NUNAVUT

Building Nursing Capacity

Misty Malott, RN, MScN
Research to Action Project Coordinator
Iqaluit, NU

Abstract

Recruitment and retention issues associated with the growing nursing shortage in Canada are magnified in Nunavut, where the scope of nursing practice is much broader than in urban settings. The Qikiqtani General Hospital (QGH), a 35-bed hospital in Nunavut's capital, Iqaluit, was the home base for this multi-pronged pilot project that spanned 16 months to March 2011. The goals of the project included creating opportunities for front-line nurses to develop new clinical skills and knowledge and expand their competencies; offering enhanced critical care training relevant to the needs of nurses; and providing a smooth transition to entry to practice in a hospital setting for new graduate nurses.

An in-house mentorship program was developed, and contracts were made with three outside parties: the Critical Care Education Network (CRI), the Ottawa Hospital and the Perinatal Partnership Program of Eastern and Southeastern Ontario. A number of professional development opportunities were provided – for example, 26 nurses participated in the CRI's critical care training, and six nurses were trained as CRI trainers.

Overall, nurses were satisfied with the accessibility, delivery and applicability of the RTA education opportunities, and all nurses agreed that these opportunities increased their professional skills. A plan for the sustainability of the critical care portion of the Nunavut RTA project is currently in place, and the QGH is in the process of hiring a nurse educator for the hospital. This hiring will be a key piece to sustain the project initiatives. If the mentorship program is to continue, it will be essential to hire someone dedicated to the orientation of new graduates and new nurses.

Background

Recruitment and retention issues associated with the growing nursing shortage in Canada are magnified in Nunavut, because recruiting nurses to the Arctic is more difficult and nurses tend to migrate south in times of shortage.

The Nunavut Nursing Recruitment and Retention Strategy 2007–2012 noted the importance of providing further education and training to nurses currently in the workforce, and also of preparing Inuit for careers in nursing. The Nursing Strategy aims to increase retention of the existing workforce, reduce current vacancy rates, raise nurses' skill profiles and increase the number of Inuit in the nursing field.

Nunavut Arctic College provides a baccalaureate nursing program based in Iqaluit, but class sizes are small (e.g., five graduates in 2010) and most nurses must be recruited from outside Nunavut. This project took place at Qikiqtani General Hospital (QGH), a 35-bed hospital in Nunavut's capital, Iqaluit, which has a population of about 7,000.

The transition from student to practising nurse is difficult at the best of times, but this issue is exaggerated in the North, where the scope of nursing practice is much broader than in urban settings. At the QGH, nurses see patients of all ages in the three clinical areas: operating room, inpatient care and emergency. In this context, nurses must have an unusually broad range of competencies to care adequately for patients with a wide range of conditions. There has been concern that the resources available for orientation and mentoring were not adequate to provide a smooth transition from graduation to work for new graduates hired directly out of Nunavut Arctic College into QGH. Similarly, experienced nurses hired to work at the QGH generally don't have experience in all the areas where they are required to work as they must care across the lifespan. Nurses in Nunavut therefore need a broad range of knowledge and judgment for appropriate assessment and intervention for everything from minor medical concerns to critical care. This broad knowledge is necessary for safe practice, but fluctuations in patient acuity, a shortage of nurses, the remote location, financial restraints and a general lack of resources make it difficult for nurses to maintain and update this range of expertise.

Nurses have identified that the care provided to critically ill patients at QGH is a matter of particular concern. The hospital does not have an intensive care unit (ICU), although there are two beds that can accommodate critical care patients who are awaiting airline transfer to Ottawa. Nurses are expected to provide competent and safe care during this interim period, which can last four hours

or, depending mainly on weather conditions, longer. (Because of a new contract, the wait time for a medical evacuation was reduced considerably, to about one hour in good weather, near the end of the project.) But critically ill patients are infrequent at QGH and they can be neonates, children, adolescents or adults – a range that makes it difficult for nurses to gain adequate experience to develop competence in critical care.

This project was a collaboration between the Government of Nunavut, Nunavut Arctic College (NAC) and the Nunavut Employees Union (NEU) (there is no separate nurses' union in Nunavut). Representatives from these groups made up the project steering committee, which provided guidance and direction.

Objectives

The Nunavut pilot RTA project objectives were to

- maintain and develop opportunities for front-line nurses at the QGH to develop new clinical skills and knowledge and expand their competencies;
- provide enhanced critical care training relevant to the needs of nurses at the QGH;
- provide a smooth transition to entry to practice in a hospital setting for new graduate nurses;
- develop greater capacity for nursing leadership, professional development and support in Nunavut;
- build collaborative relationships and resource sharing among partners;
- increase retention and recruitment of nurses at QGH.

Overview: Design and Planning

This project spanned 16 months, from November 2009 to March 2011. A full-time project coordinator was hired and conducted informal one-to-one interviews with 35 of the approximately 40 nurse employees at QGH to gather information about the areas of professional development that they thought would be most useful to them. The top areas were critical care, palliative care, mental health and wound management. The project had three main components: (a) a mentorship program for new graduates, (b) enhanced critical care training and (c) ongoing professional development opportunities for nurses to improve their clinical and leadership skills.

Contracts were made with three outside parties. The Ottawa-based Critical Care Education Network (CRI) was hired to provide enhanced critical care training for QGH nurses. The CRI is a Canadian non-profit organization with a strong

track record of providing critical care training to nurses, physicians and other healthcare providers. A contract with the Ottawa Hospital (OH) allowed the use of clinical nurse educators from OH to provide clinical education on site and via video conferencing. Labour and delivery is a large area of care in QGH, and many staff identified the need for advanced training to care for at-risk newborns. The Perinatal Partnership Program of Eastern and Southeastern Ontario (now known as the Champlain Maternal Newborn Regional Program) was contracted to deliver the Acute Care of at-Risk Newborns (ACoRN) in QGH.

In addition to the project coordinator, other resources included nurse educators and a human resources specialist from OH, CRI and ACoRN consultants and a consulting firm to conduct the project evaluation. The Nunavut project was not included in the national RTA project evaluation because the project in Nunavut started much later than the other projects.

When the project was initiated, the QGH had no critical care policies and procedures. These had to be developed, because having them in place was a precondition for the training offered by CRI. This requirement had not been anticipated originally. Critical care resource manuals were purchased to support nurses in the implementation of new critical care knowledge and skills. These included the American Association of Critical Care Nurses' Procedure Manuals for both adult and pediatric patients, up-to-date drug guides and the pharmaceutical formulary from SickKids (The Hospital for Sick Children) in Toronto.

A simulation lab was required to carry out the critical care training and to allow nurses the tools to practise and maintain infrequently used critical care skills. To that end, the following equipment was purchased: low-fidelity adult and pediatric simulators, a chest auscultation simulator, wound care model, peritoneal dialysis model and an ostomy model.

Guides and resources for planning and implementing mentorship programs were purchased and, as a resource for mentors and protégés, the telementoring online resource of the Registered Nurses' Association of Ontario (RNAO) was also purchased. It was made available to all nurses at QGH. The RNAO's best practice guidelines were procured as a resource for nurses and to complement the in-services provided by OH.

A camcorder and a device to record video conferences were also obtained in order to record, for use by nurses who were unable to attend, both live in-service education sessions and those offered through video conferencing.

Implementation

Mentorship

A mentorship program was implemented to support new graduates through their transition to work. Eight experienced QGH nurses volunteered to participate and received on-site mentorship skills training; four attended a day-long workshop; and four, who were unable to attend, were later given a shortened orientation. A mentorship orientation manual was adapted from similar resources created for the Manitoba, New Brunswick and Nova Scotia RTA projects. Five new graduate nurses hired from Nunavut Arctic College were given the mentorship orientation and were subsequently mentored one-on-one throughout their six-month orientation period. Mentors attempted to meet with protégés for a minimum of one hour a week. Group mentoring was also incorporated into the program and took place approximately once a month. One mentor would meet with all new graduates during these sessions.

Enhanced critical care training

This training, by the Critical Care Education Network (CRI), was presented in a "train the trainer" format, allowing the QGH nurses the opportunity to learn to teach critical care concepts and procedures. Training was both hands-on and in a lecture format, and took place over three days. CRI provided continuing education modules, poster boards and videos to the nurse trainings in order to help nurses maintain their skills and knowledge.

Professional development opportunities

In-services

Staff nurses identified areas of need, and clinical nurse educators from OH offered education on site and through video conferencing. In-service workshops were held in palliative care, wound care, the back injury prevention program, change management and team building. A three-day on-site in-service on post-anesthesia care was provided for all operating room and recovery room nurses.

Work/study

Seven QGH nurses participated in work/study sessions at OH. The sessions lasted a week; areas of study included pre-operative education, new nurse orientation, critical care and care of palliative patients. The QGH nurses met with educators and nurses to observe, collect resources and see what resources/programs at OH could be used or adapted at QGH. The work/study trips to OH were restricted to experienced nurses instead of including recent graduates as had been planned, because the trips did not provide hands-on clinical skills experience.

Acute Care of the at-Risk Newborn (ACoRN)
The Perinatal Partnership Program of Eastern and Southeastern Ontario (now the Champlain Maternal Newborn Regional Program) brought the ACoRN course to QGH. ACoRN's 16-hour course teaches the concepts and basic skills of neonatal stabilization and, where necessary, preparation for transport to a referral facility. ACoRN was specifically designed to meet the needs of practitioners who may be faced with a baby who is at risk or ill.

Challenges

The mentoring program, originally to be an e-mentoring program using mentors from OH to be matched with new graduates and experienced nurses, was revised to be in-house. The project steering committee and front-line nurses decided it was better for QGH nurses to develop their own mentoring skills. The project coordinator and a human resources specialist from OH provided the orientation session for both mentors and protégés. However, the start of mentoring was delayed because of timing. New nursing graduates from Nunavut Arctic College began work in June and July 2010, during prime vacation time. Delays were also caused by job changes, conflicting schedules and poor initial matches.

The need to develop QGH critical care policies and procedures, before CRI training could start, led to extra costs and delays. The number of in-service education sessions (not including CRI training) had to be reduced because other education offerings, independent of the RTA project, led to education overload for nurses. As well, in-service distance learning was plagued by multiple technical difficulties, including power outages and bad telecommunication connections.

During the needs assessment process conducted by the project coordinator, nurses identified mental health as a field in which they wanted more training, but logistical issues arose when the territory's psychiatrist decided to provide mental health training outside the RTA project.

Outcomes

Five new graduates from Nunavut Arctic College were given supernumerary status (their positions were excess to the full staff complement on a unit) for the first six months of their employment. This status allowed them to participate more easily in the mentorship program and in education provided by the RTA project.

Critical care policies and procedures were developed at the QGH. Twenty-six nurses participated in the critical care training provided by CRI: six nurses were trained as "trainers" over a three-day course and the other 20 (including two

from Rankin Inlet) received a shortened one-day course that delivered the most needed knowledge and skills for critical care. The training provided critical thinking skills and practice in skills including in-line suctioning, central venous lines, arterial lines and hemodynamic monitoring. The simulation lab purchased through the RTA project supplied the material support required to maintain critical care skills. Less than a month after the QGH nurses were trained as trainers, they offered one-day-long critical care training sessions for 15 nurses.

Nurses indicated that the mentorship program and other aspects of the project helped improve the hospital's ability to facilitate the entry-to-practice transition for new graduates. Over the duration of the mentorship program, nurse satisfaction with new hires increased 11%.

Overall, nurses were satisfied with the accessibility, delivery and applicability of the RTA education opportunities, and all nurses agreed that these opportunities resulted in increased professional skills. The majority indicated that the professional development opportunities offered through the RTA project gave them additional professional supports and sources of expertise, and furthered their development of leadership and clinical skills. Many nurses felt that time constraints with the work/study component of the project (at OH) meant they did not have time to apply newly acquired skills in the course prior to taking them back to the work site.

The relationships between the Government of Nunavut, Nunavut Arctic College and the Nunavut Employees Union became more collaborative as the project progressed. This was the first time that several of these partners had the opportunity to work together on common issues in a formal manner.

Given the limited timeframe, it was not possible to measure the effects of the project on the retention and recruitment of nurses. Importantly, however, the project evaluation did show improvements along several measures of job satisfaction, an indicator that positively correlates with retention and recruitment (Tourangeau et al. 2006, O'Brien-Pallas et al. 2010, Geiter et al. 2011).

Lessons Learned

- The start-up time of a mentorship should be carefully chosen to avoid prime vacation time. Having more mentors than protégés also allows some flexibility in planning – if a pair does not work out, other mentors are available. As well, any keen mentors who are not matched can be used as group mentors to keep them engaged in the program.

- A lag time should be considered between the new-graduate employment start date and the start-up of the mentorship program. This will allow protégés time to identify challenges in the workplace that they can bring to their mentor. It is also suggested that a kick-off event begin the program to give both parties the chance to meet in an informal setting.
- Group mentoring allows new graduates to recognize that they are all in the same boat and talk about some of the similar issues they are facing. For those unsure of how to use a one-on-one mentor, the group mentoring option provided an alternative forum for discussing challenges and successes. It allowed them both peer support and a chance to bounce ideas off and receive feedback from an experienced nurse simultaneously.
- An education committee to coordinate all education at QGH would minimize scheduling difficulties. Such a committee should involve all healthcare professions so that they can work together to coordinate education on an annual basis. This would help prevent miscommunication and double-booking of educational events. As well, providing a list of educational opportunities to staff that is regularly updated may aid in making education a regular part of work.

Sustainability and Transferability

A plan for the sustainability of the critical care portion of the Nunavut RTA project is currently in place. Teaching notes and PowerPoint presentations are available to all six of the critical care trainers for use in ongoing teaching of co-workers at QGH, and the new simulation lab is available to all staff to keep critical care skills up to date. The development of policies, procedures and infusion guides ensures consistency in care of critically ill patients and provides an ongoing resource to nurses caring for critically ill patients. As well, a system has been put in place to support nurses during the implementation of new policies, procedures and infusion guides. If a critically ill patient is admitted to QGH when a critical care trainer is not on site, an on-call critical care trainer will be called in to support the nurse caring for the patient. This system will continue until nurses are comfortable with their new responsibilities in critical care.

QGH is in the process of hiring a nurse educator for the hospital, and this position will be a key piece to sustain the project initiatives. An educator is required for the regular provision of ongoing in-services and larger courses, such as Advanced Cardiac Life Support (ACLS), Paediatric Advanced Life Support (PALS) and Acute Care of the at-Risk Newborn (ACoRN).

If the mentorship program is to continue, it will be essential to hire someone dedicated to the orientation of new graduates and new nurses who can also

coordinate the mentorship program, match mentors and protégés and arrange group mentoring sessions. It would not be difficult for such a person to continue this initiative with the resources and capacity now in place. The QGH now has seven trained mentors who have had experience mentoring new graduates; there are also five recent graduates who have been through the mentorship program and may be willing to act as mentors to future graduates. The program has the potential to grow to incorporate community health centres and nursing students, and the potential exists to develop an e-mentoring program throughout Nunavut. This would be an innovative use of telehealth. It is also possible to build on the collaboration between the Nunavut Arctic College and the QGH and put in place a mentorship program for nursing students. Pairing students with a new graduate or new nurse would offer an opportunity to build leadership capacity at QGH and lend support to students exploring career possibilities in nursing.

The education component of this project has the potential to expand in Iqaluit and be adapted to other communities in Nunavut and, indeed, other rural, remote and isolated communities throughout Canada. The use of video conferencing technology is a simple way to bring education to rural and remote communities without huge cost.

The collaboration between the Nunavut Arctic College and the QGH has multiple implications for the future. The simulation lab purchased through the RTA project for QGH nurses is also a learning resource available for NAC nursing students in practicum placements at the hospital. Multiple in-services offered through the project were opened to nursing faculty at the NAC, and this allowed dialogue between faculty members and staff nurses that is contributing to a better understanding and relationship between academia and the front line, theory and practice.

Evaluation

Because the Nunavut project began after the other nine pilots, it was not included in the national RTA evaluation. A separate evaluation was undertaken that reviewed the range of course offerings, training hours, and reports from nurses, nurse managers and course instructors regarding the extent to which skills and knowledge were enhanced.

Many initiatives were still underway at the time of the evaluation. Some changes, such as shifting the organizational climate, require a longer timeframe to assess results. The impacts of mentoring programs are often assessed only after new hires have been employed for 18 months.

A framework for monitoring progress and evaluating impacts is in place. However, the full impact of the RTA in Nunavut could not be adequately assessed at the time of this evaluation. The project would need to operate and be evaluated after an additional 18 months to determine the sustainability and transferability of the achievements to date.

The evaluation found that the RTA in Nunavut successfully completed important work to achieve all six project objectives. It has left a lasting legacy in terms of a nursing workforce with enhanced skills and more confident nurses who are able to meet leadership challenges.

It has also provided the building blocks for creating an effective system of learning and professional development for Nunavut nurses. It has helped the organization to recognize what can be achieved with leadership, focus, a common set of objectives, adequate resources and a staff that is remarkably able to pull together as a team for patients, professional learning and the future of nursing.

References

De Gieter, S., J. Hofmansi and R. Pepermans. 2011. "Revisiting the Impact of Job Satisfaction and Organizational Commitment on Nurse Turnover Intention: An Individual Differences Analysis." *International Journal of Nursing Studies* 48(12): 1562-9.

O'Brien-Pallas, L., G. Tomblin Murphy and J. Shamian. 2010. *Understanding the Costs and Outcomes of Nurses' Turnover in Canadian Hospitals.* Canadian Health Services Research Foundation.

Tourangeau A.E. and L.A. Cranley. 2006. "Nurse Intention to Remain Employed: Understanding and Strengthening Determinants." *Journal of Advanced Nursing* 55 (4): 497-509.