Nurses and Patient Safety:

A Discussion Paper

by

Canadian Nurses Association

and

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Nurses and Patient Safety

Patient safety has always been important for Canadian registered nurses. Nurses\(^1\) are involved in the provision of health care in every area of the health care system, 24 hours a day, seven days a week. This “presence” of nurses and their sound knowledge base enables them to play a critical role in patient safety.\(^2\) Through their vigilance, nurses act to keep patients\(^3\) safe, identify areas of risk and recognize situations in need of improvement.

Although there have been significant developments in addressing patient safety issues, it is important to understand how patient safety problems arise. This document has been written to stimulate discussion among nurses, other health care providers, employers, the public and policy-makers about issues surrounding nurses and patient safety. Over the past two decades, there have been many initiatives concerned with quality in health care. More recently, there has been a renewed interest in patient safety as a critical component of quality health care.

Why is patient safety an important issue now?

Many Canadians assume that Canada’s health care system is among the safest in the world. However, large studies in other countries have shown that health care systems are prone to error and that the risk of adverse events\(^4\) is significant. Studies in the United States, the United Kingdom and Australia demonstrated that adverse events may occur in 3.7 per cent to 16.6 per cent of all hospital admissions; a significant portion of them may be preventable (Brennan et al., 1991; Kohn, Corrigan, & Donaldson, 1999; National Health Service, 2000; Wilson et al., 1995). Near miss\(^5\) situations occur with or without being reported in health care organizations and occur much more often than adverse events (Barach & Small, 2002). There is little reason to believe the situation is different in Canada (Baker & Norton, 2001).

Until now there have been no reliable data on errors\(^6\) in the health care system in Canada, leaving people uncertain about how many Canadians could be dying every year because of mistakes. As the results from the first study of Canadian rates of adverse events in acute care hospitals are being made available, it is important for nurses to discuss among themselves and with the public what patient safety means from a nursing perspective.

\(^1\) In this document, the terms “nurse” and “RN” are used to mean registered nurse.
\(^2\) Patient safety refers to “the state of continually working toward the avoidance, management and treatment of unsafe acts within the health care system” (National Steering Committee on Patient Safety [NSCPS], 2002, p. 37)
\(^3\) The term “patient” is used for the most part in this document as it reflects the current dialogue on the issues under discussion. CNA uses the term “patient” or “client” to mean recipient of care, whether an individual, family, group or community.
\(^4\) An adverse event refers to “injury related to health care management, rather than to an underlying disease process. An adverse event is an unplanned and undesired harmful occurrence, directly associated with care or services provided to a patient/client, such as an adverse reaction to a medication or a negative outcome of treatment. The occurrence may result from acts of commission (e.g., administration of the wrong medication) or omission (e.g., failure to institute the appropriate therapeutic intervention) and is related to problems in practice, products, procedures, and other aspects of the system” (NSCPS, 2002, p. 35).
\(^5\) A near miss “is a situation in which the patient had a narrow escape from a serious complication” (NSCPS, 2002, p. 36).
\(^6\) An error is defined as “the failure to complete a planned action as it was intended or when an incorrect plan is used in an attempt to achieve a given aim” (Davies, Hébert, & Hoffman, 2003, p. 27).
One thing that has changed in recent years is the recognition that there is rarely one single factor or one particular individual who causes an error. It is no longer assumed that most errors are the result of factors associated with a particular individual, such as incompetence or negligence.

Instead, international studies on patient safety reveal that most harm caused to patients can be attributed to problems in the health care system itself. Factors such as interruptions in the delivery of care, loss of information, outdated equipment, poor drug labeling, inadequate warnings about drug allergies or incompatibilities, poor staffing and environmental hazards all have the potential to lead to errors (Benner et al., 2002; Cook, Render, & Woods, 2000; Reeder, 2001). To address patient safety issues, it is necessary to develop ways to ensure that both the individual health care provider and the health care system can contribute to the safe delivery of care.

**Why are nurses concerned about patient safety?**

For nurses, patient safety is not just part of what they do; nurses are committed through their code of ethics to provide “safe, competent and ethical care” (Canadian Nurses Association [CNA], 2002). Patient safety is fundamental to nursing care and is of concern wherever nurses work – in the community, acute care hospitals or long-term care facilities. It is of prime importance to nurses in all areas of practice, be it clinical practice, education, research or management/leadership positions.

Promoting patient safety and excellence in nursing practice in the interest of protecting the public is central to the mandate of professional nursing associations and colleges at the provincial, territorial and national levels. (See Appendix A for CNA’s Position Statement on Patient Safety and Appendix B on CNA’s Patient Safety Initiatives).

As a self-regulating profession, the focus of nursing regulatory bodies has been on ensuring the competence of individual nurses. There have been fewer opportunities to address safety issues of organizations or the system itself. For example, in most provinces and territories, regulatory bodies have no legal ability to inspect health care organizations. However, they have been very active in speaking out for nursing practice environments that support safe care. In some provinces, professional nursing organizations offer consultative services to address nurses’ and employers’ concerns about the practice environment.

A recent survey asked Canadian nurses about patient safety in hospitals (Nicklin & McVeety, 2002). Nurses overwhelmingly responded that the environment in which they provide care is presenting increasing risk to their patients. The reasons cited were many and varied. Among the safety issues nurses identified were those connected with workload, human resources, restructuring and bed closures, the increasingly complex needs of patients, systems problems, the physical environment and technology.

Calls from nurses received by nursing practice consultants in provincial and territorial professional nursing associations and colleges confirm that patient safety is a pressing concern for nurses. For example, slightly more than 20 per cent of calls from nurses to practice consultants at the Alberta Association of Registered Nurses during an eight-month period in 2001 dealt with safety. Nurses’ concerns fell nearly equally into four key types of problems: inappropriate staffing practices, unsafe practitioners, inability to find enough qualified staff, and system problems such as inappropriate discharges or transfers (Marck, Allen, & Phillipchuk, 2001).
Challenges to safe nursing care

The next sections of the paper explore issues that challenge the ability of nurses to provide safe nursing care and to contribute to patient safety. The issues were derived from the literature and anecdotal accounts from nurse leaders who participated in a discussion group to develop this paper. The issues are grouped under the following headings:

1. Nursing practice environment and workforce issues
2. Teamwork and communication
3. Nursing perspective on patient safety
4. Patient perspective on patient safety
5. Technology
6. Culture of blame.

Selected research findings and anecdotes from practice situations are provided throughout the paper to illustrate and support nurses’ concerns.

1. Nursing practice environment and workforce issues

What has been happening in the places where nurses work? A recently released study from the Institute of Medicine in the United States concluded that the work environment of nurses is characterized by serious threats to patient safety. These threats are related to how the organization is managed, how the workforce is used, work design and the culture of the organization (Institute of Medicine of the National Academies [IOM], 2003).

In Canada over the past decade, restructuring, which has included regionalization, mergers and downsizing, has strained the health care system. In addition, the Canadian population is aging and much new technology has been introduced into health care facilities. Patients in hospitals and at home are generally more severely ill and require more complex care than they have in the past.

All of these factors, combined with resource limitations and the critical shortage of qualified health care professionals, are resulting in unstable and stressful environments where near misses and adverse events are more likely (NSCPS, 2002; Nicklin, 2001).

Staffing decisions

Nurses have consistently reported that the number of nurses in hospitals is inadequate to allow them to provide safe care (Aiken et al., 2001). As well, in some facilities, RNs are being replaced by less qualified nursing personnel. RNs are worried about changes in the mix of nursing staff. Confusion may arise when RNs and their colleagues are uncertain about changes in their respective roles and responsibilities for patient care.

Research studies have revealed important findings about the link between nurse staffing and consequences for patients.

7 Staff mix refers to the combination and number of regulated and unregulated persons providing direct and indirect nursing care to clients in settings where registered nurses practice (CNA, 2003b).
- When patients received a higher overall number of nursing hours and when a higher proportion of that care was provided by RNs, the length of time patients spent in the hospital was shortened. They had fewer complications such as urinary tract infections and upper gastrointestinal bleeding (Needleman, Buerhaus, Mattke, Stewart, & Zelevinsky, 2002).

- The greater the number of surgical patients a nurse was assigned to care for, the greater the likelihood that the patient would die within 30 days of admission, when all else was equal (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002).

- A higher proportion of hours of care provided by RNs in the staff mix was associated with a lower 30-day mortality rate for selected medical and surgical hospitalized patients (Tourangeau, Giovannetti, Tu, & Wood, 2002).

- An increase of one hour worked by RNs per patient day was associated with an 8.9 per cent decrease in the odds of the patient getting pneumonia (Cho, Ketefian, Barkauskas, & Smith, 2003).

**Shortage of nurses and aging of the nursing workforce**

It is projected that Canada will have a shortage of 78,000 RNs by 2011 and up to 113,000 by 2016 (CNA & Canadian Federation of Nurses Unions, 2003). If all RNs working in 2001 continue working until age 65, it is estimated that the country could lose 13 per cent of its 2001 workforce by 2006 through retirement or death. If RNs take early retirement at age 55, the percentage of nurses lost to the system could increase to 28 per cent (O’Brien et al., 2003). These numbers do not bode well for patient safety.

Additionally, the nursing workforce in Canada is aging. In 2002, the average age of an RN employed in nursing was 44.2 years; in 1998, it was 42.6 years (CNA, 2003c). This is positive news in terms of the knowledge and experience nurses have accumulated and can share. Not so positive are the effects of long and overtime work shifts and increased workload on nurses whose physical endurance may be diminishing. When nurses are tired, the likelihood of adverse events increases (Curtin & Simpson, 2002).

**Part-time and casual employment**

In addition to the nursing shortage, the high numbers of part-time and casual positions\(^8\) in nursing are a concern. Part-time work is more common in health care than in other sectors and is especially common with nursing positions. In 2002, 33.8 per cent of Canadian RNs worked part time and 11.8 per cent worked in casual positions (CNA, 2003c).

With fewer nurses working in full-time positions, continuity of care is reduced, which is itself a threat to patient safety. When there is a lack of consistency in care provider, patients are exposed to many people over the course of receiving care; nurses do not get to know their patients and their individual needs as well. Nurses in part-time and casual positions do not have the same opportunities to attend in-service education about new care processes and

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\(^8\)“Casual work usually means that hours are not regularly scheduled and there are fewer or no employer benefits” (Canadian Institute of Health Information [CIHI], 2001, p. 42).
technology or to benefit from mentoring by more experienced nurses. Many nurses who are casually employed end up working for multiple employers, an arrangement that can be both stressful and exhausting.

**Pace of work and workload**
Many RNs are experiencing an increased pace of work and workload brought about by the shortage of nurses, increasing complexity of care, rising patient acuity\(^9\) and the introduction of new technology. Present workloads are at times so heavy that nurses believe they are unable to develop therapeutic relationships, make the necessary comprehensive assessments of their patients or seek guidance from nurses and other health care professionals. They believe that these factors contribute to error and incidents that have been referred to in the nursing literature as “failure to rescue.” When nurses have the time to watch for problems, identify them early and take action in a timely manner, patients are rescued from complications that may occur in health care settings (Aiken et al., 2002).

Heavy workloads may also prevent experienced nurses from guiding their less experienced colleagues. Nurses do not always have time to complete reports when errors happen and they are uncertain about whether even their managers have time to read and address such reports (Rodney, Doane, Storch, & Varcoe, 2003).

Psychologists and others who have studied work environments confirm that adverse events happen when people are rushed, under pressure, overworked, emotionally upset or working in difficult situations (Buerhaus, 1999).

When nurses try to deal with too many things at once or when they’re running out of time, they may go into “overload.” In such a situation, a problem may be misread if attention is directed to the wrong cues (Reeder, 2001). At the same time, the increased pace of work is resulting in ethical or moral distress\(^{10}\) for many nurses, causing them to feel guilt and concern. The following anecdote illustrates the distress one nurse experienced because of the complexity of the work environment.

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I work in ambulatory care for outpatient surgery. I want to quit nursing before something happens. Most of my patients are elderly, take many medications, have a number of controlled conditions – diabetes, heart, blood pressure, have had open heart surgery, hip replacement, cataract surgery, etc. When the patient arrives in the morning for day surgery, the time is very limited for getting to know the patient and conducting a thorough assessment. Given the complexity of care, aging, medications, etc., it is absolutely impossible for me now to confidently believe I’ve done a thorough assessment of all major aspects of that patient in order to safely hand the patient over to the surgeon. Several years ago, it wasn’t like this; however, complexities increase daily. One of these days something will happen and it will be my fault because I’ve missed a factor about that patient’s condition. However, the system will have set me up for that. I need to leave nursing now. I’m in a job of escalating risk to both myself and patients.
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\(^9\) Acuity refers to severity of illness.

\(^{10}\) Ethical or moral distress arises when one is unable to act on one’s ethical choices, when constraints interfere with acting in the way one believes to be right (CNA, 2003a, p. 2).
Increased workloads, time pressures, frequent work interruptions and the inability to predict what will happen in their work environments are affecting the health of nurses and consequently, their patients (Aiken et al., 2001; Baumann et al., 2001). Health care workers are more likely than Canadians working in other sectors to be absent from work because of illness and disability; nurses lose more days of work due to illness and disability than other health care workers (CIHI, 2001).

Recent research has revealed that many nursing activities are either left undone or delayed. Activities most frequently left undone include comforting and talking to the patient, providing back and skin care, teaching patients and families, and documenting care provided. Most frequently delayed are taking vital signs, administering and changing dressings, mobilizing or turning the patient, and responding to the call bell (O’Brien-Pallas, 2003). A reduction in support staff, the need to do more administrative work because of cuts to nurse manager positions (Aiken et al., 2001), and the requirement to supervise less qualified nursing staff are factors that are taking nurses away from direct patient care.

**Need for clinical support**

Nurses need support to provide safe nursing care. They have seen many of the required supports eroded because of lack of funding. Nursing orientation programs have been shortened and fewer continuing education programs are offered (IOM, 2003). Nurse manager positions and those of clinical support personnel, such as nurse educators and clinical nurse specialists, have been reduced or eliminated. For many nurses, this means the loss of meaningful relationships with more senior nurses who are both visible and accessible (Advisory Committee on Health Human Resources [ACHHR], 2002). Opportunities for novice nurses to be mentored by their more experienced colleagues are reduced as workloads increase and older nurses retire.

The following anecdote speaks to the value of experience and to the need for that experience to be shared with novice colleagues.

A nurse on the unit was preparing medications for her patients. She noticed that, although the label was correct, the pills were a different colour than they had been the previous two days she had administered this medication. Despite being very busy, this discrepancy bothered her and she decided to take time to phone pharmacy. She held the phone for quite awhile as someone checked. The answer that came back to her was that she was correct; in pharmacy, the bottle with the prescribed medication was next to one with the medication that had been sent to the unit in error.

In this scenario, it was an experienced staff nurse who checked with pharmacy. Would a junior nurse have felt she could afford the time to phone? Would she have felt confident questioning pharmacy? Here was a near miss that no one, except this nurse, would even know about.

In summary, the environments in which nurses practise either help or hinder them in providing safe nursing care (ACHHR, 2002; Baumann et al., 2001; IOM, 2003). At the present time, nurses are concerned that many factors in their current practice environments are having a negative impact on patient safety.
2. Teamwork and Communication

Nurses and other health care professionals recognize teamwork and the opportunity to practise collaboratively as important aspects of patient safety (Affonso & Doran, 2002). However, many factors in the nursing practice environment, such as those described in the previous section, may interfere with communication and teamwork. Key periods for breakdown in communication have been identified, such as times of transition including change of shift and patient transfer between facilities (Cook et al., 2000). Nurses are concerned about the impact of poor communication on their patients, a concern supported by nursing research.

In 2001, researchers reported on a study of a large number of patients and nurses working in 19 teaching hospitals in Ontario (McGillis Hall & Doran, 2001). They learned that the better the quality of communication among nurses and between nurses and other health care providers, the better patients were when they were discharged from hospital. Patients were functioning at a higher level in terms of their physical and emotional health and their ability to look after themselves. With better communication, obstetrical patients were more satisfied with the nursing care they had received. These results confirm findings from previous research.

At least 30 per cent of all negative patient incidents reported to the Canadian Nurses Protective Society (CNPS) in 2002 involved poor teamwork and communication. Poor communication and decision-making can lead to inadequate assessments of patients, errors in assessment and diagnosis, and inadequate monitoring of patients (CNPS, 2003).

The potential for the lack of collaboration and communication among health care professionals to lead to adverse events is illustrated in the following vignette.

In one large health care region, each cost centre was asked to cut costs. They were urged to do so by looking at their own costs, without an eye to which other departments might cut costs. Pharmacy made some choices believed to be related to cost cutting. One was changing the types of bags in which toxic cancer fighting drugs for intravenous administration are to be provided. Currently in use is a clearly identifiable bag that alerts nurses to the toxicity of its contents and allows them to translate that to patient safety, without even having to read the name of the drug first (‘safety at a glance’). The new bag will not be clearly identifiable. The RNs were not consulted about this change; they were only told it was going to happen.

In this anecdote, nurses were worried that patient safety was being threatened by the removal of a visual cue that helped them to be cautious. The story also speaks to the concern of nurses that their perspective on patient safety issues is often overlooked.
3. **Nursing Perspective on Patient Safety**

To contribute more fully to patient safety initiatives, nurses believe that their voice must be heard, nursing leadership is required to bring issues forward and that data on patient safety issues particular to nursing are needed.

**Listening to nurses**

High profile cases, such as the deaths of children in the pediatric cardiac program at a Winnipeg children’s hospital, raise questions about how nurses’ concerns are treated. After witnessing disturbing surgical problems and deaths, operating room nurses at the hospital alerted their supervisors and senior administrators about the situation. No changes occurred. The report of the inquest by Associate Chief Judge Sinclair included the following findings:

> “The concerns expressed by some of the cardiac surgical nurses were dismissed as stemming from an inability to deal emotionally with the deaths of some of the patients. As well, any concerns over medical issues that the nurses expressed were rejected as not having any proper basis, clearly stemming from the view that the nurses did not have the proper training and experience to hold or express such a view. In addition, while HSC [Health Sciences Centre] doctors had a representative on the hospital's board of directors, nurses did not” (Sinclair, 2000, chap. 10).

Many nurses involved in the recent SARS outbreak in Toronto were frustrated and angry that they were not listened to, nor was their clinical expertise recognized. These feelings are captured in the words of one staff nurse working in an acute care setting.

Nurses … were ignored and suppressed by administration and medical staff. They were discounted and considered not to have any knowledge of medical issues. What possible motivation could there have been for not listening to the nurses (Registered Nurses Association of Ontario, 2003)?

Some nurses believe they are at risk if they speak out about what they see and know. They may not bring forward patient safety issues if they are not in a supportive environment. The following anecdote illustrates the hesitation a student nurse had about speaking out. What teaching or coaching would have helped this student feel empowered to speak about a breach in technique?

A senior student nurse told a story about a male patient requiring catheterization. The nursing staff was having some difficulty doing the procedure. The physician was called and promised to come to do the procedure, acknowledging that there were reasons for the difficulty. Nurses waited for the physician to come; the patient experienced increasing discomfort. After some time the physician arrived in street clothes with his backpack on. The nurse had the sterile tray ready and created a clean/sterile field. Without removing his backpack or washing his hands, the physician proceeded to insert the catheter, breaching sterile technique. He was soon on his way out of the unit. The student nurse began to wonder how this could happen and what the point was of her efforts to avoid infection.
Need for nursing leadership
In the early years of restructuring, not only were nurse manager, clinical nurse specialist and nurse educator positions reduced, as discussed earlier, many chief nursing officer positions were eliminated. As a result, many nurses were excluded from policy-making within their health care facilities because their leaders were no longer part of the management systems (ACHHR, 2002; Aiken et al., 2001). Chief nursing officers who remained found their span of control increased to include other departments; nurse managers were required to take on responsibility for more nursing units. These nurses are challenged to provide the leadership required to respond to threats to patient safety in nursing practice environments.

Need for data
To date, information on nursing’s perspective and contribution to patient safety has been limited by several factors. Existing databases capture only a small number of variables specific to nursing and there is a lack of reliability in the reporting of data within and among sites. Part of the difficulty arises from the variation in definitions related to patient safety.

Problems associated with definitions and databases are not restricted to nursing; there is no consistent approach to identifying and tracking errors within the health care system as a whole. It has been suggested that learning from data on near misses will contribute more to quality care and patient safety than focusing solely on adverse events (Barach & Small, 2002).

There is a developing body of literature examining patient safety outcomes that are sensitive to actions by nurses. Included are outcomes such as medication errors, patient falls, pressure sores and hospital-acquired infections (White & McGillis, 2001). Ongoing work in this area will help address the need for a more comprehensive nursing perspective on patient safety issues.

4. Patient Perspective on Patient Safety
Nurses believe it is important for the perspective of patients to be integrated into patient safety strategies but are concerned that this does not always happen. Patients may contribute to errors but may also help to identify or avoid errors. For example, patients may put their health at risk by combining prescription and over-the-counter medications without consulting a health care professional. On the other hand, patients may alert nurses to potential medication errors when they are knowledgeable about their own care and can mention, for example, that the colour or shape of a pill is different from previous ones.

There is the potential that misunderstanding the patient’s perspective may contribute to patient safety problems. Misunderstanding may occur when nurses dismiss, misconstrue, guess or undervalue patients’ perspectives (Bournes & Flint, 2003). By talking to patients about safety, nurses can encourage them to be more active in their health and illness care and to be partners with health care providers in the pursuit of patient safety (Reeder, 2001).
5. Technology
Medication-related error is one of the most common types of error (Kohn et al., 1999). Not surprisingly then, machines that dispense drugs and systems that automate the ordering of medications have been among recent advances in technology. Other new technologies include medical devices for patient care, information management systems, patient monitoring systems and computerized physician order entry systems.

These devices and systems have the potential to enhance patient safety (Curtin & Simpson, 2002); however, they may also contribute to adverse events. As discussed earlier, technology may add to the complexity of care. Some nurses are concerned that their colleagues rely too much on technology and no longer pay adequate attention to the signs and symptoms patients are experiencing. For example, while focusing on a screen next to the patient’s bed that monitors vital signs, a nurse may neglect to observe her patient. What draws the nurse to the screen rather than to the patient (Marck, 2000)? What is the impact on patient safety?

Nurses are not always involved in decisions about the development and implementation of new technologies. They may not receive training on new devices or systems before implementation. Both factors may increase the risk of adverse events. Nurses who work at the bedside have a lot of expertise to contribute to safe implementation of technology. During a pilot test of a bar-coding system for administration of medication, nurses provided feedback to the system developers that facilitated fine-tuning of the software and hardware design and resulted in a more user-friendly efficient system (Johnson, Carlson, Tucker, & Willette, 2002).

6. Culture of Blame
A key to improving patient safety is honest reporting of errors by health care professionals (O’Connell, White, & Platt, 2003). Whether nurses report errors is determined by a number of factors. Sometimes nurses cannot agree on what constitutes an error. Is it considered an error if a nurse does not give a patient a medication ordered for 10 a.m. until noon? Whether or not it is perceived as an error is likely influenced by what people around the nurse think and organizational policy. Nurses may be reluctant to disclose and talk about errors and near misses, fearing that whatever they say may be held against them later, particularly if the matter should go to court or to a regulatory body.

The culture of the health care organization influences what and how many errors are reported (White & McGillis, 2001). Nurses frequently face a “culture of blame” operating during investigations of adverse events. When responsibility for error is assigned to individual nurses, openness and disclosure about mistakes is discouraged. Patients have the right to know when an adverse event has occurred in their care and to have the appropriate treatment to address the problem. Health care organizations should have disclosure policies in place that support good clinical practice and improve patient safety.

For nurses, being blamed for an error can reinforce feelings of shame and failure and lead to loss of confidence as well as fear of reprisal (Reeder, 2001). The consequences of making a mistake may include suspension or termination of employment, professional discipline that may result in suspension or revocation of a nurse’s license to practise, lawsuits or even criminal prosecution. A nurse may be presented with one or more of these consequences as a result of one patient incident (CNPS, 1999).
When nurses make mistakes, they are held accountable for their actions. However, as Thompson (2000) noted, “Somewhere in our history of seeking to ensure safe practice and a safe environment, making mistakes became unacceptable, and we introduced blame and punishment. The goal was appropriate, but some-how [sic] the outcome is a culture that seeks a person to blame.” Where is the opportunity to learn from mistakes? A culture of blame does not recognize that individual error and health system error are, for the most part, interrelated.
Conclusion: Addressing the Challenges for Patient Safety

The Canadian National Steering Committee on Patient Safety (2002), which included nurse representatives and other groups, recommended that the key to building a safer health system is to develop, maintain and nurture a culture of safety. It is important for the health care system to shift from a “name, blame and shame” culture to one that seeks to prevent future errors by changing structures and processes within the health care system that contribute to adverse events and near misses.

Nurses are working to respond to pressures from the public and health care providers to discover better ways to deliver safe care. Researchers at the University of Toronto have created a conceptual framework to guide innovations in patient safety research, practice and education (Affonso & Doran, 2002). The four action blocks of the framework are:

- building technological tools to create safer ways for dealing with drugs and devices;
- applying human factors design\textsuperscript{12} to create safer work environments;
- reforming organizational culture to create the conditions for critical thinking, ethical practice and opportunities for learning; and
- delivering processes to optimize safe care.

Nurses are developing classification systems for errors in nursing to be able to compare data across settings and provide concrete suggestions for solutions (Benner et al., 2002). Others are using models to analyse critical incident reports of errors that attempt to gain insight into the chain of events that may lead to an adverse event (Meurier, 2000).

Strong nursing leadership is required to ensure that nurses’ views on patient safety issues are heard. Nursing leadership brings a unique perspective to the dialogue on patient safety as “few leaders in health care are better equipped or more knowledgeable of the overall system and how the parts work and relate as a whole.” (Thompson, 2000, p. 509) Hard issues, such as the shortage of nurses and the need for work redesign, raised by nurses and described in this paper need to be addressed.

The Institute of Medicine report cautions that no single action will keep patients safe; rather, “bundles” of patient safeguards are needed in the work environments of nurses. These include:

- governing boards that focus on safety;
- leadership and evidence-based management structures and processes;
- effective nursing leadership;
- adequate staffing;
- organizational support for ongoing learning and decision support;

\textsuperscript{12} A human factors approach to patient safety has been used to reduce errors in industries that are prone to accidents, like the aviation industry. It focuses on the interrelationships between people, the tools they use and their work environment. For example, a drug dispensing machine might be developed so that the administration of medications does not have to depend to such a large degree on the nurse’s memory (American Hospital Association, 2002; Affonso & Doran, 2002).
• mechanisms that promote interdisciplinary collaboration;
• work design that promotes safety; and
• organizational culture that continuously strengthens patient safety (IOM, 2003).

At the international level in nursing, the International Council of Nurses is beginning a project to develop principles for patient safety. At the national level, CNA is involved in many patient safety-related activities (See Appendix B). Provincial and territorial nursing associations are addressing patient safety through many initiatives, including education programs, publications, conferences and discussions with key stakeholders.

All nurses have a significant contribution to make in protecting and improving patient safety. As the health care provider who spends the greatest amount of time with patients overseeing, coordinating and providing care, nurses are ideally positioned to strengthen the safety net for patient care. The nursing perspective on reducing errors and improving systems must be part of a collaborative approach involving the public, other health care providers, employers, educators, administrators, researchers and governments at all levels of the health care system.
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Appendix A
Position Statement: Patient Safety

PATIENT SAFETY

Canada's health care system is thought to be among the safest in the world. However, as large studies in several countries have shown, health care systems are prone to error and failure, and the risk of adverse events is significant. Problems with patient safety are seen as being driven by systemic factors such as rapid changes in the health care system, increased use of technology, restricted resources including shortages of qualified professionals and the quickening pace of work.

Canadian nurses have increasingly expressed concern about the ability to deliver safe care in today's health care system. Given the commitment of nurses expressed in the first value of the Code of Ethics for Registered Nurses to provide safe, competent and ethical care, nurses are experiencing increasing moral distress as they continue to work in environments that are not able to support quality professional practice. Much work has been done by nurses to address concerns for patient safety, as evidenced by the growing body of research on best practices and the Canadian Nurses Association's (CNA) promotion of quality practice environments and appropriate human resource planning in the health system, but much remains to be done.

CNA POSITION

Patient safety is the prevention and mitigation of unsafe acts within the health care system. But for nursing it must mean more than that. It means being under the care of a professional health care provider who, with the person's informed consent, assists the patient to achieve an optimum level of health, while at the same time ensuring that all necessary actions are taken to prevent or minimize harm. Patient safety is fundamental to nursing care and health care across all settings and sectors. It is not merely a mandate; it is a moral and ethical imperative in caring for others.

Providing safe, competent and ethical care to patients within the health care system is a shared responsibility of all health care professionals, health care organizations and governments and requires the involvement of the public.

CNA believes that providing for patient safety involves a wide range of actions at the level of the individual nurse, the profession, the multidisciplinary team, the health care organization and the health care system. These actions must include adequate clinical support for nurses by nurse managers. It is also critical to patient safety that nursing care data are collected and interpreted at the national level to support research on best nursing practices.

1 Studies in the United States, United Kingdom, Australia and New Zealand indicate that adverse events occur in the range of 3.7 - 16.6 per cent of all hospitalizations, summarized in Nursing Sensitive Outcome (Dotan, 2003). Canadian rates of adverse events in acute care are being investigated and are expected to be released in early 2004.
2 An adverse event is an unintended injury or complication that results in disability, death or prolonged hospital stay and is caused by health care management. This is the definition being used by researchers in the CIHI-CIHR research on Adverse Events in Canadian Hospitals (Canadian Institute for Health Information, 2002).
3 Nurses refer to registered nurses throughout.
5 (CNA, 2001).
6 (IJO, 2002).
7 (CNA, 2001).

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CNA further believes that the escalating shortage of registered nurses, the use of inappropriate staffing practices and the understaffing and underskilling of health care services pose a significant threat to patient safety and contribute to incidents of failure to rescue. Present workloads are at times so heavy that nurses are unable to develop therapeutic relationships, make the comprehensive assessments needed and seek nursing or other expertise as required. Such workloads also prevent experienced nurses from being available to guide less experienced nurses. The casualization of the nursing workforce over the last decade, in the interest of cost-reductions, has also contributed to decreasing the availability of nurses to mentor other nurses and, at the same time, reduced the continuity of care, which in and of itself is a threat to patient safety.

Human health resource issues impacting on patient safety, such as those indicated above, must be addressed on a system level and be evidence-based. An appropriate balance must be sought between full-time nursing personnel and part-time, casual and temporary personnel. In terms of staff mix, an evidence-based approach must be central to decisions on the nursing competencies; therefore, the level and mix of nursing staff required for a particular patient population in a particular setting. Even with the right numbers of nurses and the right mix of nursing competencies, nurses in clinical leadership and unit management roles must have a span of control that reasonably permits them to provide supervision and support for nurses that will ensure patient safety.

Patient safety cannot be achieved without system accountability and system competence. Efforts to analyse and reduce adverse events in the provision of health care are most effective when such events are viewed as system failures. This concept represents a paradigm shift from a culture of individual blame to a culture of safety in which reporting adverse events is required and promoted. While individual competency may be a contributing factor, and individuals remain accountable for their own actions, it is increasingly evident that system competency plays a major role in patient safety. Only when adverse events and near misses are reported can they be analysed collaboratively to identify and address problems in the system.

Patients have the right to know when an adverse event has occurred in their care and to have appropriate treatment to address the problem as far as possible. When such an event results in injury or even death, there must be open and honest communication with the patient or the family as soon as possible. The implementation of clear agency policies on the reporting of adverse events and near misses, and on disclosure of adverse events to the patient and family, are necessary to support good clinical practice and to the overall improvement of patient safety in the system.

Nurses must advocate for an environment in which nurses and other health care workers are treated with respect and support when they raise questions or intervene to address unsafe or incompetent practice. Whistleblowing legislation should be enacted in all jurisdictions so that, after all avenues of addressing the problem have been tried, nurses who speak out publicly in good faith can be protected from reprisals.

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8 (Needleman, Baehna, Marrie, Stewart, & Zelevinsky, 2001).
9 (Aiken, Clarke, Cheung, Sloane, & Silver, 2003).
10 (Clarke & Aiken, 2003).
11 “Nurses must be committed to building trusting relationships as the foundation of meaningful communication, recognizing that building this relationship takes effort. Such relationships are critical to ensure that a person’s choice is understood, expressed and advocated” (CNA, 2002, p. 11).
12 (CNA, 2003).
13 (National Steering Committee on Patient Safety, 2002).
14 “Nurses must strive to prevent and minimize adverse events in collaboration with colleagues on the health care team” (CNA, 2002, p. 9).
16 Whistleblowers are people who expose negligence, abuses or dangers, such as professional misconduct or incompetence, which exist in the organization in which they work. In health-care institutions, nurses may be the first to recognize unsafe practices or to identify actual or potential hazards (CNA, 1999).
17 (CNA, 2002, p. 17).
18 (Sinclair, 2000, chap. 10).

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The practice environment enables or hinders nurses and other health care professionals in their ability to provide safe care. Developing and supporting quality professional practice environments is a responsibility shared by practitioners, employers, governments, regulatory bodies, professional associations, educational institutions, unions and the public.\textsuperscript{19}

Strong leadership across the nursing profession is essential to moving forward the cultural reform that is required to ensure the delivery of safe quality care in professional practice environments.\textsuperscript{20} The number of first-line managers should be sufficient to allow reasonable levels of contact with nurses in the practice environments. In settings where the majority of the staff are nurses, the first-line manager should be an experienced nurse with strong leadership abilities.\textsuperscript{21}

Nurses have a significant contribution to make in protecting and improving patient safety. As the principal health care providers with the patients, overseeing, co-ordinating and providing care 24 hours a day, seven days a week, nurses are ideally positioned to strengthen the safety net for patient care. The nursing perspective on reducing errors and improving systems must be part of a collaborative approach involving the public, other professions, employers and governments. Adequate resources must be made available to undertake this work at all levels of the health care system.

BACKGROUND

Studies in the United States, the United Kingdom, Australia and New Zealand have shown that adverse events may occur in anywhere from 3.7 per cent to 16.6 per cent of all hospital admissions and a significant portion of these may be preventable.\textsuperscript{22} Canadian rates of adverse events in acute care hospitals are being investigated through research funded by the Canadian Institute of Health Information and the Canadian Institutes of Health Research.\textsuperscript{23}

Nursing has always given the highest priority to patient safety. Nursing associations at the provincial, territorial and national levels have centred their work around patient safety and promoting excellence in nursing practice in the interest of the public. CNA, over many decades, led the development of standards of nursing practice, education, administration and the Code of Ethics for Registered Nurses. CNA develops and advocates nursing and public policy that promotes not only patient safety but also high standards of health care and excellence in nursing practice.

Provincial and territorial nursing associations and colleges regulate the practice of nurses. They continually develop and maintain standards of nursing within their jurisdictions through many programs, including licensure, disciplinary procedures and requirements for continuing competence, often with the involvement of other health care professionals and public representatives. CNA develops and maintains the Canadian Registered Nurse Examination.

This combination of setting and promoting standards for the profession at the provincial/territorial and national levels has worked well in guiding individual practice to ensure patient safety. What has changed in recent years is the recognition that while the systems aimed at promoting and ensuring individual competence and accountability

\textsuperscript{19} (CNA, 2001).
\textsuperscript{20} (Affonso, Jeff, Doran, & Ferguson-Paré, in press).
\textsuperscript{22} See footnote 1.
\textsuperscript{23} See footnote 2.
are very necessary, they are not enough. Patient safety cannot be achieved without system accountability and system competence.

Patient safety concerns need to be evaluated and addressed as system-wide problems. The various movements for continuous quality improvement have tried to bring appropriate attention to system issues, but there continues to be a strong reliance on what is expected to be the flawless performance of individuals. Often this is the expectation without regard to circumstances. We are still working in a 'culture of blame' in which the investigation of adverse events is focused on assigning responsibility to individuals.

Within the national dialogue on patient safety, CNA participated in and was strongly supportive of the report of the National Steering Committee on Patient Safety, which recommended, among other important directions, the creation of a Canadian patient safety institute. The 2003 federal budget provided for $10 million annually to support the creation of the new institute, and CNA continues to participate in the development of the institute.

The work of CNA on promoting quality professional practice environments is one of our most important initiatives for patient safety. CNA is also a member of the Canadian Coalition on Medication Incident Reporting and Prevention and supports various efforts of other groups in relation to research on quality work-life indicators, dissemination of drug safety information, patient falls and other initiatives related to patient safety.

Central to CNA's work on patient safety is the recently revised Code of Ethics for Registered Nurses. The Code provides an up-to-date framework of values and professional obligations to guide nurses' actions in promoting and advocating for patient safety. It speaks to the many responsibilities for individual practice, such as obtaining informed consent, advocating for the patient's right to self-determination and disclosing of error. In addition, it highlights the importance of the practice environment, and nurses' duty to advocate for a quality practice environment and the human and material resources necessary to ensure safe and competent ethical care.

November 2003

References:


24 See footnote 13.

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Appendix B
Patient Safety and the Canadian Nurses Association

Standards

CNA has a long tradition of working in the area of patient safety. Between 1978 and 1988, CNA developed and published professional standards for nursing education, practice and administration. This work provided the leadership and foundation of nursing standards development in Canada. Setting nursing standards in practice and education is now the role of the provincial and territorial nursing associations and colleges. In regulating nursing practice, these organizations license nurses, promote continuing competence, and when required, undertake disciplinary actions. These are critical building blocks in protecting patient safety.

National Examinations

CNA continues to support protection of the public with the Canadian Nurse Registration Examination and with its Certification Program, which currently offers national examinations in 14 nursing specialities.

Code of Ethics

Central to CNA’s work on patient safety is the recently revised *Code of Ethics for Registered Nurses*. The Code provides an up-to-date framework of values and professional obligations to guide nurses’ actions in promoting and advocating for patient safety. It speaks to the many responsibilities for individual practice, such as obtaining informed consent, advocating for the patient’s right to self-determination and disclosing of error. In addition, it highlights the importance of the practice environment, and of a nurse’s duty to advocate for a quality practice environment and the human and material resources necessary to ensure safe and competent ethical care. CNA has produced educational materials that help nurses know how to apply the Code.

Patient Safety Initiatives

In terms of the latest national developments on patient safety issues, CNA participated in and was strongly supportive of the report of the National Steering Committee on Patient Safety, which recommended, among other important directions, the creation of a Canadian patient safety institute. The executive director of CNA was a member of the interim committee responsible for establishing the institute.

The work of CNA on quality professional practice environments and its guidance on whistleblowing are important initiatives for patient safety.\(^1\) CNA is also a member of the Canadian Coalition on Medication Incident Reporting and Prevention and supports efforts of other groups in relation to research on patient falls and dissemination of drug safety information.

\(^1\) (Canadian Nurses Association, 1999).
\(^2\) (CNA, 2001).
With the support of the Office of Nursing Policy at Health Canada and a strong collaboration with the Canadian Council on Health Services Accreditation (CCHSA), nursing work-life indicators are now being recognized as important to patient outcomes. Through a consensus process held in 2002, CNA identified 32 quality work-life indicators. Five indicators have been included in the CCHSA accreditation materials. These and other indicators are now being tested for validity and reliability by nurse researchers at the University of Toronto.

**References**
