Building Community and Public Health Nursing Capacity:
A Synthesis Report of the National Community Health Nursing Study

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ABSTRACT

Objectives: 1) To describe the community health nursing workforce in Canada; 2) To compare, across political jurisdictions and community health sectors, what helps and hinders community nurses to work effectively; 3) To identify organizational attributes that support one community subsector – public health nurses – to practise the full scope of their competencies.

Methods: Our study included an analysis of the Canadian Institute for Health Information nursing databases (1996-2007), a survey of over 13,000 community health nurses across Canada and 23 focus groups of public health policy-makers and front-line public health nurses.

Results: Over 53,000 registered and licensed practical nurses worked in community health in Canada in 2007, about 16% of the nursing workforce. Community nurses were older on average than the rest of their profession. Typical practice settings for community nurses included community health centres, home care and public health units/departments.

To practise effectively, community nurses need professional confidence, good team relationships, supportive workplaces and community support. Most community nurses felt confident in their practice and relationships with other nurses and professionals, though less often with physicians. Their feelings about salary and job security were mixed, and most community nurses would like more learning opportunities, policy and practice information and chances to debrief about work. They needed their communities to do more to address social determinants of health and provide good quality resources.

Public health nursing needs a combination of factors to succeed: sound government policy, supportive organizational culture and good management practices. Organizational attributes identified as supports for optimal practice include: flexibility in funding, program design and job descriptions; clear organizational vision driven by shared values and community needs; coordinated public health planning across jurisdictions; and strong leadership that openly promotes public health, values their staff’s work and invests in education and training.

Conclusion: The interchangeable and inconsistent use of titles used by community nurses and their employers makes it difficult to discern differences within this sector such as home care, public health, etc. Our studies also revealed that community nurses:

- thrive in workplaces where they share the vision and goals of their organization and work collaboratively in an atmosphere that supports creative, autonomous practice;
- work well together, but need time, flexible funding and management support to develop relationships with the community and their clients, and to build teams with other professionals;
- could sustain their competencies and confidence in their professional abilities with more access to continuing education, policies, evidence and debriefing sessions.

Key words: Community health nursing; public health nursing; demographic profile; enablers for nursing practice; Canada

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The way health care is delivered has changed profoundly in the past two decades and will continue to do so. Canada's aging population is creating many pressures for health care, not least the surge in chronic disease that will require prevention and community management to keep people out of acute care. Our growing understanding of the social determinants of health has brought awareness that health care must work with people at multiple levels if we are to improve the overall health of Canadians.1

At the same time, rising costs associated with hospital and long-term care beds, medical breakthroughs and new attitudes toward care are driving demand for improved home care, public health, primary care and other community care services. This move to community health requires careful human resources planning to ensure that adequate skilled staff are available to deliver services and that the workforce is used to its full potential. Nursing has always been an integral part of community care, and the Canadian Nurses Association (CNA) predicts that 60% of all nurses will be working in the community by 2020.2 By delving into specific issues associated with community nursing, this study expands on the CNA evidence about the solutions for eliminating nursing shortage which did “not account for variations in productivity of providers between health care settings”.3

“Community health nurse” is the prevalent title used to describe all nurses who work outside of hospitals or long-term care. Despite the variety of jobs in community nursing, certain skills, knowledge and attitudes are common to all of them.4 Community health nurses (CHN) have generally agreed on their roles.5-9 The Public Health Agency of Canada has further clarified the core competencies necessary to practice public health.10 But nurses may not be able to meet the standards they set for themselves if the organizations they work for do not adequately support their work. Supporting nurses to work more effectively, on the other hand, should enable more efficient use of funding, improve the results of community and public health programs (as nurses are the single largest group of public health employees11) and prevent more illnesses and injuries. It could also be an important step in encouraging people to take control over improving their own health.

**Research objectives**

Solid data are needed to develop an effective nursing workforce in community care and meaningful jobs that take full advantage of nurses’ education and experience. There is not much research on community nurses, however, perhaps because community nursing is by nature diffuse, varied and practised in such diverse settings as homes, schools, shelters, churches, community health centres and on the street, and working in multisectoral teams.1 Compared to nursing in large, structured organizations, community nursing therefore may be harder to define and research.

In this study, we aimed to answer some questions about the community nursing workforce and the conditions that help CHN to do their jobs effectively. Our specific objectives (and corresponding projects) were to:

1. Describe and analyze the demographic characteristics and distribution of community nurses in Canada – by number, workplace, age, employment status, education, gender, position and province/territory.
2. Compare, across political jurisdictions and community health sectors, what helps and hinders community nurses in using all their competencies.
3. Identify the organizational attributes that support public health nurses (a subgroup of community health nurses) to practise the full scope of their competencies.

This report synthesizes the results of working papers that were developed for the three research projects in this study.12-14

**METHODS**

We used mixed methods for this study, including a demographic analysis, survey and focus groups, and a broad definition of community health nursing (see Figure 1). We obtained ethics approval from McMaster University, the nursing regulatory bodies that gave us access to their members for the survey and employers who encouraged participation in focus groups.

**Demographic analysis**

We reviewed the annual nursing registration data collected by provincial and territorial regulatory bodies and collated by the Canadian Institute for Health Information (CIHI). Frequencies for the variables, including age, level of education, geographic jurisdiction, sex, and position, were compared with the overall popu-
Surveys of Canadian nurses and among community nursing subsectors using the SAS statistical software. Our analysis included CIHI data from 1997 to 2007 for registered nurses and from 2002 to 2007 for licensed practical nurses (data for licensed practical nurses prior to 2002 are not comparable due to methodological changes). We also incorporated findings from the demographic profile of the 6,667 respondents to our survey.

Focus groups
Because of funding and time limits, we concentrated on one community subsector – public health nurses – for a more detailed picture. We held 23 focus groups with a total of 156 public health employees from urban or rural and remote areas across Canada: 12 groups of front-line nurses and 11 combined groups of policymakers and managers (Table 1). Nurses or policy-makers/managers who worked on prevention and health promotion in organizations focusing on public health were eligible for the study. The participants came from all provinces/territories, and groups convened in six geographic areas (British Columbia, the Prairies, Northern Canada, Ontario, Quebec and Atlantic Canada).

We used an appreciative inquiry approach in the focus groups to uncover organizational attributes that support optimal public health nursing practice. Appreciative inquiry focuses on building on strengths, rather than trying to fix what does not work, so we asked participants to think of an experience when an intervention by public health nurses worked very well and what factors made it work. After small-group discussions, participants recorded the organizational attributes that contributed to their successful experiences.

We did the qualitative analysis of the feedback in three stages, starting with a nominal group process adapted from Institute for Cultural Affairs methodology during the focus groups. The groups discussed the statements they had written, clarified meanings, insights and interpretations, and produced a thematic analysis. Then we used established procedures for thematic analysis to collate, analyze and compare the results from the four categories of focus groups (urban front-line, rural/remote front-line, urban policy-maker/manager, rural/remote policy-maker/manager). Finally, we worked with the decision-makers on our research team to refine the identified themes, focusing on main messages and recommendations.

Table 1. Participation in the Public Health Focus Groups

<table>
<thead>
<tr>
<th>Geographic Region</th>
<th>Front-line Rural/Remote</th>
<th>Policy-maker/Manager Rural/Remote</th>
<th>Total Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic</td>
<td>(n=7)</td>
<td>(n=6)</td>
<td>(n=23)</td>
</tr>
<tr>
<td>Quebec</td>
<td>7</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Ontario</td>
<td>4</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Prairies</td>
<td>8</td>
<td>9</td>
<td>32</td>
</tr>
<tr>
<td>British Columbia</td>
<td>9</td>
<td>7</td>
<td>34</td>
</tr>
<tr>
<td>North</td>
<td>6</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>Total Participants</td>
<td>47</td>
<td>38</td>
<td>156</td>
</tr>
</tbody>
</table>

Descriptive statistics are reported for demographic characteristics of the participants and their questionnaire responses. Following initial exploratory factor analysis of the Ontario responses, we conducted confirmatory factor analysis for the national data. Internal consistency of each factor was verified using Cronbach’s alpha coefficient. The factors and independent questions were analyzed using one-way ANOVA and Tukey post-hoc tests or Kruskal-Wallis and Mann-Whitney nonparametric tests. We weighted the responses to compensate for oversampling in Ontario, as well as for different population sizes and response rates across provinces and territories.
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Table 2. Registered Nurses and Licensed Practical Nurses Working in Community Health Compared to Other Health Sectors (2002 to 2007)

<table>
<thead>
<tr>
<th>Health Sector</th>
<th>Registered Nurses and Licensed Practical Nurses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002</td>
</tr>
<tr>
<td>Community</td>
<td>16.1</td>
</tr>
<tr>
<td>Hospital/Long-term Care/Other/Not Stated</td>
<td>83.9</td>
</tr>
<tr>
<td>Total (n)</td>
<td>291,016</td>
</tr>
</tbody>
</table>

Community health centres differ across provinces, but they generally provide primary health care services, illness and injury prevention, chronic disease management and community development, using a population health promotion approach and a multidisciplinary team. The teams often include physicians, nurses, social workers, dietitians, counsellors and other health care providers.

In 2007, more than 54% of community registered nurses had full-time jobs, and 31% worked part-time. Our survey showed that published health nurses were more likely to work full-time and home care nurses were more likely to work part-time. Historically, community registered nurses were slightly more likely to work full-time than hospital nurses, but that ratio reversed in 2005. Community health nurses had a slightly greater tendency for more casual work and less part-time work.

The CIHI database showed an increase in the number of full-time jobs among community LPN, up from 42% in 2002 to 51% in 2007. Licensed practical nurses in all sectors appeared less likely to work full-time than registered nurses, but a significant percentage of practical nurses were listed as “unknown” job status, so there may be some inaccuracy in these estimates. Overall, nurse practitioners were much more likely to have full-time jobs (60%). In the community, the number of full-time jobs for nurse practitioners rose from 61% in 2001 to 71% in 2005, with a noticeable decrease in casual and part-time work.14

Education
Community nurses tended to have more education than nurses overall. Registered nurses who worked in the community were more likely than nurses in other sectors to have a university degree, but the gap is closing (from twice as many in 1996 to 1.5 times as many in 2007). Public health nurses were most likely to have a degree (81% in the survey did). Licensed practical nurses were slightly more likely to have a diploma than an equivalency level. CIHI data show that between 2001 and 2005, the percentage of community nurse practitioners with a diploma decreased about 18%, while the proportion with a baccalaureate and graduate education increased.15 The level of education was similar to all nurse practitioners.

Sex
Male nurses were the minority everywhere, but there were even fewer men in community nursing positions (4.4% in community nursing compared to 6% overall). By 2005, the percentage of male nurse practitioners was also lower than in other health sectors, representing a change from 2001-2003.15 There also was a smaller proportion of male LPN in the community (4.2%) than in other health sectors (7.3%).

Position
In 2007, less than 15% of registered nurses in chief nursing officer or chief executive positions worked in the community, the lowest proportion since 1996.15 However, more than 50% of nurse consultants worked in the community, increasing from 30% to 53% in the 10-year study period. There was no information on clinical nurse specialists, nurse midwives and nurse practitioners from 1996 to 2000. The percentage of licensed practical nurses working as community case coordinators or managers increased from 20% in 2002 to 33% in 2007.
What are enablers and barriers to effective community nursing practice?

There was an overall response rate of 57% to our survey: 60% of registered nurses (6,180) and 49% of licensed practical nurses (1,659) responded. Of the 7,839 total responses, 1,172 did not fit our study criteria, which left 6,667 responses that could be used for the analysis. The range of response rates among provinces and territories for registered nurses varied from 42.6% to 67%. For LPN, it went from 25% to 63.6%.

The demographic profile of the respondents approximated the national cohort of CHNs as discussed above. Respondents came from 16 different community subsectors. The three work settings most reported by RNs were public health unit/department (34%), home care agency/visiting nursing agency (21%), and community health centre/health centre (19%). Most LPNs indicated they worked in home care/visiting nursing agencies (35%), followed by physicians’ offices and community health centres (both 19%).

Figure 2 represents the thematic framework that emerged from our factor analysis of the survey responses on what affects (helps or hinders) community nurses’ practice. The survey results are reported below under the four main themes: professional confidence, team relationships, work environment and community context. Table 3 lists agreement levels among respondents for selected enablers for community nurses to use their full scope of competencies.

### Table 3. Agreement Levels for Selected Enablers in the NHSRU CHN Questionnaire©

<table>
<thead>
<tr>
<th>Enabler for Effective Practice</th>
<th>Registered Nurses</th>
<th>Licensed Practical Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive relationships with other nurses</td>
<td>92</td>
<td>88</td>
</tr>
<tr>
<td>Community nurses have access to policies, procedures and up-to-date information</td>
<td>85</td>
<td>87</td>
</tr>
<tr>
<td>Positive relationships with other professionals</td>
<td>86</td>
<td>83</td>
</tr>
<tr>
<td>Employer upholds standard of practice</td>
<td>84</td>
<td>83</td>
</tr>
<tr>
<td>Organization has nurses in key leadership positions</td>
<td>76</td>
<td>72</td>
</tr>
<tr>
<td>Professionals from other community agencies respect the judgement of nurses</td>
<td>76</td>
<td>69</td>
</tr>
<tr>
<td>Community nurses can work collaboratively with home care services</td>
<td>70</td>
<td>74</td>
</tr>
<tr>
<td>Positive relationships with physicians</td>
<td>68</td>
<td>70</td>
</tr>
<tr>
<td>Organization trusts its nurses</td>
<td>64</td>
<td>73</td>
</tr>
<tr>
<td>Nurses are able to adapt care plans</td>
<td>62</td>
<td>55</td>
</tr>
<tr>
<td>Nurses have a fair and safe workload</td>
<td>58</td>
<td>66</td>
</tr>
<tr>
<td>Positive relationships with clients</td>
<td>53</td>
<td>66</td>
</tr>
<tr>
<td>Organization uses community-based approach to address social determinants of health</td>
<td>47</td>
<td>42</td>
</tr>
<tr>
<td>Community nurses have access to learning resources</td>
<td>45</td>
<td>45</td>
</tr>
</tbody>
</table>

*Likert scale mean scores <2.5 were considered agreement; ratings ranged from 1 (strongly agree) to 5 (strongly disagree). Responses were weighted to adjust for oversampling in Ontario, differences in population sizes and response rates across provinces and territories.*
standing their role, working in partnership and trusting community nurses from their agency. In contrast, 92% of registered nurses and 88% of LPN agreed that they have effective relationships with other nurses. Most nurses (86% of registered nurses, 83% of LPN) also agreed that they have effective relationships with other professionals in general. However, the numbers were lower when it came to doctors: 68% of registered nurses and 70% of LPN said they have effective relationships with physicians (although the answers varied by region). Outpost registered nurses, who mostly work in the North, reported better relationships with physicians than other nurses. Public health nurses had less positive relationships with physicians than other community nurses.

Work Environment

Material Resources: Including job security, pay and support for travel and equipment. Community nurses’ feelings about salary and security were mixed. Registered nurses were more likely to feel fairly paid than LPN, and they also felt more secure in their jobs (satisfaction with pay and perception of job security varied by province/territory). Full-time community nurses felt more secure in their jobs than those in casual positions. Visiting registered nurses felt less job security than nurse practitioners, public health nurses or chief nursing officers; visiting licensed practical nurses were less likely to feel secure than those who worked as coordinators, case managers or consultants.

For the most part, community nurses were compensated for travel and the equipment they need is provided. Only 13% of community nurses said their organizations do not supply the equipment they need. Northern and outpost nurses were more likely to be concerned about equipment than nurses in other parts of Canada.

Human Resources Policies: For supportive learning environments, realistic workloads and safe working conditions. Less than half of community nurses (45%) felt that they had the learning opportunities they needed including adequate time, money and access to learning resources; outpost nurses were least likely to have opportunities for learning. There was some variation by province/territory, and registered nurses providing direct client services reported fewer learning opportunities than nurses in management. Younger licensed practical nurses were less likely to say they had access to learning compared to those with over 40 years in nursing.

A quarter of community nurses felt out of touch, indicating that they lacked access to policies, procedures, protocols and up-to-date information to support client care, ensure employee well-being and handle potential emergencies. About 90% of community nurses, however, had access to a manager or practice consultant to talk to about client issues. Nearly 20% of community nurses did not get information from their organizations about recent government policies that affect their practice; another quarter was not sure whether they did. Community nurses in front-line positions reported less access to government policy information than those in management, but older licensed practical nurses were more likely to agree they got policy information than younger ones.

More than half of community nurses (58%) thought their employer assigned a fair workload. There were some differences among regions and positions. Registered nurses who worked as coordinators, case managers or outpost nurses were less likely to say their workload was fair compared to clinical resource nurses, clinical educators and occupational health nurses.

The great majority of nurses felt safe on the job (89% of registered nurses and 93% of LPN) and said their employers provided a safe working environment, though there were regional variations. Registered nurses who reported unsafe working conditions were often outpost or visiting nurses.

Support for Nurses: Reflected in nursing leadership, debriefing opportunities, understanding and trust in community nurses’ capacity. Most registered nurses (84%) worked for organizations with nurses in key leadership positions and felt their leaders understood nursing practice and upheld its standards. Nurses in management agreed more strongly that their leaders understood nursing practice. Practical nurses (66%) were more likely than registered nurses (51%) to say their organizations understood the differences in their roles. Management nurses reported more clarity about the different roles than other community nurses.

More than 40% of registered nurses in the community lacked opportunities to discuss clinical or program issues with their colleagues or management. Visiting nurses, staff nurses, public health nurses, coordinators and case managers had fewer opportunities for debriefing than others.

The majority (64% of registered nurses and 73% of LPN) agreed that their employers and managers demonstrated trust in their ability to carry out their roles, recognized their achievements and welcomed input. Having said this, chief nursing officers, chief executive officers and directors reported more trust in nurses than nurses in fact felt from them; and managers, supervisors and administrators in outpost positions reported more trust from upper management than did the nurses on the front lines.

Three quarters of registered nurses surveyed said they had flexibility to vary the amount of time they spend with a client, but fewer (62%) felt they could vary the nursing care plan. Staff nurses, outpost nurses and those who marked “other” for nursing positions were less likely to say they could vary the nursing care plan. Staff nurses in fact felt from them; and managers, supervisors and administrators in outpost positions reported more trust from upper management than did the nurses on the front lines.

Employer Approach to Community: Including support to address population needs. Two thirds of community registered nurses felt they have support from their employers to address population needs, such as:

- access to resources that are culturally appropriate for their clients
- support to be an effective advocate for their clients
- support to network with community physicians
- access to resources to support clients facing barriers to getting health services
- support to carry out community development activities
- encouragement to provide culturally appropriate approaches to care.

Community Context

Policies: Less than half of registered nurses felt their communities address social determinants of health, and even fewer (38%) said they have timely access to good-quality community resources for clients. Just over half of the registered nurses said provincial policy related to their programs helps them work with their clients; 35% neither agreed nor disagreed (it was not clear whether these nurses did not know about provincial policies that affect their programs or whether the policies were not helpful).
Service Coordination: Seventy percent of registered nurses said they work collaboratively with home care services, but occupational and public health nurses indicated less collaboration with home care. Licensed practical nurses in the managers, supervisors and administrators group perceived more collaboration with home care than nurse practitioners, public health nurses and those in “other” nursing positions. Nurses also felt limited resources made it difficult to meet the needs of their clients, although as many said agencies in their community coordinate services.

Three quarters of the registered nurses said professionals from other community agencies respect the judgement of nurses from their agency, but only half said they were invited to meetings because of their credibility as a nurse. Licensed practical nurses with less than 10 years of experience were less likely to feel respected by professionals from other community agencies.

What organizational attributes best support public health nursing practice?

For this part of our study, we concentrated on public health nurses – one of the largest groups in community health nursing – to identify attributes that could prove relevant for all community subsectors. Focus group participants said public health nursing needs a combination of factors to succeed: sound government policy, a supportive culture in their organization and good management practices.

Government and System Attributes
Flexible and Adequate Funding Structures: There must be enough public health funding to provide stable, long-term support for programs and enough flexibility to respond to changing needs. In optimal situations, funding was available to assess community needs, build capacity for better health and develop partnerships. Rural groups particularly emphasized the importance of flexible funding that lets them respond to emerging needs.

Champions for Public Health: The need to promote public health was a very strong theme in the focus groups. Nurses said governments must champion public health and its place in the publicly funded health system. Local boards of health also have to support public health workers for effective health promotion to happen.

Public Health Planning and Coordination: Participants said government and other organizations must coordinate public health planning across regions, provinces/territories and the country, including sharing infrastructure and resources such as databases, research, evaluation and standardized educational tools.

Organizational Values and Leadership Characteristics
Participants focused on workplace culture (such as room to be creative and flexible, and opportunities to learn and share information) and on relationships (including the need for shared vision and goals, partnerships and collaboration) rather than on particular structures or things.

A Shared Vision for Public Health: Focus groups stressed the importance of working in an organization that had a clear vision shared by all. Public health values – including prevention and health promotion, addressing the social determinants of health, population health and community development – need to be driving the organization’s direction and linked to specific needs and goals. Most groups reinforced that public health policy and practice should be based on research evidence and community issues.

Effective Leadership: All the groups said visionary, empowering and motivational leadership figured in public health nurses practicing their full scope of competencies. When effective leadership permeates organizations, everyone feels empowered and motivated to be effective in their roles. Leadership must respect, trust and value public health.

Culture of Creativity and Responsiveness: Policy-maker and manager groups said effective leaders create a culture that encourages creativity and innovation, and they recognized that fostering creativity involved taking risks. Front-line groups agreed that management must support and value creativity. Everyone said leadership has to be open to change: for policy-makers, by letting organizations be flexible and responsive; for front-line workers, by being flexible in how they deliver programs.

Management Practices
The focus groups felt that management practices were by far the most important organizational attribute for effective public health nursing. Management practices affect how the organization functions and nurses’ working conditions, both of which strongly affect whether public health nurses are using all their competencies.

Clear Program Planning: Policy-makers, managers and front-line nurses said public health planning must be clear and strongly grounded in community and client needs, which involves effectively assessing public health and community development needs. All the focus groups emphasized the importance of clearly defining roles and responsibilities and linking them to overall goals and accountability. Further, defining roles by what is to be accomplished is important for professional autonomy and independent practice. Front-line groups in particular felt that roles should be defined in terms of the organization’s vision and goals rather than identifying who does what.

Promoting and Valuing Public Health Nursing: Managers and policymakers said good public relations, including promoting public health nursing to other providers, community partners and the public, were important because the public needs to understand the role of public health nurses in order for the latter to be effective. Two groups of rural policy-makers and managers said it is strategically important to increase physician support for public health nursing as physicians are a gateway to the public.

Front-line and policy-maker/manager groups stressed that managers must understand and value public health nursing. Managers need to clearly show respect for and be guided by their nurses’ experience, knowledge and understanding. One group of rural nurses discussed the difficulty of reporting to a manager who had no background in public health or nursing and could not provide the support and guidance they needed. Everyone thought management needed to acknowledge publicly the contributions that public health nurses make.

Supporting Autonomous Practice: All the focus groups told us public health nurses need to be given autonomy and be seen as leaders who can determine the right thing to do in their assigned activities. Rural groups said autonomy is the ability to be creative and responsive to meeting community needs, while urban groups described autonomy as freedom of action in everyday practice and nurses’ physical separation from managers and doctors. Front-line nurses said managers must let them be flexible in how they
approach their work. Some nurses said autonomous practice includes having a broad job description so they are not pigeon-holed into a small area of practice.

Commitment to Learning and Professional Development: An organization that supports public health nursing supports learning. All the participants valued strong learning environments, with almost every focus group identifying the importance of professional development, training, educational opportunities and organizational investments in education and training for nurses to keep their skills and competencies up to date. Many groups recommended practice councils where nurses can discuss issues and learn from each other.

Policy-maker/manager groups said new staff need solid orientation programs, and informal knowledge sharing and mentoring should be encouraged as well. This theme was especially strong in rural focus groups. Front-line groups said they needed information and knowledge exchange, including training and support to keep current with electronic resources (particularly important to rural groups) and access to educational tools and policy manuals to support their practice. Groups of all types said it was good for public health nurses to have access to specialists such as epidemiologists, nurse educators, practice experts and social marketers.

Effective Human Resources Planning and Adequate Staffing: Participants identified recruiting and keeping employees as an important organizational attribute for effective community nursing. The communities served by public health are diverse, and it takes sufficient staffing (with knowledgeable nurses) to meet their needs. Organizations need to build a stable, consistent workforce with the skills to do their jobs well, and they need to provide public health nurses time, flexible work assignments and support to build partnerships and involve the community. Front-line nurses also stressed the need for enough staff to cover vacations, professional development days and other absences.

Supporting Partnerships and Community Development: Focus groups noted that public health is interdisciplinary and intersectoral, involving collaboration with community groups, other agencies and providers, as well as internal collaboration. Management must allow time for developing partnerships and encourage working with others. Front-line participants said they need time to build “trust, respectful” relationships with clients and their families and to involve them in developing programs.

Effective Communication: Participants discussed communication issues for staff and management, peers and interdisciplinary teams. Policy-makers and managers said open and clear communication strategies are important for public health organizations, and they felt that involving management and staff in decisions promoted communication. Front-line nurses said regular information sharing in the organization helps them work effectively. Rural front-line groups said public health nursing teams work better when they are given opportunities to review and debrief; northern groups agreed but noted that those opportunities can be rare in remote areas.

Healthy Workplace Policies: The focus groups highlighted the need for policies to make workplaces healthy. Rural groups said healthy workplaces had family-friendly policies and flexible work hours. Urban groups valued flexible hours but also emphasized the need for safe places to work.

**DISCUSSION AND RECOMMENDATIONS**

**Community nursing workforce**

Our findings show that it is difficult to accurately count and describe nurses in different community subsectors since definitions of community nurses’ workplaces, the services they offer and their job titles vary across provinces, territories and organizations, and even from nurse to nurse. For example, survey respondents who identified themselves as public health nurses were as likely to work in a community health centre as a public health unit in some provinces. Even in provinces where public health departments are more clearly delineated, some public health nurses said they work in community health centres, though most said they work in public health units. This discrepancy led us to use “position in nursing” category rather than “place of work” to describe roles. Still, community health centre is one of the main categories listed by CIHI, and as Canadian primary health care reform continues to gather momentum, it is likely that more community health centres will open.23

The CNA study forecast of future requirements for nurses’ services focussed their analysis to “RNs in Canada who are employed in direct patient/client clinical care. […] In the community context information was limited to the number of [patient] consultations…”1 (p.8-9). Unfortunately this work did not recognize the community development or capacity-building type of engagements (that could be called education, policy or administration) that many community nurses are involved in; it fails to take into account that community nurses’ clients are individuals, families, groups and communities.4

Our study reveals that Canada may not be able to meet the future demand for skilled community and public health nurses, given an aging nursing workforce and predicted nursing shortage. In comparison to other health care sectors, the problem is proportionally greater in the community sector because there is a higher percentage of older nurses, fewer younger nurses are entering this specialty and the share of the nursing workforce is not increasing as the need for community services expands.

Our demographic profile also showed changes in employment status and education of community nurses compared to other sectors. Community registered nurses used to be more likely to work full-time than hospital nurses, but that ratio reversed in 2005, possibly because of a government policy to encourage more full-time hospital jobs. Full-time jobs in the community increased for licensed practical nurses, but we could not tell if there really was an increase or because fewer nurses were listed in the CIHI database as having unknown job status. Registered nurses working in the community still are more likely to have a university degree than registered nurses in other sectors, but our analysis showed that gap is closing now that registered nurses in most of Canada are required to have baccalaureate degrees. Public health nurses were most likely to have a degree, probably because most provinces have required them to have a baccalaureate in nursing.3

Effective community nursing and health human resource policy and planning will require more detailed information on community nurses’ numbers, roles and responsibilities according to program titles and subsectors. Other authors have also noted that their health human resources planning models depend on knowledge of existing providers and that their results are dependent on the range and quality of data available.31,36 More research is needed to estab-
lish and test alternative data sources (such as provincial databases derived from employer information) to count community and public health staff. There is a role for a national task force, likely under the auspices of the Community Health Nurses Association of Canada, with the Canadian Institute for Health Information, the Public Health Agency of Canada and other collaborators, to develop a common classification of community nurses according to their roles and responsibilities.

**Enablers and barriers for community nurses to work effectively**

Analysis of the results of our survey of community health nurses sheds light on how this workforce can be used to its full capacity and potential. Further to the issue raised in the CNA study about a general absence of administrative data about productivity, this study investigated the supports that enable community nurses to practise their full scope of competencies, thereby optimizing productivity. These supports were identified in four main themes: professional confidence, team relationships, workplace environment and community context (Figure 2).

**Professional Confidence**

Research supports the assumption that confidence is important for nurses to achieve successful results. Davidhizar defined self-confidence as “the feeling that one knows how to do something and has the power to make things happen.” The confidence that community nurses in our study demonstrated will be sustained if organizations and nurses themselves take advantage of learning opportunities as discussed below.

**Team Relationships**

We know that collaboration among health care professionals improves client satisfaction and clinical outcomes and that enhanced teamwork is a human resources goal for health care settings throughout Canada. Team relationships are also important to community capacity because optimal team functioning influences human resource utilization requirements associated with nurses and other disciplines. Overall, team relationships were strong, though community nurses do not feel equal bonds with everyone they work with. Nurse-physician relationships could be strengthened, and nurses expressed concern about clients and colleagues in their communities not understanding their role. This concern could be addressed by leadership undertaking public relations efforts at local and provincial levels to educate the public about the services that community nurses provide – a strategy that also was identified in the public health focus groups to support nursing practice. In addition, researchers, employers, managers and practitioners should work together to investigate ways to support interdisciplinary teamwork in community health and design training based on the evidence from those investigations.

**Work Environment**

Negative feelings some nurses reported about pay and job security might reflect situations in certain provinces at the time of the survey. For example, nurses in one province were coming to the end of their contract, and in another province physicians had received a large pay increase while there was no indication of a similar increase for nurses. On average, nurses neither agreed nor disagreed that they were paid fairly, which could mean that they are not especially satisfied with their pay or that they do feel fairly paid. However, given the looming recruitment issues, it would be worthwhile for researchers to further investigate differences in pay and job security among community nurses in various subsectors and make policy recommendations for planners.

There are other opportunities to improve workplace conditions. Employers and managers should improve access to research and practice evidence and continuing education, and encourage community nurses to keep up to date and sustain confidence in their professional abilities. Community health nurses also have responsibility to take advantage of learning opportunities.

Management trust in employees has been linked to improved business results. The discrepancy in perceived trust between frontline and management nurses in the survey suggests that managers do not demonstrate the confidence and trust they have in their nurses – a finding consistent with other studies of Canadian nurses. Reflecting on practice is a fundamental part of nursing and community nurses see chances to debrief as a sign of support for their profession. Managers could further show their trust in nurses by supporting autonomous practice and giving nurses the flexibility to meet client needs, increasing debriefing opportunities and including community nurses in program planning.

Nurses also need support from their employers to meet population needs. More research is required to explore the extent to which community health organizations address the social determinants of health in policy and practice, and to develop methods to account for differences among them.

**Community Context**

Nurses in the survey reported that limited community resources make it difficult to meet the needs of their clients, but a similar number said agencies in their community coordinate services. It may be that resources are coordinated but not accessible when they are needed, or that they are not of adequate quality.

Community nursing has its roots in social justice, and its standards of practice include a focus on the determinants of health – the idea that people’s social, economic and physical environments all influence their health. As a result, communities that address inequity and try to improve social conditions are seen as supporting community nurses in their work. Federal, provincial and community policy-makers need to help organizations identify and integrate services and strategies to address the social determinants of health.

**Supportive public health organizations**

A public health nurse is a community health nurse who “focuses on promoting, protecting and preserving the health of populations...and links health and illness experiences of individuals, families and communities to population health promotion practice.” Our focus groups gave us in-depth information about the influence organizations can have on public health nurses’ practice. The emphasis in the focus groups on broad system and organizational supports may be a reflection of how public health nurses work in communities. However, the findings for the public health subsector likely have implications for all community health nurses. For policy-makers and administrators to make the best use of
the community nursing workforce, it would be wise to do similar investigation in other community subsectors.

Government and system-level action is needed along with shared organizational values and effective management practices to support optimal public health nursing outcomes. These results are in keeping with a growing recognition that health care systems and organizations are best understood as complex adaptive systems. In complex systems, relationships among the parts are more important than the parts themselves. Change requires integrated action, with each system area incrementally reinforcing and developing other areas. The following suggestions for public health organizations will require integrated action at all levels:

- Decision-makers and managers maintain flexible program funding and ensure public health nurses can work autonomously on community development and partnerships to improve health outcomes.
- Governments collaborate on communication strategies to promote understanding of the role of public health in health care.
- Public health planning is coordinated at every level and across jurisdictions to create a common vision with clear goals and responsibilities, and includes shared resources and less duplication of services.
- The Public Health Agency of Canada, provincial ministries of health and local health authorities provide funding to develop leaders and managers at all levels of public health.
- Public health managers plan nursing services based on evidence of their impact and results, and allow nurses room to be creative and responsive to the community's needs.
- Public health managers and policy-makers work with academic researchers to gather information and develop staffing models that allow for changing needs, including emergencies, epidemics and the growing prevalence of chronic disease.
- Public health decision-makers, managers and practitioners share responsibility for creating healthy workplaces.
- Managers make sure they understand the role of the public health nurses who work for them and make it possible for nurses to work to the full scope of their competencies.
- Decision-makers and managers invest in professional development and set clear benchmarks for public health nurses, and nurses take advantage of these learning opportunities.
- Schools of public health and local health authorities develop and share educational resources, with particular consideration of the learning and knowledge exchange needs of rural and remote public health nurses.

Study limitations

There were inconsistencies in the CIHI data we used to describe the community nursing workforce. Data for registered nurses were available from 1996 onward; data for nurse practitioners began in 2001 and for licensed practical nurses in 2002. The CIHI database depends on information submitted by nurses on their annual registration renewal forms, but definitions of subsectors in community nursing varied over time and across provinces/territories, which made it difficult to estimate the workforce accurately. Inconsistent and interchangeable use of terms such as community health nurse, public health nurse, visiting nurse, immunization nurse and child health nurse in the databases of the regulatory bodies limited our estimates of workforce capacity. Nevertheless, our survey of community health nurses provided some insight into how nurses identify themselves, and we were able to describe some general trends about the community workforce through CIHI's databases.

We found six limitations in the survey: there were no historical comparison groups because the survey tool was new; responses collected in Ontario in 2005 were combined with responses from late 2006 and early 2007 from all other provinces and territories; the respondents self-selected, so community nurses who declined to participate in research on their registration forms and people who did not reply were not included; the research team chose 2.5 on the Likert Scale as the cut-off for a response to be considered positive; only one item on the questionnaire was reversed to a negative (which may have led to a positive bias).

We experienced several problems reaching community health nurses in different parts of the country. The regulatory bodies for registered psychiatric nurses who work in the community in British Columbia, Alberta, Saskatchewan and Manitoba refused to facilitate their participation in the study. The Registered Nurses Association of Prince Edward Island has a policy of not giving access to its members for research, so we had to contact nurses through their employers. Licensed practical nurses in the Northwest Territories declined to participate because there are so few of them that confidentiality could be broken; there are no licensed practical nurses working in Nunavut. In British Columbia, 138 licensed graduate nurses were considered ineligible because they were “grandfathered” nurses and not registered with their regulatory body. Licensed practical nurses in Manitoba who work as community nurses in private agencies or are self-employed could not be identified separately in the database and were not surveyed.

There were four limitations to the focus groups: it was hard to recruit participants because of their heavy workloads; participation rates were lower in Quebec and the Yukon; three focus groups were conducted through video conference; and groups were run by different facilitators — although all the facilitators were centrally trained, paired with a facilitator experienced in the study's methodology and given written notes to guide the group processes.

CONCLUSION

Adequate community health capacity is necessary to mitigate pressures on acute and long-term care. A system shift from hospital to community care and toward improved health system capacity will require planning to ensure that quality and safety are not compromised and to take full advantage of the competencies and skills of community nurses. In this study, we set out to gather information on community health nurses and identify optimal conditions for them to work effectively. We have provided a starting point for planners with a broad-brush picture of the community nursing workforce for the period 1997-2007 and the perspectives of approximately 7,000 nurses working in the community during the years 2005-2008.

More than 53,000 registered and licensed practical nurses work in community health in Canada — about 16% of the nursing workforce. Community nurses thrive in workplaces where they share the vision and goals of their organization and work collaboratively in an environment that supports creative, autonomous practice. Community nurses work well together, but need time, flexible funding and management support to strengthen relationships with their communities and clients and to build partnerships with other professionals.
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