



ISSUES DISCUSSION at Annual Meeting 2009

NURSES' SOLUTIONS FOR COST-EFFECTIVE HEALTH CARE

Issue

The global recession is having devastating effects on the Canadian economy. Economists have predicted that Canada will lose 600,000 jobs during this recession and that an economic recovery will not occur any time in the near future (Beltrame, 2009). The declining economy, coupled with record high health-care expenditures, places the health care industry in a vulnerable position. More than 250,000 registered nurses in Canada are working on the front lines, saving lives, promoting health and reducing costs to the health system (Canadian Institute for Health Information, 2008). Registered nurses are in an ideal position to offer solutions for cost-effective health care.

Background

Governments, health care leaders and policy makers will be looking for innovative solutions to address the economic pressures. The work of nurses positions them well to provide solutions for cost-effective health services. By increasing the number of entry points, coordinating care and assisting patients in navigating the system, registered nurses improve health outcomes, reduce lengths of hospital stay, reduce wait times, and provide timely and cost-effective access to care.

There is evidence to support the fact that nurses are a good investment.

Saving Lives

Studies have shown that the care provided by registered nurses is associated with fewer adverse events and better health outcomes.

- Higher RN staffing has been associated with shorter lengths of stay and lower rates of shock and cardiac arrest, urinary tract infections, pneumonia and respiratory failure (Kane et al., 2007; Needleman et al., 2002).
- Hospital patient deaths could be avoided by increasing the hours of care provided by registered nurses (Dall et al., 2009; Kane et al., 2007; Needleman et al., 2006; Estabrooks et al., 2005; Person et al., 2004).
- An increase in registered nursing time in long-term care facilities has been associated with reduced adverse outcomes among residents in such areas as pressure ulcers, hospitalizations, urinary tract infections, weight loss and deterioration in ability to perform activities of daily living (Horn, Buerhaus, Berstrom & Smout, 2005).

Promoting Health

- The provision of health promotion and prevention care to elderly home care clients by registered nurses has been shown to result in improved mental and physical functioning, a reduction in depressive symptoms and a lower cost per person for prescription drugs (Markle-Reid et al., 2006).
- Nurses are taking the University of Ottawa Heart Institute's smoking cessation program to the bedsides of hospitalized patients 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 effectively promote 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).

Reducing Costs

- Increasing the proportion of hours of care provided by registered nurses is associated with net cost savings through reduced lengths of hospital stay and avoided adverse outcomes (Needleman et al., 2006).
- Researchers in the Netherlands have determined that nurse-led follow-up of children with asthma is as effective as pediatrician-led follow-up and that the cost of outpatient follow-up by nurses is 17.5% lower than that by pediatricians (Kamps et al., 2004).
- In England, nurse-led respiratory care teams that care for patients with chronic respiratory disease in their homes during acute episodes have realized cost savings through reduced lengths of hospital stay and avoided admissions. The cost of providing in-home care was estimated to be 62 per cent of the cost of conventional hospital care (Ward, Barnes & Ward, 2005).

Solutions for Cost Effective Health Care

There are five potential strategies for improving the cost-effectiveness of health care services.

Solution 1: Reducing absenteeism due to illness and injury

Reducing absenteeism due to illness and injury will enhance productivity in the workplace and reduce costs to the health system. The health sector loses more days per worker due to illness, disability and personal or family responsibility than any other industry in Canada (Statistics Canada, 2008). The *2005 National Survey of the Work and Health of Nurses* showed the alarming statistic that time lost over the course of a year due to illness and injury was equivalent to the hours worked by 15,000 full-time registered nurses (Shields & Wilkins, 2006).

Continued efforts to improve workplace health and safety will reduce the risk presented to both care providers and patients and will save the system money. For example, the "best practices" musculoskeletal injury prevention programs that include mechanical lifts and reposition aids, a zero lift policy, and training for employees on the use of equipment were successful in reducing injuries while recovering the capital equipment costs in three years through reduced workers' compensation costs (Collins, Wolf, Bell & Evanoff, 2004).

Solution 2: Reducing nurse turnover

Reducing nurse turnover will have a positive impact on patient, nurse and system outcomes and will reduce health care costs. For example, a study by O'Brien-Pallas, Tomblin Murphy and Shamian (2008) found that nurse turnover was associated with decreased job satisfaction, higher probability of medical errors and a higher number of overtime hours. Given that the average nurse turnover rate in Canadian hospitals is almost 20 per cent and that the average cost associated with nurse turnover is \$25,000, health organizations can achieve significant cost savings by stabilizing the nursing workforce (O'Brien-Pallas et al., 2008).

Improvements in the work environment are required to promote workforce stability. Building effective leadership and creating healthy workplaces are important for retaining nurses. Increasing the full-time employment rates is another way of promoting stability in the nursing workforce. A higher proportion of full-time hours is associated with lower nurse turnover rates (O'Brien-Pallas et al., 2008). In 2007, 57.2 per cent of the registered nursing workforce was in full-time positions, while 32.1 per cent worked part time (Canadian Institute for Health Information, 2008). Approximately twenty per cent of registered nurses who were not working full time in 2005 reported a preference for full-time work (Shields & Wilkins, 2006).

Solution 3: Improving work processes and optimizing the work of nurses

Increasing efficiencies in the work environment optimizes the work of nurses and improves system outcomes. The practice of lean management, commonly used in the manufacturing sector, can be applied in the health sector to reduce non-value-added activities. It is estimated that a nurse spends only 30 per cent of a work day providing direct patient care, while much of the remaining time is consumed by a variety of activities that are symptomatic of inefficient processes ("TCAB Improvements Double Time at the Bedside," 2008). *Transforming Care at the Bedside* (TCAB), an initiative that aims to redesign clinical processes to move waste and reallocate the time to activities that add value for patients, has been successful in doubling the amount of staff time spent at the bedside ("TCAB Improvements," 2008). Further information about *Transforming Care at the Bedside* can be found on the Institute for Healthcare Improvement website at <http://www.ihl.org/IHI/Programs/StrategicInitiatives/TransformingCareAtTheBedside.htm>

In the United Kingdom, the National Health Service (NHS) Institute for Innovation and Improvement's *Releasing Time to Care* program is another initiative directed at improving processes and freeing up time for nurses to spend on direct patient care. Results are showing an increase of 50 per cent in the throughput of patients in community hospitals, a reduction of repetitive documentation of 90 per cent and a reduction in the time to admit patients of 50 per cent (National Health Service Institute for Innovation and Improvement, n.d.). Health organizations in Saskatchewan are testing the improvement principles and techniques of the *Releasing Time to Care: The Productive Ward* program as part of the province's goal to achieve a high performing health system. Further information about *Releasing Time to Care: The Productive Ward* can be found on the NHS Institute for Innovation and Improvement website at www.institute.nhs.uk/quality_and_value/productivity_series/productive_ward.html

Solution 4: Embracing technology

Technology offers a promising solution for reducing costs and improving efficiency in the health system.

- A Canadian Home Care Association (CHCA) study (2006) showed 85 per cent fewer hospital admissions and 55 per cent fewer visits to the emergency department among people enrolled in a New Brunswick telehealth homecare program. Telehomecare also reduces the frequency of home care visits that nurses need to make, thereby improving their productivity (CHCA, 2008).
- The 24-hour health information and advice services provided by registered nurses across Canada have decreased non-urgent emergency department visits by up to 32 per cent (Stacey et al., 2004).
- Monitoring cardiac patients at home with telehome monitoring technology reduced hospital admissions among angina patients by 45 per cent over a one-year period (Woodend et al., 2008).

Solution 5: Adopting new health care delivery models

Adopting new cost-effective models of delivering health care in Canada can address the current health and economic challenges. Nurses in existing roles and expanded roles can take a leadership role in developing and providing service in the new models of care. For example, the U.K. Department of Health's White Paper *Our Health, Our Care, Our Say* sets out a direction for shifting resources to prevention and health promotion, providing more care outside hospitals and in the community, and integrating primary care services with social care (Department of Health, 2006). Integrated multidisciplinary teams, nurse-led services and extended roles for community nurses are essential for achieving the goals set out in the new vision for health care. Capital Health in Edmonton, for example, has implemented a new system-wide care model of screening and treatment to improve the management of diabetes and other chronic diseases. In this model, registered nurses have an important role in the multidisciplinary health care teams that are providing a range of prevention and treatment services. This model of care has facilitated close monitoring of patients and has freed up time for physicians to manage more complex cases (Every, 2007).

Conclusion

The CNA Board is seeking responses from its members to the following questions:

- Is this kind of evidence on the return on investment in nursing helpful to you in dialogues with your employer or elected officials (MPs, MPPs, etc.)?
- How can CNA support you in having discussions with your employer about the economic impact of nursing?
- Do the solutions described above for cost-effective health care resonate for you in your practice?

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