Timely access to healthcare services requires the right number, mix and distribution of appropriately educated nurses, physicians and other healthcare professionals. In Ontario, as in several other jurisdictions, changing demographics, patterns of health service utilization and an aging workforce have created challenges related to the supply of nurses available now and in the future to deliver quality patient care. From 2006 to 2009, the Nursing Secretariat (NS) of Ontario’s Ministry of Health and Long-Term Care undertook a progressive and comprehensive approach to address the issue of nursing supply across the province through the introduction of 17 Nursing Health Human Resources Demonstration Projects (demonstration projects). The demonstration projects initiative has led to the creation of a unique collection of best practices, tools and resources aimed at improving organizational planning capacity. Evaluation of the initiative generated recommendations that may guide the ministry toward policy and program development to foster improved nursing health human resource planning capacity in Ontario healthcare organizations.

The Demonstration Projects: Creating the Capacity for Nursing Health Human Resource Planning in Ontario’s Healthcare Organizations

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**Background**

The demonstration projects initiative had its inception in 2006 with the Nursing Graduate Guarantee initiative, whereby the Ministry of Health and Long-Term Care (MOHLTC) promised full-time employment to every nurse graduating in Ontario. A task force was formed and charged with developing policy recommendations for the implementation of the guarantee. The task force identified the need for improved health human resource (HHR) planning among healthcare employers, resulting in the creation of the Employer Capacity Building Working Group, made up of employers and associations from across the healthcare sector.

The working group identified several challenges with respect to nursing HHR planning in healthcare organizations across Ontario. These challenges include (a) the wide variability in HHR planning capacity by organizations across the province, (b) a lack of evidence about the ability of healthcare organizations to undertake HHR planning, (c) the lack of efficacy of the existing tools and models to support HHR planning, (d) a need for simple and easy-to-implement solutions in the face of a complex problem, (e) the variability across the continuum of care of organizational infrastructure to support effective HHR planning, (f) the different challenges different sectors face in HHR planning requiring different solutions, and (g) the greater support and knowledge transfer that mid-managers require in order to effectively develop, implement, manage and evaluate HHR plans (MOHLTC 2007).

In response to these findings, the ministry supported the development of the demonstration projects initiative. The goals of the initiative were to increase employer capacity for nursing HHR planning and to support the creation of more full-time nursing positions, with the target of achieving 70% full-time employment for all nurses practising in Ontario.

**Overview of the Demonstration Projects Initiative**

In October 2007, the Nursing Secretariat of Ontario’s Ministry of Health and Long-Term Care solicited applications from healthcare organizations across all sectors that were interested in becoming demonstration sites for designing, implementing, evaluating and sharing innovative HHR planning tools and practices (MOHLTC
2007). Applicants were required to demonstrate a partnership, new or existing, to facilitate sharing and collaboration throughout the duration of the demonstration projects initiative. Eight workforce building blocks, including (1) planning tools, (2) a service delivery model, (3) professional practice, (4) retention, (5) succession planning, (6) recruitment, (7) human resources management, and (8) labour relations and negotiation, were identified in the literature as critical factors in nursing workforce planning.

Tools that enable effective forecasting of workload measurement and monitoring of the supply and utilization of the nursing workforce are required to develop sound HHR plans (McGillis Hall et al. 2006; Morris et al. 2007; Tomblin Murphy et al. 2007). Tools and resources are also needed to assist with organizing clinical care models, determining the number of staff and skill mix required to increase positive patient outcomes, supervising staff and identifying clinical indicators to monitor the delivery of healthcare services (Lookinland and Crosson 2005; Tiedeman and Lookinland 2004). Literature regarding specific human resource (HHR) tasks such as scheduling is limited. Tools that provide a framework for developing flexible scheduling and job-sharing opportunities may also support effective HHR planning (Berkow et al. 2007; Provincial Scheduling Working Group, Health Employers Association of British Columbia and British Columbia Nurses’ Union 2003).

Nursing managers require education and training regarding soft skills to support nursing retention as well as skill in promoting healthy work environments (Hart 2007; Wolf and Greenhouse 2006). Succession planning is an important component of nursing workforce planning that may be accomplished through leadership development programs, defining and providing support to middle managers and career planning and development activities (Canadian Nurses Association 2003; Coonan 2005; Laschinger 2006). Innovative HHR planning tools and resources to support the stabilization and sustainability of the nursing workforce are necessary (Beauregard et al. 2007; Christmas 2007; Woods and Cardin 2002).

Each of the workforce building blocks was identified as essential to effective nursing HR planning and formed the basis upon which the demonstrations projects were developed.
Over the course of approximately two years, 17 healthcare organizations developed, implemented and evaluated the innovative tools and resources produced to support nursing health human resources planning in Ontario healthcare organizations. The description, details and evaluation results of the individual demonstration projects are addressed in articles that follow in this special edition of the Canadian Journal of Nursing Leadership.

Evaluation of the Demonstration Projects Initiative
The ministry evaluated the demonstration projects initiative to identify lessons learned from developing and implementing the HHR tools and best practices at each site, and to determine whether the projects produced the anticipated results. Members of the Employer Capacity Building Working Group (originally convened under the Nursing Graduate Guarantee), MOHLTC staff members and key participants from each demonstration project formed the evaluation team, which was led by a consulting firm procured by the ministry. Findings from the evaluation of the initiative were intended to guide the ministry toward policy and program development that could foster improved nursing HHR planning capacity in Ontario healthcare organizations.

Methodology
A mixed methods approach was used to conduct the evaluation. Data were collected through interviews, focus groups, site visits, documents and data analysis of HR metrics. Additionally, secondary source data were collected and analyzed for the year prior to the implementation of the demonstration project to establish baseline nursing HR metrics that could be used as a comparator in the data analysis.

Telephone and face-to-face interviews were conducted at the mid-point of the initiative with the coordinator of each project to assess the status, document lessons learned and identify anticipated challenges that might prevent the successful completion of the project. Site visits were conducted at 11 of the demonstration sites to gain an understanding of the development and implementation of the tools and resources being produced and gather observations regarding the use of the tools at the site (Virani 2009). At the conclusion of the demonstration project, focus groups were held with representatives from each project team, including members of the demonstration project advisory or steering committee, end users of the resources developed through the project and representatives from each of the partner organizations involved in the project. In addition, on completion of the projects, telephone interviews were conducted with project coordinators to once again gather data regarding key insights, barriers, facilitators and lessons learned. Finally, additional data from end users of the resources developed by the
demonstration projects were collected through an online survey. Analysis of the data included pre and post data comparisons and extraction of emerging themes.

**Discussion**

Results of the analysis provided the basis for the development of 13 recommendations aimed at guiding the ministry toward policy and program enhancement to foster improved nursing HHR planning capacity in Ontario. Recommendations drawn from the findings of the evaluation of the initiative include:

1. **Knowledge, skills and capacity development.** *Ontario nurse managers require support in enhancing their knowledge, skills and capacity in workforce planning human resources management.* Findings from the evaluation revealed that nurse managers in Ontario are not appropriately prepared to meet HHR challenges. In part, this can be explained by the fact that many nurse managers do not have formal education in HHR management and/or administration. Most training in this area is conducted informally, on the job, with little mentorship and human resources support (Virani 2009).

Determining and addressing the various needs of the nursing workforce, such as generational, internationally trained and career path requirements of nurses, is necessary to promote effective HHR planning (Virani 2009). In addition, nurse managers require requisite skills to access, collect and analyze pertinent HR data to conduct effective HHR planning. Important HR data such as staffing models, scheduling options, methods of addressing issues of diversity in the workplace, information regarding labour union issues, succession planning strategies, and methods to support and mentor nurses at different stages in their careers were identified as essential for supporting nurse managers in developing sound nursing HHR plans (Virani 2009). Finally to address gaps in the HHR knowledge of nurse managers, the creation of a standardized and accessible education program focusing on common HR issues that nurse managers may experience in performing their role was recommended (Virani 2009).

2. **Collaboration between nurse managers and human resource experts.** *Nurse managers require access to HR experts to support their ability to forecast, plan and manage nursing human resources.* Evaluation results revealed that there were insufficient structured relationships between nurse managers and HR specialists operating within the same organization. Involvement of HR departments in nursing HHR planning
was often limited to providing support in relation to recruitment and hiring processes and emerging labour relations issues. Confusion and lack of clarity with respect to the HHR obligations of nurse managers and HR specialists was an important finding. More opportunities for collaboration between nurse managers and HR specialists are required to foster improved HHR planning within healthcare organizations (Virani 2009).

3. Enhancing systems to support workforce planning and human resources management. Healthcare organizations require consistent human resource information systems, preferably electronic (automated).

Findings revealed a lack of centralized electronic nursing HR data and inconsistent methods of defining and collecting the HR data within healthcare organizations. Furthermore, the nursing HR data that did exist were missing several essential elements necessary for forecasting and developing effective nursing HHR plans. Deficiencies in the accessibility and collection of nursing HR data may be explained, in part, by the finding that HR departments often lack the necessary tools, processes and expertise required to establish appropriate nursing HHR databases to support effective planning (Virani 2009).

4. Inter-organizational learning as a powerful capacity development tool. Promoting project-specific partnerships to develop health human resource capacity is highly recommended.

There was unanimous agreement among organizations that participated in the initiative that partnership arrangements were beneficial in promoting shared learning and creating economies of scale. Findings revealed that the opportunity to establish partnerships through the initiative was critical to the ability to access dedicated funding and expert resources necessary to build tools and resources that might support enhanced nursing HR planning (Virani 2009).

To foster continued learning and development in relation to HHR planning and management, the establishment of inter-organizational and local community forums was recommended.

5. Inter-professional collaboration. The interface between the inter-professional collaboration and service delivery models and issues of human resource management requires focused attention.

Findings revealed a lack of understanding regarding the relationship between inter-professional collaboration and service delivery models, and HHR management issues. Further research is necessary to examine the implications of nursing HR planning, collaborative models of practice and service deliv-
ery in relation to HHR management issues such as collective bargaining and scope of practice (Virani 2009).

6. Gap between graduation and full productivity. Enhanced orientation, education and mentorship are necessary.
Evaluation results indicated that infrastructure and resources necessary for educating novice nurses, new nurses and nurses transitioning to different patient care areas were insufficient. Existing orientation programs were found to be too general and inadequate for the effective transitioning of nurses to fully productive clinicians within a reasonable time frame (Virani 2009). The implication is that inefficient transition of nurses to full productivity impedes the ability to plan and manage nursing resources. Enhanced orientation programs, sector-specific residencies, and internships were recommended as a means to support the efficient transition of nurses to fully productive clinicians, thereby improving the potential for effective HHR planning.

7. Scope of practice. Seize the opportunity to maximize the scope of practice of Registered Nurses and Registered Practical Nurses.
Virani (2009) recommended that healthcare organizations maximize nurses’ scope of practice to ensure that their knowledge and expertise is used to its full extent. However, organizations must consider the regulatory requirements associated with scope of practice and the education, training and mentoring that may be required to support maximizing scope of practice.

8. Regional workforce planning and recruitment. Local Health Integration Networks across the province need to provide the leadership for regional workforce planning and recruitment.
A significant finding that arose from the evaluation was the need to foster a regional strategy for nursing workforce planning and recruitment. Shifting away from regional competition between healthcare organizations to a more collaborative environment regarding regional HHR strategies was recommended (Virani 2009). Providing Local Health Integration Networks (LHINs) with best practices developed through the initiative could support regional workforce planning strategies (Virani 2009).

9. Develop a focused nursing HR strategy for supporting urban/northern nursing shortages.
Findings revealed that the creation of a focused strategy to address the shortage of nurses in rural and isolated communities in Ontario is necessary (Virani 2009).
10. Sector-specific marketing.
Results of the evaluation revealed that increased marketing related to nursing in the long-term-care sector is necessary to change negative perceptions of practising in this area. Funding to support the transition and retention of internationally educated nurses was also recommended as a method to increase the supply of nurses and address retention of this cohort of nurses (Virani 2009).

11. Healthy work environments. 
Create positive work environments as this is intricately linked to recruitment, retention and succession planning. According to the Registered Nurses Association of Ontario (RNAO), “a healthy work environment is a practice setting that maximizes the health and well-being of nurses, quality patient care outcomes, organizational performance, and societal outcomes” (RNAO 2008: p. 88). Tomey (2009) suggested that unhealthy work environments may increase healthcare organization costs related to high absenteeism and stress levels, inadequate work performance and work-related accidents. Implementing best practice guidelines in all healthcare organizations that support the workplace health and safety of nurses is critical to patient outcomes and the sustainability of the nursing workforce in Ontario.

12. Dissemination of best practices. Create a multifaceted plan to share the best practices and products generated from the 17 demonstration projects. The creation of a centralized repository was recommended in order to maximize the benefits of the initiative and ensure accessibility and dissemination of the tools and resources developed to healthcare organizations across the province. The HealthForceOntario website was recommended as the ideal forum for establishing the repository. Webinars and discussion forums regarding approaches for implementing HR planning tools and resources to support nursing workforce planning were also recommended (Virani 2009).

13. Sustainability. Continued financial support is necessary to sustain gains achieved through the initiative. There is a shared responsibility for sustaining the development and implementation of best practices in nursing HR planning (Virani 2009). Healthcare organizations were also encouraged to be innovative and examine existing and new partnership opportunities between organizations as a mechanism to create economies of scale and cost savings in relation to ongoing nursing HR planning initiatives. Financial support provided by the LHINs and the Ministry of Health and Long-Term Care was also recom-
mended to support the implementation of nursing HR planning across the province (Virani 2009).

**Summary**
The demonstration project initiative has led to the development of an innovative collection of nursing HHR planning tools, best practices and resources with the potential to enhance organizational nursing HHR planning. A comprehensive dissemination plan is presently being developed to maximize the return on investment of this initiative and stimulate continued dialogue, development and implementation of best practice tools and resources for nursing HR planning. A key component of the plan involved implementation workshops, which were conducted by demonstration project coordinators in October 2009. Over 120 representatives from healthcare organizations, local health planning bodies and the ministry attended workshop sessions to learn about the HHR tools and resources that were developed and to gain practical knowledge and insight regarding strategies for implementation.

Province-wide access to the tools and resources developed through this initiative will be available on the Nursing Secretariat website in the near future. Finally, the Local Health Integration Network Engagement Strategy was developed to provide the opportunity for local health planning bodies to apply for funding to support regional nursing HR planning and the implementation of key demonstration project tools and resources in healthcare organizations. Stabilizing and sustaining the nursing workforce requires effective HHR planning at the provincial, local and organizational level.

**Conclusion**
The Nursing Health Human Resources Demonstration Projects was an initiative of the Nursing Secretariat of Ontario’s Ministry of Health and Long-Term Care aimed at building nursing HHR planning capacity to address supply needs in Ontario. The initiative led to the creation of a unique collection of best practices, tools and resources that may facilitate improved nursing HHR planning and contribute to the stabilization and sustainability of Ontario’s nursing workforce. Evaluation of the initiative generated recommendations that may guide the ministry toward policy and program development to further enhance nursing HHR planning capacity in Ontario.

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References