

# **Patient Safety and the Management of Adverse Health Event Education Curriculum**

**A Background Paper Prepared for the Task Force  
on Adverse Health Events**

**Deborah Gregory, Ph.D.**

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Ms. Joan Rowsell, Director, Centre for Nursing Studies, Eastern Health

Ms. Karen Webber, Associate Director of Undergraduate Studies, School of Nursing, Memorial University of Newfoundland

Dr. Sandra LeFort, Director, School of Nursing, Memorial University of Newfoundland

Dr. James Rourke, Dean, Faculty of Medicine, Memorial University of Newfoundland

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## Introduction

There is a growing body of literature that demonstrates that when health care professionals understand each others' roles and are able to communicate and work effectively together, patients are more likely to receive safe, quality care.<sup>1</sup>

The potential to educate all health care providers in patient safety and management of adverse health events using an interprofessional approach has been recognized in the United Kingdom<sup>2</sup>, the United States<sup>3</sup> and Australia<sup>4</sup>.

## Patient Safety Education

Demands for change in medical education are no longer confined to the medical profession; governments and the community also want change as a result of publicized adverse events...Most medical educators acknowledge that problems are caused by poorly designed systems, but are uncertain what needs to be taught about quality and safety, and how best to teach and assess it.<sup>5</sup>

In 2006, the role of education in improving safety and quality in health care was the subject of an article published in the *Medical Journal of Australia* by Walton and Elliott. Educating doctors about quality and safety and the need to incorporate training and education into the undergraduate and postgraduate medical training are the foci of the article. The authors describe the National Patient Safety Education Framework and suggest "that interdisciplinary and vertically integrated education and training are needed, incorporating innovative methods, to create a safer health care system" (page S63).<sup>6</sup>

In the following sections, a high level overview of the comprehensive patient safety education curriculum developed by the Australian Council for Safety and Quality in Health Care and similar patient safety education curriculum being proposed at the national level in Canada is presented. Finally, patient safety education curriculum currently used by the Schools of Nursing and the Faculty of Medicine in Newfoundland and Labrador are presented.

## Patient Safety Education Curriculum - Australia

### *National Patient Safety Education Framework*

In 2005, the Australian Council for Safety and Quality in Health Care published the National Patient Safety Education Framework (NPSF). The framework is

- patient-centred
- identifies the knowledge and performance required by all health care workers in relation to patient safety
- is flexible in design, and
- can be used to develop curriculum, competency-based training programs and other safety and quality initiatives.<sup>7</sup>

The framework targets all health care workers who are defined by 4 categories:

**Category 1** – health care workers who provide support services (e.g., personal care workers, volunteers, transport, catering, cleaning and reception staff).

**Category 2** – health care workers who provide direct clinical care to patients and who work under supervision (e.g., ambulance officers, nurses, interns, resident medical officers and allied health workers).

**Category 3** – health care workers with managerial, team leader, and/or advanced clinical responsibilities (e.g., nurse unit managers, catering managers, department heads, registrars, allied health managers and senior clinicians).

**Category 4** – clinical and administrative leaders with organizational responsibilities (e.g., CEOs, board members, directors of services and senior health department staff).<sup>8</sup>

According to the NPSF, health care workers need the following competencies in order to provide safe care:

1. Communicating effectively
  - 1.1. Involving patients and carers as partners in health care
  - 1.2. Communicating risk
  - 1.3. Communicating honestly with patients after an adverse event (open disclosure)
  - 1.4. Obtaining consent
  - 1.5. Being culturally respectful and knowledgeable
2. Identifying, preventing and managing adverse events and near misses
  - 2.1. Recognizing, reporting and managing adverse events and near misses
  - 2.2. Managing risk
  - 2.3. Understanding health care errors
  - 2.4. Managing complaints
3. Using evidence and information

- 3.1. Employing best available evidence-based practice
- 3.2. Using information technology to enhance safety
- 4. Working safely
  - 4.1. Being a team player and showing leadership
  - 4.2. Understanding human factors
  - 4.3. Understanding complex organizations
  - 4.4. Providing continuity of care
  - 4.5. Managing fatigue and stress
- 5. Being ethical
  - 5.1. Maintaining fitness to work or practice
  - 5.2. Ethical behaviour and practice
- 6. Continuing learning
  - 6.1. Workplace learning
  - 6.2. Workplace teaching
- 7. Specific issues
  - 7.1. Preventing wrong site, wrong procedure and wrong patient treatment
  - 7.2. Medicating safely

The 22 learning topics are accompanied by learning objectives, knowledge and performance elements. The level of knowledge and performance elements is determined by the health care workers' level of responsibility. Patient narratives highlight topics from the patient's perspective. The term "patient" also applies to consumers and clients.

## **Patient Safety Education Curriculum - Canada**

### ***Recommendations of the Change Foundation and Ontario Hospital Association***

Wong & Beglaryan (2004)<sup>9</sup> conducted a review of the research on strategies for hospitals to improve patient safety. Based on the literature available at that time on patient safety and adverse events, several recommendations were made primarily targeting hospitals and, to a lesser extent, professional organizations and governments. The recommendations relevant to the work of the Task Force included:

- 1. Providing leadership for patient safety initiatives
- 2. Creating a culture of safety
- 3. Providing training and continuous education
- 4. Improving reporting systems
- 5. Establishing a national patient safety strategy

## 6. Next steps in research

Recommendation three is directly relevant to this section of the report, and therefore requires further elaboration. The authors identified four key recommendations<sup>10</sup> under this domain.

- i. Hospitals must maintain up-to-date patient safety standards and protocols.
- ii. Universities should train health sciences students in the prevention of adverse events.
- iii. Professional associations, colleges and hospital associations should promote improved patient safety by disseminating information on best practices and giving professionals training in risk management.
- iv. Provincial governments must finance training and development programs supporting safety in hospitals.

### ***Recommendations of the National Steering Committee on Patient Safety***

In 2004 the National Steering Committee on Patient Safety produced a report titled “Building a Safer System – A National Integrated Strategy for Improving Patient Safety in Canadian Health Care.” The following recommendations of the report that focus on the establishment of educational and professional development programs are relevant to effective adverse health event management:

- Develop and implement health care education and professional development programs for improving patient safety.
- Develop educational and continuing professional development programs to improve patient safety in collaboration with national accrediting bodies, academic institutions, provincial licensing authorities (for peer assessment reviews) and health-care facilities/organizations/scholarly societies.<sup>11</sup>

### ***Canadian Patient Safety Institute – Safety Competency Framework***

The vision of the Canadian Patient Safety Institute (CPSI) is to create one of the safest health care systems in the world. CPSI believes it is necessary to equip health care providers with the tools and knowledge during their training years to build and maintain such a system. In March 2007, CPSI announced a new initiative spearheaded by CPSI's Advisory Committee on Education and Professional Development. The development of a pan-Canadian framework for patient safety competencies would identify the key knowledge, skills and attitudes related to patient safety for institutions with an interest and responsibility for education and the professional development of practitioners in

medicine, nursing, pharmacy and the therapy groups (physical therapy, occupational therapy and respiratory therapy). CPSI partnered with the Royal College of Physicians and Surgeons of Canada to facilitate the development of the Canadian Safety Competencies Framework<sup>12</sup>.

The objectives of developing the framework are:

- To identify the key knowledge, skills and attitudes related to patient safety competencies for all health care professionals.
- To develop a simple, powerful, flexible framework that will act as a benchmark training, educating and assessing health care professionals in patient safety
- To develop a framework that will allow for its smooth integration into curriculum at educational institutions, into the professional development programs of health care associations, and directly into patient care sites across the health-care delivery spectrum.
- To foster interprofessional and interorganizational collaboration in patient safety.
- To help make patient safety competencies easy for everyone to understand and apply.<sup>13</sup>

The draft Canadian framework consists of six domains:

1. Contribute to a culture of patient safety.
2. Work in teams for patient safety.
3. Communicate effectively for patient safety.
4. Manage safety risks.
5. Optimize human and environmental factors.
6. Recognize, respond to and report adverse events.<sup>14</sup>

The framework will be formally launched in September 2008 (Personal Communication, Chantal Backman, May 26, 2008). The ultimate goal is to incorporate the framework into the education of health professionals in Canada. It is anticipated that the development and integration of a framework of interprofessional patient safety competencies will expedite the development of regional patient safety curriculum.

In a July 2, 2008 news release, Health Canada announced the renewal of funding for the Canadian Patient Safety Institute.<sup>15</sup> Over the next five years CPSI will work in collaboration with its national and regional partners on four key areas: education, research, tools and resources, and interventions and programs. It will continue to promote patient safety as a focus in health sector education and training, and facilitate the development of curriculum competencies. CPSI will also

- enhance patient safety research capacity,
- provide tools to foster accountability, and
- improve patient safety practices and processes and develop pan-Canadian programs to enable timely implementation of patient safety practices.<sup>16</sup>



## Patient Safety Education Curriculum – Newfoundland and Labrador

### *Centre for Nursing Studies*

Information from the Centre for Nursing Studies as it pertains to teaching materials and/or curriculum descriptions the School of Nursing may use as it relates specifically to patient safety, safety culture, management of adverse events, and the code of ethics and standards of practice for registered nurses and licensed practical nurses is outlined verbatim below. Specific feedback from faculty included the following:

BN (Collaborative) Program

#### **Year I**

- Safe patient handling is taught in first-year theory, lab and clinical courses.

#### **Year II**

- The *Pharmacology* course includes sections on the “role and responsibilities of the nurse,” “legal and ethical implications,” “drug errors” and “self-administration and self-prescription.” A guest speaker from the “Canada Vigilance Regional Office – Atlantic” does a presentation on “Reporting of adverse reactions: the role we play to ensure patient safety.” Safety is a thread through all of our lab sessions and there is a full lab entitled “Medication Errors.” Pharmacology content focused on safety is tested through theory exams and lab practicum.
- *Community Health* clinical addresses the safety of the nurse during home visiting.
- *Nursing Practice for the Care of Women and the Childbearing Family* includes the objective to “provide competent nursing care.” Competent nursing care is evaluated using the Nursing Practice Appraisal Form, which includes the following: 1) [the nurse] administers appropriate aseptic technique when carrying out procedures; 2) maintains safety principles when providing all aspects of nursing care. Personal, colleague and client safety issues/concerns are emphasized and addressed in both lab and clinical settings in Nursing Practice for the Care of Women and the Childbearing Family.
- *Extended Practice* includes the objective for students to “provide competent nursing care to individuals and families who are experiencing health-related needs;” competent care is inclusive of “safe” care. Specifically, this implements preventive strategies related to the safe and appropriate use of medication; it implements other preventative and therapeutic interventions safely (e.g., positioning, managing intravenous therapies, oxygen administration and wound care); and uses safety measures to protect self and colleagues from injury or potentially abusive situations (e.g., aggressive clients, appropriate disposal of sharps, lifting devices). Extended Practice also includes the objective that students “apply legal, ethical and professional standards that guide the practice of nursing.” Specifically, the nurse practices nursing according to agency and school policies; recognizes limitations of practice and consults with faculty in

new/unfamiliar situations; reports unsafe/unethical/illegal practices; questions, recognizes and reports errors (own and others); and takes action to minimize harm arising from adverse events.

### Year III

- *Nursing Concepts for Middle and Older Adults*. In both theory and lab, students are taught and shown Eastern Health’s “occurrence reporting” forms, including the multiple different types of occurrences (e.g. patient falls, medication errors, etc.). Also, in the lab and clinical there is a process in place should a student or faculty member be injured (e.g., needlestick). An occurrence form is completed and the appropriate people (e.g., Occupational Health) notified for any necessary follow-up/treatment.
- *Nursing Practice with Middle and Older Adults* uses a clinical incident report (Appendix IV Student Handbook – see faxed material) to report/track student incidents in the clinical area. When there is an actual error, a clinical incident form on the unit is also completed. Students are sent to the lab for remedial if there is an actual error. The lab faculty track medication errors and discuss/review the incident with the students.
- *Nursing Concepts and Nursing Practice for Mental Health* (theory and clinical) address the legal and ethical issues related to mental health nursing. The Mental Health Care and Treatment Act is discussed in both courses as it relates to safe patient practice. In the clinical course, issues related to safety, including clinical observations, how to report an incident, documentation and sharps policies are reviewed. All issues related to safety on individual clinical units are discussed. In theory, discussions focus on suicide, aggression and violence, medication as it relates to adverse health events, including prevention of adverse health events and psychiatric medication emergencies. Also debriefing after an incident happens is discussed as a means of reviewing the events and strategizing re future understanding and prevention.

### Years I – IV

- Throughout the four-year nursing program, client safety, medical asepsis and proper body mechanics are guiding principles for every lab and clinical experience. It is stressed with students that they must wash their hands before and after every patient contact, and if they do not, for example, they would not be deemed independent for a particular skill, e.g., dressings. Any safety concerns would be documented on the student’s appraisal, and if an unsafe pattern is demonstrated with no sign of improvement, the student could fail the clinical course.

The Centre’s *Student Handbook* references the Clinical Incident Report. Faculty also reviewed each course in the BN (Collaborative) Program to determine the learning opportunities provided for students to apply the competencies required for entry-level practice, as identified by the *ARNNL (2006): Competencies in the Context of Entry-Level RN Practice*

2007-2010. The courses line up with the competencies (Ms. Joan Rowsell, personal communication, July 8, 2008).

### ***Memorial University of Newfoundland - School of Nursing***

The following information is included – often as threads – through courses offered from the first year through to fourth year (Ms. Karen Webber, personal communication, June 10, 2008).

#### *(A) Patient Safety/Safety Culture*

This topic is discussed in N1017, Fundamental Psychomotor Competencies & N2004, Pharmacology & Nutritional Therapeutics.

#### *(B) Adverse Health Event Management*

This topic is addressed in N2004, Pharmacology & Nutritional Therapeutics

- A guest speaker from the Canadian Adverse Reaction Monitoring for the Atlantic Region delivers a lecture to the students.

#### *(C) Changing from a Culture of Blame to a Culture of Discovery*

#### *(D) Medication Errors: Identifying, Reporting, Assessing, Disclosing*

#### *(E) ARNNL's Protocol Regarding Concerns about Patient Care*

- Topics C, D and E are covered through lectures and discussion in N3113, *Nursing Leadership and Management*.

#### *(F) Standards of Nursing Practice & Code of Ethics*

- These topics are introduced in N1004, *Introduction to Nursing*, as well as being addressed again formally in N4103, *Issues in Nursing & Health Care*.

### ***Memorial University of Newfoundland - Faculty of Medicine***

The Faculty of Medicine is currently in the process of a major curriculum revision. The Faculty is keen to incorporate the knowledge gained by the Task Force and translate that into a more specific patient safety approach that can be prominently interwoven throughout the new MD education program curriculum (Dr. James Rourke, personal communication, June 9, 2008).

At the current time, most of the specific patient safety and management of adverse events education takes place in the postgraduate residency training program. Dr. Rourke provided the Task Force with the following information:

- During the initial Post Graduate Medical Education (PGME) orientation for PGY1 (first-year residents), it is included in a session dealing with the Canadian Medical Protective Association (CMPA), which covers many patient safety issues.
- It is also dealt with contextually by each of the disciplines.
- The Faculty has a formal adverse incident report process involving the residents. The Assistant Dean for PGME meets with Dr. Oscar Howell, Vice-President of Medical Affairs for Eastern Health when such an incident occurs to discuss and address concerns and develop and take appropriate action.
- Avoiding adverse events has also been included as part of Medicine Grand Rounds as recently as May 9<sup>th</sup> 2008, and previously was the focus of an all-day professional development session involving external experts.

Dr. Rourke also addressed the Faculty of Medicine's commitment of incorporating patient safety into its educational curriculum. This is illustrated in the following quote:

At both the postgraduate residency training and the MD education programs, the Faculty of Medicine is committed to incorporating the most up-to-date educational and management approaches to address patient safety issues and concerns in a most effective way. The timing of our curriculum renewal process and your work [the work of the Task Force on Adverse Health Events] will facilitate this.

## Conclusion

The Canadian Patient Safety Institute, in collaboration with the Royal College of Physicians and Surgeons, is promoting the development and of a national interprofessional patient safety competencies framework. It is anticipating adoption of the framework into regional patient safety curriculum.

A recent submission to the Task Force on Adverse Health Events focusing on interprofessional education (IPE) and patient safety competencies highlighted "the potential for IPE to enhance interprofessional teamwork and other Patient Safety Competencies identified by the Canadian Patient Safety Institute."<sup>17</sup> At a provincial level, there is a window of opportunity to expedite the adoption of the framework, given that the Faculty of Medicine is reviewing its curriculum, with major changes planned in the coming year.

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