How Government Invests in Research to Advance Policy: Evolution of Evidence

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INTRODUCTION

The Nursing Health Services Research Unit (NHSRU) has helped aid nursing policy for Ontarians for the past 20 years. The NHSRU is comprised of two sites, one at McMaster University in Hamilton and the other at the University of Toronto. The McMaster site is headed by Dr. Andrea Baumann. Funded primarily by the Nursing Secretariat and Research Unit of the Ministry of Health and Long-Term Care (MOHLTC), the unit began in 1990 and has held several names during the past two decades.

As the most recent contract with the MOHLTC ends in 2010, the NHSRU McMaster site has drafted policy-relevant research evidence spanning the past five years. From 2004 to 2009, 20 reports in the NHSRU McMaster University Site’s Health Human Resource Series were published, as well as many journal articles and fact sheets. The evidence from this research has been categorized into five themes below.

THEME 1: DATABASES - IMPLICATIONS FOR POLICY DEVELOPMENT

Researchers at the Nursing Health Services Research Unit (NHSRU), McMaster University site, have found that databases used to conduct research reveal significant implications for policy development. For example, researchers have discovered that nurse retention is high in hospitals and public health, policies are needed to address rural health care organizational needs, and overall health care should invest in better data analysis to improve workforce management and address emerging needs. The NHSRU at McMaster University has made available the Better Data, Better Decisions, Strengthening your Organization: Nursing Workforce Planning Toolkit (www.nhsru.com).

- Results of a longitudinal study of a dataset of all nurses registered with the College of Nurses of Ontario shows that once hired, nurses are likely to stay employed in hospital and public health settings.

- Evidence from an analysis of health human resource policies for rural areas showed the following government policies presented challenges to managers attempting implementation: the goal of 70% full-time employment, the new graduate policy, and the late career initiative. Rural institutions have difficulty accessing government funding intended to build sustainable workforces. Policies meant to be broadly implemented across jurisdictions may not fit the needs of rural institutions and their clients. Health care databases should include a rural variable to enhance understanding of this population.

- An early initiative of workforce profiling encouraged organizations to look at the data currently available in order to provide a unique panoramic view of the nursing workforce to inform decision makers and planners about relevant workforce trends. Researchers at the NHSRU developed a nursing workforce planning toolkit for use as part of organizational strategic planning. The Better Data, Better Decisions, Strengthening your Organization: Nursing Workforce Planning Toolkit can organize and streamline workforce planning to ensure the availability of sufficient staff with appropriate experience and skills.

- Planning exercises for extraordinary events (e.g., a pandemic) are strengthened by good workforce databases. These databases should include an accurate profile of the existing workforce and staffing requirements for maintaining sufficient service while mobilizing responses to critical events.

Research

How Government Invests in Research to Advance Policy: 
Evolution of Evidence


**THEME 2: THE CHANGING NATURE OF WORK**

The nature of nursing work evolves over time as a result of changes in society and technology and in response to policies that influence the allocation of resources. Researchers at the NHSRU, McMaster University site, have examined the effects of the various factors that influence nursing work and their implications for future policy. Researchers have found that strategies are needed to achieve nursing workforce sustainability in all areas across all sectors, including acute and long-term care and community and public health in both rural and urban areas.

- The proportion of all nurses working in the hospital sub-sector has decreased. In the community sector, however, expansion of the nursing role was evident. Nurses are being used in community agencies and community mental health, representing a shift from hospital-based workers. They are also being used as case managers in the CCAC sub-sector. The total number of nurses employed in public health (a sub-sector of community health) has been stable despite population growth and increased demands for services. This is because funding from the Ministry of Health and Long-Term Care Public Health Division and the Ministry of Health Promotion is augmented by funds from the Ministry of Children and Youth Services. On average, there is a higher proportion of younger nurses in public health than in the Ontario nursing workforce overall.

- Nurses feel their work has intensified since the health sector reforms of the 1990s. Work intensification contributed to increased stress and decreased job satisfaction. Results of NHSRU research provide empirical support to the literature that suggests work intensification adversely affects workers' health, well-being, and work attitudes.

- As health care systems evolve, nursing staffing patterns have become more complex and predicting staffing requirements has become more difficult. Relief staffing strategies, including increased part-time and casual hours and the use of overtime and agency employees, are being used to meet the needs of this changing environment. Obtaining a better understanding of frontline nursing workforce profiles must be a priority and should include accurate nurse demographics and staff utilization at general and specialty nursing levels. Understanding our nursing workforces is essential in forecasting future nursing needs to meet service demand.

- A 2004 analysis of rural nursing workforce demographic trends showed 11% of the registered nursing workforce in Ontario lived in rural areas, but only 3.3% of these nurses worked there. In Canada, rural nurses were more likely than urban nurses to be employed part-time and have multiple employers. In Ontario, fewer rural nurses (47%) than urban nurses (54.8%) were employed full-time. In rural and urban Canada, younger nurses were more likely to be employed part-time and have more than one employer. In Ontario, between 1994 and 2000, the number of registered nurses decreased in rural areas (2.32%) and increased in urban areas (0.22%) and the rural nurse to population ratio declined from 73 to 70 nurses per 10,000 population.

- The sustainability of the nursing workforce and delivery of quality patient care may be in jeopardy in rural areas. Concerns must be addressed if residents in less populated areas of Ontario are to receive the best care.
How Government Invests in Research to Advance Policy: Evolution of Evidence


The 2004 study focused on 19 rural hospitals in LHIN 2 in South West Ontario and examined how employment patterns have evolved. The research team found that although government initiatives had been implemented in recent years to improve the supply of nurses, rural hospitals do not have the capacity or resources to fully participate.

- Research revealed enablers and barriers for community health nurses to practice effectively include successful interdisciplinary health care team functioning, supportive workplace policies, and a community policy that supports health improvements. Enablers should be strengthened and barriers overcome to maintain an effective system to meet changing community needs. Needs for community health nurses will continue to be redefined as challenges in health care arise.

- Rural practice settings have unique characteristics that make it challenging for them to implement government policies designed to address workforce issues. For example, the 70/30 full-time to part-time Employment Status conversion of part-time to full-time positions is difficult to implement because more part-time staff are required to meet the needs of fluctuating patient census in rural areas. The New Graduate Guarantee is difficult to implement because rural hospitals employ few nurses and some of the sampled hospitals did not hire any new graduates. The benefits obtained from this initiative varied with the availability of new graduates. The Late Career initiative is difficult to implement because, compared to urban hospitals, rural hospitals have fewer administrators available to apply for funds and insufficient numbers of experienced staff to replace program participants.

Research


THEME 3: DEVELOPMENT OF HEALTH CARE PROFESSIONS

The development of the nursing profession should have an impact on policy. Nursing evolves with demographic and economic changes, and researchers in the last decade have found that nurses have a growing demand for standards in the profession. Nurses have different needs in various stages of their careers, and specific nursing standards are necessary for specialty areas. The creation of LHINs is paramount to devising new strategies and research paths. A strong mandate is needed concerning how registered nurses (RN) and registered practical nurses (RPNs) should work together, and a standard plan should be implemented for the orientation of new nursing graduates.

• Research reveals that for different nursing generations in the contemporary workplace, there are significant differences in career commitment, job satisfaction, stress and emotional exhaustion, depersonalization, personal accomplishment, and propensity to leave the hospital. Researchers recommend policies that address the needs of nurses of different ages.

• Findings suggest a need for nursing associations and specialty groups, notably at the national level, to integrate regulatory standards into their own documents and build upon them to reflect the dimensions of specialty practice.

• The current understanding of underserviced areas should be expanded to encompass other professions, including nurses. Researchers highlight the importance of health services restructuring, particularly the creation of LHINs, to future HHR policies and make relevant recommendations about future strategies and research directions.

• There should be some consideration for formal credit, either towards a baccalaureate in nursing or a critical care nursing certificate for the beginner critical care nurse. Strong partnerships between the educational and hospital sector and structures such as LHINs are required. Ongoing collaborative planning at the local, regional, and governmental level will be essential in making this a reality.

• A new vision is needed about how the RN and RPN professions should develop and relate to one another. However, before such plans can be made, current issues must be identified and resolved. Failure to establish definitive roles for RNs and RPNs may affect the credibility of the nursing profession and public confidence in
health care. The challenge for policy makers and workforce planners is to ensure that RPNs are used appropriately and to their full scope.

- New graduate orientation should include several key components such as standardized minimum length of time, learning plans used to monitor and evaluate the progress of new graduates, data collected from clinical areas that account for costs and human resource requirements, and evaluation of the new graduate strategy built upon College of Nurses of Ontario standards.

Research


**THEME 4: GLOBAL AND LOCAL HEALTH HUMAN RESOURCES**

Unraveling health human resource concerns in nursing helps to solve the policy puzzle. Researchers have uncovered various aspects about nursing practices and organizational initiatives that can assist policy makers in creating strategies for a stronger and more efficient workforce. Suggestions include refining staffing procedures,
bustering job satisfaction, and continuing to develop strategies to employ new graduates and internationally educated nurses.

- Studies reveal a need for more sophisticated staffing practices for nurses that are based on an understanding of economics and other trends that influence the workforce.

- Research demonstrated capacity issues that should be addressed as part of a larger human resources initiative to create a more flexible workforce. For example, since the SARS epidemic, a number of government and organizational initiatives have been developed to increase nursing capacity. New research is required to analyze issues emerging in the context of H1N1 and other public health threats.

- Researchers suggest managers employ nurses in jobs they prefer, decrease unpaid overtime, and consider the importance of earnings for them and their families when developing policies and programs to retain nurses. Downsizing hospitals without careful attention to the potentially negative impact on the nursing workforce can lead to retention difficulties and adversely affect the supply of nurses in the workforce and the health outcomes of people living in Ontario.

- Study results show that low job satisfaction and heavy workload are associated with nurses’ turnover intention. If working conditions outside the organization are deteriorating, then turnover is not usually an issue for nurses. However, we suggest the impact of these factors, according to employment contracts, should be considered in developing human resources policies for nurses’ job satisfaction and retention.

- Over the past 10 years, there has been a dramatic improvement in the employment status for nurses in Ontario. In 1998, over 60% of nurses were PT or casual. Today, 64% of all nurses and 76% of new graduates are employed FT. Since 2005, FT employment has increased 24% for new graduate RNs and 29% for new graduate RPNs. The Toronto Central LHIN employs the largest percentage of new graduates, and 75% of all new graduates are employed in the acute care sector. Overall, the community and long-term care sectors hired fewer new graduates in 2008 compared to 2007.

- Many internationally educated nurses (IENs) find it difficult to reinstate themselves in their profession after migration. Studies show that IENs encounter obstacles at each stage of the migration process. New strategies are required to assist IENs to re-enter the workforce. Given the consistent predictions of an extreme nurse shortage, it is important that the brain waste of immigrant nurses be minimized. Difficulties associated with international educational and regulatory differences illustrate the need to create global nursing standards.

- Researchers found most IENs are not eligible to practice upon arrival in Canada. They also discovered many foreign-trained nurses abandon the idea of re-entering the nursing profession because of the length of time it takes to become eligible to write examinations, pass national exams, and find professional employment. At the same time, there is a projected shortage of nurses.

- More system supports are being developed to help IENs enter the workforce, including the Enhanced Language Training initiative. Bridging programs for IENs have been established in 5 universities/colleges and Creating Access to Regulated Employment programs has been established in Toronto and Hamilton to prepare IENs for professional examinations and employment in the Canadian health care system. The HealthForceOntario Marketing and Recruitment Agency has a comprehensive job portal and a centre where internationally educated health professionals can obtain information needed to work in Ontario.

- A shortage of health care professionals is forecast for Ontario. An aging workforce and insufficient recruitment and production in the past decades mean that the province must make full use of all health human resources.
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This research is meant to support the development of guidelines for the integration of internationally educated health professionals (IEHPs) into the workplace. Challenges and barriers to hiring IEHPs and mechanisms for addressing them are outlined.

- NHSRU researchers teamed up with four Local Health Integration Networks (LHINs) to design a toolkit for creating strategies to increase full-time positions for nurses. The toolkit identifies local needs toward 70 per cent full-time nurse employment. *Health Human Resource Series Number 18. Strategies to Advance 70% Full-Time Nurse Employment Toolkit*, can be found at [www.nhsru.com](http://www.nhsru.com). This NHSRU/LHIN partnership was formed to address the Ontario Ministry of Health and Long-Term Care’s (MOHLTC) priority theme of a 70 per cent full-time commitment to nurse employment (RN and RPN) in the province of Ontario. These following strategies are identified as successful tools for increasing full-time nursing positions: innovative scheduling, cross-training, collaborating across sectors, creating full-time positions from available hours, creating specialty lines across sites, using RPNs to full scope of practice, participating in government initiatives, building relationships with academic partners.

Research


How Government Invests in Research to Advance Policy: 
Evolution of Evidence


**THEME 5: TRANS CANADIAN COMPARISONS**

In taking a look at various nursing workforces across Canada, researchers suggest many areas can be streamlined to make way for better partnerships that will allow for a seamless national nursing workforce, particularly for community and public health nurses.
Provinces could make significant progress in the areas of recruitment, training, and retention for home care and public health services by working collaboratively. The nursing roles are different between various community sub-sectors and the skills required to work in these sectors may be different. The Canadian Institute for Health Information database relies on information from the nursing regulatory bodies, which do not necessarily provide the detail needed for planning frontline community and public health services. New data sources are necessary.

Decision makers at the federal, provincial/territorial, and local levels have opportunities to address community health nurses' (CHN) learning needs relevant to professional and interdisciplinary practice. They need to create equitable human resource policies across provinces and territories, support workplace and client safety policies, and promote public awareness about community health sector mandates and CHN roles. Careful attention to the factors that enable CHNs to practice their full scope will strengthen recruitment and retention while improving the efficiency of available CHN resources to enhance health outcomes in Canada’s communities.

Results of research revealed several areas for public health development, including targeting funds for leadership and management development at all levels of the public health system. There is also a need for coordinating public health planning across jurisdictions with a clear vision, goals, and responsibilities so that surge needs will be effectively managed. This can result in sharing resources and reducing duplication. In addition, local public health agencies should be encouraged to implement staffing models that allow for changing local needs (e.g., the management of pandemic outbreaks, the growing prevalence of chronic disease, and other emergency challenges).

Results suggest a number of important topic areas for continuing education of CHNs, including health promotion theory, program evaluation, engaging in collaborative intersectoral partnerships, principles of epidemiology, nursing informatics, culturally relevant care, harm reduction, emergency management, addressing service accessibility issues at the federal level, and advocating for health public policy. Results also indicate there are some differences by province and territory in performing the CHN activities identified in the Canadian Community Health Nursing standards and the learning needs associated with the activities. Results show statistically significant differences by province and territory on many of the items, which highlights the need to tailor continuing education programs for certain provinces and territories.

Globally, nursing practice and education is evolving as nurses address the challenges of moving away from hospitals into communities. As illustrated through the Canadian case study analysis, it is imperative to invest in primary health care nursing curricula and to remove any obstacles that prevent primary health care from being utilized to its fullest capacity.

Research


How Government Invests in Research to Advance Policy: Evolution of Evidence


Canadian public health nursing capacity: Implications for action. Hamilton, Ontario: Nursing Health Services Research Unit, McMaster University.


This summary report was prepared by Theresa Noonan, Knowledge Broker, NHSRU, McMaster University site. Please contact her at noonant@mcmaster.ca if you are interested in learning about NHSRU research evidence, or please visit www.nhsru.com. Bios of the NHSRU scientists are posted below.

Andrea Baumann RN, PhD is the Associate Vice-President, Faculty of Health Sciences (International Health) at McMaster University and Scientific Director of the NHSRU, McMaster University site. The NHSRU, funded by the Ontario Ministry of Health and Long-Term Care, coordinates many projects relevant to nursing health human resources (HHR), including economics, business, epidemiology, and industrial engineering. Dr. Baumann’s research interests include HHR planning, production, and management; health care systems and organizational restructuring; migration and mobility; clinical decision making; and quality practice environments. Dr. Baumann is a co-investigator in a CIHR Team grant in Community Care and Health Human Resources. She is also a member of the Ontario Career Scientists Review Committee.
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How Government Invests in Research to Advance Policy:
Evolution of Evidence


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