RESEARCH TO ACTION Staffing Tool Projects

Introduction

Nurses from across the country, and from all health settings, are often overwhelmed by the number and acuity of their patients. In a recent survey of emergency department directors, for example, 82% of 158 directors reported a perception that overcrowding was a major source of stress for nurses (Bond et al. 2007). Not surprisingly, then, Canadian nurses have exceptionally high rates of overtime, sick time and absenteeism (CFNU 2011).

A wealth of studies document the effects of poor work environments on nurses (Lasota 2009; Greco et al. 2006; Laschinger 2004). Nurses in Canada and abroad report alarming rates of burnout (Lavoie-Tremblay et al. 2008; Poghosyan et al. 2010; McHugh et al. 2011), and nurses will leave their jobs if they are not satisfied with working conditions (O'Brien-Pallas et al. 2001; Aiken et al. 2002). A large Canadian study covering 181 nursing units in 10 provinces found a mean turnover rate of 19.9%, with an average cost of \$25,000 per nurse turnover (O'Brien-Pallas et al. 2008). Conversely, improved job satisfaction and a positive work environment correlate with improved retention and recruitment (McGillis Hall 2003; Tourangeau et al. 2006; O'Brien-Pallas et al. 2008; De Gieter et al. 2011).

Appropriate staffing levels play a large role in ensuring healthy work environments. Studies show that staffing below recommended standards is associated with increased risk of mortality (Needleman et al. 2011), whereas increased RN staffing is associated with lower mortality, decreased odds of pneumonia, unplanned extubation, respiratory failure, cardiac arrest, shorter length of stay and a lower risk of failure to rescue (Kane et al. 2007). Increasing staffing levels based on demand has also been linked to nurses reporting a significant increase in overall job satisfaction, particularly with adequacy of RN staff and time for patient education (Spetz 2008). Nurse autonomy has also been linked with job satisfaction. Nurses desire opportunities to provide further input on assessing patient acuity, changes in patient needs and staffing requirements (Kramer and Schmalenberg 2003; Laschinger et al. 2003).

Two of the *Research to Action* (RTA) pilot projects implemented staffing tools that aimed to help ensure appropriate staffing levels and enhance the role of nurses in staffing decisions. Their overall goal was to improve work environments, thereby reducing turnover and improving patient care.

- The Saskatchewan project implemented the Synergy Model staffing tool, which seeks to find the best fit between patient and nurse characteristics. The model allowed the bedside nurse, in consultation with management, to adjust nurse—patient ratios to reflect changes in the number or acuity of patients.
- The Ontario project studied the indicators that are required to assess the most
 effective level of staffing on an individual unit. The project allowed nurse
 leaders within practice settings to measure nursing work and make informed
 decisions about the appropriateness of staffing levels.

References

Aiken, L., S.P. Clarke, D.M. Sloane, J. Sochalski and J.H. Silber. 2002. "Hospital Nurse Staffing and Patient Mortality, Nurse Burnout and Job Dissatisfaction." *Journal of the American Medical Association* 288(16): 1987–93.

Bond, K., M.B. Ospina, S. Blitz, M. Afilalo, S.G. Campbell, M. Bullard et al. 2007. "Frequency, Determinants and Impact of Overcrowding." *Healthcare Quarterly* 10(4): 32–40.

Canadian Federation of Nurses Unions (CFNU). 2011. "Trends in Own Illness or Disability-Related Absenteeism and Overtime among Publicly Employed Registered Nurses: Quick Facts." Ottawa: Informetrica Limited.

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): 1562–69.

Greco, P., H.K.S. Laschinger and C. Wong. 2006. "Leader Empowering Behaviours, Staff Nurse Empowerment and Work Engagement/Burnout." *Canadian Journal of Nursing Leadership* 19(4): 41–56.

Kane, R., T. Shamliyan, C. Mueller, S. Duval and T. Wilt. 2007. "The Association of Registered Nurse Staffing Levels and Patient Outcomes." *Medical Care* 45(12): 1195–204.

Kramer, M. and C. Schmalenberg. 2003. "Magnet Hospital Nurses Describe Control Over Practice." Western Journal of Nursing Research 25(4): 434–52.

Laschinger, H.K.S. 2004. "Hospital Nurses' Perceptions of Respect and Organizational Justice." *Journal of Nursing Administration* 34: 354–64.

Laschinger, H.K.S., J. Almost and D. Tuer-Hodes. 2003. "Workplace Empowerment as a Predictor of Nurse Burnout in Restructured Healthcare Settings." *Longwoods Review* 1(3): 2-11.

Lasota, M. 2009. Trends in Own Illness or Disability-Related Absenteeism and Overtime among Publicly Employed Registered Nurses. Summary of Key Findings. Ottawa: Canadian Federation of Nurses Unions.

Lavoie-Tremblay, M., L. O'Brien-Pallas, C. Gélinas, N. Desforges and C. Marchionni. 2008. "Addressing the Turnover Issue among New Nurses from a Generational Viewpoint." *Journal of Nursing Management* 16: 724–33.

McGillis Hall, L. 2003. "Nursing Intellectual Capital: A Theoretical Approach for Analyzing Nursing Productivity." *Nursing Economics* 21(1): 14–19.

McHugh, M., A. Kutney-Lee, J. Cimiotti, D. Sloane and L. Aiken. 2011. "Nurses' Widespread Job Dissatisfaction, Burnout, and Frustration with Health Benefits Signal Problems for Patient Care." *Health Affairs* 30(2): 202–10.

Needleman, J., P. Buerhaus, S. Pankratz, C. Leibson and S. Stevens. 2011. "Nurse Staffing and Inpatient Hospital Mortality." *New England Journal of Medicine* 364: 1037–45.

O'Brien Pallas, L., D. Irvine Doran, M. Murray, R. Cockerill, S. Sidani, B. Laurie-Shaw and J. Lochhaas-Jerlack. 2001. "Evaluation of a Client Care Delivery Model, Part 1: Variability in Nursing Utilization in Community Home Nursing." *Nursing Economic*\$ 19(6): 267–76.

O'Brien-Pallas, L., G. Tomblin Murphy and J. Shamian. 2008. *Understanding the Costs and Outcomes of Nurses' Turnover in Canadian Hospitals. Final Report.* Toronto: Nursing Health Services Research Unit, University of Toronto.

Poghosyan, L., S. Clarke and M.A. Finlayson. 2010. "Nurse Burn-out and Quality of Care: Cross-National Investigation in Six Countries." *Research in Nursing and Health* 33: 288–98.

Spetz, J. 2008. "Nurse Satisfaction and the Implementation of Minimum Nurse Staffing Regulations." *Policy, Politics and Nursing Practice* 9: 15–21.

Tourangeau, A.E., G. Cummings, L.A. Cranley, E.M. Ferron and S. Harvey. 2006. "Determinants of Hospital Nurse Intention to Remain Employed: Broadening Our Understanding." *Journal of Advanced Nursing* 66(1): 22–32.