Quality Assurance in the Regulation of Health Professions in British Columbia: Philosophical Approach, Principles and Assumptions

February 1, 2005

"We envision a system of care in which those who give care can boast about their work, and those who receive care can feel total trust and confidence in the care they are receiving."

- Donald M. Berwick, 2002

I. Introduction

The Health Regulatory Organizations of British Columbia (HROBC) worked with consultant Jon Pascoe in preparing this discussion paper on quality assurance relative to professional regulation. This project was directed by a Steering Committee, including the executive directors/registrars of the professions of registered nurses, occupational therapists, and midwives.

Following a review by HROBC members, the August 1, 2004 draft was updated on October 6, 2004 with input from a group composed of registrars of the following professions: social workers, hearing aid practitioners, optometrists and dietitians. Final revisions were made at a January 18, 2005 meeting of the HROBC and the paper was approved on February 1, 2005.

This document builds upon the literature review and survey prepared by the Ministry of Health Planning in 2003 (Logan). It is intended to respond to recent amendments to the Health Professions Act (RSBC 1996 Chapter 183) particularly Section 26, which establish quality assurance programs:

"The quality assurance committee must establish a program of quality assurance in accordance with the (health professional regulatory college's) bylaws."

Terms such as "quality assurance," "competence," and "continuing competence" are not defined in the HPA or any of the professions' Regulations.

II. Approach to the Discussion Paper

The contents of this discussion paper are intended to:

- Review the common principles and key elements relating to quality assurance, and to quality assurance and health professional regulation.
Comment upon the concept of health professional delegated self-governance, as the context for quality assurance and accountability.

Examine some of the challenges in clarifying the relationship between quality assurance and health professional regulation.

Comment upon the concepts of Continuous Quality Improvement, "systems thinking," and the "culture of patient safety."

Enumerate health professional regulatory colleges’ approaches to quality assurance, and some of their challenges.

Examine an evidence-based approach to quality assurance.

Suggest principles for further emphasis in the coming years.

III. Common Principles and Key Elements of Quality Assurance

Quality assurance has been commonly defined to mean managing business processes so that customers are satisfied with the quality and consistency of the goods or services being provided. Its features are found in initiatives such as:

- Total Quality Management
- Continuous Quality Improvement
- Customer Relationship Management
- Business Process Reengineering
- Benchmarking
- "Voice of the Customer"
- Knowledge Management
- Program Evaluation
- Six Sigma/Statistical Process Control
- Lean Thinking
- Balanced Scorecard.

The common principles and key elements of quality assurance have been largely guided by five opinion leaders in the past 60 years: Deming, Crosby, Juran, Donabedian and Berwick. As well, the United States Pew Health Professions Commission devoted considerable attention to workforce regulation and its implications for the provision of quality health services (Logan).

Until the mid-1900s, quality assurance initiatives were concerned mostly with the structural components of health care delivery, specifically the facilities, equipment, staff and administration. In the 1950s, requirements to meet specific criteria began to be imposed prior to some medical interventions. As health care expenditures escalated in the 1960s, quality assurance measures were often used as a method to control costs. The implementation of mandatory continuing education gained momentum in the 1970s in the United States, and in the 1980s in Canada.

(i) **W. Edwards Deming**: urged a new style of management that shifts the focus from hierarchical thinking and profits to quality. Deming advocated that employees learn how to monitor, control and continually improve their work processes and systems with the application of a scientific approach.
Deming pointed out what he saw as flaws in the traditional model of "management by objectives," which emphasized a chain of command in which objectives were translated into work quotas or standards. He advocated that the quality of products and services should be improved by addressing the methods of how the work is done, rather than necessarily the results.

(ii) Philip Crosby: proposed that quality improves productivity, sales, and employee and stakeholder satisfaction. His work addressed myths such as:

- A lack of motivation or caring by the workforce causes most quality problems.
- The aim of quality management is to reduce errors to "acceptable" levels.
- Quality is best ensured by those who inspect the work and the resources spent on inspection.
- Improving quality reduces productivity.

Instead, Crosby recommended:

- Having top management strongly committed to quality and project management.
- Having project management focusing on the cost of quality.
- Making "zero defects" the watchword through workforce training.

(iii) Joseph Juran: saw quality planning as part of identifying customers and their needs, establishing optimal quality goals, creating measurements of quality, planning processes capable of meeting quality goals under operating conditions, producing continuing results in improved market share, and a reduction of error rates. Juran advocated for establishing a new approach to quality planning and training by:

- Creating awareness and establishing mastery over quality structures and processes, by establishing specific goals and plans and responsibilities for reaching the goals.
- Assisting companies to replan existing processes and avoid quality deficiencies.
- Basing employee rewards on results achieved.

(iv) Avedis Donabedian: was a physician who addressed the implications of quality assurance to health care systems. His 1966 widely cited work introduced:

- Structure: "the resources used to deliver the care, including the physical resources (facilities, organization, standards and policies)."
- Process: "the act of doing the task."
- Outcome: "consequence to health," such as effective care, patient satisfaction, and the efficient use of resources.
(v) Donald Berwick: is a physician and leader in the area of quality management and the American health care system. He gained significant prominence with the publication of the 2000 report by the Institute of Medicine "To Err is Human." The IOM's report on patient safety pointed to the following observations:

- American health care is unacceptably unsafe. Between 3 and 4% of hospital patients are harmed by the care that is intended to help them (recent Canadian statistics are comparable).
- Almost all information on patient safety is specific to acute care hospital settings. Far too little is known about other areas of care, like nursing homes, home health care, office-based care, and ambulatory surgery.
- Errors and threats to patient safety are not generally due to carelessness or incompetence. Perhaps 95 to 98% are "system errors," attributable to the equipment, procedures, job designs, and communication systems.
- There is a long history of scientific research on causes of errors and ways to prevent them. The aviation industry is an excellent example of this type of accountability. Other industries rely on human factors engineering, human psychology, industrial engineering, and others to make their systems safer.
- Improving safety will require cultural changes in health care. To reduce errors, health care needs to know about and discuss its own errors, which is now rarely the case. Health care has trouble learning about hazards and preventing them. There is widespread distrust by the public in the lack of transparency of the health system.

(vi) Pew Professions Health Commission - Taskforce on Health Care Workforce Regulation: was established in 1989 to provide guidance to health professionals, educational institutions and policymakers. The Commission defined professional competence as "... knowledge, judgment, technical skills and interpersonal skills relevant to professionals throughout their respective careers."

The Commission recommended a wide range of initiatives to promote professional accountability, many of which have since been formalized in health professional legislation. The Commission’s work has had a particularly significant impact upon health professional regulation in Canada, including British Columbia, Alberta and Ontario with their similar legislative frameworks.

IV. Delegated Self - Governance: The Context for Quality Assurance, Accountability and Professional Competence

Health professional regulatory colleges have been delegated authority by the Provincial Government to "... serve and protect the public..."(Section 16.1) The HPA sets out common governance and self-regulation principles. The HPA's
regulatory framework is supplemented by profession-specific Regulations and college bylaws.

*Colleges are delegated this authority within a framework of quality assurance and accountability.* This principle is evident in all aspects of colleges' practices, including registration, practice permit renewals, codes of ethics, standards of practice, continuing competency programs (as well as practice visits), incapacity assessments, and inquiry and discipline processes. The legislation necessitates standardized committee structures and requirements for certain regulatory duties to be fulfilled, consistent terminology across the professions, and similarity in processes (particularly inquiry and discipline).

Colleges are empowered to create bylaws, and policies and procedures to:

- determine competencies of applicants for entry to practice.
- obligate registrants to participate in continuing competency programs and remain "current in practice."
- maintain a public register.
- authorize designated members to use protected titles and abbreviations.
- authorize practitioners to perform certain health services and reserved actions.
- address members' conduct in their professional capacities, including the requirement to be of "good character."
- obligate members to possess liability insurance.
- initiate formal investigations and potentially disciplinary hearings, with a wide range of outcomes, up to and including a practitioner's inability to practice their profession on a short-term to permanent basis.
- reinstate registration and practice permits cancelled because of inappropriate conduct.
- delegate certain responsibilities from Board or Council to college committees or staff members.

V. Difficulties in Clarifying the Relationship Between Quality Assurance and Health Professional Regulation

The terms quality and competence mean different things to patients or clients, providers, colleagues, the health care system, and to citizens of large. A comprehensive search of the quality assurance/health professional regulation literature for this discussion paper reveals that there continues to be significant imprecision in terminology and an overall inability to assess the impact of quality assurance upon health outcomes (Logan, Cummings, Harrigan). There is an overall lack of compelling and objective evidence that quality management systems actually lead to improvements in patient care and outcomes.
Most of the published literature deals with hospital or facility-based quality assurance, not quality assurance for specific health professions. Additionally, the majority of literature is American, applicable to a different system with variable access, different approaches to regulating health professions, and different methods of payment.

Various stakeholders are involved in quality assurance, including accreditation bodies, voluntary credentialing boards, consumer groups, continuing education providers, employers, health care professionals and their colleges and associations, educational institutions, and the academic community (Citizen Advocacy Center).

There is considerable difficulty in gathering valid and reliable information, and applying research findings to practice settings. This translates into an imperfect rationale for quality assurance activities in health care systems generally, and more specifically for health professional regulators. Quality assurance has often been faulted because of:

- the imprecision of terminology and proliferation of jargon.
- the presumption that registrants are "already competent," and view continuing competence activities as largely unnecessary.
- the perception that it is time consuming, potentially costly, administratively burdensome and possibly irrelevant to eventual practice patterns.
- the perception that it is not necessarily effective or efficient, due to the lack of data demonstrating improved quality patient care.
- the various "quick fix" corrective actions that have resulted from quality assurance reviews (Cummings).
- the tendency to focus on measurement rather than improvement.
- the predominant emphasis on outliers (the "bad apple" theory).
- the principles of quality assurance and quality improvement may not be taught in undergraduate health professional education.
- the lack of management resources, time, and data collection and dissemination devoted to quality assurance, relative to "front line" responsibilities.
- difficulties in gaining commitment from clinicians and administrators.
- prevailing skepticism about relevance of quality assurance to practice issues.
- the potential to focus on processes peripheral to actual care.
Yet, the increased emphasis on quality assurance in health care include has:

- obliged providers to develop skills and patterns of performance assessment.
- made managers, supervisors, administrators and clinicians more knowledgeable about quality information, standards, surveys and norms.
- potentially improved the quality, efficiency and effectiveness of care because of increased attention.
- brought together practitioners, supervisors, managers and other stakeholders to solve clinical concerns and policy issues (Cummings).
- provided some support for health services being provided by integrated, inter-disciplinary teams, particularly in primary care settings.

VI. The Concepts of Continuous Quality Improvement, "Systems Thinking," and the "Culture of Patient Safety"

During the past decade, there has been a shift in emphasis from quality assurance to "continuous quality improvement (CQI). Quality assurance focuses on ensuring compliance with clearly established standards. Quality improvement addresses compliance with clearly established standards and the development of systems and tools designed to facilitate improved practices." (Assessment Strategies).

CQI has been defined as:

"... a management philosophy and system which involves management, staff and health professionals in the continuous improvement of work processes to achieve better outcomes of patient/client/resident care. It involves the application of statistical methods and group process tools to reduce waste, duplication and unnecessary complexity in work. (It's) goal is to consistently meet or exceed the needs of patients, families, staff, health professionals and the community... it includes such dimensions as organizational vision, values, policy planning, leadership, and the pursuit of excellence through continuous improvement." (Quest for Quality).

A common myth is that most quality problems can be blamed on individuals. Yet, the literature suggests that well over 80% of quality problems are related to system problems. These include inefficiencies in the workflow, information breakdowns, poorly designed or inefficient work processes, and/or inadequate resources.
One system-wide example to address errors that has attracted widespread interest is the collaboration between airline regulators, airplane manufacturers and commercial airline carriers in the following areas:

- redundancies in key operating systems.
- simulator training on an ongoing, "continuing competence" basis to improve teamwork and predict and respond to emergencies.
- restrictions on the number of consecutive hours worked.
- mandatory reporting of designated aviation accidents and incidents.
- voluntary reporting of near misses.
- extensive use of information technology for the provision of flight information and weather conditions.
- comprehensive and objective investigation of accidents with reporting of probable cause(s).
- procedural checklists with alarms for key equipment and/or human failures.

Many of the actions that have effectively improved airline passenger safety have not yet been adapted and implemented in the health care system (National Steering Committee on Patient Safety).

Many health professionals work in team-based, organizational practice settings. In the latter part of the past decade, there has been an increasing emphasis on the connection between continuous quality improvement and patient safety. Much of the literature suggests that an organization’s culture has an impact upon the quality of care and the incidence of accidents. An organization’s culture may be defined as the:

"... shared values ("what is important") and beliefs ("how things work") that interact with an organization’s structures and control systems to produce behavioral norms ("the way we do things around here")."

In a reporting culture, professionals are encouraged and are comfortable to report errors, incidents and near misses so the errors can be understood and prevented from recurring. In a just culture, there is recognition that in most cases punishing staff for errors does nothing to help ensure that the next employee in a similar situation will not make the same error. Yet, a just culture does not accept negligence, willful violation of rules and standards, or substance abuse.

An organization has developed a learning culture when the leadership is willing and able to draw the right conclusions and make the changes needed to address new or undefended risks. The learning culture takes advantage of the reporting culture and just culture, to keep the organization on the road of continuous improvement." (Robson)
Health regulatory organizations have the potential to develop learning cultures within their own organizations, and to support the development of these cultures more broadly within their respective health professions.

**VII. Challenges Inherent in Health Professional Regulatory Colleges' Approaches to Quality Assurance and Continuous Quality Improvement**

Quality care is more likely when quality improvement and control are emphasized over quality measurement. As only a small minority of health care providers are incompetent, most of the effort in quality assurance programming should be directed to the large majority of practitioners who would benefit from quality improvement. Yet, there is only a modest correlation between practitioners' competencies, and the resulting impact upon the level of care provided.

Health professional regulatory colleges have traditionally approached quality assurance through:

- identifying and addressing members who are incompetent or unfit to practice
- promoting the improvement of individual members' competence, most often through mandatory continuing education
- attempting to raise the collective performance of the profession, by focusing on improving patient outcomes (Cummings).

Yet, there are varying levels of competence along a continuum, from novice to expert. Novices often tend to focus on literal interpretations of problems, and to solve them with structured and largely predictable responses. Experts are more problem oriented, and can apply their competencies in a far more innovative, specific and focused matter.

Colleges have experienced numerous challenges in the development and implementation of their quality assurance programs, including:

- limited financial and human resources to devote to quality assurance programs.
- resistance and anxiety among some college members in complying with quality assurance programs.
- the need to develop innovative strategies for program delivery because of variations in the scopes of practice and practice settings within some professions, as well as providing programs such as continuing education for practitioners in remote areas.
- turnover in the membership of quality assurance committees.
implementation of quality assurance programs during periods of intense change in health care environment.  
- some means of enforcing participation in quality assurance programs must be available when support and facilitation are rejected by the regulated member.  
- a member who may be deficient in competence may continue to practice for a lengthy period until remedial and/or disciplinary action occurs (HPRAC - Quality Assurance).

Colleges are at varying stages in the development and implementation of their quality assurance programs. This makes judging all colleges by the same criteria neither realistic nor judicious (Cummings).

As well, there is an imprecise relationship between continuing competence programs and many of the complaints that may (anecdotally) result in investigation and discipline such as:

- unmanaged substance abuse and addictions.  
- impaired mental and/or physical health.  
- failure to communicate appropriately.  
- incomplete or inaccurate documentation.  
- practicing beyond the regulated member's level of competency  
- unethical behaviour, including the abandonment of responsibilities.  
- breach of trust and/or the confidentiality of patient records.  
- fraud, theft or misrepresentation.  
- physical, verbal or sexual abuse.  

There are numerous methods of assessing competence in the literature, including:

- mandatory continuing education  
- periodic re-examinations  
- peer/colleague feedback and review  
- patient care evaluations  
- on-the-job performance evaluations, case studies and skill simulations  
- self-assessment against professional standards  
- professional portfolios (which demonstrate the practitioner's self-assessment and introspection when compiling a personal profile)  
- the obligation to remain "current in practice" through obtaining a certain number of practice hours  
- office visits and practice reviews  
- certification  
- written examinations, and  
- objective structured examinations (Logan).

Each method certainly has its advantages and disadvantages. Mandatory continuing education and self-assessment are the most common methods used to promote continuing competence. However, the research is far from conclusive that continuing education and/or self-assessment have any appreciable impact upon continuing competence and/or changes in practice.
In response, some colleges have evaluated the impact of their quality assurance programs through performance indicators such as:

- the percentage of members complying with various elements of the program.
- number and percentage of members calling the college for information on the quality assurance program.
- number of members of the public seeking information on the quality assurance program.
- members’ compliance with practice standards.
- monitoring and tracking of patient complaints.
- percentage of members passing peer assessments.
- percentage of members for whom remediation is recommended.
- patient/client satisfaction (Cummings).

VIII. Toward an Evidence Based Approach

Evidence based health care is the "... conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients... use of evidence does not replace clinical skills, judgment and experience, or patient preferences... (the approach)... provides another dimension to the traditional decision process. (Spolarich)

Clinical expertise and competence is acquired through years of experience and practice. The best clinical evidence is obtained from basic science, laboratory and clinical research studies. (Integration) of evidence is a process that requires lifelong self-directed learning, which creates the need for clinically important and useful information about patient care (Spolarich).

There are many barriers to embracing an evidence-based approach to care, including time, workload pressures, patient demands for specific interventions, a tendency to search for evidence that confirms prior assumptions, and the vast amount of not always objective and unbiased research and popular literature.

What professionals know from the literature and what they actually do in practice often vary. Current best evidence may also contradict what a professional believes.

An evidence-based approach to care assumes a professional is a lifelong learner, committed to being aware of current trends and research, and able to embrace information technology and continuing education opportunities, and integrate them into their clinical practice.
With the increasing escalation of technical and scientific knowledge, it has become challenging for health care professionals to commit to the highest level of professional competence. The appropriate choice of evaluation mechanisms to assess each individual practitioner's competence will continue to be problematic.

Current literature seems to suggest that it is largely ineffectual to pursue continuing education requirements without prior competency assessments, coursework to address demonstrated deficiencies, and rigorous testing to ensure desired competencies have been assimilated into practice. Some professions, particularly in the United States, have moved toward objective assessments of practitioner competencies at periodic intervals throughout their career.

Periodic reassessment of practitioners' competencies has been supplemented by mandatory requirements for continuing education and practice hours. This approach is fraught with many logistical, financial, operational and other concerns.

Consistent with these themes in the literature, the 2000 Institute of Medicine report recommended that health professional licensing bodies should:

- implement periodic re-examinations and licensing of health care providers, based on competence and knowledge of safety practices.
- work with certifying and credentialing organizations to develop more effective methods to identify unsafe providers and take action against them.

The IOM, in its 2003 report, challenged health care regulatory agencies to abandon reliance on continuing education. Regulatory agencies should adopt a more systematic approach by requiring that each practitioner's competence be assessed, interventions be targeted to specific deficiencies, and each caregiver be tested to ensure that desired competencies have been acquired and incorporated into practice:

"All health professional boards should move toward requiring licensed health professionals to periodically demonstrate their ability to deliver patient care... through direct measures of technical competence, patient assessment, evaluation of patient outcomes, and other evidence-based assessment methods." (Citizen Advocacy Center).

The patient safety literature suggests that specific educational and professional development programs that focus on evidence-based practice, periodic audit, and a team approach to practice and learning may reduce the likelihood of human error. The health care system must develop an atmosphere of trust, in
which openness and frankness in identifying and reporting problems and potential problems is encouraged and rewarded (National Safety Committee).

IX. A Proposed Set of Principles for Quality Assurance Programs for Health Profession Regulators

Health professional regulatory colleges and their registrants strongly support the concepts of protection of the public through health professional regulation and self-governance, lifelong learning, and commitment to evidence-based practice.

The HROBC believes that promotion of a quality assurance approach in the coming years should be guided by the following principles:

(i) Registrants understand and value self-regulation. Health professional regulatory colleges share accountability and responsibility for quality assurance with their registrants.

(ii) Quality assurance is embedded across the continuum of key roles for which health professional colleges are responsible: from entry to practice, to supporting the maintenance of competent practice, through to remediation, and intervening when practice is below expected standards.

Health professional regulatory colleges are responsible for establishing, monitoring and enforcing standards of education and qualifications for registration; promoting high practice standards and the maintenance of competence; monitoring and enforcing professional ethics; and reducing incompetent, impaired or unethical professional practice.

(iii) Quality assurance initiatives are more likely to be accepted by the profession and thus to succeed when there are collaborative partnerships between health professional regulatory colleges, employers, membership-driven associations, educational institutions, and other stakeholders.

(iv) Colleges are obligated to continue to provide support to registrants in pursuit of quality assurance, including continuing competence programs. The nature of this support will vary by college, and may include existing continuing competence programs.

Colleges need to be creative and allocate sufficient resources to their quality assurance endeavours. Continuing competence and related programs need to be manageable, cost-effective, efficient, and administratively realistic for colleges and registrants.
(v) Colleges and membership service organizations should continue to collaborate to promote safe, competent and ethical practice. Health professional regulatory colleges must additionally pursue initiatives to prevent or reduce the incidence of poor practice, and intervene when practice is unacceptable.

(vi) College quality assurance and related programs must ideally be evidence-based, accessible, administratively fair, transparent, and promote public confidence in health professional self-governance.

(vii) Colleges should continue to evaluate their quality assurance and continuing competence programs across various dimensions to ensure that these programs remain valid, reliable, feasible and acceptable. Important ongoing questions for Colleges to ask themselves about their quality assurance and continuing competence programs include:

- Is there evidence that they improve professional practice patterns – and that there are improvements for those receiving care?
- Are they easily accessed by registrants?
- Are registrants satisfied – do they judge the programs to be fair and useful?
- Do these programs assist registrants in being able to practice to the full limits of their competence, contingent upon practice settings?
- Do they make the best use of resources?
- Is the public aware of the college’s regulatory responsibilities?
- Are the processes transparent?
- Is the patient/client/public satisfied with the quality of care registrants provide?
Selected Bibliography


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Health Regulatory Organizations of BC – Member Organizations

BC College of Chiropractors
College of Dental Hygienists of BC
College of Dental Surgeons of BC
College of Dental Technicians of BC
College of Denturists of BC
College of Dietitians of BC
Board of Hearing Aid Dealers of BC
BC Society of Laboratory Science
College of Massage Therapists of BC
Emergency Medical Assistants Licensing Board
College of Midwives of BC
College of Naturopathic Physicians of BC
Registered Nurses Association of BC
College of Occupational Therapists of BC
College of Opticians of BC
Board of Examiners in Optometry
College of Pharmacists of BC
College of Physicians and Surgeons of BC
College of Physical Therapists of BC
College of Licensed Practical Nurses
College of Psychologists of BC
Canadian Institute of Public Health Inspectors, BC Branch
BC Association of Podiatrists
College of Registered Psychiatric Nurses of BC
Board of Registration for Social Workers
College of Traditional Chinese Medicine Practitioners and Acupuncturists of BC

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