

# Nursing Workload and Patient Care

Understanding the Value of Nurses,  
the Effects of Excessive Workload, and  
How Nurse-Patient Ratios and Dynamic  
Staffing Models Can Help

**Dr. Lois Berry, RN, PhD**  
**Paul Curry, PhD(c)**



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The “Realities from frontline nurses” found throughout this book are based on actual experiences of nurses. However, the names and some of the details have been changed to protect the confidentiality of the nurses, patients and facilities involved.

This book was prepared by the CFNU to provide information on a particular topic or topics. The views and opinions expressed within are solely those of the individuals to whom they are attributed, and do not necessarily reflect the policies or views of the CFNU, or its member organizations.

 OTTAWA

Project manager: Linda Silas  
CFNU advisory committee: Vicki McKenna, ONA; Deb Stewart, MNU;  
Paul Curry, NSNU; Judith Grossman, UNA; Patricia Wejr, BCNU;  
Murielle Tessier, FIQ.  
Project team: Sean Dillon-Fordyce, Oxana Genina, Deanna MacArthur,  
Ismail Maniliho

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## ***Realities from frontline nurses:***

The phones are ringing and you do the best you can to answer inquiries for individuals you have not yet had time to assess. Admitting has called for a second, third, and fourth admission. Upon the call for the fifth admission, the nursing staff state that the situation on the floor is unstable at this point, could they hold until the admissions to the floor are caught up before sending any more? The administrator on call doesn't understand the situation or what is involved in an admission process, so is less than supportive.

In less than four hours the nursing staff have admitted five new patients while attempting to assess, medicate and settle for the night the other clients under their care. At 00:30 hrs the administrator finally contacts ER to hold admissions until we are caught up. At 01:00 ER is calling to give a report for the next admission. A long night, with no breaks, and you leave your shift exhausted – worried that you might have forgotten something.

Sherilyn (Ontario)

# The Canadian Federation of Nurses Unions (CFNU)

The Canadian Federation of Nurses Unions (CFNU) represents close to 200,000 nurses and student nurses. Our members work in hospitals, long-term care facilities, community health care, and our homes. The CFNU speaks to all levels of government, other health care stakeholders and the public about evidence-based policy options to improve patient care, working conditions and our public health care system.

Safe Staffing =  
Quality Care

## Message from the CFNU Linda Silas



On July 26, 2012, Canada's Premiers' Health Care Innovation Working Group released its first report to polite applause. "Baby steps," "low-hanging fruit," "motherhood and apple pie" are all words that have been used to describe the initial efforts of the Premiers, but it is a good start for the first six months of work.

Those of us clapping loudly are trying to blow some air on this spark of pan-Canadian collaboration so that health care improvements do catch fire across the country. We are very pleased that the Premiers committed to continuing this work.

Nurses know changes are needed. Hospitals across the country are over capacity. A generally accepted standard of safe hospital occupancy is 85%, yet most hospitals are working at a 100% or higher. The results of overcrowding include compromised care, high rates of hospital-acquired infections and unnecessary rates of hospital readmission. Another result is dangerous levels of workload, and the resulting vicious circle of working short.

Nurses are nearly twice as likely to be absent due to illness or injury than the average of workers in other occupations. Public sector nurses worked the equivalent of 11,400 full-time-equivalent positions in paid and unpaid overtime in 2010. Twenty



percent of nurses in the hospital sector leave their jobs annually, with a cost to the hospital estimated by some at \$25,000 and by others at over \$60,000 per nurse as a result of the transition. Workload is often cited as a key factor in turnover.

Two decades of national and international research have consistently demonstrated a clear relationship between inadequate nurse staffing and poor patient outcomes, including increases in mortality rates, hospital-acquired pneumonia, urinary tract infections, sepsis, hospital-acquired infections, pressure ulcers, upper gastrointestinal bleeding, shock and cardiac arrest, medication errors, falls, failure to rescue and longer than expected length of hospital stay.

The link between nursing workloads and patient safety is as clear in long-term care as it is in acute care. The more direct nursing care the resident receives, the better the resident outcomes, including lower mortality rates, improved nutritional status, better physical and cognitive functioning, lower urinary tract infection rates, fewer incidents of pressure sores, and fewer hospital admissions.

This evidence linking working conditions to care conditions can no longer be ignored. Safe staffing must be made one of the Premiers' guiding principles for health human resources management. Sadly, the word "patient" does not appear in the health human resources section of the Innovation Working Group's first report, but it is patient safety that must drive staffing decisions.

Three decades of a "silo" approach to health human resources planning has left health care workers and health care budgets on a roller coaster. Safe staffing goes beyond scopes of practice and team-based care — although both are part of addressing dangerous workloads. The Premiers' Health Care Innovation Working Group must work with provider associations, unions and employers in the next phase of its consultation. Premier Wall, co-chair of the Working Group, has a home-grown model to share — a partnership agreement between the Saskatchewan Union of Nurses and the Government of Saskatchewan with the addition of Regional Health Authorities, aimed at achieving safe levels of staffing for patients.

Some jurisdictions, notably California and Australia, have mandated staffing ratios as a way of addressing nursing workload. Emerging research has associated mandated nurse-patient ratios with improved patient outcomes and even financial savings to the health system by decreased length of stay, adverse events and reduced turnover.

Governments should commit to achieve safe staffing across the continuum of care. Data on adverse events should be linked with data on workload and staff mix to assist decision makers to improve working and care conditions.

Nurses across this country have been loud and clear. Safe staffing must be a guiding principle and a measurable outcome in health care.

The CFNU commissioned this paper, *Nursing Workload and Patient Care*, for policy makers and decision makers in health care. Safe staffing is a first step towards health human resources planning with patients' needs as a focus.

I would like to thank Dr. Lois Berry for her excellent work researching and writing this report. I would also like to acknowledge the input and expert advice of Paul Curry (NSNU) and the CFNU Advisory Committee: Vicki McKenna and Jo Anne Shannon (Ontario Nurses' Association), Patricia Wejr (British Columbia Nurses' Union), Deborah Stewart (Manitoba Nurses Union) and Judith Grossman (United Nurses of Alberta).

We must also recognize the work and commitment of Canadian nursing researchers that participated in this project by lending us their time and expertise:

- Dr. Mélanie Lavoie-Tremblay, McGill School of Nursing
- Patty O'Connor, McGill University Health Centre
- Dr. Judith Ritchie, McGill University Health Centre
- Dr. Linda McGillis Hall, University of Toronto School of Nursing
- Dr. Ann Tourangeau, University of Toronto School of Nursing
- Dr. Gail Tomblin Murphy, Dalhousie School of Nursing
- Dr. Marlene Smadu, University of Saskatchewan College of Nursing
- Dr. Judith Shamian, Victorian Order of Nurses
- Dr. Maura MacPhee, University of British Columbia School of Nursing
- Barbara Foster, Health Canada

Together, we know we have to find ways to give the power to frontline nurses to determine when care is being compromised. We know that one solution won't fit every situation, however, we are confident that this report will assist in influencing staffing decisions for the mutual benefit of better work and care conditions.



Linda Silas, RN  
President of the Canadian Federation of Nurses Unions

### ***Realities from frontline nurses:***

## Shortage of nurses in long-term care

In my facility, nurses are mandated to do overtime on a daily basis and we use agency nurses who come for a two-week period and leave. We are short support staff as well. When we are unable to cope, the residents suffer: treatments are missed, no interaction with nurses, basic care not provided. We are like family to our residents but we are no longer able to give TLC. It's been so long since I have used this term. I believe it means "tender loving care."

My residents are also concerned about me as their nurse. They are aware of the days I am there in the morning and still there at night when they go to bed. They take the time to thank me for staying to care for them and tell me to get some rest. They should not have to worry about me working to excess, or if there will be a nurse on duty to care for them.

I cannot remember when I last went home after a shift and felt I had met all the needs of my residents. New nurses see this as the norm. This is what is the most unsettling.

Shannon (Manitoba)

**Preface**  
Dr. Lois Berry, RN, PhD



This report paints a sobering picture of the state of nurses' workload and the impact this workload has on patients and their families. Despite years of research showing that optimizing nurse staffing results in improved patient safety, better health outcomes, and improved quality of care, there has been little action to ensure safe nurse staffing. This is especially disheartening in the light of the many major Canadian reports by nationally respected health care policy and research organizations that have highlighted their concerns about the state of nursing worklife in this country and its impact on nurses and patients. These studies, a number of which were commissioned by government sources, have persistently and urgently called for immediate action to address nursing workload and nursing worklife issues.

Little has changed for nurses and patients over the last twenty years. In fact, my interactions with nurses from all levels in the health care system over the last eight months have confirmed that patient acuity and complexity continue to increase at an unrelenting pace, with little accommodation in staffing. Point of care nurses, union activists, frontline managers, senior nurse administrators, nurse researchers and nurse policy makers who were consulted were unanimous in their frustration. In a

system that bills itself as being committed to evidence-based decision making, many nurses believe that policy makers have failed to act on the evidence.

Nurses are the largest health professional group in the health system. They are well-educated, highly skilled, and positively regarded by the patients and families they serve. And yet they continue to practice in systems that do not engage their expertise in making decisions about patient care, or how nurses should be assigned to provide that care. The system lacks the nimbleness to adjust available nursing hours to changes in patient acuity, and the political will to create systems that acknowledge that matching nurse staffing levels to patient needs saves lives.

In international settings, nurses have countered this inaction. In California and in Australia, they have achieved standardized nurse-patient ratios. They have given up on good faith interactions with employers to achieve safe staffing, and have succeeded in having those staffing levels mandated through legislation and collective agreements. In other areas of the US, frontline nurses have worked with employers to develop dynamic staffing models that share decision making, creating staffing processes that respond to the acuity and complexity of patients.

Standardized, legislated nurse-patient ratios and dynamic, shared decision-making models of staffing have provided nurses with something lacking in the traditional staffing processes. They have given nurses at all levels direct and autonomous input into patient care decisions. They have resulted in processes where nurses feel empowered and respected. Growing research evidence shows that these processes have resulted in safer care and improved outcomes for patients and their families.

As a nurse of 37 years, I read the research and public reports referenced in this paper with increasing alarm and dismay. My question as I read these documents was this: How is it that we have failed to act on this evidence? My frustration was further heightened as I talked with nurses from across Canada as this project unfolded. Their angst and sadness at their inability to give the care that they entered the nursing profession to provide was evident as we talked. I continue to ask: Can't we do better?

This policy paper is intended to advise policy makers, decision makers, elected officials and health care executives on the current state of evidence with respect to safe staffing and improved patient outcomes. I hope that this information can inspire a commitment on the part of decision makers to indeed do better.

# Executive Summary

## Nursing Workload and Patient Care

In an era of apparent respect for evidence-based decision making, Canadian nurses are becoming increasingly disgruntled with the failure of decision makers to act on the vast evidence that links safe levels of nurse staffing with better outcomes for patients.

Two decades of national and international research have consistently demonstrated a clear relationship between inadequate nurse staffing and poor patient outcomes, including increases in mortality rates, hospital-acquired pneumonia, urinary tract infections, sepsis, hospital-acquired infections, pressure ulcers, upper gastrointestinal bleeding, shock and cardiac arrest, medication errors, falls, failure to rescue and longer than expected length of hospital stay.

In the early days of the millennium, Canadian and international governments recognized that nursing was in crisis. An international shortage of nurses, coupled with evidence that nurses were burned out, stressed and overwhelmed by their work environments, resulted in the commissioning of ten major national reports between 2000 and 2006 directed at addressing issues for nurses in the health care system.

The findings of these reports were consistent. Using phrases like “untenable crisis,” “urgent need to repair the damage,” and concern for “deterioration in the

quality of the nation's health care system," these reports called for action to address nursing concerns with the ultimate goal of improving patient care.

Recommendations from these reports fell into two broad categories: improving nurses' workload and improving nurses' worklife. Most reports made recommendations with respect to appropriate staffing, matching scope of practice to patient needs, addressing the increasing pace and complexity of work, reducing absenteeism and nurse fatigue, and improving the integration of client care within health care institutions and between institutions and the community. They tackled the work environment, with recommendations aimed at creating an environment where nurses experience respect, where they are involved in decision making with respect to patient care, and where increased funds are provided for education and professional development. These reports called for programs to address and reduce abuse and violence in the workplace. They highlighted the need to increase the enrolment in nursing education programs to redress the budget-driven cuts to nursing education, made during the 1990s.

Unfortunately, with the exception of increasing nursing education seats nationally and pilots around healthy work environments, few of these study recommendations were implemented. As a result of this failure to act, the negative workload and worklife issues for nurses continue, and are in fact worsening.

Currently, overcapacity and overcrowding issues in emergency departments and throughout hospitals have further exacerbated the nursing crisis of the early 2000s. Overcapacity has resulted in "hallway nursing" — the provision of patient care in hallways, patient lounges, tub rooms, and other inappropriate, ill-equipped, exposed and unsafe locations. Overcapacity occurs most frequently as a result of lack of availability of alternate care in the community, including lack of nursing home, home care and community services. Overcapacity is associated with an increased risk of in-hospital morbidity and mortality, including increased occurrences of pneumonia, poor pain management, poor management of acute chest pain, delayed antibiotic treatment beyond recommended protocols, increased hospital readmission, and decreased patient satisfaction.

Poor work environments continue to impact nurses' ability to provide safe care. Frequent interruptions, role confusion, limited technical and human support, lack of system integration and coordination, relentlessly increasing patient acuity, and a lack of autonomous decision making and input into patient care decisions continue to negatively impact nurses and the patients and families they serve. Today's nurses continue to experience high levels of burnout, absenteeism, turnover and fatigue, and lack of job satisfaction. Studies show a direct correlation between nurse satisfaction and patient satisfaction.

Surveys of Canadian frontline nurses today show that issues of workload and safe staffing are the most significant issues they face in their work on a daily basis. Nurses report that they are losing patience with the failure to act on the evidence that exists linking safe staffing to positive patient outcomes.

Nurses want solutions to these problems. They are looking to the solutions implemented in California and some states in Australia where nurses have successfully lobbied for legislation or collective agreements mandating nurse-patient ratios. Such ratios limit the number of patients for whom one nurse can provide care. For example, in California, a 1:4 nurse-patient ratio is mandated by legislation.

In New South Wales, Australia, ratios were achieved based on a formula of minimum nursing hours per patient day (NHPPD). The NHPPD formula, although varying according to hospital classification, generally creates ratios equivalent to 1:4 on day shifts across a seven-day period. Differences in ratios are found on some nursing units of higher acuity, and mechanisms exist within the legislation to allow for improved staffing in periods of increased patient acuity. Staffing can be managed at the nursing unit level. Ratios act as a minimum to insure safe staffing, not as a maximum.

Emerging evidence has demonstrated that patient outcomes have improved subsequent to the implementation of such mandated ratios. Studies of the Australian experience showed a decreased occurrence of patient conditions that have been linked directly to nursing care (nurse-sensitive indicators), including decreased mortality, central nervous system complications, ulcers, gastritis, upper gastrointestinal bleeding, sepsis, pressure ulcers and length of hospital stay. Studies of the Californian experience reveal similar results with respect to mortality, and also demonstrate significantly improved nurse reporting of reasonable workloads and improved quality of care. These improvements in quality of care were reported by nurses in frontline and managerial positions. There was a significant increase in reported job satisfaction among frontline nurses following the implementation of mandated ratios.

An alternative to mandated ratios involves the use of a dynamic, shared decision-making model of nurse staffing that incorporates both patient factors and nurse characteristics, and employs a process where frontline nurses have direct input into staffing decisions. The American Critical Care Nurses Synergy Professional Practice Model has been adapted for use in staffing decision making beyond critical care and has been implemented in projects in British Columbia and Saskatchewan. The shared decision-making aspect has increased frontline nurse engagement in staffing decisions and has been highly regarded by those involved.



Importantly, the cost of increased nurse staffing can be largely or even entirely recuperated at the institutional level. This follows from the proven link between increased nurse staffing and length of stay, readmission, patient morbidity, medication error and nurse turnover. Looking beyond the walls of health facilities, the savings for society at large through increased productivity are much, much greater than increased staffing costs.

Both mandated nurse-patient ratios and dynamic shared decision-making models hold promise for frontline nurses who are losing patience with the lack of action to improve nursing workloads, worklife and the health care experience of patients and their families. Nurses want immediate action to support the implementation of safe staffing processes. They urge policy makers to implement such safe staffing mechanisms immediately, and to establish data collection processes that will capture the predicted improved outcomes for patients and their families. In addition, funding to health care institutions and programs should be tied to improvements in patient outcomes, as well as nursing workload and work environment indicators.

The Canadian reports of the last decade clearly showed that, as go nurses, so goes the health care system. At this point in time there is an urgent need to address the ongoing workload and worklife issues for nurses in order to improve the outcomes and experiences of patients and their families in the Canadian health care system.

### ***Realities from frontline nurses:***

I worked the unit for four months before quitting. Looking back, I realize I was having ethical/moral distress in not being able to provide nursing care at the level my patients deserved. I was going home feeling horrible that half of my patients didn't get bathed that day.

Sidney (Saskatchewan)

## Nursing Workload and Patient Care

Understanding the Value of Nurses, the Effects of Excessive Workload, and How Nurse-Patient Ratios and Dynamic Staffing Models Can Help

## Recommendations Canadian Federation of Nurses Unions

### Principal recommendations

That policy makers:

1. Immediately commit to action to achieve safe staffing models across the continuum of care. Such action should include safe staffing ratios that replace like with like, ensuring that the right nurse with the right skills is matched with the patient.
2. Immediately fund implementation of a national prototype for safe staffing models, using either nurse-patient ratios or a dynamic shared decision-making model such as the Synergy Professional Practice Model.
3. Enforce health care system accountability for safe, quality patient care by moving beyond the wait-time and volume-driven, pay-for-performance benchmarks currently measured, and instead link institutional funding to improvements in patient outcomes and nursing indicators (reductions in absenteeism, burnout, turnover, etc.). Accountability mechanisms should ensure that employers and funding decision makers are held accountable for staffing decisions and their impact on patients, staff and budgets.

## Supporting recommendations

That policy makers:

4. Ensure that staffing models and practices are based on evidence available in national and international research, and that they follow evidence-based guidelines such as the RNAO Best Practice Guidelines.
5. Provide targeted funding for quality nursing workplace initiatives directed at improving nursing workload and patient outcomes.
6. Standardize collection of health care data, including nursing indicators, and make it readily available to decision makers in easily understood, manageable electronic formats for use in decision making at system-wide and local levels.
7. Involve nurses at all levels in health care solutions.
8. Address governance issues in health care, starting at the front line and moving upward.
9. Clarify nursing scopes of practice and the role of unregulated workers in the system, and ensure replacement of nurses with nurses, eliminating substitution models which are unsafe and result in fragmentation of care.
10. Address overcapacity in the health care system by improving the integration of services between units, and between hospitals and their communities. This can be achieved by improving funding to home care and organizations providing alternate levels of care, and by improving access to primary care.

### ***Realities from frontline nurses:***

It's the change of shift, and nurses attempt to get their reports. They are no longer verbal; you get your report off the computer. The staffing has been reduced by two, as the CRN and the ward clerk have now left for the day. Their roles and responsibilities now become yours. The phones are ringing...

Katie (New Brunswick)

**Evidence and  
Inaction**

**Nursing Workload  
and Patient Care**

**Introduction**

Transformation and innovation are high on the agendas of national and provincial health care quality improvement organizations which hope to improve the health outcomes and care experience of Canadians, and control system costs. Research organizations such as the Canadian Institutes of Health Research proportion a significant amount of their annual funds to new research directed at improving the quality of health care in Canada. While this focus on new research for quality improvement is supported by Canada's nurses, there is mounting frustration among frontline nurses, nurse leaders and researchers alike at the failure of governments to act on what we *already know* about quality improvement and patient outcomes.

What do we know? We know that nurses impact patient outcomes. We know that quality nursing care reduces complications and length of stay, which ultimately reduces health care costs. We know from two decades of research that nursing workload impacts patient outcomes, and that the quality of nursing work environments impacts patient outcomes. We know that nurses are overworked and tired. They work in environments fraught with frequent interruptions, role confusion, limited technical and human support, lack of integration and

coordination, and ever-increasing patient acuity. In order to improve health outcomes and the quality of care, health care decision makers need to be challenged to act on what we already know, and to address the workloads and working environments of nurses.

How do we know that nursing workload and nursing work environments impact patient outcomes? Nurses have known this intuitively throughout their practice lives. But Canadian policy makers have been provided with what is now irrefutable evidence through two decades of national reports on the subject, supported by over 100 national and international research studies.

Between 2000 and 2006, ten major national reports were published in Canada, addressing Canada's crisis in health human resource planning, with an urgent focus on issues within the nursing workforce (Canadian Health Services Research Foundation, 2006). These reports included:

- Advisory Committee on Health Human Resources (2000). *The Nursing Strategy for Canada*. Advisory Committee on Health Human Resources.
- Baumann et al. (2001). *Commitment and Care: The Benefits of a Healthy Workplace for Nurses, their Patients, and the System*. Canadian Health Services Research Foundation.
- Advisory Committee on Health Human Resources (2002). *Our Health, Our Future: Creating Quality Workplaces for Canadian Nurses*. Advisory Committee on Health Human Resources.
- Kerr et al. (2002). *Monitoring the Health of Nurses in Canada*. Canadian Health Services Research Foundation.
- Canadian Policy Research Networks (2004). *Our Health, Our Future: Creating Quality Workplaces for Canadian Nurses. A Progress Report on Implementing the Final Report of the Canadian Nursing Advisory Committee*. Canadian Policy Research Networks.
- Nursing Sector Study Corporation (2005). *Building the Future: An Integrated Strategy for Nursing Human Resources in Canada*. Nursing Sector Study Corporation.

- Advisory Committee on Health Delivery and Human Resources. (2005). *A Framework for Collaborative Pan Canadian Health Human Resource Planning*. Advisory Committee on Health Delivery and Human Resources.
- El-Jardali & Fooks (2005). *An Environmental Scan of Current Views on Health Human Resources in Canada: Identified, Proposed Solutions and Gap Analysis*. Health Council of Canada.
- Canadian Health Services Research Foundation (2006). *What's Ailing our Nurses: A Discussion of the Major Issues Affecting Nursing Human Resources in Canada*. Canadian Health Services Research Foundation.
- Ellis, Priest, MacPhee & Sanchez McCutcheon (2006). *Staffing for Safety: A Synthesis of the Evidence on Nurse Staffing and Patient Safety*. Canadian Health Services Research Foundation.

This flurry of reports was prompted by conditions in nursing at the time, but made even more urgent by the predicted massive shortage of nurses. A 1997 Canadian Nurses Association report forecast a shortage of between 59,000 and 113,000 registered nurses by 2011 if immediate action was not taken at that time (Ryten, 1997).

The findings of these reports were consistent. Using phrases like “untenable crisis,” “urgent need to repair the damage,” and concern for “deterioration in the quality of the nation’s health care system,” these reports painted an unsettling picture of a stressed and overworked nursing workforce.

Recommendations from these reports fell into two broad categories: improving nurses’ workload and improving nurses’ worklife. Most reports made recommendations with respect to appropriate staffing, matching scope of practice to patient needs, addressing the increasing pace and complexity of work, reducing absenteeism and nurse fatigue, and improving the integration of client care within health care institutions and between institutions and the community. They tackled nurses’ worklife, with recommendations aimed at creating an environment where nurses experience respect, and where increased funds are provided for education and professional development. The reports called for programs to address and reduce abuse and violence in the workplace. They highlighted the need to increase the enrollment in nursing education programs to redress the budget-driven cuts to nursing education made during the 1990s.

All of these recommendations were backed up by Canadian and international studies on nursing workload, nursing worklife, patient outcomes and quality of care. The ensuing years have added many additional national and international research studies. In fact, research linking the impact of nurse staffing with outcomes of care has literally exploded in the last fifteen years (Clarke, 2008).

Unfortunately, little has changed. Despite all of these reports, and all of the ongoing research, we have not acted on what we know. With the exception of supporting increased enrolments in nursing education programs and quality workplace pilot projects, governments have not addressed the issues. Action lags, despite the development of patient safety and quality work environment standards for health care institution accreditation, which require institutions to monitor and improve client safety, promote a healthy and safe work environment, and promote quality worklife (Accreditation Canada, 2012). As early as the 2004 report reviewing the success in implementing the recommendations of the Canadian Nursing Advisory Committee Report of 2002, authors noted a declining interest in resolving nursing issues on the part of all governments (Maslove & Fooks, 2004).

The issues have not gone away. Canada continues to experience a nursing shortage. Following the budget-driven seat cuts to nursing education in the 1990s, the number of registered nurses did not return to the 1993 level until 2003, and because of a rising population, we still have not recovered the nurse-to-population ratio we enjoyed in the early 1990s (Canadian Institute for Health Information, 2012). If past trends continue, Canada will be 60,000 FTE RN positions short by 2022 (Tomblin Murphy et al., 2009).

The ongoing nursing shortage continues to take its toll on the workplace. A 2011 study of labour force data, commissioned by the Canadian Federation of Nurses Unions, found that public-sector nurses worked the equivalent of 11,400 full-time positions in paid and unpaid overtime in 2010, at a cost of \$891,000,000 annually (Canadian Federation of Nurses Unions, 2011).

Turnover continues to plague the health care system. On average, one in five Canadian hospital nurses leaves his or her job every year, at a per capita cost to the institution of \$25,000 (O'Brien-Pallas, Tomblin Murphy, Shamian, Li & Hayes, 2010). American studies cite even higher turnover costs of up to \$67,000 per capita (Tschannen, Kalisch & Lee, 2010). Nurse burnout, fatigue and absenteeism as a result of excessive workload continue to impact patient care outcomes at considerable cost to the system. This cost is even higher when replacing for turnover on specialized nursing units.

This policy paper is directed at health care decision makers and provides updated research on the current state of nurses' workload and worklife issues,

and the impacts on patients and nurses. It identifies potential solutions to these long-standing issues, with a specific look at the implementation of mandated nurse-patient ratios in California and Australia. It recommends action to improve outcomes for patients and their families by aggressively and immediately addressing nurses' workload and the quality of nursing worklife.

*Note: Of necessity, this document relies on RN data more heavily than data for licensed practical nurses (LPNs), registered practical nurses (in Ontario, RPNs), and registered psychiatric nurses (RPNs) simply because there is much less academic data available for the latter groups. Wherever possible, data for these groups is included. Roles and regulatory provisions for autonomous practice and self-regulation for practical and psychiatric nurses vary widely across the country. Research is needed to determine the appropriate makeup of the nursing and health care team, in particular patient care situations, to ensure that the contributions of all members are acknowledged and used appropriately.*

*Canadian researchers and health leaders have acknowledged that the roles of other professional health care workers and of multidisciplinary teams should also be the focus of study and recommendations (Hanson, Fahlman & Lemonde, 2007; Smadu & McMillan, 2007). Collaborative approaches should be directed at maximizing scopes of practice, determining appropriate roles, and ensuring that the proper supports, in the form of unregulated health workers and technological assistance, are in place (Canadian Health Services Research Foundation, 2010). Research and action are necessary to ensure that patients are cared for by the right provider in the right care context, with the right tools and the right amount of time to provide quality care.*

## **Realities from frontline nurses:**

Over a period of one year I gained forty pounds and started having trouble getting to work on time. On one occasion, I was reprimanded in front of other staff for being late. Some weeks later, at a time of family crisis, I called in to request a personal leave day, and I felt my integrity was being questioned by the manager. That day I submitted a request to give up my FTE and revert to a casual position.

Francis (Alberta)



## ***Realities from frontline nurses:***

### In long-term care

I am a Registered Nurse working in a long-term care facility. I am responsible for three units with a total of 70 residents. I work with a team of Licensed Practical Nurses as well as Personal Care Attendants in the provision of nursing care. My day starts off normally but it quickly deteriorates. I get a call from one unit: A resident has fallen and the LPN is concerned that he has fractured his hip. I go to the unit to assess the resident. Yes, he has a broken hip. While there, I get another call that a resident on another unit has developed shortness of breath and appears to be in pain. I go back and forth between the two units, completing my assessments and interventions, and arranging transportation to hospital for both residents. On top of this, family members are waiting to talk to me, a physician has arrived to do rounds, and I have been unable to complete any of my regular duties. Several hours later I can finally take a breath, but I am very discouraged. This is wrong. Residents deserve better.

Susan (Newfoundland and Labrador)

# The History Behind This Project

Members and leaders of the Canadian Federation of Nurses Unions (CFNU) have become increasingly alarmed in recent months at nurses' stories of negative patient experiences resulting from inadequate nurse staffing. The anguish expressed by these frontline nurses unable to provide the care their patients require has moved the CFNU to act.

The CFNU recognized the need to clearly identify current issues related to patient care and nursing workload, and the actions needed to address these issues. The first step in the process involved a think tank of sixteen prominent Canadian nurse leaders, academics, researchers and policy makers in December 2011. These leaders provided insights on current nursing workload issues in practice and their impact on patient safety and quality of care, on the state of nursing workload research nationally and internationally, on health care finances and on action-based solutions to our current problems.

Two additional meetings of nursing and health care leaders and activists were held in January 2012 to gain further insight and feedback for this project. On January 12, the CFNU convened its provincial negotiators to meet with representatives of Californian and Australian nursing organizations to garner firsthand knowledge of

the impact of implementation of mandated nurse-patient ratios in these regions. On January 31, the CFNU representatives, with support from the Office of Nursing Policy, met with nursing, union, and health care organizational representatives, in a roundtable forum titled A Reality Check on 'Gaps' and Success Affecting Today's Health Workplaces. Input and feedback from both of these meetings played a key role in informing the direction of this policy document (See Appendices A, B and C for lists of participants).

Consultation with these nursing leaders confirmed what is echoed in this report: the failure to address patient safety and quality of care issues arising from nursing workload challenges does not occur due to a lack of evidence regarding appropriate solutions. It is also not simply a result of lack of funding. *The failure is based on a lack of political will to act on the evidence.* While further data collection is important, especially outside of acute care settings, what is necessary is action. The nurse leaders represented very diverse perspectives (unions, employers, governments, professional associations, academics, administrators, policy makers) and yet they were united in their message. They identified the importance of nurses translating their research to policy makers and the public in understandable ways. Nurses at all levels need to work together, and to work collaboratively with patients and families, to make their message powerfully obvious to political decision makers. They need to collectively explore innovative ways to act on what we know. To these nursing leaders, the evidence is clear. The time for action is now.

### ***Realities from frontline nurses:***

#### In long-term care

As a nurse on the evening shift I am faced with an overwhelming workload on a daily basis. With a capacity of 60 residents with various needs (diabetes, palliative, saline locks, trach care), supervising six care aides, building check (involving checking on boiler room, sprinkler room), replacing staff, one fire drill each month, I am not able to provide the quality of care that the residents deserve and pay for.

Diane (Prince Edward Island)

The research findings are unequivocal. Nursing overload negatively affects patient outcomes. In 2002, two landmark American research studies showed an irrefutable association between nurse staffing levels and patient outcomes. Using administrative data from 799 hospitals in 11 states, Needleman et al. (2002), established clear relationships between nurse staffing and mortality rates, hospital-acquired pneumonia, urinary tract infections, sepsis, nosocomial (hospital-acquired) infections, pressure ulcers, upper gastrointestinal bleeding, shock and cardiac arrest, medication errors, falls and longer than expected length of stay (generally viewed as a measure of complications and delay of treatment) (Needleman, Buerhaus, Mattke & Stewart, 2002).

Another 2002 study of linked data from more than 10,000 nurses and more than 232,000 patients discharged from 168 Pennsylvania hospitals reported a relationship between nurse-patient ratios and preventable patient deaths. For every surgical patient added to a nurse's workload, the odds of a patient dying under the nurse's care increased by 7%. Each additional patient per nurse was associated with a 23% increase in the chance of nurse burnout and a 15% increase in the chance of job dissatisfaction (Aiken, Clarke, Sloane, Sochalski & Hiber, 2002).

But the numbers of nurses tell only part of the story. In addition to numbers of nurses, we are obliged to look at the circumstances under which nurses work. Who is on the nursing care team? What are their roles? What is the level of experience of the team members? The level of education? How many hours have they worked in a particular day? In a week? How much time off have they had? All of these factors affect patient outcomes.

### **What is it about nurses and their work that impacts patient outcomes?**

Studies show that the makeup of the nursing team, the way in which work schedules are organized, the nature of relationships within and beyond the team, and the resources and time available to team members in planning and delivering care all impact patient outcomes. A Canadian study examined the 30-day mortality rates of medical patients discharged from medium to large Ontario acute care medical hospitals and found that lower 30-day mortality rates were associated with hospitals that had a higher percentage of RNs, a higher percentage of nurses prepared at the baccalaureate level, higher nurse-reported adequacy of staffing and resources, higher use of care maps or protocols to guide patient care, and higher nurse-reported care quality (Tourangeau, Doran, McGillis Hall, O'Brien Pallas, Pringle, Cranley & Tu, 2006).

Nurses' work schedules also influence patient outcomes. Odds of the occurrence of pneumonia deaths were 31% greater in hospitals where nurses reported schedules with long work hours, and 24% more likely to occur when nurses limited breaks between shift groupings. For patients with acute myocardial infarction, there was a 33% increase in mortality odds when the number of hours per week and days in a row worked were high. For patients with congestive heart failure, the odds of mortality increased by 39% when nurses reported working while sick (Trinkoff et al., 2011).

In a study conducted in Alberta, lower 30-day mortality rates correlated with higher RN/non RN staff mix and with a lower proportion of casual and temporary nurses in relation to permanent full-time nursing staff. In the same study, hospitals with higher scores on collaborative nurse-physician relationship scales were associated with lower rates of 30-day patient mortality (Estabrooks, Midodzi, Cummings, Ricker & Giovannetti, 2011).

Patients are also at risk when nurses are frequently interrupted during the course of their work (McGillis Hall, Pedersen & Fairley, 2010). Eighty-nine percent of the interruptions in a recent Canadian study had the potential to negatively impact patient safety. Interruptions greatly increase the risk of errors, particularly medication errors.

Interruptions come from many directions. In a Canadian study of interruptions to nurses' work, one third of all interruptions came from other members of the health team, 25% from other nurses, and 25% from patients, families and visitors.

Interruptions were largely related to communication around patient care. Twenty-five percent were related to searching for the patient or patient supplies. One third interrupted patient care assessments or procedures, one third interrupted documentation time, and 19% occurred during the preparation or administration of medications (McGillis Hall et al., 2010).

### **A specific look at workload, staffing and patient outcomes.**

Studies continue to reinforce the findings of the early studies by Aiken et al. (2002) and Needleman et al. (2002) that nurse staffing impacts what happens to patients. In a Californian study, increases in hospital nurse staffing were associated with reductions in mortality (Harless & Mark, 2010). In a Michigan study of 13,000 hip fracture patients, the odds of in-hospital mortality decreased by 0.16 for every additional FTE RN added per patient day (Schilling & Dougherty, 2011).

In a US study of hospital administrative data, Needleman et al. (2011) looked at mortality in situations where nurse staffing was frequently eight hours or more below the recommended standard. An increased risk of death occurred in agencies that were frequently staffed below standard. A risk of increased mortality also occurred on units with high patient turnover. This may relate to the increased time demands on nurses for admission and discharge assessments, interaction with patients and families, and the need for immediate development of plans of care and discharge plans that arise when patients are admitted, discharged and new patients admitted to units over the course of a shift (Needleman, Buerhaus, Pankratz, Leibson & Stevens, 2011).

Increased nurse staffing was associated with lower hospital-related mortality in intensive care, surgical and medical units in a summary of 28 international studies. An increase by one RN per patient day was associated with decreased odds of hospital-acquired pneumonia, unplanned extubation, respiratory failure, and cardiac arrest in ICUs, and a lower risk of failure to rescue in surgical patients (Kane, Shamliyan, Mueller, Duval & Wilt, 2007). Studies in critical care units support the findings on non-critical care units. A 2010 systematic review of 26 research studies in critical care found decreased staffing in intensive care units, associated with increased adverse events in virtually all studies (Penoyer, 2010).

Studies have also addressed specific nursing outcomes, including nosocomial (hospital-acquired) infection, readmission, falls, failure to rescue, length of stay, medication errors, and patient satisfaction in relation to patient outcomes.

### **Nosocomial infection**

Nurse staffing impacts infection rates. A recent Canadian study found that higher nursing staffing levels predicted fewer occurrences of methicillin-resistant

staphylococcus aureus (MRSA) infection (Manojlovich, Souraya, Covell & Antonakos, 2011).

### Readmission

Studies continue to show that improving nursing staffing reduces the incidence of readmission. In a recent US study, researchers found an increase of 0.71 hours in RN hours per patient day (RNHPPD) was associated with 45% lower odds of an unplanned emergency room (ER) visit after discharge. In contrast, a 0.08-hour increase in registered nurse overtime was associated with a 33% increase in the odds of an unplanned patient ER visit (Bobay, Yakusheva & Weiss, 2011).

### Falls

In a 2011 study of patient falls in military hospitals in the United States, a greater proportion of RNs relative to unlicensed assistive personnel was associated with fewer falls in medical-surgical and critical care units. Higher nursing care hours per patient per shift were significantly associated with a decreased likelihood of both falls and falls with injury. Increased falls were associated with increased acuity on medical-surgical units. A higher patient census was related to more falls in both step-down and medical-surgical units (Patrician, Donaldson, Loan, Bingham, McCarthy, Brosch & Fridman, 2011).

### Failure to rescue

Failure to rescue is a nursing care indicator of death of a patient, usually believed to be related to a failure to observe, recognize or act on complications (Shever, 2011). Studies show that the number of times a nurse observes and assesses a patient in a day directly influences patient health outcomes. Researchers refer to these assessments and observations as nurse surveillance, defined as intentional, ongoing acquisition, interpretation, and synthesis of patient data for clinical decision making. The amount of nurse surveillance possible is, of course, clearly contingent on the level of nurse staffing. A recent US study indicated that when nursing surveillance was performed an average of 12 times a day or greater, there was a significant decrease in the odds of experiencing failure to rescue (Shever, 2011).

### Length of stay

Proper nursing staffing can reduce patients' length of stay. In a systematic review of 17 studies addressing patient length of stay and hospital costs, all studies that looked at the relationship between nurse staffing and length of stay found that the

higher the number of nursing hours, the shorter the length of stay (Thungjaroenku, Cummings & Embleton, 2007). A US study found that length of stay was shortened by 24% in ICUs and by 31% in surgical patients with an increase of one RN per patient day over baseline staffing (Kane et al., 2007). Length of stay is a major factor in the cost of hospitalization. The Canadian Institute for Health Information estimated that the average hospital stay cost \$6,983 in the baseline year 2004 (Canadian Institute for Health Information, 2009).

### Medication errors

There is significant evidence indicating that improved nurse staffing and hours of work reduce medication errors. A 2009 US study found a higher likelihood of medication errors when nurses experienced higher patient care demands (Holden et al., 2011). A 2010 US study found that nurses who worked more than 40 hours per week were 28% more likely to report that patients occasionally/frequently received the wrong medication or dose. For every additional hour of overtime worked each week, the likelihood that a nurse reported occasional/frequent wrong medication or dose administration increased by 2% (Olds & Clarke, 2010).

### Patient satisfaction/patient experience

Nurses are key players in the patient experience. A foundational study in health human resources in Canada in 2001 reported that nurses' job satisfaction was the strongest predictor of patient satisfaction (Baumann et al., 2001).

There is a clear relationship between nursing workload, quality of nursing worklife, and patient satisfaction. In a 2009 US study of 430 hospitals, the quality of the nursing work environment was positively associated with all patient satisfaction measures (Kutney-Lee et al., 2009). Another recent study involving five units at the McGill University Health Centre showed that an 8% increase in RN direct patient care correlated with a 30% improved scoring of caregiver responsiveness by patients (O'Connor, Ritchie, Droin & Covell, 2012).

The Registered Nurses Association of Ontario (RNAO) position statements on client-centered care in hospitals, long-term care facilities and home care, coupled with its *Healthy Work Environments Best Practice Guidelines, Developing and Sustaining Effective Staffing and Workload Processes*, provides evidence and guidance to inform best practices for safe staffing (Registered Nurses Association of Ontario, 2007; 2010a; 2010b). In other words, many of the tools necessary to improve the patient experience are already in our hands.



Nurse staffing is one of the few areas in health care in Canada where evidence is ignored in decision making (McGillis Hall et al., 2006).

Decision Making for Nurse Staffing: *Canadian Perspectives*. Policy, Politics & Nursing Practice, 7(4), p. 267.

The research findings with respect to nursing workload and patient outcomes are consistent and conclusive. But so too are the findings with respect to the impact of nursing workload on nurses themselves. The negative impact of excessive workload and poor quality workplaces has been known for many years. The author of the 2002 Canadian Nursing Advisory Committee Report, Dr. Michael Decter, introduced the report with this statement:

*There is urgent need to repair the damage done to nursing through a decade of healthcare reform and restructuring. The case for constructive change is compelling. However, simply to endeavour to return to better days will not meet the needs of Canadians for high-quality nursing services as a mainstay of our broader healthcare system. This report describes in detail why Canada needs more nurses and better working conditions for nurses. It also sets forth a plea for treating nurses with greater respect.... I hope that our report lends urgency to the recognized problems in Canadian nursing. Actions are required (Canadian Nursing Advisory Committee, 2002, p. v).*

Despite such calls for action, little has changed for nurses in the decade since this report was commissioned, a complaint that has been levelled over and over since 2002 (Shamian & El-Jardali, 2007). Some of the ongoing issues in the quality of nurses' worklife include burnout, turnover, fatigue and absenteeism.

### Burnout

Nurse Alia Accad, an expert on nurse burnout, eloquently sums up the issue:

*In 40 years specializing in stress and burnout, one thing is clear to me – burnout is the result of people working in conflict with their deepest values. Nurses have the capacity to work tirelessly and hard for years when they feel good about themselves and the value of their work. However, working for prolonged periods with no personal satisfaction from the effort is a situation ripe for burnout. While physical stress is tiring, the spiritual stress of being out of harmony with your truth and your values is devastating (Accad, 2009).*

With their current crippling work assignments, lack of input into how those assignments are determined, and lack of autonomous decision making with respect to their patients' care, nurses are experiencing burnout at unprecedented levels. They are simply not able to provide the care that they know their patients need. They are unable to meet their professional, legal and ethical obligations to patients and their families, and the angst that results takes its toll.

Burnout is an international phenomenon. In a six-country study of almost 55,000 nurses, higher levels of burnout were associated with lower ratings of quality of care, independent of the nurses' perceptions of their practice environment (Poghosyan, Clarke & Finlayson, 2010).

In a study of 546 nurses from 42 Belgian hospitals, significant associations were found between unit-level nursing practice environments and burnout, job satisfaction, intention to leave, and nurse-reported perceptions of quality of care (Van Bogaert, Clarke, Roelant, Meulemans & Van de Heyning, 2010).

Frontline nurses suffer burnout more than their colleagues. In a cross-sectional study of 95,499 US nurses, nurses in direct patient care were found to have significantly higher levels of dissatisfaction and burnout than nurses in other positions. As was found in the 2001 Canadian study (Baumann et al., 2001), patients in hospitals with high levels of nurse dissatisfaction and burnout reported lower levels of satisfaction with care (McHugh, Kutney-Lee, Cimiotti, Sloane & Aiken, 2011).

A recent Canadian study supports the international findings that burnout in nurses persists. It reveals another significant aspect about burnout in nurses in Canada — burnout is not restricted to older, shop-worn nurses. A recent study of 309 new nurses in Quebec found that 43% reported a high level of psychological distress. The same study revealed that 62% of respondents intended to quit their present jobs for other jobs in nursing, and 13% intended to leave the profession entirely (Lavoie-Tremblay, O'Brien-Pallas, Desforages & Marchionni, 2008).

Burnout is about not feeling respected. Nurses experiencing burnout no longer believe that they can make a difference. For many nurses, the work environments in which they work and the workloads they carry seriously challenge their belief that their work *has* value. Accad, in her advice to nurses about avoiding burnout, speaks of the need to regain the passion for what they do. She tells them: “You cannot burn out when your heart is aflame” (Accad, 2009). For too many nurses, that flame is flickering and dying because their worklife does not present the opportunity to provide the care they believe patients require.

## Turnover

High levels of nurse turnover pose a significant problem for the health system. A recent Canadian study on turnover found that the mean turnover rate in the 41 hospitals surveyed was 19.9%. Higher turnover was associated with lower job satisfaction. High levels of role ambiguity and role conflict were associated with mental health deterioration in the nurses in these agencies. Higher turnover rates and higher role ambiguity were associated with increased risk of error. Recent studies report varying but consistently high costs for turnover: an average of \$25,000 per nurse (O'Brien-Pallas et al., 2010), or ranging between \$21,514 to as high as \$67,100 per nurse (Tschannen, Kalisch & Lee, 2010), or even 1.3 times the salary of the departing nurse (Jones & Gates, 2007). Costs of nurse turnover include recruitment, advertising, replacement costs during vacancy (including overtime, bed closure, diversion to other institutions, etc.), hiring, orientation, decreased productivity, potential patient errors, poor work environment, loss of organizational knowledge, and additional turnover (Jones & Gates, 2007).

A cross-sectional descriptive study of 110 nursing units in 10 mid-western US hospitals found that units with higher rates of missed care and absenteeism had a higher rate of intention to leave within a year of the study. Missed care was defined as any aspect of care omitted or significantly delayed (Tschannen, Kalisch & Lee, 2010).

### Fatigue

Nursing fatigue seriously affects the ability of nurses to care effectively for their patients. In a major study on nurse fatigue and patient safety, conducted in 2010, the Canadian Nurses Association (CNA) and the Registered Nurses Association of Ontario (RNAO) found that nurses reported significant levels of fatigue, defined as

*...a subjective feeling of tiredness... that is physically and mentally penetrative. It ranges from tiredness to exhaustion, creating an unrelenting overall condition that interferes with individuals' physical and cognitive ability to function to their normal capacity. It is multidimensional in both its causes and manifestations; it is influenced by many factors: physiological (e.g., circadian rhythms), psychological (e.g., stress, alertness, sleepiness), behavioural (e.g., pattern of work, sleep habits) and environmental (e.g., work demand). Its experience involves some combination of features: physical (e.g., sleepiness) and psychological (e.g., compassion fatigue, emotional exhaustion). It may significantly interfere with functioning and may persist despite periods of rest (Canadian Nurses Association and Registered Nurses Association of Ontario, 2010, p.1).*

The 6,312 Canadian nurses surveyed in the CNA/RNAO study cited fatigue as a major negative influence on their engagement, decision making, creativity and problem-solving abilities, all essential aspects of safe patient care in today's fast paced health care system. Nurses reported that the most significant organizational reasons preventing their ability to respond to their fatigue were workload (reported by 73% of surveyed nurses), professional responsibility to be there for patients (70%), feelings of not wanting to let down their colleagues (66%) and the culture of doing more with less (60%). Nurses reported the causes of their fatigue as workload, shift work, including 12-hour shifts and working more than 12 hours in one shift, patient acuity, little time for professional development and mentoring, a decline in organizational leadership and decision-making processes, and inadequate "recovery" time during and following work shifts (Canadian Nurses Association and Registered Nurses Association of Ontario, 2010). Clearly, nurses feel a moral obligation to their patients, which prevents them from taking action to address their fatigue levels.

### Absenteeism

The stress in nurses' working lives affects their ability to come to work. An analysis of Statistics Canada Labour Force data found that in 2010, an average of 19,200 Canadian nurses were absent from work every week due to illness or

disability. Nine percent of public-sector health care nurses who usually work at least 30 hours per week were absent due to illness or disability every week. This is nearly twice the rate of all other occupations, and remains higher than all other health care occupations. The annual cost of Canadian nurse absenteeism due to own illness or disability was \$711 million in 2010 (Canadian Federation of Nurses Unions, 2011).

In a systematic review of online databases from 1986 to 2006, potential predictors of nurse absenteeism were examined. Findings showed that job satisfaction, organizational commitment, and work/job involvement reduced nurse absenteeism, whereas burnout and job stress increased it (Davey, Cummings, Newburn-Cook & Lo, 2009).

Issues of excessive workload and poor quality work environments are not only found in acute care settings. In a recent Canadian study, 675 RNs, LPNs and other staff from 26 long-term care facilities were surveyed about their work environment and related factors, as well as their job satisfaction and turnover intentions. Among the findings, higher job satisfaction was associated with lower emotional exhaustion, higher empowerment, better organizational support and stronger work group cohesion. Higher turnover intention was associated with lower job satisfaction, higher emotional exhaustion and weaker work-group cohesion (Tourangeau, Cranley, Laschinger & Pachis, 2010).

There is little research available regarding nursing workload issues in home care. A recent study exploring issues in home care nursing workload measurement in Canada noted that, while home care workload assessment tools exist, they have only been used in two instances in Canada. Despite the reported usefulness of such tools, their use was not sustained as the necessary personnel and financial resources to fulfill their requirements were not attainable (Mildon, 2011).

Fatigue, burnout, absenteeism and turnover are most common when nurses are not satisfied with their working conditions (O'Brien-Pallas et al., 2001; Irvine & Evans, 1995; Greco, Laschinger & Wong, 2006; Laschinger, 2004; Lasota, 2009). This dissatisfaction is often rooted in excessive workloads and insufficient staffing (Canadian Federation of Nurses Unions, 2012; Greenglass, Burke & Moore, 2003). Addressing these problems is an obvious way to improve nurses' worklife, while also improving the safety and quality of care for patients and their families.

Issues of nursing workload and worklife are not simply issues of supply and demand. They are symptoms of systemic problems within the health care system itself.

## What is moral distress in nursing?

Moral or ethical distress arises when nurses are unable to fulfill their moral obligations or commitments, or fail to live up to their own expectations of ethical practice (Canadian Nurses Association, 2008). It occurs when nurses know what to do but are unable to do what is right. Storch, Rodney and Starzomski (2013) maintain that it is constraints to nurses' autonomy, and the resultant distress that threaten the well-being and safety of nurses and ultimately their patients. Moral distress has increased in nursing in recent years.

*Restructuring, lack of human and structural resources, altered work environments, increased patient acuity with off-loading of care to families... have created a significant level of moral chaos in the nursing profession. The prevalence of this moral chaos within the practice of nursing has, we believe, led to a moral winter for our profession.... The metaphor of moral winter speaks to a moral landscape of nursing practice that has become frozen, lying dormant and buried beneath layers of contextual constraints. When nurses see themselves as unable to stop moral wrongdoing they themselves have become frozen, and when substandard practice becomes normalized, such that deteriorations in practice standards are not overtly challenged, a moral winter has arrived (Storch, Rodney & Starzomski, 2013, p. 190).*

# Health Care Systems Issues: Trouble Starts in the Emergency Department

Overcapacity issues are a significant cause of excessive workload. Overcapacity is an issue that exists throughout health care institutions, but is perhaps most evident and more commonly identified in the emergency room (ER). Overcapacity issues in the ER provide a lens through which to view broader issues related to patient care organization, nursing workload and patient outcomes within the health care system. The ER has been described as the health care systems' "canary in the coal mine," as its functioning is reflective of the health and efficiency of the entire system (Laupacis & Born, 2011). The problems for patients and nurses that result from overcapacity in the ER are symptomatic of problems in the other units and sectors within the system.

Overcrowding in the ER emerged in the Canadian health care system, following the massive reorganization and downsizing of the system in the 1990s (Bond et al., 2007). It has resulted in the advent of institutional overcapacity protocols. These protocols are short-term strategies that move patients from the ER to nursing units, hallways, tub rooms and patient lounges, and increase the capacity of existing rooms beyond their design. Caring for patients in such temporary locations is referred to as "hallway nursing" (College of Nurses of Ontario, 2009). Hallway nursing has



significant negative impacts on the ability of nurses to provide nursing care. More importantly, it endangers patients.

### **Distributing the problem and hiding it in the corner: ER overcapacity and hallway nursing**

Canadian media reports highlight the overcrowding of emergency rooms on an ongoing basis (CTV News, 2011; Wingrove, 2010; Yuen, 2009). ER overcrowding is defined as “a situation in which demand for service exceeds the ability to provide care within a reasonable time, causing physicians and nurses to be unable to provide quality care” (Canadian Association of Emergency Physicians & National Emergency Nurses Affiliation, 2001). In a survey of 158 Canadian emergency department directors, 62% reported overcrowding as a major problem during the preceding year (Bond et al., 2007).

### **Overcrowding in the ER is bad news for everyone involved**

The most significant cause of ER overcrowding is compromised flow of admitted patients from the ER to hospital inpatient units (British Columbia Medical Association, 2011). In British Columbia, more than one third of patients requiring hospitalization wait more than 10 hours following the decision to admit them to hospital to access a hospital bed (British Columbia Medical Association, 2011). This lack of accessibility to timely inpatient care occurs for a variety of reasons: reduced availability of hospital beds, shortage of personnel (in particular, nurses), length of stay of hospital inpatients, complexity of patient conditions, lack of availability of appropriate community-based services, and poor integration and coordination of the hospital-to-community transition (British Columbia Medical Association, 2011; Canadian Health Services Research Foundation, 2010).

One particular concern with respect to ER nursing care is the lack of nurses with training in specialty areas like emergency care. In an attempt to help address this issue, and with the support of Nova Scotia’s Registered Nurse Professional Development Centre, the Prince Edward Island Nurses’ Union recently partnered with the PEI Department of Health and Wellness and the University of Prince Edward Island to implement critical care and emergency nursing programs in Prince Edward Island. Previously, nurses had to travel to Halifax for up to 15 weeks for these programs (Cotton, 2012). This kind of training is required on a larger scale and in more jurisdictions in order to have the nursing specialists in place to address shortages.

A significant cause of the access problem is the lack of appropriate resources beyond the hospital walls. Simply put, many patients end up in the ER because there is nowhere else for them to go. Up to 20% of acute care beds in British Columbia are occupied by patients requiring alternate levels of care (ALC) – that is, patients in acute care settings who could be more appropriately cared for in another setting. Often patients cannot access alternate care because of shortages in community resources such as home care, long-term care or palliative services. This situation impedes patient flow, increases wait times for acute care beds, and increases lengths of stay (British Columbia Medical Association, 2011).

The need for appropriate alternate levels of care is a national issue. In 2007-2008, ALC patients accounted for 5% of Canadian hospitalizations and 14% of hospital days in acute facilities (Canadian Institute for Health Information, 2009). Thus, on any given day, almost 5,200 beds in acute care hospitals were occupied by ALC patients. These patients come to hospital and stay. Of ALC patients admitted to acute care hospitals, 59% had stays of more than a week, 20% more than a month, and 4% of patient stays were more than 100 days (Canadian Institute for Health Information, 2009). These stays not only result in a backlog of patients in emergency rooms; they result in patients often suffering from dementia or requiring palliative care, being cared for in overcrowded chaotic ER hallways or acute care units ill-equipped for the supportive physical and emotional care they and their families require.

Contrary to popular belief, the accessing of emergency services by patients seeking primary health care for minor ailments is not the biggest barrier to timely ER care (Canadian Health Services Research Foundation, 2010; Schull, Kiss & Szalai, 2007; *University of Toronto Magazine*, 2003). Such patients tend to be dealt with quickly and do not block the system in ways that patients with complex conditions requiring admission do.

While not the biggest barrier to timely care, the use of the ER as a provider of primary care does have negative consequences. Such use diverts nursing and other staff time and attention, as well as resources, away from patients requiring the specialized services of an emergency department. Of even more significance, however, is the inadequacy and inappropriateness of the ER as a source of integrated care for patients and their families. Canada's lack of access to primary care services leaves the ER, a service set up to provide urgent and emergency care in crisis situations, completely unprepared to provide the case management and ongoing continuity required to address the complex care needs of patients and families needing ongoing care and a coordinated interprofessional team approach. Trying to provide primary care in an ER setting leaves nurses frustrated regarding their inability

to meet the ongoing health needs of clients and their families. Nurses are concerned about their inability to meet their professional standards of care, including possible loss of their licenses as a result of missed assessments and care due to the mismatch between patient care needs and available services. The episodic nature of the care provided to patients using the ER as a source of primary care, with its short term focus, lack of integration and coordination, and limited use of the interprofessional team approach leaves patients and their families at risk.

The 2002 Romanow Commission on the Future of Health Care in Canada called for a fast tracking of the implementation of an integrated primary care system based on continuity of care, early detection and action, better information on needs and outcomes, and new and stronger incentives to achieve transformation. It called for immediate attention to the need for alternate levels care, particularly home care. Yet now, ten years later, little has changed. Canada continues to rank behind other nations and has significant regional variability in the quality and accessibility to primary health care services (Canadian Health Services Research Foundation, 2010). The number of days of hospitalization for patients requiring alternate levels of care continues to rise, from 10% of all hospital days in 2006 to 14% in 2009 (Canadian Institute for Health Information, 2009). This is a clear signal that Canadians are often not receiving care in the most appropriate setting. Development of an integrated seamless system encompassing the continuum of care from primary and preventive care services, home care, acute, chronic and rehabilitative inpatient services, palliative care and long-term care is necessary to increase the quality of services that patients and their families receive, and that nurses and other health professionals can provide.

### **The negative consequences of overcrowding for patients**

ER overcapacity usually results in overcrowding which is associated with an increased risk of in-hospital morbidity and mortality (Hoot & Aronsky, 2008). One study estimates the increased risk of mortality at 30% (Collis, 2010). When overcrowding exists in the ER, patients with pneumonia or acute pain experience longer wait times for treatment and a significantly higher probability of leaving the ER against medical advice or without being seen (Bernstein et al., 2009). Research shows that the frequency, timeliness and documentation of pain management were compromised during times of overcrowding (Collis, 2010).

Studies have found that prolonged patient stays in the ER for patients admitted with chest pain were associated with decreased use of guidelines and poorer patient outcomes. Patients with chest pain experience delayed treatment and delayed

transport. Antibiotic treatment for pneumonia was frequently delayed beyond recommended protocols (Collis, 2010).

Overcrowding negatively impacts the patient experience. Patients cared for in the waiting room or hallway were more likely to return for hospitalization within seven days, and left without being seen or against medical advice more often than patients cared for in acute care beds. Patients reported increased dissatisfaction with care in overcrowded situations (Pines et al., 2007).

### **Overcrowding and hallway nursing: What does it do to nurses?**

Overcrowding in the ER has negative consequences for nurses as well as patients. In a survey of 158 Canadian emergency directors, 82% reported a perception that overcrowding was a major source of stress for nurses, and 68% noted a significant negative impact on the recruitment and retention of nurses (Bond et al., 2007).

Overcapacity issues negatively impact nurses' mental health. In a Finnish study of nurses within and outside of the ER, exposure to six months of average bed occupancy rates 10% or more above the recommended bed occupancy limit was associated with a 1.7-fold increase in new treatment for antidepressants in nurses (Virtanen et al., 2008).

A 2009 survey of over 500 Ontario nurses revealed three themes: that emergency rooms and inpatient units were under relentless and escalating pressure from overcapacity issues; that nurses were increasingly unable to uphold their professional standards as a result of this pressure, with resultant concern from both legal and moral standpoints; and that they were experiencing ever-diminishing resiliency in the face of these demands (College of Nurses of Ontario, 2009). Frequent – often daily – occurrences of overcapacity engendered feelings in the nurses of lack of control, increased risk and vulnerability. The perceived off-loading of emergency patients into areas ill-equipped to care for them produced an undercurrent of tension and conflict in many hospitals (College of Nurses of Ontario, 2009). Nurses described concern about the risks to patients from fire, the lack of time for proper assessment, delays in treatment, and caring for patients with conditions that were not part of their nursing expertise (such as adult cardiac patients being housed on pediatric units). Their frustration was summed up by one nurse who described it as the “let’s distribute the problem and hide it in a corner” approach (College of Nurses of Ontario, 2009).

There were consistent messages from the Ontario nurses surveyed regarding the lack of safety for patients in these environments. The lack of appropriate equipment (oxygen, suction, infection control precautions, call bells, mechanical

lifts) endangered patients. But in addition to physical safety, the nurses reported the anguish they felt for patients experiencing lack of psychological and emotional safety due to a lack of privacy and confidentiality in exposed hallway environments. Elderly patients became increasingly confused in these environments, with the constant noise, interruptions, and continuous bright lighting. Nurses' moral distress was most evident when caring for palliative patients. Nurses found the lack of dignity afforded dying patients and their families painful to experience. Their reports of patients dying in the hallway showed anguish, sadness, anger and frustration (College of Nurses of Ontario, 2009).

The distress experienced by nurses as a result of these conditions is also consistently evidenced in reports from expert hearings that arise as a result of work situation reports filed by Canadian nurses through collective agreement processes. Nurses who are concerned about patient safety and their own ability to meet their professional standards in practice as a result of unsafe staffing have access to professional practice review processes through their collective agreements. In Ontario, for example, if nurses do not receive satisfactory responses to the filing of their work situation reports, they may call for the formation of an assessment committee to review the situation. A panel of three nurse/health care experts then reviews the practice/workload situation. Assessment committee processes nationally have identified staffing situations which endanger patients, and have made recommendations to improve patient safety through improved staffing. Unfortunately, as we have seen in other reports on this topic, the recommendations are not always implemented.

The message from nurses is clear: This is not what they signed on for. The moral distress expressed by nurses as a result of overcapacity, overcrowding, hallway nursing and excessive nursing workload in compromised surroundings ultimately affects their daily practice, their health, their ability to meet the standards of their profession, and ultimately, their desire to continue to do what they do.

### **It is time to address the challenges of overcrowding and hallway nursing**

Health care, professional, and labour organizations have produced protocols to protect patients and health care providers in overcapacity conditions. The College of Nurses of Ontario (CNO) has made six recommendations for health care decision makers: Support the standards of professional practice; develop and support the use of evidence-informed protocols and policies; maximize the use of existing human

resources; support the use of ER performance measures; encourage the collection and reporting of additional performance data; and encourage local innovation (College of Nurses of Ontario, 2009).

The Canadian Nurses Association (CNA) position paper on overcapacity in the ER advocates increased access to community resources and alternate levels of care, more effective management of chronic disease, improved access to primary care services, improvements in the capacity for self-care, innovations in geriatric care across the health care continuum, innovations in discharge assessment, planning and follow-up, investment in health promotion and disease prevention strategies, investment in nursing retention and recruitment, maximization of care services for home care clients, and removal of legislative barriers to the participation of nurse practitioners in primary and tertiary care (Canadian Nurses Association, 2009).

The Canadian Federation of Nurses Unions has called upon federal and provincial/territorial governments to fund public home care, long-term care and hospitals to address the current realities of patients, to increase capacity for and access to primary care services, improve community-based health care services, enhance accessibility to multidisciplinary care providers, increase the efficiency of triage processes and ensure appropriate staffing levels. The CFNU recommended additional strategies to target overcrowding: improving flow of patients into and through hospitals by better integration of services between units in the hospital, and between the hospital and the community, increased availability of alternate levels of care services, and optimizing acute care lengths of stay (Canadian Federation of Nurses Unions, 2009).

Issues of integration, quality and patient safety cannot be resolved within the health care system without meaningful collaboration and coordination at all levels. Governments at all levels should clarify their roles with respect to ensuring integration and quality within in the health system for improved patient care, and nursing human resource planning, including quality nursing work environments and improved nursing workloads. However, such solutions cannot be achieved without the input of nurses at all levels within the system.

These solutions require action beyond the ER. They require serious, long-range attention to the integration of the activities of the health system, within and beyond the hospital. In the interim, we have to ensure that short-staffing does not contribute to this problem.

### ***Realities from frontline nurses:***

## Understaffing in the ER

More and more patients were kept in observation because there were no beds available to admit them on units. There was space to admit four patients in observation, but there were always more admitted in other rooms not close to the nurses' station. At night staffing was reduced to two nurses and one RA...

One of the nurses went out of the trauma room and heard a strange noise, so she looked in one of the 'make-shift' rooms... She saw her patient having a seizure. How long had she been in distress?

Lynne (New Brunswick)

# Workload Is the Top Issue for Canadian Nurses Today

Canadian nurses tell us that excessive workload not only occurs in times of periodic surge capacity. It is now viewed by many frontline nurses as the norm. For example, the Newfoundland and Labrador Nurses' Union, in partnership with the Association of Registered Nurses of Newfoundland and Labrador, has felt compelled to develop a strategy document entitled *Excessive Hours of Work: Professional and Union Considerations* (Newfoundland and Labrador Nurses' Union, 2011). The document provides nurses with strategies for dealing with endemically overburdened workplaces. Polls by nurses unions from across the country, as we will soon see, testify to the rising concern over working conditions (Canadian Federation of Nurses Unions, 2012).

## **Nursing overload: Why does it happen?**

Nursing overload arises from a variety of sources. Overcapacity of patients in relation to available bed space is a common cause. Inadequate staff availability is commonly reported, because of inadequate baseline staffing, or failure to replace staff that are away ill or on vacation. Failure to replace staff may be due to lack of



available replacement staff, or may be a cost-cutting measure. Inadequate staffing also occurs when the system is unable to adjust its staffing to address the acuity of patients, or to adjust to surges in capacity. Making up the shortfall in staffing through the use of overtime is common – public sector nurses worked over 20 million hours in overtime in 2010 (Canadian Federation of Nurses Unions, 2011). Requiring nurses to work beyond their scheduled hours has a significant impact on their quality of life and can result in fatigued nurses giving unsafe care.

Inadequate staffing may also be the result of lack of availability of the right kind of staff, including lack of the appropriate designation of nursing staff (RN, LPN) required to care for the complexity of patients, the required advanced training (critical care nursing, for example), or the appropriate supply of support staff whose absence requires nurses to assume non-nursing tasks, such as portering patients, making beds, passing trays and searching for supplies.

### **What do Canadian nurses say about workload?**

In surveys of nursing union members in 2011 and 2012, provincial unions heard a consistent message regarding unmanageable, unsafe workloads. While in the past wages and pensions were typically the top concerns, now issues of workload, short staffing and overtime are taking precedence (Canadian Federation of Nurses Unions, 2012).

**British Columbia.** Of the 5,600 members of the British Columbia Nurses' Union surveyed, 81% indicated that workload was a problem; 39% indicated it as a major problem. Fifty-one percent reported that the staffing complement was insufficient to meet the workload and patient acuity requirements. Eighty percent reported that they worked short of the planned baseline staffing complement, with 35% saying they worked short-staffed most or all of the time. Reasons given for short staffing situations were positions not being filled due to budgetary constraints (32%); not backfilling for vacations and sick leave (31%); and difficulty filling vacancies (18%). Of acute care nurses surveyed, 45% said that they had cared for patients in hallways, closets or unfunded beds with no additional nurses assigned within the twelve months prior to the survey.

**Alberta.** Of the 1,500 members of the United Nurses of Alberta surveyed, 38% cited the shortage of nurses as the single most important issue, followed by heavy workload and burnout (21%). Two thirds of those surveyed reported being called at home repeatedly to work extra shifts or overtime at least once in an average week. This figure rose to 90% for nurses working on emergency units. Sixty-four percent

of those full-time nurses surveyed reported working above their scheduled full-time hours. The figure was 81% for part-time nurses.

Twelve percent of the Alberta nurses surveyed indicated dissatisfaction with their jobs, with 58% of these nurses indicating that their dissatisfaction was due to inadequate staffing. Only 28% of nurses surveyed reported that there was adequate staffing at their primary workplace.

Of those surveyed, 51% reported working unpaid overtime. While in 2009, 26% of nurses reporting working paid overtime said they did so due to short staffing or absenteeism, in 2011 this number had risen to 53%. Similarly, the number reporting paid overtime due to not being able to take meal and rest breaks due to emergencies and heavy workload went from 12% in 2009 to 27% in 2011.

**Saskatchewan.** Staffing (nurse-patient ratio) and workload were identified as the most significant bargaining issues for the 800 members of the Saskatchewan Union of Nurses surveyed, at 32% and 25% respectively. For 54%, workload was a very major concern, while 24% rated it a major concern. More than 51% claimed that nurse-to-patient ratios were a very major concern, while another 24% claimed it as a major concern.

Increasing workloads occur for a variety of reasons. Over 45% of the Saskatchewan nurses surveyed reported that the number of appropriate staff on hand had decreased over the last year. The number of patients for whom they provide care has increased over the past two to three years for 56% of those surveyed. The complexity of patient care tasks increased for 72% of those surveyed, and 67% indicated that the number of interventions for a typical patient has also increased. Over 45% indicated that the number of appropriate staff available to support care has also decreased.

Overtime is also an issue for Saskatchewan nurses. Short staffing and sick leave replacement are the greatest reasons cited for overtime. Nurses who report doing overtime hours average at least one hour of overtime per week.

Workload and working conditions play a significant role with respect to retirement. Of the Saskatchewan nurses surveyed, 32% were eligible to retire by the end of 2012. Working conditions were cited as the most important factor for determining whether to retire or remain working, with 63% saying they were a very important consideration, and 22.5% saying that they were important to decision making.

**Manitoba.** Of the 1,200 members of the Manitoba Nurses Union surveyed, 35% identified the shortage of nurses as the most important issue facing nurses in Manitoba. The only other issue noted by a significant number of nurses was “heavy

workload/long hours/burnout,” which was identified as the main issue by 23% of nurses.

**Ontario.** In a survey of 58,000 members of the Ontario Nurses’ Association in 2010, issues of wages and benefits were for the first time overtaken by workload and professional issues as the top concerns facing Ontario nurses. More than 60% of those surveyed reported staffing ratios as problematic, while 34% identified a significant issue with inappropriate skill mix for the acuity of patients. Members reported that budget restraints continue to trigger workload and professional issues. Rising paid and unpaid overtime continued to be significant issues, with resultant rising injuries and burnout amongst Ontario nurses.

**New Brunswick.** Of the 1,500 members of the New Brunswick Nurses Union surveyed, 26% stated that better working conditions are a priority, including better work-life balance. Twenty-seven percent would like to do less overtime and 27% stated that they work short-staffed at least twice a week due to vacancies and absenteeism.

Of the nurses working in long-term care facilities, 61% of nurses polled cited the need for better working conditions, 67% claimed there is a staff shortage, and 62% claimed they are not always able to deliver the care that residents require. Forty-two percent of the long-term care nurses surveyed felt that adequate staffing levels would most improve working conditions.

**Nova Scotia.** Of the 600 members of the Nova Scotia Nurses’ Union surveyed, 43% claimed their workplace usually or always works below core staffing, with another 36% indicating that they sometimes work below core staffing. When asked why, 36% claimed the employer did not fill vacancies, while 64% claimed the employer was unable to fill vacancies. Fifty-two percent believed that core staffing was inadequate at their workplace.

Sixty-three percent of nurses reported a decline in the quality of patient care. Forty-eight percent of nurses who responded thus attributed this primarily to increased workload, while 25% attributed it to having fewer nurses on staff. When asked what would most improve the quality of care in their workplace, 80% of nurses reported additional nursing staff. When asked which factors contribute most to workplace dissatisfaction, 66% of nurses claimed workload and 59% claimed insufficient staffing, while only 33% claimed it was wages.

These surveys provide a snapshot of nurses’ current views with respect to workload, data not readily available from other sources. The messages from these data are consistent with the published research findings. Nurses are working short

and are increasingly unable to meet the intensifying needs of their patients. They are doing their own work and the work of others who are no longer in the system. They are working paid and unpaid overtime in increasing amounts. They often do not plan to take holidays, knowing that their colleagues and their patients will likely be left without nursing support if they do. As staffing patterns change, they are unclear of their roles in relation to other providers in the system. As they come closer to retirement, the physical, mental, and emotional demands of the stretched workplace play a significant role in their decisions regarding leaving the workplace and the profession.

### ***Realities from frontline nurses:***

Another day, another impossible choice

We are working 14-16 hours, occasionally more, on a regular basis. When nurses have attempted to refuse this overtime, we have been told this would be considered 'patient abandonment.' Nurses are not willing to abandon our patients. This OT is resulting in burnout and increased sick time, and extreme fatigue at the end of a very long shift. To make things worse, the same thing could happen again tomorrow. These exhausted nurses are also to stay late again on tomorrow's shift, 'if required.'

Barb (Ontario)

People who oppose mandated nurse-patient ratios have to realize that they are using mandated ratios to make decisions now. Only the ratios they use now are mandated by budget, not what's best for the patient.

Jill Furillo, RN, (National Bargaining Director, National Nurses United, 2012)

As previously noted, countless international and Canadian research studies and commissioned reports have proposed solutions to nursing workload and worklife issues over the last 20 years. Repeated calls have been made for transforming the relationship between the hospital and community, addressing the issues of alternative levels of care services, improving primary care services, improving the flow of patients through hospitals, and transforming nurse staffing decision-making processes. Many studies have demonstrated the positive relationship between increased nurse staffing and improved patient outcomes. Yet all sources of data tell us that nurses' workloads and the quality of their worklife are not improving, with corresponding harmful results for patients and their families. In many instances, things are getting worse.

Why is it that we have not solved the issues of nurse staffing in relation to patient needs? For many, the answer lies in the mechanisms we use to assign nurses to care for clients.

## Successful nursing workload measurement systems: Why we aren't there yet

There is a lack of consensus among Canadian nurse leaders and researchers regarding the effectiveness of current nurse staffing models. Broad, principle-based decision-making frameworks often prove useful in theory, but the problems of applying them in practice are challenging (McGillis Hall et al., 2006). Many different workload measurement systems exist, but their applicability beyond the setting in which they were developed is often questionable. It is difficult to ensure that these systems capture aspects of workload in a broad range of facilities with many different patient groupings, unique geographies and different staffing availability. These systems may not be sensitive enough to account for varying patient care needs or unique staffing variables at a specific unit level (Registered Nurses Association of Ontario, 2007). This has resulted in the development or alteration of tools for individual unit and agency purposes. While this makes these systems more relevant in the specific situation, such individualization limits useful comparison for research and policy development purposes. Nursing work and workload concepts are often articulated and measured in a variety of ways that make them difficult to compare (Morris, MacNeela, Scott, Treacy & Hyde, 2006).

Ongoing staff shortages, inadequate staff orientation as to the purpose and processes of the rubrics developed, and cumbersome or non-existent technological processes for data collection result in inaccurate and incomplete data input at the unit level. Even when data is available, it is often not used in making staffing decisions. In some cases, the nurses who need this data to make decisions do not know how to access and interpret it (McGillis Hall et al., 2006). While there are numerous workload measurement systems in place, they are often not used for staffing decisions because they do not account for the fluctuations in staffing needs (McGillis Hall et al., 2006). Many rely on individual nurse perceptions, and so lack validity and reliability.

There is an urgent need for data that is easily collectible, reportable and comparable across sectors and jurisdictions. Standardized patient information systems, patient acuity systems and workforce data collection systems allow for integrated workforce planning and system-wide analysis of nursing workload and patient outcomes. The implementation of electronic health records (EHRs) has the potential to improve access to data for tracking and decision making. However, implementation of the EHR should be based on principles of improving the ability to deliver patient-centered care, and not simply on the need for fiscal cost accounting and decision making.

Another significant issue reported by frontline nurses is their lack of authority and autonomy in being able to implement the necessary measures to staff their units to the level indicated by the workload measurement tools. A recent Canadian survey of health care decision makers and stakeholders revealed that workload management systems were often not used because they showed need for more staff than organizations were able or willing to provide. When they were used, they were often unidirectional – when the workload measurement process showed a surplus of nurses on the unit, they were sent off to float to other units. When the process revealed a need for more nurses, rarely were any provided (McGillis Hall et al., 2006).

Nurses not only lack input into decision making at the individual patient level, they lack collective input into the way in which the health care system is run. The CNAC report of 2002 suggested the development of provincial nursing councils and other mechanisms to advise provincial, territorial and federal governments and recommend solutions to nursing, patient care, and health system issues. While many of these councils were formed, they were rarely provided with the resources they needed to explore issues, and they are now non-existent, or where still functioning, suffer from declining interest on the part of governments to address nursing issues. True nursing representation in the process would require the development and funding of action-oriented bodies representing frontline nurses, nurse leaders, nurse researchers, employers and funders to actively address issues of nursing work environments and workload (Advisory Committee on Health Delivery and Human Resources, 2005; Canadian Nursing Advisory Committee, 2002).

Initiatives to improve patient care require representation from nurses at all levels within the system, including frontline nurses. Most provinces have attempted to implement nursing advisory committees, but many of these have not produced results. Manitoba has implemented the Manitoba Nursing Advisory Committee. Representatives from unions, employers, educators and government meet on a quarterly basis. The Manitoba Nurses Union also participates in the Joint Nursing Council wherein they meet with the Ministry of Health on a quarterly basis. Unfortunately, to date, these joint committees have produced little in the eyes of the Union, and what has been productive has been done through the collective bargaining process. Similarly, since the early 1990s, la Fédération interprofessionnelle de la santé du Québec, a federation of 60 unions which includes most nurses in Quebec, has partnered with employers to established Committees on Care which have the express goal of studying complaints about workload and helping to ensure satisfactory working conditions. While this is an important tool, it has not been a systematic solution as workload continues to be major issue for Quebec nurses.



Some partnerships and initiatives work better than others. The partnership between the Saskatchewan Union of Nurses and the Government of Saskatchewan, with the addition of the regional health authorities, began in 2008 and was renewed in 2012. It is an example of collaboration that allows frank and open dialogue between political decision makers, public servants and representatives of frontline nurses directed at rebuilding the nursing profession and building a patient- and family-centered health care system in the province (Saskatchewan Union of Nurses, 2012).

In Ontario, the Joint Provincial Nursing Committee, co-chaired by the provincial Chief Nursing Officer and the President of the Ontario Nurses' Association, has initiated several projects aimed at workplace quality improvement and nurse retention and recruitment. This committee is made up of nurse stakeholders, including professional associations, deans of nursing, researchers, regulatory bodies, unions, employers, etc., and is intended to contribute to health policy from a nursing perspective.

There are glimmers of hope. Across the country, frontline nurses and nursing administrators are adopting evidence-based nursing research such as the Registered Nurses Association of Ontario's *Best Practice Guidelines* to improve the clinical aspects of nursing. Some positive work has been done on nurse recruitment and retention, including Ontario's late career initiatives (Ontario Ministry of Health and Long-Term Care, 2012), Alberta's supernumerary program for new graduates (Weidner, Graham, Smith, Aitken & Odell, 2012), and Manitoba's new legislation on bullying (Government of Manitoba, 2011).

Despite these important, if modest, efforts, nurses are beginning to become impatient. Principle-based staffing frameworks and workload measurement systems have failed to truly impact the system. Frontline nurses still lack the authority and autonomy to operationalize the staffing indicated by such measurement systems in timely ways, and there is little nursing input at the system level. These problems persist despite the overwhelming evidence that points to the need for adequate staffing to provide safe, high-quality care. What action can be taken at the front line to address their concerns, and ultimately improve the quality of care? The answer lies in staffing approaches that are transparent, responsive, and implementable at the unit level and that result in the right staffing for safe, quality patient care. Two major approaches to staffing may provide these answers: mandated standardized nurse-patient ratios, and staffing through dynamic, collaborative shared decision making.

## Mandated standardized nurse-patient ratios: What's the story?

Mandated standardized nurse-patient ratios have emerged in California and Australia. Standardized nurse-patient ratios were legislated in California in 1999, following aggressive lobbying of politicians by nursing organizations. In 2004, following research to determine the most appropriate ratios for each clinical specialty area, input from stakeholders, and considerable debate and negotiation, standardized nurse-patient ratios were mandated for all state hospitals (Aiken, 2010; DeVandry & Cooper, 2009). Implementation began in 2002, with completion mandated by 2006. Ratios were mandated by specialty area. See Table 1.

**Table 1**  
**Legal nurse-patient ratios in California**

Unit Type	Nurse-Patient Workload
Medical/surgical	1:5
Paediatric	1:4
Intensive care	1:2
Oncology	1:5
Psychiatric	1:6
Labour/delivery	1:3

(Table data from Aiken et al., 2010)

Nurse-patient ratios have been implemented in Australia in two separate states: Victoria (2001) and New South Wales (2011). The implementation of nurse-patient ratios occurred in Victoria at the directive of the Australian Industrial Relations Commission, following a series of cutbacks in funding during the 1990s which left nursing services in disarray. The initial 1:4 ratio evolved into the 5:20 (five nurses for twenty patients) ward-level ratio in 2004 (Gerdtz & Nelson, 2007). The 5:20 ratio was seen as an advantage over the 1:4 ratio in that it allowed for flexibility at the unit level and placed the unit nursing leader back in the staffing process, allowing for unit-based decision making (Gerdtz & Nelson, 2007). Rather than requiring every nurse to care for a maximum of four patients, the 5:20 model allows for some nurses on the unit to have more than four patients when appropriate, in order that other nurses can have fewer, sicker patients requiring more attention. These decisions can be made in real time at the level of the unit, allowing for flexible consideration of unique patient needs and nurse capabilities.

In New South Wales a nursing hours per patient day (NHPPD) formula produced the ratio as it is currently used. The NHPPD classified hospitals into one of seven categories using patient characteristics such as patient complexity, intervention levels, presence of high-dependency beds, emergency/elective patient mix, and patient turnover. Once hospitals were allocated to a classification, NHPPD were allocated to each unit. The ratios can be managed over a seven-day period, allowing for variations in capacity and patient acuity. Unit nurses have the right to request a spot check of the unit staffing plans over a one-month period if they believe that the ratios are not being applied appropriately. It is important to note that the ratios in these models denote *minimum* staffing requirements. Both the Californian and Australian models contain patient acuity processes which allow for increased staffing when units are experiencing levels of unanticipated high patient acuity.

### **Mandated nurse-patient ratios: Are they the way to go?**

Standardized, legislated nurse-patient ratios are supported by many nurses who believe that they will improve the nursing work environment, increase nurse retention and recruitment, improve patient outcomes and increase both patient and nurse satisfaction (Ross, 2010).

The nursing research and leadership community has been split on the potential impact of mandated nurse-patient ratios. In a 2008 commentary, prominent nursing human resources researcher Peter Buerhaus argued that mandated nurse-patient ratios were counterproductive and would produce negative consequences for the profession (Buerhaus, 2009). He believed that mandated ratios removed the necessary flexibility that hospitals require to adjust staffing levels. He expressed concern that locked-in nurse-patient ratios would not let hospitals adjust for improvements in patient outcomes that originated in other departments, such as pharmacy. For example, care improvements generated in other departments could result in a decreased need for nurses. Hospitals would not be able to respond because they are locked in to mandated ratios. Greater efficiency and productivity could therefore not be achieved with mandated ratios, according to Buerhaus (2009). Others supported Buerhaus, expressing concern regarding the rigour of the science surrounding the determination of ratios (Hackenschmidt, 2004).

A further concern of nurse-patient ratio skeptics is that hospitals could meet the legislated requirement for more RNs by increasing the number of RNs but reducing the number of licensed practical nurses and unregulated workers, resulting in a net reduction in overall surveillance of patients, and more non-nursing tasks being done by RNs (Coffman, Seago & Spetz, 2002; Ross, 2010).

Some nurses expressed concern about the “at all times” requirement of nurse-patient legislation, indicating that it was a challenge to ensure that ratios are upheld while nurses are on breaks (Hackenschmidt, 2004). Skeptics predicted an increase in overtime and use of temporary agency nurses to meet the requirements of the legislation (Ross, 2010).

Others were concerned about the possible reduction in hospital services (Ross, 2010). Some feared that rural hospitals would be unable to meet the mandated ratios due to lack of available nurses, and would be forced to close, thus reducing accessibility to health care for the affected rural population (DeVandry & Cooper, 2009). Another concern expressed early in the implementation period was the fear that wait times would increase (Hackenschmidt, 2004). Early research appeared to lend some legitimacy to the concerns that nurse-patient ratios may not result in the intended changes for which they were implemented. A number of studies supported the original concerns about nurse-patient ratios, citing concerns regarding the cost of implementation (Coffman, Seago & Spetz, 2002). While one study reported a significant increase in job satisfaction for nurses in California between 2004 and 2006, such increases were also seen in other jurisdictions where ratios had not been implemented (Spetz, 2008).

Two early studies done in California, comparing pre-implementation data (2002), initial implementation data (2004) and final phase implementation data (2006), reported mixed outcomes for nurse-patient ratios (Burnes Bolton et al., 2007; Donaldson et al., 2005). The use of RN staffing did in fact increase during the implementation period. Hours of RN care per patient day increased by 0.5 hours on medical surgical units by 2004, and an additional one hour by 2006, for a total increase from 2002 to 2006 of 1.5 hours of RN care per day per patient. These numbers appeared to be largely temporary agency and traveller nurses. There was a decline in the percentage of LPNs (8% to 6%) and unlicensed personnel (33% to 24%) used in medical-surgical units (Burnes Bolton et al., 2007; see also Aiken et al., 2010). Most significantly, there was no evidence in these studies at that time that patient falls or occurrence of pressure ulcers decreased (Burnes Bolton et al., 2007; Donaldson et al., 2005). While these studies did not show an impact on patient outcomes following increased RN staffing, one study noted that the impact of simultaneous significant increases in patient acuity in hospitals during this time may have played a significant role in this outcome (Donaldson & Shapiro, 2010).

One recent study found that hospitals in California have reduced the amount of uncompensated care provided since the advent of mandated ratios (Reiter, Harless, Pink, Spetz & Mark, 2011). This is care provided for which the hospital was not

## ***Realities from frontline nurses:***

### A day in the community

As part of my influenza assignment, I was assigned to do all outreach influenza vaccination for the entire county. Travel time ate away at my FTE. Then, I was also assigned to run the Health For Two program. The Health For Two program mushroomed with many young, complex and high needs clients. I requested to be assigned to fewer clinics to enable me to give the Home Visitation the agreed time. In addition to having no time allotted for actually running the programs, there was no central location for organizing the resources. What a system!

Joyce (Alberta)

## ***Realities from frontline nurses:***

Need more staff!

We had seven patients each at the beginning of the shift, and eight each halfway through. No one could take a break. This is an in-patient medical unit where we're supposed to have four patients each! Thirty-two acute patients for three RNs and one LPN is way too much. Not only that, the nurse-to-patient ratios have to be updated because patient acuity is far beyond what it was.

I filled out a workload situation report. Where it asks what we could have done differently on this shift, I can only say: we need MORE STAFF! As an RN I felt very unsafe and challenged. I was unable to provide full care. I can just imagine how my patients felt.

Eileen (Nova Scotia)

reimbursed, including free or reduced rate care to low-income clients. The authors speculated that hospitals opted to limit the provision of uncompensated care due to the financial pressures of increased nurse staffing.

In spite of these many critiques, recent studies have furnished strong evidence in favour of nurse-patient ratios.

### **Mandated nurse-patient ratios: The supporting evidence**

Even some nurses who were concerned about the issues surrounding implementation of ratios believed that they were a good first step in addressing nursing workload and patient outcomes (Hackenschmidt, 2004). A 2006 study of Canadian nursing stakeholders and decision makers found that the attitude of some of those interviewed about standardized ratios appeared to be changing. While initially negative about ratios, viewing them as simplistic and unable to respond to variability, some decision makers interviewed at the time of the study expressed support for ratios as a way of making nursing contribution to patient care more evident and measurable (McGillis Hall et al., 2006). While supportive of ratios, some of those interviewed suggested that ratios must be constantly adapted in accordance with the reality of nurse workload, the changing practice environment, and patient care needs (Gordon, Buchanan & Bretherton, 2008).

There is important emerging research indicating that nurse-patient ratios do have a positive impact on nurses' workload and on patient outcomes. A 2011 study addressed the concern that mandated ratios would be met by replacing RNs with LPNs. The study found that registered nurse staffing – calculated as hours per adjusted patient day – was higher in California hospitals than in matched hospitals in other states following California's implementation of the mandated ratios. The increase in registered nurse hours per patient day was two times higher in California than in Texas, and five times that of New York. The study showed one half hour more RN hours per adjusted patient day than would have been expected without the mandated policy (McHugh, Kelly, Sloane & Aiken, 2011). Contrary to prediction by some, RNs have not been replaced by other nursing groups to meet the ratio requirements.

A 2011 Australian study, using data from 236,454 patient records and 150,925 nurse staffing unit records, found a significant decrease in nine nurse-sensitive outcomes following the introduction of the nursing hour per patient day (NHPPD) formula (Twigg, Duffield, Bremner, Rapley & Finn, 2011). For all medical surgical patients, the death rate decreased by 25% after the introduction of NHPPD staffing.

Surgical patients experienced a 54% drop in central nervous system complications, and a 37% decrease in ulcers, gastritis and upper gastrointestinal bleeding rates. The rate of gastrointestinal bleeding decreased in all surgical patients, and medical patients experienced a decreased death rate from shock and cardiac arrest. Sepsis rates decreased for all patients. Medical patients had lower rates of pressure ulcers, sepsis and mortality, and length of stay decreased by an average of 0.67 days. Surgical patients had lower rates of deep vein thrombosis. This study supported increasing overall nursing hours through a mandated staffing process as a way of improving patient safety (Twigg et al., 2011).

The most compelling evidence to date in support of nurse-patient ratios is offered by a 2010 study led by Linda Aiken, a prominent and prolific researcher on nurse workload and worklife and their impact on patient safety and quality care. The study focused on whether, following the implementation of mandated nurse-patient ratios, nurse staffing in California differed from two states without such legislation, and whether the differences were associated with nurse and patient outcomes. The study included nurse survey data of 80,000 nurses in California, New Jersey and Pennsylvania, and secondary data on patient outcomes from state data sets.

The study found that there was a significant difference in staffing levels among the states. California nurses cared for two fewer medical surgical patients than nurses in the other states. Whereas 88% of California medical-surgical nurses cared for numbers of patients at or below the mandated number (5), only 19% and 33% of the nurses in New Jersey and Pennsylvania cared for numbers of patients at or below California benchmarks.

When nurses' workloads in the comparator states were in line with California ratios, nurses' burnout was lower, job satisfaction higher, and nurses reported consistently better quality of care. Higher percentages of nurses in California indicated that their workloads were reasonable, that they received significant support to do their jobs, that there were enough nurses to complete the nursing workload and give high-quality care, and that they regularly took their scheduled breaks.

Frontline and managerial nurses alike reported that the mandated ratios had produced their intended results. Quality of care had improved in California since the implementation of ratios according to 74% of staff nurses, 68% of managers, and 62% of mid- or executive-level managers. All nurse groups surveyed felt that ratios had improved nurse retention. A significantly lower proportion of California nurses experienced burnout as compared with New Jersey and Pennsylvania (29%, 34% and 36%). Nurses in California reported less dissatisfaction with their jobs than those in New Jersey and Pennsylvania (20%, 26% and 29%).



Higher nurse-patient ratios resulted in statistically significant lower mortality rates (Aiken et al., 2010). When comparing deaths using nurse-patient ratios in California to Pennsylvania and New Jersey, the research showed that surgical deaths would have been 13.9% lower in New Jersey and 10.6% lower in Pennsylvania if these states had similar nurse-patient ratios as in California. Aiken et al. estimated that 486 lives might have been saved in Pennsylvania and New Jersey over a two-year period if staffing levels were at the level mandated in California.

Other than the reported decrease in available unlicensed clinical support personnel, Aiken et al. concluded that there was no evidence of the unintended consequences of mandated ratios predicted by critics. Despite the reduction in support personnel, there was no reported evidence to suggest that this had a negative impact on patient outcomes. This study, with its large sample and sophisticated study design, rebuts the misconceptions about the unintended consequences of mandated nurse-patient ratios.

### ***Realities from frontline nurses:***

#### Unsafe by the numbers

We had three RNs and a patient census of 28 — that's over nine patients for each RN. We also had an LPN, but she was fresh out of school and required orientation. This was an unfair situation for her. I explained to the manager that the staff did not feel safe on this shift. I called the ER administrator to ask them to hold patients longer before admitting them to us but, of course, the ER was also understaffed! This workload is unsafe.

Janice (Nova Scotia)

# Dynamic Shared Decision- Making Staffing Models: What, Why and How?

One of the most common criticisms of staffing by mandated nurse-patient ratio is that the process is a blunt instrument – it does not account for variations in patient acuity, nor does it address the characteristics of the nurses available with respect to scope of practice, experience and education/certification. Critics of mandated standardized nurse-patient ratios advocate for systems with more flexibility and responsiveness (although this critique is mitigated if we shift from a 1:4 ratio to a 5:20 model as has evolved in New South Wales). The Synergy Professional Practice Model attempts to address the perceived weaknesses of standardized ratios and capture the dynamic nature of patient care.

## **Synergy in nursing practice**

The Synergy Model was developed by the American Association of Critical-Care Nurses (AACN) in the 1990s as a nursing model of patient care. The Model aims to achieve a synergistic relationship between nurses and patients such that at any given time a patient has the most appropriate caregiver, and a nurse has the most appropriate complement of patients. When patient characteristics and nurse competencies are in synergy, optimal patient outcomes can occur (Curley, 2007).

The Model describes nursing practice based on eight patient characteristics spanning the health-illness continuum: resiliency, vulnerability, stability, complexity, resource availability, participation in care, participation in decision making, and predictability (Kaplow & Reed, 2008). Each of the patient characteristics is evaluated on a scale of one to five, with one being minimal and five being high, with the higher score indicating a more capable and higher functioning patient.

The Synergy Model also addresses eight nurse competencies: clinical judgement, advocacy and moral agency, caring practices, collaboration, systems thinking, response to diversity, facilitation of learning, and clinical inquiry (Kaplow & Reed, 2008). Each of the nurse characteristics is evaluated on a scale of one to five, where one is competent and five is expert. The nurse side of the model ensures that nursing competence matches patient needs.

Inherent in the use of the Model for staffing is a shared decision-making process, where frontline nurses and unit managers collaborate daily using a jointly developed process to assess patients and assign scores. Nurse characteristics are determined on an individual nurse basis and reviewed at predetermined intervals as part of an ongoing professional development process.

Shared decision making is a key component of effective nursing workplaces, significantly influencing job satisfaction. Structural power – access to information, resources, supports and opportunities through formal or informal lines of communication – predicts nurses' job satisfaction, decision involvement, and their trust and respect for management (MacPhee, Wardrop & Campbell, 2010). The Synergy Model advantage over other commonly used workload measurement systems is that it is dynamic – responding to changes in both patient condition and available nursing competence – and requires a shared decision-making approach between frontline nurses and unit nursing leadership. It does not only provide the frontline nurse with power in decision making, it provides for autonomy in nursing practice thereby allowing the opportunity to reduce the moral distress experienced by individual nurses when they are unable to make the contributions to patient care expected of them by their professional standards and their personal ethics of care (Storch, Rodney & Starzomski, 2013).

The Synergy Model provides a common language by which staff can communicate the needs of their patients and clarify professional roles. In a 2009 Saskatchewan demonstration project implemented as part of the Canadian Federation of Nurses Unions' national Research to Action project, the Synergy Model was used to score patient characteristics to inform staffing decisions (Rozdilsky & Alecxe, 2012). The project and its tools were modelled after a project conducted

in British Columbia from 2006-2010 (MacPhee, Jewell, Wardrop, Ahmed & Mildon, 2010). Due to unit overcapacity, ongoing human resource issues and timelines, the project did not use the nurse characteristics portion of the model, but used licensure status (RN/LPN), years of service on the unit and special training as a proxy measure (Rozdilsky & Alecxe, 2012). Implementation of the model resulted in a process where the frontline nurse, in consultation with management, could adjust day-to-day staffing in response to the number and acuity of patients.

The project report noted important outcomes in collaboration and improved communication among staff and unit and institutional leaders because of the shared decision-making processes used in making patient assignments on an ongoing basis (Rozdilsky & Alecxe, 2012; Stamler, Berry & Alecxe, 2011). This project demonstrated the importance of engaging frontline staff in the day-to-day decision making with respect to patient assignments. The positive results of empowering frontline staff to demonstrate and fully utilize their leadership skills, decision-making abilities and their professional competencies and judgement were clearly evident in the project results (Rozdilsky & Alecxe, 2012). These findings were similar to those found by MacPhee et al. (2010) in the British Columbia project, and are supported by the work of Canadian researcher Heather Spence Laschinger which links empowerment of frontline nurses with improved patient care (Laschinger, 2008).

Supporters of dynamic shared decision-making staffing models such as the Synergy Model cite as a strength the ability to account for variations in both nurse and patient characteristics when making staffing decisions. They also support the shared decision-making aspect as a means of nurse empowerment. Critics of the Synergy Model and other multi-faceted staffing models find them too complex, time-consuming and difficult to administer for the benefits achieved. Computer-based mechanisms of documentation and calculation could make the process more streamlined and efficient. Dashboard projects such as the pilot project that occurred in Hamilton, ON, as part of the Canadian Federation of Nurses Unions' Research to Action project could help in the development of simple and efficient electronic mechanisms that facilitate staffing decisions in the Synergy Model (Fram & Morgan, 2012).

Regardless of whether mandated ratio or a dynamic, shared decision-making processes are used, frontline nurses and their employers need real-time, responsive, transparent 24-hour mechanisms that give nurses the autonomy and authority to ensure nurse-patient ratios that allow for the delivery of safe, quality patient care.

## ***Realities from frontline nurses:***

### Looking for a new job

Working in a specialty care unit, the nursing needs are complex and often rely on monitors and other fairly high-tech equipment. Imagine my shock when I received report from the day shift charge nurse that she was the only unit-oriented staff that worked for the whole 12-hour shift.

The charge nurse worked her tush off as she was the only one familiar with the three long-term patients that had particular needs. Plus she needed to provide a cursory orientation to two nurses who really only wanted to work their shifts in their own units. (Who could blame them!)

The charge nurse's perception is that the management has abandoned all hope and expects the frontline staff to deal with their co-workers' absences (peer pressure) to "fix" the problem.

I'm looking for a new job.

Jennifer (Manitoba)

# The Financial Benefits of Improved Nurse Staffing: Let's Look at the Big Picture

Whether improved staffing is achieved through mandated ratios, dynamic shared decision-making models or other mechanisms, there is solid research evidence to support its financial benefits. A 2011 US study reported that at times when unit RN hours per patient day (RNHPPD) were higher, the likelihood of a post-discharge ER visit was lower. At times when RN overtime (RNOT) was lower, the likelihood of a post-discharge ER visit was lower. When RN vacancies were higher, there was an increased potential for post-discharge ER visits. Researchers hypothesized that higher RN hours allowed for better discharge planning and teaching, and that lower RN overtime hours reduced fatigue and improved the care given by the nursing staff. With respect to cost, the additional RN staffing costs were offset by the reduced costs of ER visits (Bobay et al., 2011).

Costs in health care cannot be looked at in isolation. They must be viewed in relation to overall societal costs beyond the health care system. A 2009 simulation exercise to determine whether there were cost savings through increasing nurse staffing found societal savings from avoided deaths and patient adverse events.

Increasing RN staffing by one RN FTE/patient day was associated with a positive cost-saving ratio in various clinical settings. The financial benefit of saved lives per 1,000 hospitalized patients was 2.5 times higher than the increased cost of one additional RN FTE/patient day in ICUs, 1.8 times higher in surgical units, and 1.3 times higher in medical units. The researchers estimated that an increase by one RN FTE in ICUs in the US would save 327,390 years of life in men and 320,988 in women with a productivity benefit (present value of future earnings) of \$4 billion to \$5 billion. The productivity benefit from increased nurse staffing in surgical patients was estimated to be larger: \$8 billion to \$10 billion (Shamliyan, Kane, Mueller, Duvall & Wilt, 2009).

In a 2006 study, Needleman found that raising the proportion of RN nursing hours without raising overall nursing hours resulted in net savings to the hospital. In addition, increasing nursing hours, with or without increasing RN hours, reduced length of stay, adverse outcomes, and patient deaths at a net overall cost increase of 1.5% or less. There was no modeling of potential associated savings at a societal level, such as a potential decrease in need for home care or increased productivity with earlier return to work for patients involved. These would constitute economic and societal savings, but would not be reflected in the hospital's financial outcomes (Needleman, 2006).

In the aforementioned simulation study, the overall cost to the individual hospital of the increased nurse staffing was larger than the saving from the decreased length of stay (Shamliyan et al., 2009). Additional costs were estimated at \$1,748 per patient, while savings from length of stay were estimated at 94% of this - \$1,640 per patient. A 2006 study by Needleman similarly found slight increases in hospital costs, but noted that in estimating the benefits of increased nurse staffing, many economic and non-economic factors were not considered, including: the value to patients and families of reduced morbidity, the economic value to hospitals of lower liability and improved reputation, the reduction in many nurse-sensitive adverse events (falls, medication errors, blood-borne infections, etc.), patient education and decreased nurse turnover (Needleman, Buerhaus, Stewart, Zelevinsky, Mattke, 2006). If all of these factors were considered, the economic balance might very well tip in favor of increased nurse staffing. Turnover alone, as previously noted, has been estimated to cost anywhere from \$25,000 per nurse (O'Brien Pallas et al., 2010) to as much as \$67,000 US per RN (Jones & Gates, 2007), and short-staffing, excessive workloads and low job satisfaction are all clear predictors of nurse turnover (Aiken et al., 2002; Greco et al., 2006; Laschinger, 2004; O'Brien Pallas et al., 2001). In short, increased staffing is likely cost-effective even at the institutional level, but this remains difficult to determine unless all factors are considered (Goryakin, Griffiths & Maben, 2011).

Regardless, as a collective we should look beyond the institutional case to the clear and compelling case at the societal level (Leatherman et al., 2003; Needleman, 2008). While American studies provide us with some solid hypotheses with respect to the financial benefits of improved nurse staffing, comparisons of savings can be difficult. However, in the light of our highly integrated health and social safety net in Canada, it is clear that there are massive potential savings at the societal level. Unfortunately, today's short budget cycles, siloed approaches to budgeting, and politically motivated decision making do not allow for this big picture view.

### ***Realities from frontline nurses:***

#### A day in a rural long-term care home

My manager left the building saying “do your best.” The shift was a nightmare. A man with dementia became violent and I had to call the RCMP. A woman was dying in pain without the needed doctor's orders for more medication. In addition to this I still had to complete my regular responsibilities including approximately 400 medications, 5 dressings, phone answering, dealing with other families and supervision of SCAs. This was my worst day as a nurse. I went home and cried. I was also 7 1/2 months pregnant that day.

Linda (Saskatchewan)



***Realities from frontline nurses:***

No break, no lunch, no hope

It was late afternoon before I realized I had missed break and lunch and that the physician on call had not even made rounds yet! No sooner had that crossed my mind, then in walked the doc. Needless to say, I was almost 45 minutes late leaving work, totally exhausted, frustrated and discouraged with the poor staffing and heavy workload.

I felt I did not provide the best care to my clients that I normally do and am capable of. I return for another 12-hour shift tomorrow...

Alyson (Prince Edward Island)

**Patients Need Safe,  
Quality Care.  
Nurses Need  
Solutions.**

Why do decision makers fail to act on such powerful evidence? Much of this failure can be attributed to the short-term financial management strategies of the health care system, which require solutions to immediate fiscal demands at an institutional level, thereby restricting our ability to move forward in a manner that is driven by vision and strategy. As a publicly funded and administered system, the Canadian health care system requires true integration to create seamless movement of patients through the system. Fiscal planning and administration must be done with long-term, big-picture goals in mind. Staffing decisions should be made considering long-term financial gains from improved patient outcomes. This long view will prevent administrators from balancing health care budgets through short-sighted cuts to nurse staffing.

Nurses know what the evidence says about their workload and the health outcomes for their patients. They know it from reading research findings such as those found here, and they know it from their day-to-day interactions with patients. They are frustrated. Working daily in an environment that cloaks itself in the mantle

of evidence-based practice, they do not understand why twenty years of evidence on nursing workload and its impact on patients is ignored.

The 2004 Canadian Policy Research Network study, which reviewed the success in implementing the 2002 Canadian Nursing Advisory Committee (CNAC) Report, made the following statement: “The goodwill displayed by nursing stakeholders is not endless and ultimately, success can only be measured by whether nurses perceive that their jobs are changing for the better” (Maslove & Fooks, 2004). The ten Canadian reports on nursing and health human resources between 2000 and 2006 called for immediate action. Research in the ensuing years has only served to reinforce this call. Action is now long overdue.

In his introduction to the Canadian Nurses Advisory Committee report in 2002, Michael Decter commented: “Simply put, as nursing goes, so goes the rest of the system” (Canadian Nursing Advisory Committee, 2002). Creating mechanisms for nurses to have autonomous, meaningful input into the care they give their patients, and the time and tools to give that care will go a long way to making a more effective, sustainable, cost-effective system that better meets the needs of the patients and families it serves.

## ***Realities from frontline nurses:***

### In the OR

Today I went home discouraged and exhausted with a headache and a sore back which may be because I have not eaten all day and I am so tired. I wonder if I missed anything and I keep thinking about whether I could have done anything to prevent the death of the young woman. I can't get the images of her family out of my mind. I question whether I want to continue working like this and wonder if tomorrow will be the same type of day. I don't think I can take two days like this in a row.

Ken (Newfoundland and Labrador)

## Nursing Workload and Patient Care

Understanding the Value of Nurses, the Effects of Excessive Workload, and How Nurse-Patient Ratios and Dynamic Staffing Models Can Help

# Recommendations Canadian Federation of Nurses Unions

### Principal recommendations

That policy makers:

1. Immediately commit to action to achieve safe staffing models across the continuum of care. Such action should include safe staffing ratios that replace like with like, ensuring that the right nurse with the right skills is matched with the patient.
2. Immediately fund implementation of a national prototype for safe staffing models, using either nurse-patient ratios or a dynamic shared decision-making model such as the Synergy Professional Practice Model.
3. Enforce health care system accountability for safe, quality patient care by moving beyond the wait-time and volume-driven, pay-for-performance benchmarks currently measured, and instead link institutional funding to improvements in patient outcomes and nursing indicators (reductions in

absenteeism, burnout, turnover, etc.). Accountability mechanisms should ensure that employers and funding decision makers are held accountable for staffing decisions and their impact on patients, staff and budgets.

***Realities from frontline nurses:***

New Year's

Over New Year's Eve week-end, the nurse's working day began at 06:45 hours on December 31st.

There was no nurse available for the night shift so I worked until midnight and then slept on the cot in the staff room until 05:00. On January 1st when I began a new shift, there was still no nurse for that night so, guess what... I remained at work until 23:00 hours that night.

Candice

## Supporting recommendations

That policy makers:

4. Ensure that staffing models and practices are based on evidence available in national and international research, and that they follow evidence-based guidelines such as the RNAO Best Practice Guidelines.
5. Provide targeted funding for quality nursing workplace initiatives directed at improving nursing workload and patient outcomes.
6. Standardize collection of health care data, including nursing indicators, and make it readily available to decision makers in easily understood, manageable electronic formats for use in decision making at system-wide and local levels.
7. Involve nurses at all levels in health care solutions.
8. Address governance issues in health care, starting at the front line and moving upward.
9. Clarify nursing scopes of practice and the role of unregulated workers in the system, and ensure replacement of nurses with nurses, eliminating substitution models which are unsafe and result in fragmentation of care.
10. Address overcapacity in the health care system by improving the integration of services between units, and between hospitals and their communities. This can be achieved by improving funding to home care and organizations providing alternate levels of care, and by improving access to primary care.

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## Appendix A

### Canadian Federation of Nurses Unions — Workload Project Think Tank

Toronto,

December 5-6, 2011

Participant	Position	Organization
Linda Silas	President	Canadian Federation of Nurses Unions
Barbara Foster	A/Executive Director	Office of Nursing Policy, Health Canada
Dr. Judith Shamian	President and CEO	Victorian Order of Nurses
Dr. Gail Tomblin Murphy	Professor & Associate Director	Dalhousie School of Nursing
Dr. Mélanie Lavoie-Tremblay	Assistant Professor	McGill School of Nursing
Patricia O'Connor	Director of Nursing	McGill University Health Centre
Dr. Judith Ritchie	Associate Director of Nursing for Research	McGill University Health Centre
Dr. Linda McGillis Hall	Professor, Associate Dean of Research & External Relations	University of Toronto School of Nursing
Dr. Ann Tourangeau	Associate Professor	University of Toronto School of Nursing
Dr. Marlene Smadu	Associate Dean	University of Saskatchewan College of Nursing
Dr. Maura MacPhee	Associate Professor	University of British Columbia School of Nursing
Murielle Tessier Dufour	Conseillère syndicale Secteur Organisation du travail	Fédération interprofessionnelle de la santé du Québec
Jo Anne Shannon	Professional Practice Specialist	Ontario Nurses' Association
Deborah Stewart	Professional Practice and Education Officer	Manitoba Nurses Union
Judith Grossman	Policy and Research Officer	United Nurses of Alberta
Patricia Wejr	Senior Policy Analyst	British Columbia Nurses' Union
Arlene Wortsman	Consultant	Arlene Wortsman and Associates
Dr. Lois Berry	Consultant	University of Saskatchewan College of Nursing
Paul Curry	Research Officer	Canadian Federation of Nurses Unions

## Appendix B

### Nurses Unions Negotiators Meeting

Vancouver,  
January 12, 2012.

<b>Participant</b>	<b>Position</b>	<b>Organization</b>
John Vivian	Executive Director	Newfoundland and Labrador Nurses' Union
David Brown	Executive Director	New Brunswick Nurses Union
Kendra Gunn	Executive Director	Prince Edward Island Nurses' Union
Dan Anderson	Director & Chief Negotiator	Ontario Nurses' Association
Leona Barrett	Labour Relations Officer	Manitoba Nurses Union
Rosalee Longmoore	President	Saskatchewan Union of Nurses
Paul Kuling	Second Vice President	Saskatchewan Union of Nurses
Kelly Miner	Director of Labour Relations	Saskatchewan Union of Nurses
Amber Alecxe	Director Patients and Families First and Government Relations	Saskatchewan Union of Nurses
Carl Veistrup	Employment Relations Officer	Saskatchewan Union of Nurses
David Harrigan	Director of Labour Relations	United Nurses of Alberta
Gary Fane	Executive Director of Negotiations and Strategic Development	British Columbia Nurses' Union
Linda Silas	President	Canadian Federation of Nurses Unions
Dr. Lois Berry	Consultant	University of Saskatchewan College of Nursing
Brett Holmes	General Secretary	New South Wales Nurses' Association
Jill Furillo	National Bargaining Director	National Nurses United
Debra McPherson	President	British Columbia Nurses' Union
Debbie Forward	President	Newfoundland and Labrador Nurses' Union
Heather Smith	President	United Nurses of Alberta
Jeannine Arbour	Negotiator	United Nurses of Alberta
Linda Haslam-Stroud	President	Ontario Nurses' Association
Bev Mathers	Negotiator	Ontario Nurses' Association
Valerie MacDonald	Negotiator	Ontario Nurses' Association

## Appendix C

### Roundtable Meeting

#### “A Reality Check on ‘Gaps’ Affecting Today’s Health Workplaces”

Ottawa,

January 31, 2012

Participant	Position	Organization
Lori Lamont	Vice President & Chief Nursing Officer	Winnipeg Regional Health Authority
Jane MacDonald	Vice President	Public Affairs and Community Engagement, VON
Patricia O’Connor	Director of Nursing	McGill University Health Centre
Diane Calvert-Simms	Vice President of Patient Services, Chief Nursing Officer	Cape Breton District Health Authority
Suzanne Johnston	VP, Clinical Programs & Chief Nursing Officer	Northern Health
Debbie Forward	President	Newfoundland and Labrador Nurses’ Union
Michel Mailhot	6th Vice President	Fédération interprofessionnelle de la santé du Québec
Sandi Mowat	President	Manitoba Nurses Union
Rosalee Longmoore	President	Saskatchewan Union of Nurses
Patricia Wejr	Senior Policy Analyst	British Columbia Nurses’ Union
Dr. Debra Bournes	Chief Nursing Officer	Ontario Ministry of Health & Long Term Care
Sylvie Hains	Directrice des soins infirmiers	Ministère de la Santé et des Services sociaux du Québec
Anita Paras	Manager, Workforce Planner	Alberta Health Services
Lynn Digney Davis	Chief Nursing Officer	Saskatchewan Health
Dorothy LaPlante	Executive Director, Officer of Nursing Services	First Nations and Inuit Health Branch
Linda Silas	President	Canadian Federation of Nurses Unions
Norma Freeman	Nurse Advisor	Canadian Nurses Association
Barb Foster	A/Executive Director	Health Canada, Office of Nursing Policy
Kate Thompson	Senior Nurse Consultant	Health Canada, Office of Nursing Policy
Jacquie Lemaire	Senior Policy Analyst	Health Canada, Office of Nursing Policy
Dr. Lois Berry	Consultant	University of Saskatchewan
Arlene Wortsman	Consultant	Arlene Wortsman and Associates
Paul Curry	Research Officer	Canadian Federation of Nurses Unions



## Appendix D

### Traduction du Message de la présidente de la FCSII, Linda Silas

Le 26 juillet 2012, le premier rapport communiqué par le Groupe d'innovation en matière de santé, groupe créé par les premiers ministres provinciaux et territoriaux, a été accueilli par des applaudissements polis. « Petits pas », « solutions faciles », « évident et qui va de soi » sont des expressions utilisées pour décrire les efforts initiaux des premiers ministres. C'est, toutefois, un bon début pour six mois de travail.

Si certains d'entre nous applaudissent fort c'est pour essayer d'attiser cette étincelle de collaboration pancanadienne afin que les améliorations aux soins de santé se propagent dans tout le pays. Nous sommes vraiment ravis de savoir que les premiers ministres sont déterminés à continuer ce travail.

Les infirmières et les infirmiers savent que des changements sont nécessaires. Les hôpitaux du pays fonctionnent en surcapacité. Une norme généralement acceptée, relativement au taux d'occupation des hôpitaux, est 85 %. Or, la plupart des hôpitaux ont un taux d'occupation de 100 % ou plus. Le surpeuplement compromet les soins, engendre un taux élevé d'infections d'origine hospitalière et des réadmissions non nécessaires à l'hôpital. Sans parler des charges de travail atteignant des niveaux dangereux qui amorcent le cercle vicieux du manque de personnel.

Le personnel infirmier est presque deux fois plus susceptible de s'absenter en raison d'une maladie ou blessure que la moyenne des travailleurs de toute autre profession. En 2010, les heures supplémentaires, rémunérées et non rémunérées, des infirmières et des infirmiers du secteur public correspondent à 11 400 emplois équivalents temps plein. Vingt pour cent des infirmières et des infirmiers du secteur hospitalier quittent leur emploi annuellement. Cela représente un coût, pour l'hôpital, estimé par certains à 25 000 \$ et par d'autres à 60 000 \$ par infirmière pour la transition. La charge de travail est souvent invoquée comme facteur clé du roulement de personnel.

Deux décennies d'études nationales et internationales ont établi, de façon constante, un lien très clair entre la dotation inadéquate en personnel infirmier et de piètres résultats des patients, y compris une augmentation du taux de mortalité, des pneumonies contractées à l'hôpital, des infections urinaires, des septicémies, des infections hospitalières, des plaies de pression, des saignements gastroduodénaux, des chocs et des arrêts cardiaques, des erreurs médicales, des échecs des secours, et des durées plus longues que prévues du séjour à l'hôpital.

Le lien entre la charge de travail du personnel infirmier et la sécurité des patients est aussi évident en soins de longue durée qu'en soins actifs. Ainsi, plus les patients reçoivent de soins directs, meilleurs sont les résultats, notamment taux inférieur de

mortalité, meilleur état nutritionnel, meilleur fonctionnement sur le plan physique et cognitif, taux inférieur d'infections urinaires, moins de plaies de pression, et moins d'admissions à l'hôpital.

Nous ne pouvons plus ignorer les données liant les conditions de travail à la qualité des soins. Un niveau sécuritaire de dotation doit être un principe directeur pour les premiers ministres lors de la gestion des ressources humaines en santé. Malheureusement, dans le premier rapport du Groupe de travail, le mot « patient » n'apparaît pas dans la section sur les ressources humaines en santé. Or, c'est la sécurité des patients qui doit être la force motrice derrière les décisions liées à la dotation en personnel.

Trois décennies d'une approche cloisonnée en matière de planification des ressources humaines en santé se sont traduites en montagnes russes pour les travailleurs de la santé et les budgets en santé. La dotation sécuritaire va au-delà des champs d'activités et des soins dispensés par des équipes, même si les deux font parties des solutions aux charges de travail dangereuses. Le Groupe de travail sur l'innovation en matière de santé doit travailler avec les associations de fournisseurs, les syndicats et les employeurs lors de la prochaine étape de la consultation. Le premier ministre Wall, co-président du Groupe de travail, a un modèle conçu dans sa province à partager, soit une entente de partenariat entre le Syndicat des infirmières et infirmiers de la Saskatchewan et le gouvernement de la Saskatchewan, ainsi que les régies régionales de la santé, visant à établir des niveaux sécuritaires de dotation pour les patients.

Certains États et pays, notamment la Californie et l'Australie, ont des niveaux de dotation prescrits par la loi, afin de régler les problèmes liés à la charge de travail. Des études récentes établissent un lien entre les ratios infirmière-patients prescrits et de meilleurs résultats des patients. À cela s'ajoutent des économies pour le système de santé en raison d'une diminution de la durée du séjour à l'hôpital, des incidents néfastes et du roulement du personnel.

Les gouvernements devraient s'engager à établir des niveaux sécuritaires de dotation en personnel dans tout le continuum de soins. Les données sur les incidents néfastes devraient être associées aux données sur la charge de travail et celles sur la composition du personnel (éventail des compétences) afin d'aider les décideurs à améliorer les conditions de travail et la qualité des soins.

La voix des infirmières et des infirmiers du pays a été forte et claire. La dotation sécuritaire doit être un principe directeur et un résultat mesurable dans le secteur de la santé.

Cet ouvrage intitulé *Améliorer les résultats des patients et la qualité des soins en ciblant la charge du travail du personnel infirmier : ratios prescrits infirmière-patients*,

et plus encore, a été commandé par la FCSII à l'intention des décideurs et des responsables des politiques dans le secteur de la santé. La dotation sécuritaire est un premier pas dans la planification des ressources humaines qui mettent l'accent sur les besoins des patients.

J'aimerais remercier Lois Berry, Ph. D., et Paul Curry (SIINÉ) pour leur excellent travail de recherche et pour la rédaction de ce rapport. J'aimerais aussi souligner la contribution, les conseils et l'expertise du comité consultatif de la FCSII : Vicki McKenna et Jo Anne Shannon (Association des infirmières et infirmiers de l'Ontario), Patricia Wejr (Syndicat des infirmières et infirmiers de la Colombie-Britannique), Deborah Stewart (Syndicat des infirmières et infirmiers du Manitoba) et Judith Grossman (Infirmières et infirmiers unis de l'Alberta).

Nous devons aussi souligner le travail et l'engagement des chercheurs canadiens du secteur des soins infirmiers qui ont participé à ce projet en nous consacrant leur temps et leur expertise :

- D<sup>r</sup> Mélanie Lavoie-Tremblay, École des sciences infirmières de l'Université McGill
- Patty O'Connor, Centre universitaire de santé McGill
- D<sup>r</sup> Judith Ritchie, Centre universitaire de santé McGill
- D<sup>r</sup> Linda McGillis Hall, École des sciences infirmières de l'Université de Toronto
- D<sup>r</sup> Ann Tourangeau, École des sciences infirmières de l'Université de Toronto
- D<sup>r</sup> Gail Tomblin Murphy, École des sciences infirmières de l'Université Dalhousie
- D<sup>r</sup> Marlene Smadu, Faculté des sciences infirmières de l'Université de la Saskatchewan
- D<sup>r</sup> Judith Shamian, Infirmières de l'Ordre de Victoria
- D<sup>r</sup> Maura MacPhee, École des sciences infirmières de l'Université de la Colombie-Britannique
- Barbara Foster, Santé Canada

Nous savons tous qu'il faut trouver des façons de permettre, aux infirmières et aux infirmiers de première ligne, d'agir lorsqu'ils jugent que les soins sont compromis. Nous savons qu'une solution ne convient pas nécessairement à toutes les situations, toutefois, nous avons l'assurance que ce rapport permettra d'influencer les décisions relatives à la dotation et se traduira en avantages mutuels en raison des meilleures conditions de travail et d'une meilleure qualité des soins.

Linda Silas, I.I.

Présidente de la Fédération canadienne des syndicats d'infirmières et infirmiers

## Appendix E

### Traduction du Résumé et des Recommandations

À une époque où l'on semble respecter les prises de décisions fondée sur les données probantes, le mécontentement des infirmières et des infirmiers du Canada s'accroît de plus en plus car les décideurs n'agissent pas en fonction de l'abondance de données établissant un lien entre des niveaux sécuritaires de dotation en personnel infirmier et de meilleurs résultats des patients.

Deux décennies d'études nationales et internationales ont établi, de façon constante, un lien très clair entre la dotation inadéquate en personnel infirmier et de piètres résultats des patients, y compris une augmentation du taux de mortalité, des pneumonies contractées à l'hôpital, des infections urinaires, des septicémies, des infections hospitalières, des plaies de pression, des saignements gastroduodénaux, des chocs et des arrêts cardiaques, des erreurs médicales, des échecs des secours, et des durées plus longues que prévues du séjour à l'hôpital.

Au tout début du millénaire, le gouvernement canadien, et ceux d'autres pays, ont reconnu la crise touchant le secteur des soins. En raison de la pénurie infirmière à l'échelle internationale, et des données selon lesquelles le personnel infirmier est épuisé, stressé et submergé par leur milieu de travail, dix importants rapports nationaux ont été commandés, entre 2000 et 2006, dans le but de mieux comprendre les problèmes du personnel infirmier au sein du système de soins de santé.

Les conclusions de ces rapports sont conséquentes. En utilisant des expressions ou des phrases telles « crise intenable », « besoin urgent de réparer les dommages » et inquiétude par rapport à la « détérioration de la qualité du système de soins de santé du pays », ces rapports demandent d'agir pour régler les problèmes du secteur des soins infirmiers dans le but ultime d'améliorer les soins dispensés aux patients.

Les recommandations comprises dans ces rapports se rangent dans deux grandes catégories : améliorer la charge de travail du personnel infirmier et améliorer la vie au travail du personnel infirmier. La plupart des recommandations ciblent ce qui suit : dotation pertinente, jumelage du champ d'activité aux besoins du patient, solutions à la cadence accrue et à la complexité du travail, réduction de l'absentéisme et de la fatigue chez le personnel infirmier, et meilleure intégration des soins entre les établissements de soins, et entre les établissements et la collectivité. Les rapports se sont attardés au milieu de travail en faisant des recommandations ciblant la création de milieux de travail respectueux envers le personnel infirmier grâce à la participation aux décisions relatives aux soins des patients et davantage de fonds alloués à la formation et au développement professionnel. Ces rapports préconisent les programmes visant à réduire la violence au travail. Ils soulignent l'importance

d'augmenter le nombre d'inscriptions dans les écoles de sciences infirmières afin de redresser la situation en raison des réductions, motivées par le budget dans les années 1990, et ciblant la formation infirmière.

Malheureusement, peu de ces recommandations ont été mises en œuvre, sauf une augmentation du nombre de places dans les écoles infirmières et quelques projets pilotes sur les milieux de travail sains. En raison de cette inaction, les problèmes liés à la charge de travail et à la vie au travail du personnel infirmier sont toujours présents. En fait, ils s'enveniment.

Actuellement, les problèmes de surcapacité et de surpeuplement des urgences et dans tous les hôpitaux n'ont fait qu'exacerber la crise du secteur infirmier du début des années 2000. La surcapacité a engendré les « soins infirmiers dans les couloirs », i.e. soins dispensés dans les corridors, les salons des patients, et autres lieux inappropriés, mal équipés et exposés. La surcapacité survient surtout en raison du manque d'autres niveaux de soins dans la collectivité, dont manque de foyers de soins, de services communautaires et de soins à domicile. La surcapacité est liée à une augmentation du risque de morbidité et de mortalité à l'hôpital, y compris augmentation de la fréquence des pneumonies, mauvaise gestion de la douleur, mauvaise gestion des douleurs thoraciques aiguës, retard dans l'administration d'antibiotiques par rapport aux protocoles recommandés, augmentation du nombre de réadmissions à l'hôpital, et diminution du degré de satisfaction des patients.

Les milieux de travail malsains continuent de nuire à la sécurité des soins dispensés par le personnel infirmier. Les interruptions fréquentes, la confusion quant aux rôles, le soutien technique et humain limité, le manque d'intégration et de coordination au sein du système, l'augmentation continue de l'acuité des besoins des patients, l'absence de prise de décision de façon autonome et de participation aux décisions relatives aux soins des patients continuent d'avoir des répercussions négatives sur le personnel infirmier et leurs patients. De nos jours, le personnel infirmier affiche un degré élevé d'épuisement, d'absentéisme, de roulement, de fatigue et d'insatisfaction au travail. Les études établissent un lien direct entre le degré de satisfaction du personnel infirmier et celui des patients.

Selon des sondages, menés auprès du personnel infirmier de première ligne au Canada, les problèmes liés à la charge de travail et à la dotation sécuritaire sont les problèmes qui surviennent le plus souvent au travail sur une base quotidienne. Les infirmières et les infirmiers mentionnent être à bout de patience en raison de l'inaction malgré les données probantes liant la dotation sécuritaire aux résultats positifs des patients.

Les infirmières et les infirmiers veulent des solutions à ces problèmes. Ils se tournent vers les solutions mises en œuvre en Californie et dans certains États de l'Australie où le personnel infirmier a réussi à faire pression et obtenir des ratios infirmière-patients prescrits par la loi et les conventions collectives. De tels ratios

limitent le nombre de patients dont doit s'occuper l'infirmière. Par exemple, en Californie, un ratio de 1:4 est prescrit par la loi.

À New South Wales, en Australie, les ratios ont été déterminés en fonction d'une formule d'heures minimum de soins infirmiers, par patient, par jour. Cette formule peut varier selon les classifications au sein de l'hôpital mais, généralement, les ratios correspondent à 1:4 pour le quart de jour sur une période de sept jours. Les ratios peuvent varier dans certaines unités de soins dans lesquelles l'acuité des besoins est plus élevée. Des mécanismes, prescrits par la loi, permettent d'améliorer la dotation lors de périodes où l'acuité des besoins des patients augmente. La dotation en personnel peut être gérée au niveau de l'unité de soins. Les ratios correspondent à un minimum pour assurer un niveau sécuritaire de dotation, et non pas à un maximum.

De nouvelles études démontrent une amélioration des résultats des patients à la suite de la mise en place de ratios prescrits. Des études ciblant l'expérience australienne démontrent une diminution de la fréquence des incidents directement liés aux soins infirmiers (indicateurs de résultats liés aux soins infirmiers), y compris diminution du taux de mortalité, des complications du système nerveux central, des ulcères, des gastrites, des saignements duodénaux, des septicémies, des plaies de pression, et de la durée du séjour à l'hôpital. Des études ciblant l'expérience californienne révèlent des résultats similaires par rapport au taux de mortalité, et indiquent qu'un nombre significativement plus grand d'infirmières et d'infirmiers mentionnent des charges de travail raisonnables et une amélioration de la qualité des soins. Cette amélioration de la qualité des soins a été mentionnée par les infirmières et les infirmiers de première ligne et ceux occupant des postes de gestion. Après la mise en œuvre des ratios prescrits, on a aussi observé une augmentation significative du nombre d'infirmières et d'infirmiers mentionnant être satisfaits au travail.

Une alternative aux ratios prescrits est un modèle dynamique de prise de décision partagée relativement à la dotation. Ce modèle tient compte à la fois des caractéristiques des patients et du personnel infirmier, et comprend un processus grâce auquel le personnel infirmier de première ligne participe directement aux décisions relatives à la dotation. Le modèle synergique de prestation des soins de l'American Association of Critical Care Nurses a été adapté à la prise de décisions relatives aux secteurs autres que les soins intensifs, et a été mis en œuvre en Colombie-Britannique et en Saskatchewan. La prise de décision partagée a augmenté la participation des infirmières et des infirmiers aux décisions relatives à la dotation, et ils accordent une très bonne cote à ce processus.

Il est important de souligner que le coût lié à une augmentation de la dotation infirmière peut être largement, voire même entièrement, récupéré par l'établissement. Cela s'explique par le lien confirmé entre une augmentation de la dotation infirmière et la diminution de la durée du séjour, des réadmissions, de la morbidité, des erreurs médicales et du roulement du personnel infirmier. Si l'on va au-delà des

murs des établissements de santé, on observe que, pour l'ensemble de la société, les économies réalisées en raison d'une plus grande productivité sont beaucoup, beaucoup plus importantes que les coûts pour augmenter la dotation.

Les ratios infirmière-patients prescrits, et les modèles dynamiques de prise de décisions partagée, sont encourageants pour les infirmières et les infirmiers de première ligne qui sont à bout de patience en raison de l'inaction à améliorer la charge de travail et la vie au travail du personnel infirmier, ainsi que l'expérience des patients et de leur famille. Le personnel infirmier veut qu'on agisse immédiatement pour mettre en place des processus de dotation sécuritaire. Les infirmières et les infirmiers demandent, avec instance, aux décideurs de mettre en œuvre, immédiatement, de tels mécanismes ainsi que des procédures de collecte de données permettant de consigner l'amélioration prévue aux résultats des patients. De plus, le financement des établissements et des programmes de santé devrait se faire en fonction des améliorations des résultats des patients et des indicateurs de la charge et des conditions de travail du personnel infirmier.

Les rapports canadiens publiés au cours de la dernière décennie illustrent clairement jusqu'à quel point la situation infirmière est le miroir de la situation dans le système de soins de santé. En ce moment, il est impératif de régler les problèmes liés à la charge de travail et à la vie au travail du personnel infirmier si nous voulons améliorer les résultats des patients, ainsi que leur expérience et celle de leur famille dans le système canadien de soins de santé.

### Principales recommandations

Que les décideurs :

1. S'engagent immédiatement à agir pour mettre en place des modèles de dotation sécuritaire dans tout le continuum de soins. Les mesures devraient comprendre des ratios sécuritaires de dotation selon lesquels les personnes sont remplacées par des personnes ayant les mêmes compétences, et selon lesquels le patient est jumelé à une infirmière ayant les compétences pertinentes.
2. Financent immédiatement la mise en œuvre d'un modèle national de dotation sécuritaire, en utilisant soit les ratios infirmière-patients ou un modèle dynamique de prise de décision partagée, par exemple le modèle synergique de prestation des soins.
3. Honorent l'obligation de rendre compte au sein du système de soins de santé afin d'assurer la sécurité et la qualité des soins aux patients en allant plus loin que les éléments actuellement mesurés (temps d'attente, paramètres liés



au volume et à la rémunération au rendement), et allouent plutôt les fonds aux établissements en fonction des améliorations par rapport aux résultats des patients et aux indicateurs relatifs au personnel infirmier (diminution de l'absentéisme, de l'épuisement, du roulement, etc.). Des mécanismes de responsabilisation devraient être en place afin que les employeurs et les décideurs chargés du financement soient tenus responsables des décisions relatives à la dotation en personnel et des répercussions sur les patients, le personnel et les budgets.

## Recommandations à l'appui

Que les décideurs :

4. S'inspirent des données issues d'études nationales et internationales pour élaborer les modèles de dotation et les pratiques, et qu'ils respectent les lignes directrices fondées sur les données probantes, dont les lignes directrices de l'Association des infirmières et infirmiers autorisés de l'Ontario relatives aux pratiques exemplaires.
5. Financent, de façon ciblée, les initiatives visant une meilleure qualité du milieu de travail infirmier en améliorant la charge de travail infirmière et les résultats des patients.
6. Normalisent la collecte des données en soins de santé, y compris les indicateurs relatifs au personnel infirmier, et rendent ces données facilement accessibles aux décideurs grâce à des formats électroniques faciles à comprendre et à gérer, et pouvant être utilisés lors de la prise de décisions à l'échelle locale ou dans l'ensemble du système.
7. Fassent participer le personnel infirmier à tous les paliers par rapport à la mise en œuvre de solutions pour régler les problèmes du secteur infirmier.
8. S'occupent des problèmes liés à la gouvernance dans le secteur de la santé, en commençant aux premières lignes et en progressant vers le haut.
9. Clarifient le champ d'activité du personnel infirmier et le rôle des travailleurs non réglementés au sein du système, et assurent le remplacement des infirmières par des infirmières en éliminant les modèles de remplacement qui posent des risques et entraînent une fragmentation des soins.
10. Règlent le problème de la surcapacité au sein du système par une meilleure intégration des services entre les unités, et entre les hôpitaux et les collectivités. Cela peut se faire par un meilleur financement des soins à domiciles et des organismes dispensant d'autres niveaux de soins, et en améliorant l'accès aux soins de santé primaires.



***Realities from frontline nurses:***

Proud to be a nurse in spite of the conditions

My co-worker and I cried. We cried because we felt for our palliative patient but, worst of all, in my case, I did not feel that I had provided very good care to her. I felt I was the worst nurse because I didn't have time to turn her! However my co-worker and I gave each other a pat on the back that we were able to prevent the two paediatric patients from going into respiratory failure, and they survived that night.

I am thankful for being a part of the health care team and proud to be a nurse!

Jackie

Relying on the best evidence, and on the experience of frontline nurses, *Nursing Workload and Patient Care* presents a sobering look at the challenges facing our overworked nursing workforce and the ensuing effects on patients. This book reviews the now incontrovertible body of evidence linking inadequate nurse staffing with increases in mortality and other negative outcomes for patients. *Nursing Workload and Patient Care* lays bare the empty promises of countless government studies while urging policy makers to fully understand the value that a nurse's education and training bring to patient care. The report offers a clear vision of a future in which nurse staffing benefits patients and nurses while contributing to the financial viability of our health system.

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WHERE KNOWLEDGE  
MEETS KNOW-HOW