



Hospital Care

RNAO Vision backgrounder

April 2014

Defining Acute (hospital) Care

According to legislation, a hospital is broadly defined as: “any institution, building or other premises or place that is established for the purposes of the treatment of patients and that is approved under this Act as a public hospital.”¹

The World Health Organization defines hospitals as “... institutions that have an organized medical and other professional staff, and inpatient facilities, and deliver medical, nursing and related services 24 hours per day, seven days per week. Hospitals offer a range of acute, convalescent and terminal care using diagnostic and curative services in response to acute and chronic conditions arising from diseases as well as injuries and genetic anomalies. In doing so, they generate essential information for research, education and management. Traditionally oriented on individual care, hospitals are increasingly forging closer links with other parts of the health sector and communities in an effort to optimize the use of resources for the promotion and protection of individual and collective health status.”²

Health human resources profile of registered nurses (RN) and nurse practitioners (NP) in acute care

In 2013, the College of Nurses of Ontario (CNO) reports the following number of RN positions in Ontario³:

- 59,335 (RN)– Acute Care Hospital
 - 61.4% full-time, 25.5% part-time and 13.2% casual
- 862 (NP) – Acute Care Hospital
 - 70.3% full-time, 10.7% part-time and 19.0% casual

Context for Action

Patient complexity and acuity are rapidly increasing and require the full scope of practice utilization of RNs.^{4,5,6,7,8} This will continue over the long-term. At the same time, hospitals are receiving minimal or no increases in funding.⁹ The funding model is also changing from global budgets to patient-based funding.¹⁰ A shift in the role and funding of the hospital, combined with changing demographics, demands a robust nursing workforce that can effectively meet this demand. The RN role and presence must be secured within hospitals to achieve person-centred care.¹¹ The evidence is clear; when you increase the number of RNs in hospitals, patients do better and the system saves money. When you decrease the number of RNs in hospitals, (often as a short-sighted attempt to save money) patients encounter more complications at an additional cost to the system. See Appendix A for a briefing on staffing issues.

It is imperative that nursing leadership be embraced in the hospital environment. We know that nursing leadership shapes the profession, facilitates policies on mentoring and evidence-based practice and helps navigate change in challenging times.¹² Nursing leadership can be enabled in hospitals by fully utilizing and enabling chief nurse executives to participate at the board table and within senior management.^{13,14}

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There is also tremendous opportunity to improve patient access in hospitals through the use of advanced practice nurses. Relatively recent legislative amendments enable NPs to admit, treat, transfer and discharge hospital in-patients.¹⁵ Hospitals can use RNAO's *NP Utilization Toolkit* to ensure that they are adopting these changes to improve access, flow and outcomes.¹⁶ There are also opportunities to fund additional clinical nurse specialist positions and expand their current capacity. Clinical nurse specialists are RNs with education at the graduate level and provide specialized nursing care.

Appendix A

Matrix of Recent Nursing Staffing Evidence

Article Title	Authors	Publication	Key Findings
HOSPITALS			
Nurse staffing and education and hospital mortality in nine European Countries: a retrospective observational study	Aiken, L.H., Sloane, D.M., Bruyneel, L., Van den Heede, K., Griffiths, P., Busse, R., Diomidous, M., Kinnunen, J., Kozka, M., Lesaffre, E., McHugh, M.D., Moreno-Casbas, M.T., Rafferty, AM., Schwendimann, R., Scott, P.A., Tishelman, C., van Achterberg, T., & Sermeus, W.	The Lancet (2014)	<p>“Our findings shows that an increase in nurses’ workload increases the likelihood of inpatient hospital deaths, and an increase in nurses with a bachelor’s degree is associated with a decrease in inpatient hospital deaths.”</p> <p>“An increase in a nurses’ workload by one patient increased the likelihood of an inpatient dying within 30 days of admission by 7%, and every 10% increase in bachelor’s degree nurses was associated with a decrease in this likelihood by 7. These associations imply that patients in hospitals in which 60% of nurses had bachelor’s degrees and nurses cared for an average of six patients would have almost 30% lower mortality than patients in hospitals in which only 30% of nurses had bachelor’s degrees and nurses cared for an average of eight patients.”</p>
The Changing Skill mix in Nursing: Considerations For and Against Different Levels of Nurse	Jacob, E.R., Mckenna, L., & D’amore, A.	Journal of Nursing Management (2013).	<p>“Changes in skill mix need to be balanced with quality care, as if increasing the skill mix produces better outcomes for patients, there are compelling reasons for health care systems to consider configurations that use higher numbers of RNs rather than cheaper alternatives.”</p> <p>“... the reduction in the length of hospital stay and decreased patient complication rates found when employing greater numbers of RNs negates the financial argument for employing cheaper staff to undertake the ‘simpler’ tasks.”</p>
The Association Between Nurse Staffing and Hospital	Glance, L.G., Dick, A.D., Osler, T.M., Mukamel, D.B., Li,	BMC Health Services Research	“A 1% increase in the ratio of licensed practical nurse (LPN) to total nursing time was associated with a 4% increase in the odds of mortality and a 6% increase in the odds of sepsis. Hospitals in the highest quartile of

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Outcomes in Injured Patients	Y., & Stone, P.W.	(2012), Vol. 12	<p>LPN staffing had three excess deaths and five more episodes of sepsis per 1000 patients compared to hospitals in the lower quartile of LPN staffing.”</p> <p>“These findings suggest that the increased risk of mortality associated with higher levels of LPN staffing is caused by the substitution of LPNs for RNs.”</p>
Staffing Matters – Every Shift	West, G., Patrician, P.A., & Loan, L.	American Journal of Nursing (2012), 112(12), 22-27.	<p>In Medical-Surgical Units, a 10% decrease in RN skill mix resulted in an 11% increased probability of falls, a 30% increased probability of falls with injury and 13% increased probability of medication errors.</p> <p>In Critical Care Units, a 10% decrease in RN skill mix resulted in a 20% increased probability of falls, a 36% increased probability of falls with injury and a 17% increased probability of medication errors.</p>
Nurse Staffing is an Important Strategy to Prevent Medication Errors in Community Hospitals	Frith, K.H., Anderson, E.F., Tseng, F., & Fong, E.A.	Nursing Economics (2012), 30(5), 288-294.	<p>“Our findings indicate nurse staffing is an important human resource to keep patients safe from medication errors. As the RN HPEqPD increased, the medication errors decreased; conversely, as the LPN HPEqPD increased, the medication errors increased.”</p> <p>“Findings indicate even a small number of LPNs in staffing can contribute to medication errors. Even though using LPNs reduces payroll expenses, the safety of patients could be affected. This study adds to the body of evidence that patient care is most safely delivered when there are enough RN care hours and when LPN hours are reduced or eliminated. The cost associated with RN hours must be balanced against the cost of an error.”</p>

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Patient Turnover and the Relationship Between Nurse Staffing and Patient Outcomes	Park, S.H., Blegen, M.A, Spetz, J., Chapman, S.A., & De Groot, H.	Research in Nursing & Health (2012), 35, 277-288.	“In general, we found that more RN hours per patient day were associated with lower rates of [Failure-To-Rescue], controlling for non-RN staffing and hospital characteristics. This finding is consistent with that of previous studies where investigators found an inverse relationship between RN staffing and FTR.

References

- ¹ Public Hospitals Act: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90p40_e.htm#BKO
- ² World Health Organization: <http://www.who.int/topics/hospitals/en/>
- ³ CNO Data Query Tool
- ⁴ Ontario’s Action Plan for Health Care: http://www.health.gov.on.ca/en/ms/ecfa/healthy_change/docs/rep_healthychange.pdf
- ⁵ RNAO’s Primary Solutions for Primary Care Report: www.rnao.ca/primary_care_report
- ⁶ The Commission on the Reform of Ontario’s Public Services: <http://www.fin.gov.on.ca/en/reformcommission/chapters/ch5.html>
- ⁷ Toronto Star Editorial Board: http://www.thestar.com/opinion/editorials/2013/10/15/let_ontario_nurses_prescribe_basic_drugs_editorial.html
- ⁸ Registered Nurses’ Association of Ontario (2012). Enhancing Community Care for Ontarians (ECCO) White Paper: <http://www.rnao.ca/ecco>
- ⁹ OHA Media Release: <http://www.newswire.ca/en/story/1157707/ontario-budget-avoids-key-actions-necessary-to-sustain-ontario-s-health-care-system>
- ¹⁰ Health System Funding Reform: http://health.gov.on.ca/en/pro/programs/ecfa/funding/hs_funding.aspx
- ¹¹ RNAO Strengthening Client Centred Care in Hospitals: <http://rnao.ca/policy/position-statements/strengthening-client-centered-care-hospitals>
- ¹² RNAO Developing and Sustaining Nursing Leadership Best Practice Guideline: http://rnao.ca/sites/rnao-ca/files/LeadershipBPG_Booklet_Web_1.pdf
- ¹³ Chief Nursing Executive Governance and Leadership Initiative: <http://rnao.ca/policy/reports/chief-nursing-executive-governance-and-leadership-initiative-faq>
- ¹⁴ Nurse Executive Leader Toolkit: <http://rnao.ca/resources/toolkits/nurse-executive-leader-toolkit/introduction-and-overview>
- ¹⁵ RNAO NP Utilization Toolkit: <http://rnao.ca/resources/toolkits/np-toolkit>
- ¹⁶ RNAO NP Utilization Toolkit: <http://rnao.ca/resources/toolkits/np-toolkit>