Blueprint Project

Transforming Patient Safety Education in Alberta

A collaborative initiative sponsored by the Health Quality Council of Alberta

Patient Safety Principles

Definitions, Descriptions and Rationale

June 2010

Acknowledgements

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Principles 'Think Tank'

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Blueprint Project Steering Committee

The Blueprint Project began in May 2009 as a collaborative initiative between the following project partners represented on the Steering Committee:

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Blueprint for Patient Safety Education in Alberta Project

In spring 2009, the Health Quality Council of Alberta began a multi-year collaborative project (the Blueprint Project) to develop a framework for patient safety education in Alberta. The project will identify consistent key messages related to patient safety that should be incorporated into educational programs at all levels (undergraduate, post-graduate, workplace learning) for all healthcare workers (support staff, front-line care providers, managers, senior executives and board members).

Foreword

On behalf of the Health Quality Council of Alberta (HQCA), I am pleased to introduce the Blueprint Project, a collaborative initiative to develop a framework for patient safety education in Alberta. The HQCA is proud to support this project, which provides a tremendous opportunity to improve patient safety through education of healthcare workers at all levels -- undergraduate, post-graduate, workplace learning.

The impetus for this project comes from a growing awareness that if patient safety is to be intrinsic to the fabric of our healthcare system, it must be woven in at every level and at every opportunity. The principles described in this document are foundational to patient safety. They were identified by a group of stakeholders with varied perspectives on patient safety in a day-long "Think Tank" session held in September 2009. The principles provide a common thread running through resources that will be developed by the Blueprint Project to support healthcare worker education.

The Blueprint Project provides a unique opportunity for health organizations to work hand-in-hand with post-secondary educational institutions to ensure patient safety is a common goal in Alberta. This is a long-term project that has already created goodwill and begun to build bridges between the academic institutions and health organizations through the collaborative efforts of many.

I would like to acknowledge our project partners: Alberta Health Services, the University of Alberta, the University of Calgary, the University of Lethbridge, Mount Royal University, Northern Alberta Institute of Technology, Norquest College, the Canadian Patient Safety Institute, the British Columbia Patient Safety and Quality Council and the Manitoba Institute for Patient Safety.

These organizations and the representation they provide to the steering committee and various other project committees are the glue that holds us together. Their enthusiasm for improving patient safety through education is commendable, as is their pioneering spirit and unwavering commitment.

John W. Cowell, MD
Chief Executive Officer
Health Quality Council of Alberta
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Introduction

A primary consideration in the delivery of health care is to keep patients safe: *primum non nocere* – first do no harm. There is a substantial challenge in fulfilling this axiom because delivery of health care is complex.

The healthcare system can also be described as complex, that is, characterized by specialization and interdependency where one component of the system can interact with many other components in unexpected ways.[1] The larger healthcare (macro) system is composed of both meso and microsystems. A mesosystem[2] is formed by a grouping of interrelated microsystems that provide care to a shared population of patients. A microsystem represents a small group of people who work together on a regular basis to provide care to discrete subpopulations of patients.[3] Direct delivery of health care is based on clinical microsystems.

In many respects, patient safety exists in the decisions, actions and behaviours of all individuals – those who manage (at the macro- and meso-levels) and those who deliver (at the micro-level) health care, as well as those who receive health care. For a healthcare system to honour *primum non nocere*, the decisions, actions and behaviours of every individual should be based on fundamental safety principles, where a principle is a comprehensive and fundamental law or doctrine.[4] Principles apply both to individuals and organizations.

The Healthcare Encounter Safety & Quality Model (see Appendix) and the framework of learning topics for patient safety education derived from it are built on six patient safety principles. These principles define the basic requirements for safe health care:

1. Patient engagement at all levels of healthcare delivery
2. Respectful, transparent relationships between and among those who deliver and those who receive health care
3. Recognition that health workers function within complex systems to deliver care
4. A just and trusting culture
5. Appropriate responsibility/accountability at all levels of a healthcare system
6. Continuous learning and improvement

Principle 1: Patient engagement at all levels of healthcare delivery

Definitions

- Patient – an all-encompassing term describing a person who is receiving health services plus those the patient chooses to support him/her (i.e., family members or friends)
- Engagement – a formal promise, agreement, undertaking, covenant[5]

Description and Rationale

At the microsystem level, this principle means that a patient's safety interests should be of prime importance when decisions are made about care that he/she might receive. This principle also recognizes that a patient and the people the patient chooses to provide support (i.e., family/friends) need to be full partners in the care that is delivered. This partnership will increase the likelihood that the care is appropriate and safe.

Patients are full partners when:

- their knowledge and values are considered in the planning and delivery of care.[7]
- information that is complete and unbiased is shared with them in ways that are affirming and useful.[7]
- they are encouraged and supported to participate in care and decision-making at the level they choose.[7]

At the meso and macrosystem levels, this principle means that patients are included on a system-wide basis in facility design, policy and program development (as well as its implementation and evaluation), in the design of care delivery, and professional education. Patients' safety interests should also be of prime importance in decisions that are made at the meso- and macro-levels of healthcare systems that could have an important impact on the delivery of safe care to patients.

"Nothing about me without me." [7]

Principle 2: Respectful, transparent relationships between and among those who deliver and those who receive health care

Definitions

- Respect – due regard for wishes, feelings, rights of others[6]
- Transparent – obvious or evident; open to public scrutiny; easy to perceive or detect[6]

Description and Rationale

This principle means that relationships are at the core of healthcare delivery and occur between/among individuals at all levels of the healthcare system.

At the microsystem level, relationships occur between:

- healthcare providers and healthcare recipients (patients and the people they choose for support).
- healthcare providers who are part of formal or informal teams that deliver or support the delivery of care to patients.

At the meso and macrosystem level, relationships occur between:

- healthcare organizations and the patient populations/communities to whom they are accountable for providing services.
- healthcare organizations and the healthcare workers they employ or with whom they have a contractual relationship to provide or support healthcare delivery.
- regulatory agencies and the society to which they are accountable (for protecting their welfare/best interests).

Effective communication is essential to ensure that patients are engaged in healthcare delivery and to transmit safety-critical information. Communication is enhanced in environments where there is a trusting relationship; trust is gained through mutual respect and transparency. These concepts are especially important in situations where patients have been harmed during the course of healthcare delivery and when trusting relationships need to be reestablished.

Who respects without trust; who trusts without transparency?

Principle 3: Recognition that health workers function within complex systems to deliver care

Definitions

- System – a set of interdependent components interacting to achieve a common aim[9]; a set of things working together as a mechanism or interconnecting network[5]
- Complex – a whole made up of complicated or interrelated parts[4]

Description and Rationale

Complexity applies to the nature, number and familiarity (or visibility) of possible interactions of system components. Complex interactions are of unfamiliar sequence, or unplanned and unexpected sequences, and either are not visible or not immediately comprehensible.[10] Humans and human interactions are a fundamental component of the systems of healthcare delivery and contribute to its complexity. When designing, or analyzing the failure of, healthcare delivery it is important to consider and make allowance for the complexity of healthcare systems.

Human error is often the only focus and never an adequate explanation for adverse events.

Principle 4: A just and trusting culture

Definitions

- Just – morally right and fair; appropriate or deserved; well-founded[6]
- Trusting – showing trust in or tending to trust others (trust – firm belief in something or someone[6])
- Culture – the set of shared attitudes, values, goals and practices that characterizes an institution or organization[4]

Description and Rationale

This principle is based on the understanding that human error is both universal and inevitable and that errors can be made at all levels within the healthcare system (micro, meso and macrosystem levels). Although the human condition (fallibility) cannot be changed, the systems in which humans work can be. The appropriate management of hazards that threaten patients' safety and efforts to improve patients' outcomes needs to be directed at the design of systems' structures and processes that support humans in delivering safe care. By definition, errors are unintentional; workers, therefore, should not be disciplined for committing them.[11]

When there is a failure in the delivery of care, the evaluation of workers' actions and behaviours should be done fairly (interpreted within the context of the situational circumstances in which the work was performed and an understanding of intention) and without consideration of the patient's outcome. However, it is insufficient to evaluate only the actions and behaviours of the individuals who were closest to the event. The characteristic elements of systems that create error-provoking conditions need to be understood and addressed because human actions are influenced and shaped by the systems and circumstances in which individuals work to deliver care. The context in which the work was being performed and the factors influencing that context should be comprehensively evaluated.

By supporting workers in this way, management increases the probability that workers will voluntarily report errors they observe, including their own, because they will recognize that the making of errors reflects system weaknesses that could be rectified before patients are harmed. In contrast, actions/behaviours undertaken with an intent to harm, or with an intent to be non-compliant with accepted standards of providing services because of self-interest rather than patient best-interest (an important qualifier), should not be tolerated and warrant sanctions. A just culture is not a 'no-blame' culture.[11]

A culture that is just and trusting is:

- characterized as having an atmosphere of trust in which people are encouraged, even rewarded, for providing essential safety-related information.[11]
- a fundamental requirement for establishing effective reporting (from healthcare workers) about safety issues, which is an important component of a safety information system.

Workers who feel safe, trust enough to report hazards and their own errors.

Principle 5: Appropriate responsibility/accountability at all levels of a healthcare system

Definitions

- Responsible – having an obligation to do something, or having control over or care for someone/capable of being trusted/(of a job or position) involving important duties or decisions or control over others[5]
- Accountable – required or expected to justify actions or decisions[5]

Description and Rationale

Responsibility/accountability for the delivery of safe care is shared by individuals or teams of healthcare workers (at a microsystem level) and by administrative leaders of healthcare organizations (at a meso and macrosystem level). Responsibility/accountability needs to be linked with authority (control) to take action as required. Authority is particularly important in urgent situations where individuals who need to take action have the flexibility and ability to respond in a timely fashion,[11] whether it be to rectify an unsafe situation or to respond to actions/behaviours that require immediate review.

At the meso and macrosystem levels, the design and implementation of improvements in structures and processes that support safer delivery of care should be assigned to specific, appropriate individuals. Expectations of improved performance/actions to be carried out need to be clearly communicated to the appropriate individual or established team.

"The price of greatness is responsibility." – *Churchill*

Principle 6: Continuous learning and improvement

Definitions

- Learning – the action of receiving instruction or acquiring knowledge; a process that leads to the modification of behaviour or the acquisition of new abilities or responses, and which is additional to natural development by growth or maturation[5]
- Improvement – an act of making or becoming better; a process, change, or addition, by which the value or excellence of a thing is increased; that in which such addition consists or by which anything is made better[5]

Description and Rationale

This principle recognizes that for health care to be as safe as possible, continuous monitoring of important safety information is required for:

1) systems that support the delivery of care (environment/equipment/technology/information systems).

2) individual patients (microsystem level) and populations of patients (meso and macrosystem levels).

Individuals and organizations should:

- have a willingness and competence to draw the right conclusions from safety information systems,[10] both to manage individual patient care and to design/provide for patient populations or subpopulations.
- have the will to implement changes when their need is indicated.[11]
- act to implement changes at micro, meso and macrosystem levels.

"Knowing is not enough; we must apply.
Willing is not enough; we must do." – *Goethe*

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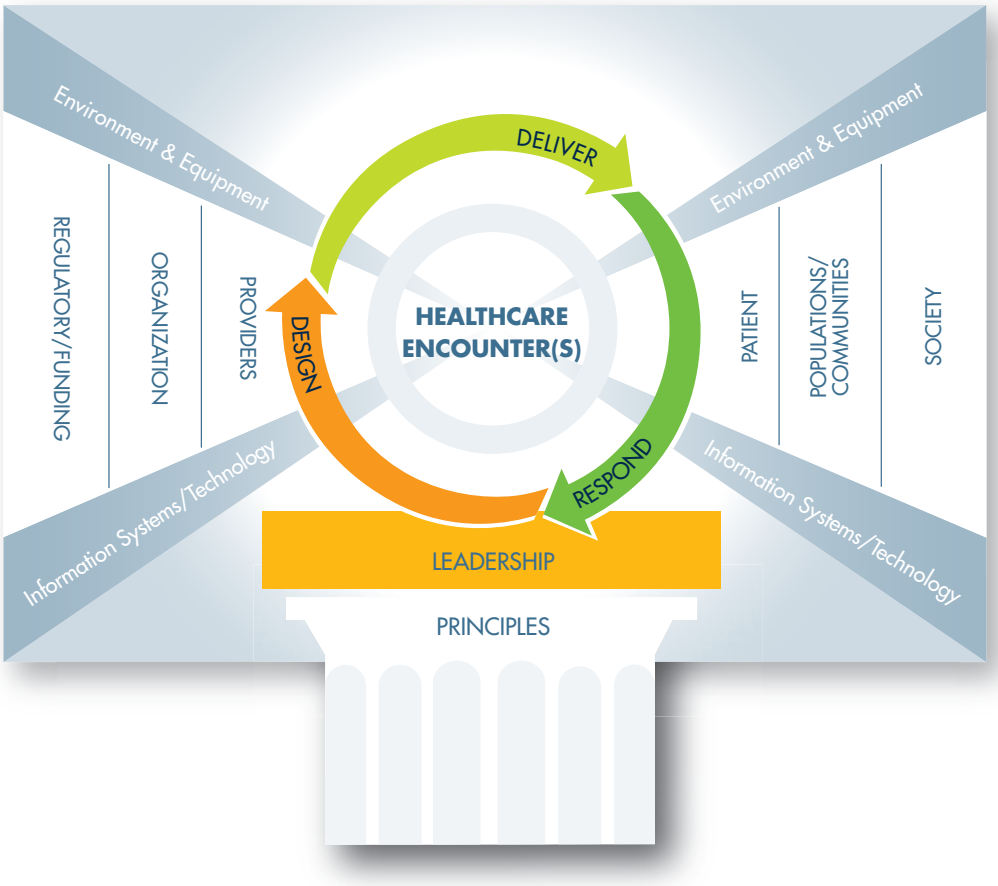
Appendix

The Healthcare Encounter Safety & Quality Model

The Healthcare Encounter Safety & Quality Model is centred on the healthcare encounter – a representation of the provision of health care in which the people/teams providing health care (in association with the organizations/regulatory/funding agencies that provide infrastructure) interact with the recipients of health care – patients, their families and/or supporters, the broader community and populations, as well as society.[1] The model places the healthcare encounter in the context of three broad objectives: keeping people healthy, diagnosing and/or treating conditions when they arise, and providing care at the end of life. This triad of objectives was adapted from the Health Quality Council of Alberta's Quality Matrix.[2]

Embedded within the model is a human factors-based approach, described by Davies,[3, 4] for understanding why failures of healthcare delivery occur. The approach is based on Donabedian's triad of structure, process, and outcome,[5] as well as an adaptation of Reason's model of the dynamics of accident causation[6,7] and Helmreich's concept of simultaneously operating factors that influence behaviour.[8]



The model highlights the critical importance that interaction between providers and recipients involved in the healthcare encounter plays in the safe, effective and efficient delivery of health care. It reflects three key functions that the healthcare system must continually perform to improve the safety and quality of care delivered to patients:

1. Design of healthcare encounters for populations/communities of patients to ensure the reliable delivery of optimal (evidence-based) care.
2. Delivery of optimal care to individual patients.
3. Response to patients when the outcomes and delivery of care are not optimal.

The model also highlights two foundational elements that healthcare systems require to support the stakeholders and the key healthcare system functions:

1. Leadership (that must occur at all levels of the healthcare system).
2. Principles of patient safety and quality.

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