

## THE VALUE OF REGISTERED NURSES

*Nurses are a good investment for the health system. More than 250,000 registered nurses are working on the front lines of care in Canada saving lives, promoting health and reducing costs to the health system.*

### SAVING LIVES

*Registered nurses provide highly skilled assessments and interventions that improve the quality of care and assist patients in achieving an optimal state of health. There is a body of evidence showing that care provided by registered nurses is associated with reduced adverse events and improved health outcomes.*

- A higher proportion of registered nurses in the mix of licensed care providers has been associated with shorter length of stays and lower rates of shock and cardiac arrest, urinary tract infections, pneumonia and respiratory failure among medical and surgical patients (Kane, Shamliyan, Mueller, Duval & Wilt, 2007; Needleman, Buerhaus, Mattke, Stewart & Zelevinsky, 2002).
- In-patient deaths could be avoided by increasing the hours of care provided by registered nurses (Dall, Chen, Seifert, Maddox & Hogan, 2009; Kane et al., 2007; Needleman, Buerhaus, Stewart, Zelevinsky & Mattke, 2006; Estabrooks, Midodzi, Cummings, Ricker & Giovannetti, 2005; Person et al., 2004).
- A higher proportion of professional nurses on medical-surgical units has been associated with lower rates of medication errors and wound infections (McGillis Hall, Doran & Pink, 2004).
- Increased registered nursing time in long-term care facilities has been associated with reduced adverse outcomes among residents in such areas as pressure ulcers, hospital admissions, urinary tract infections, weight loss and deterioration in ability to perform activities of daily living (Horn, Buerhaus, Berstrom & Smout, 2005).
- By increasing the number of entry points to care, coordinating care and assisting patients in navigating the health-care system, registered nurses are reducing wait times and providing timely access to care (CNA, 2009).

Summaries of research articles related to staffing can be found on the CNA website: [http://www.cna-aiic.ca/CNA/issues/research\\_summaries/nurse\\_staffing/default\\_e.aspx](http://www.cna-aiic.ca/CNA/issues/research_summaries/nurse_staffing/default_e.aspx).

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## PROMOTING HEALTH

*The greatest impact on the health system may be achieved by giving priority to nursing interventions that promote healthy living, prevent and manage chronic diseases and reduce the demand for health services. According to the World Health Organization (n.d.), at least 80 per cent of cases of premature heart disease, stroke and type 2 diabetes, and 40 per cent of cancer cases, can be prevented through a healthy diet, regular activity and avoidance of tobacco products. Health promotion by nurses is showing some positive results.*

- In one study, health promotion and prevention care provided by registered nurses resulted in improved mental and physical functioning, a reduction in depression and lower costs per person for prescription drugs among elderly clients receiving home care (Markle-Reid, Weir, Browne, Roberts, Gafni & Henderson, 2006).
- Nurses are taking the University of Ottawa Heart Institute's smoking cessation program to the bedsides of patients in hospitals across the country to help them quit smoking. The success of the program is evident in the fact that up to 50 per cent of the participants remained smoke-free for at least six months after leaving the hospital (University of Ottawa Heart Institute, 2007).
- Nurse practitioners are effective in promoting health and better management of chronic diseases. Studies have shown that patients with hypertension respond better to the care provided by nurse practitioners than to that provided by physicians (Canadian Health Services Research Foundation, 2002).
- Home visits by nurses improve child and maternal outcomes. A study found that home visits by nurses had a positive effect on "parental care; child abuse, injury and neglect; number of subsequent pregnancies; workforce participation; and social assistance use." Home visits by paraprofessionals have not been found to be as effective (Ford-Gilboe, Wuest, Varcoe & Merritt-Gray, 2006).

## REDUCING COSTS

*By providing quality care, registered nurses reduce both the length of hospital stay among patients receiving acute care interventions and the number of readmissions among clients receiving care at home. As service delivery models shift from institutions to the community, registered nurses in home care and other community programs are well-positioned to provide more cost-effective service.*

*There is a business case for investing in nursing.*

- Increasing the proportion of hours of care provided by registered nurses is associated with net cost savings through reduced length of hospital stays and avoided adverse outcomes (Needleman et al., 2006).
- Increasing the number of registered nursing hours per patient day has an estimated value of US\$60,000 per additional full-time equivalent position in avoided medical costs and improved national productivity (Dall et al., 2009). Estimates for the economic value of nursing would be higher if other factors were taken into



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account, such as the cost savings that could be realized through reduced nurse turnover, lower risk of readmissions or fewer malpractice claims.

- Researchers in the Netherlands determined that nurse-led follow-up of children with asthma was as effective as follow-up by a pediatrician and that the cost was 17.5 per cent lower (Kamps, Roorda, Kimpen, Overgoor-van de Groes, van Helsdingen-Peek & Brand, 2004).
- In England, nurse-led respiratory intermediate care teams that provided care for patients with chronic respiratory disease during acute episodes have realized cost savings through reduced length of hospital stays and avoided admissions. The cost of providing in-home care was estimated to be 62 per cent of the cost of conventional care (Ward, Barnes & Ward, 2005).

Other summaries of studies showing the cost-effectiveness of nursing can be found on the CNA Return on Investment (ROI) web pages at <http://roi.cna-aiic.ca>.

*This document has been prepared by CNA to provide information.  
The information presented here does not necessarily reflect the views of the CNA Board of Directors.  
Published June 2009*

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