, telehealth, Canadian Blood Services, Workplace Safety and Insurance Board)</td>
<td>3,267 (14.1%)</td>
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</table>
Data Analysis

• Data analysis was performed using SAS-PC

• A series of cross-tabulations were carried out to determine the distribution of nurses across subsectors of employment for each year

• Next, year-to-year transition matrixes were generated to calculate ‘stickiness’ for each sector/subsector of nursing employment over the 2004–2010 period

• Analyses were repeated by sector and subsector of employment, nurse group, and work status
RESULTS
Shift of nurses between hospital and community settings

- Active movement of nurses between the hospital and community sectors in Ontario
- Overall positive balance toward the community sector for all years studied
- The shift of nurses between the hospital and community sectors over the period of analysis yielded an overall positive balance of 3,002 nurses to the community
Shift of nurses between hospital and community settings

• Note that CNO data reveals that the community sector in Ontario added a total of 5001 nurses between years 2004 and 2010

• Thus, the study’s analysis of workforce trends reveals that 60% of nurses’ influx into the community sector came from the hospital sector across the period of analysis

• The question remains whether community nurses are being effectively retained in the community sector and whether there is a differential in retention across community subsectors of employment
## Stickiness of community nurses by subsector of employment

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<tbody>
<tr>
<td>HOSPITAL</td>
<td>92.6</td>
<td>93.5</td>
<td>93.6</td>
<td>94.1</td>
<td>94.0</td>
<td>94.2</td>
</tr>
<tr>
<td>OTHER</td>
<td>73.1</td>
<td>79.5</td>
<td>79.5</td>
<td>78.7</td>
<td>78.9</td>
<td>79.4</td>
</tr>
<tr>
<td>COMMUNITY</td>
<td>79.1</td>
<td>79.1</td>
<td>80.5</td>
<td>78.9</td>
<td>78.7</td>
<td>80.0</td>
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### Stickiness of Community Subsectors

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<tbody>
<tr>
<td>Public Health (PH)</td>
<td>90.4</td>
<td>91.2</td>
<td>91.4</td>
<td>90.7</td>
<td>91.5</td>
<td><strong>92.1</strong></td>
</tr>
<tr>
<td>Community Care Access Centers (CCAC)</td>
<td>85.8</td>
<td>83.5</td>
<td>84.0</td>
<td>82.8</td>
<td>82.7</td>
<td><strong>83.5</strong></td>
</tr>
<tr>
<td>Physician Office</td>
<td>77.8</td>
<td>77.8</td>
<td>78.7</td>
<td>78.2</td>
<td>78.9</td>
<td><strong>79.8</strong></td>
</tr>
<tr>
<td>Community Nursing/Staffing Agency</td>
<td>59.1</td>
<td>67.7</td>
<td>69.9</td>
<td>69.3</td>
<td>68.2</td>
<td>69.5</td>
</tr>
<tr>
<td>Mental Health</td>
<td>60.5</td>
<td>60.0</td>
<td>64.6</td>
<td>65.6</td>
<td>67.0</td>
<td>68.0</td>
</tr>
<tr>
<td>Hospice</td>
<td>-</td>
<td>62.6</td>
<td>60.0</td>
<td>64.4</td>
<td>62.7</td>
<td>65.3</td>
</tr>
<tr>
<td>Community Health Centers (CHC)</td>
<td>54.1</td>
<td>47.9</td>
<td>51.5</td>
<td>51.5</td>
<td>51.7</td>
<td>53.9</td>
</tr>
<tr>
<td>Other Community</td>
<td>30.3</td>
<td>39.1</td>
<td>46.9</td>
<td>46.2</td>
<td>46.1</td>
<td>49.3</td>
</tr>
</tbody>
</table>
Stickiness of community nurses by nurse group

- Although the stickiness of both RNs and RPNs in the community sector has been generally stable over the period of analysis, RNs working in the community have consistently displayed higher stickiness compared to their RPN counterparts.

- Thus, it is expected that subsectors employing a higher proportion of RPNs would display a lower level of stability and stickiness.
Stickiness of community nurses by work status

• The stickiness of community nurses decreased with workforce casualization

• Full-time (FT) nurses displayed higher levels of stickiness and lower turnover rates compared to nurses working on part-time and casual basis

• Therefore it is expected that community subsectors employing a higher proportion of nurses on FT basis would display a higher level of stability and stickiness
DISCUSSION
A shift of nurses from hospitals to community is happening: Are we supporting it?

• Our analysis reveals an active shift of hospital nurses to work in the community sector
• We measure that around 60% of nurses gained in the community sector across the period of analysis are coming from hospitals:
  – The necessitates the establishment of adequate orientation and preceptor-ship opportunities to ensure that those nurses possess the required competencies and skills to practice independently in the community
  – There is also a need to reflect on nursing educational programs to ensure their readiness to serve in the community
The differential stickiness among community subsectors: % FT and RNs makes a difference

- Higher proportion of FT nurses
- Higher proportion of RNs
- Nature of the job
- Working conditions

Higher stickiness in the community subsector
Stickiness of community nurses: subsector comparison

- For example, the stickiest community subsectors in Ontario, PH & CCAC, had the highest proportion of RNs (approx 95%) and FT employment (approx 75%).
  - Yet, literature reports that nurses in both subsectors enjoy a higher level of satisfaction with work conditions, including: favorable working hours, balanced workloads, better job security and satisfaction with compensation

- In contrast, the relatively poor stickiness figures for the Nursing/Staffing Agency subsector could be attributed to the relatively lower proportion of nurses working on FT basis (from 37.5% in 2004 to 49.1% in 2010) and lower proportion of RNs (from 76.5% in 2004 to 64% in 2010)
  - Literature reports that agency nurses have serious concerns with their working conditions, including: salaries and benefits, job stability, travel time and costs, and occupational health and safety
  - Additional concerns with the means through which this sub-sector is organized and financed
CONCLUSIONS AND FUTURE RESEARCH DIRECTIONS
Attention to subsectors offering direct patient care

• The relatively lower ability to retain staff in community subsectors that provide homecare as part of their service delivery, notably Nursing/Staffing Agency and Hospice, compared to community subsectors that involve less direct contact and visitation with clients, i.e. PH and CCAC.

• Examine the underlying causes for this differential in subsectors’ ability to retain nurses over time and distinguish between:
  – Variables affecting retention that are more amenable to the intervention of planners and managers (e.g. offering FT jobs)
  – Variables that are more related to the nature of work in a particular subsector (e.g. visiting clients at home, working after hours).
Future research directions

- Assess the readiness of hospital nurses moving to practice in the community sector and whether they are offered the orientation and preceptorship opportunities that would empower them to serve patients in the community.

- Apply more advanced data analysis methods (survival analyses, Markov chain, flow analyses, etc.) to compare cohorts across longer time frames.
Thanks for your attention

Questions