Happenings

Ontario's Nursing Health Services Research Unit Marks the 20th Anniversary of Its Founding

Diane Doran, Andrea Baumann

History

The Nursing Health Services Research Unit (NHSRU) was founded in 1990 with funding from Ontario's Ministry of Health and Long-Term Care (MOHLTC). The Unit's name has been changed twice over the past two decades as its research has evolved and become more diverse. It was known first as the Quality of Nursing Worklife Research Unit, then as the Nursing Effectiveness, Utilization and Outcomes Research Unit, and now as the NHSRU. The Unit was founded as a collaborative effort of two universities — the University of Toronto and McMaster University in Hamilton — and was co-directed until 2009 by Drs. Andrea Baumann and Linda O'Brien-Pallas.

In the early 1990s the Unit conducted multidisciplinary research to better understand factors that influence the quality of nurses' worklife. In the succeeding years it shifted the emphasis to health human resources, examining the impact of health-care restructuring on the nursing work-force. This research led to the development of the Health Human Resource Conceptual Model, which was adopted by the Canadian Institute of Health Information to guide the study of health human resources in Canada. The NHSRU has also focused on the development of key databases that continue to guide research today and has made rec-ommendations on future data collection.

In addition, the Unit has conducted population-based health services research in nursing, with a focus on population health needs and patient, system, and provider outcomes, to determine the number and type of nurses and other health professionals needed to meet future health needs. Over the years, multi-site studies to determine the work-environment factors, system characteristics, and management behaviour most likely to improve nurse recruitment and retention have also informed policy-making on nursing workforce issues.

Current Status

In 2009 the NHSRU was re-funded by the MOHLTC's Nursing Secretariat and Research Unit, receiving a mandate to help strengthen nursing policy for Ontarians for another 3 years. The funding provided for a new 3-year program of research titled Building and Sustaining the Nursing Workforce for Better Patient Outcomes.

Dr. Baumann of McMaster University and Dr. Diane Doran of the University of Toronto are the scientific directors of this new program of research, which was begun on October 1, 2009. The program builds on the studies conducted by the NHSRU in the past and consists of a core team of researchers at the two universities. It also incorporates the NHSRU's expertise, infrastructure, and experience, including its extensive partnerships with researchers and decision-makers.

In addition to celebrating its recent refunding, the NHSRU marks the 20th anniversary of its founding this year. Part of its current mandate is to continue supplying the MOHLTC with rapid-response information and time-limited studies in order to produce background data and evidence to support policy development. Over the past 20 years the Unit has also trained future researchers and decision-makers, thereby increasing capacity and promoting a wider understanding of nursing and health services research. In addition to its McMaster and University of Toronto sites, the new program engages four further academic institutions: Laurentian University, Queen's University, the University of Western Ontario, and the University of Windsor. The main focus of the research program is the understanding that an effective workforce is a prerequisite to excellent patient care. The purpose of the program is to generate evidence through rigorous research to support decisions on how best to build and sustain the nursing workforce for improved patient outcomes.

Research Projects

Under the current research program, the McMaster site is taking the lead on studies such as (a) longitudinal employment patterns and trends among new graduate nurses that impact on workforce planning, (b) projects to support the integration of internationally educated nurses (IENs) into the Canadian workforce, and (c) risk analyses of increased turnover of critical-care nurses based on specific utilization strategies. The NHSRU has created an outstanding environment for building nursing research capacity. Its educational activities involve the support of undergraduate, master's, doctoral, and postdoctoral students from the School of Nursing at McMaster, partner organizations, and other universities in Canada and internationally. There is student involvement in each of the projects listed below.

Original research conducted by Dr. Baumann identified a trend towards part-time employment and casualization of Ontario's nursing workforce. Based on this research, an employment policy, the Nursing Graduate Guarantee (NGG), was developed by the MOHTLC in 2007. The NGG is a financial stimulus package to encourage the full-time employment of Ontario nursing graduates and facilitate their transition to the workplace. A Web site has been developed where new graduates can search for full-time positions posted by employers. The funding provided to employers supports 6 months of employment for new graduates and includes an extended orientation and mentorship program. A multi-year evaluation of the NGG initiative is being conducted by Dr. Baumann and her team. Since 2007, 8,123 new graduates and 250 employers have participated in the program. The hospital sector has the highest percentage of employer participation in the NGG, with over 70% of Ontario's hospitals taking part. Based on the results from the evaluations, Dr. Baumann and her team recommend that the MOHLTC focus on strategies to stimulate employer participation among public institutions identified as belonging to "high need" sectors (i.e., long-term care, community care) and geographic contexts (i.e., rurality). The NGG employment initiative will be supported by other initiatives, such as the Ontario Nursing Workforce Alliance. Researchers are now beginning the next NGG evaluation, for 2010–11.

NHSRU researchers at the McMaster site are collaborating with the Ontario Ministry of Citizenship and Immigration and the Canadian Association of Schools of Nursing (CASN) to help IENs integrate into the workforce. These collaborations involve two projects focused on integrating IENs into the Canadian workforce.

A Framework for Integrating Internationally Educated Nurses Into the Health Care Workforce is a partnership project between the NHSRU and the Ontario Hospital Association (OHA) and is funded by the Ontario Ministry of Citizenship and Immigration. The project aims to enhance the integration of IENs into the health-care workforce through the creation, implementation, and evaluation of a leading practice guide for hospital employers. The guide will identify barriers to the integration of IENs into the workplace and strategies to address these. In phase 1 (Development) a draft guide will be developed from a literature review and key findings of stakeholder interviews. The guide's applicability to a wide range of settings will be evaluated through an interactive think-tank comprising human resources, nursing, and other leaders. In phase 2 (Dissemination) the guide will be disseminated widely and implementation workshops will be held. Phase 3 (Demonstration on Implementing Leading Practices/Evaluation) will consist of field-testing of specific leading practices from the guide at six demonstration sites to further

enhance the guide. The demonstration evaluation and iterative revision by the OHA will ensure that the guide remains current.

The CASN has received funding from Health Canada to conduct a knowledge synthesis research study titled The IEN Bridging Programs Project. Dr. Baumann and her research team have been awarded the contract to conduct the study, which will examine current bridging programs in Canada. The CASN's objective is to standardize IEN bridging programs nationally and to develop and implement essential components of IEN bridging programs.

Another study being conducted at the McMaster site is Development of a Critical Care Nursing Workforce Profile and Tracking System in Ontario, funded by the Critical Care Secretariat (CCS) of the MOHLTC. The goals of the study are to gain a better understanding of Ontario's critical-care nursing workforce and track the workforce on an annual basis. This multi-year project initially involved the development of a survey instrument to collect annual workforce data, including nurse demographics, workplace statistics, and nurse utilization data within the workplace. In the second phase of the study, all levels 2 and 3 critical-care units in the province were surveyed and a nursing database was developed and housed at the CCS. A minimum data set was derived from the initial survey and provincial, regional, and organizational reports were prepared for the 2007–08 fiscal year. The workforce database has been repopulated with 2008–09 data, and data for the 2009–10 fiscal year will be collected in January 2011. This tracking system forms the basis for further studies to assess retention and recruitment challenges, forecast nurse departure rates and training/replacement rates at all levels, and track the impact of government-funded initiatives designed to improve retention. Currently, analyses are being conducted to determine how the use of overtime, agency nursing, and level of full-time nurses might affect nurse turnover (nurse exit) and retention levels.

The NHSRU's University of Toronto site, in the Lawrence S. Bloomberg Faculty of Nursing, is studying (a) the relationship between nurse-utilization patterns and health and safety outcomes for chronic-disease populations; (b) nurse staffing changes, quality work environments, and Health Outcomes for Better Information and Care (HOBIC) across Local Health Integration Networks; (c) improvements in worklife issues for correctional nurses; and (d) evidence-informed decision-making at the point of care.

Another study currently underway at the University of Toronto site is The Relationship Between Nurse Utilization Patterns and Health and Safety Outcomes for Chronic Disease Populations. This study is exploring the processes that impact on patient-safety outcomes in home care settings and inpatient psychiatric settings by investigating the relationship

between nurse utilization and patient-safety outcomes in these two environments. NHSRU researchers recently completed a detailed demography of nurses working in inpatient psychiatry. Over the next year they will be building on these data with much-needed information on the relationship between established measures of nurse utilization and patient-safety outcomes for individuals with chronic illness who are receiving either inpatient psychiatric care or nursing home care. Findings from this study will demonstrate to researchers and policy-makers how treatment settings form an important bridge for a patient's ultimate recovery or ability to return to a more independent level of functioning. Outcomes of the study include the development of a database of nursing-workforce and patient-safety outcome variables that will allow for investigation of these factors both longitudinally and across sectors.

Dr. Doran and her team at the University of Toronto site will also be undertaking a MOHLTC applied-research study. Home Care Nursing Health Human Resources: Building and Sustaining a Quality Nursing Workforce in Home and Community Care is intended to generate evidence on strategies for recruiting and retaining home care nurses and sustaining home care nursing capacity in order to meet the health needs of Ontario's diverse population. Findings from this study will assist with developing ways to attract nurses to under-resourced areas by improving the prospects for rewarding, long-term employment in home care. The study, comprising two interrelated projects, will generate information on priority issues identified by both the MOHLTC and individuals working in the nursing profession, with an emphasis on innovation and development of healthy work environments specific to home care nurses. The first project in the study explores the utilization and skill mix of community nursing resources for home care patients managing complex medical concerns such as diabetes, mental illness, congestive heart failure, and Alzheimer's disease. The second project will add knowledge about factors related to worklife, supportive work environments, and innovative work arrangements in recruiting new graduates and retaining early-, mid-, and late-career home care nurses.

Another research project to be conducted at the University of Toronto site is a systematic evaluation of the Late Career Nurse Initiative (LCNI). The LCNI was introduced by the MOHLTC in 2004 to help reduce the loss of Ontario's late-career nurses. It entailed the provision of funding to individual organizations that presented a workable plan to implement a .20% full-time equivalent to engage nurses in less demanding and more enriching employment activities. In addition to evaluating "hard" indicators of success (e.g., retention rates), the study is exploring the secondary benefits of the initiative, such as capacity-building and its impact on patient care.

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The research project Career Transitions Among Specialist Nursing Roles is expected to have policy implications with regard to specialist nursing as a career path and strategies for retaining nurses in clinical practice roles within the health-care system. In addition to describing the transition patterns, the project will provide evidence on whether exit patterns and retention rates vary between specialist and non-specialist nurses. Little is known about the number of nurse specialists currently working in Ontario, their qualifications, characteristics of their roles, and the impact of their roles on nurses' job satisfaction and retention. Specialist nursing roles may be a means of retaining nurses who wish to have a rewarding career while maintaining a clinical practice focus. One of the purposes of the study is to describe the transition patterns of specialist nurses working across the different health-care sectors and in/out of the nursing profession.

HOBIC, funded by the MOHLTC, is an initiative to measure outcomes relevant to the practice of nursing across sectors. Among other benefits, HOBIC information can be used by nurses to monitor the impact of care and ensure that patients are prepared for discharge. Dr. Doran is currently leading an NHSRU project to investigate Factors That Contribute to Variation in HOBIC Adoption and Utilization and to identify strategies for improving utilization of HOBIC information for clinical care planning and health-system improvement. Examination of the current evidence and consultation with experts will inform changes in evidence-based practice and facilitate HOBIC use by health-care organizations in Ontario.

Future Path

As health-care systems prioritize quality improvement by reducing wait times and increasing access to care, nursing health services research has played and will continue to play a facilitating role. The Nursing Health Services Research Unit, by working with policy-makers, health-care managers, and clinicians for the past two decades, has provided expertise and timely data to inform evidence-based decision-making. Its current program of research is aimed at addressing how best to build and sustain the nursing workforce for better patient outcomes. The Unit will continue to evolve in order to identify and analyze priority issues in this field and will continue to create and implement interventions relevant to these issues.

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