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ENHANCING PAN-CANADIAN HEALTH HUMAN RESOURCES

Vernon Curran

Building upon the important work of Commissioner Roy Romanow and the Senate Committee chaired by Michael Kirby. the First Ministers' Accord on Health Care Renewal noted that appropriate planning and management of health human resources (HHR) is key to ensuring that Canadians have access to the health providers they need, now and in the future. The First Ministers agreed that collaborative strategies are to be undertaken to strengthen the evidence base for national planning, promote interprofessional education, improve recruitment and retention, and ensure that supply of needed health care providers.

The Accord sets out an action plan that will ensure the following:

*all Canadians have timely access to health services on the basis of need, not their ability to pay, regardless of where they reside in Canada; *the health services available to Canadians are of high quality, effective, patient-centred and safe; and *our health care system is sustainable and affordable and will be there for Canadians and their children in the future.

The 2003 federal budget committed $90 million over five years to improve health human resource planning and coordination. The budget commitment enables Health Canada in collaboration with provinces, territories and key health and health education stakeholders to play a strategic role in ensuring that the HHR element of the Accord is implemented. In response, Health Canada, in partnership with provincial and territorial governments, educators and health professionals, is developing a Pan-Canadian Health Human Resource Strategy. This strategy is composed of three
initiatives:
Health Human Resource Planning, Recruitment and Retention and Interprofessional Education for Collaborative Patient-Centred Practice.

Interprofessional Education for Collaborative Patient-Centred Practice:

Changing the way we educate health providers is key to achieving system change and to ensuring that health providers have the necessary knowledge and training to work effectively in interprofessional teams within the evolving health care system.

This component of the proposed Pan-Canadian HHR Strategy will facilitate and support the implementation of a strategy on Interprofessional Education for Collaborative Patient-Centred Practice (IECPCP) across all health care sectors.

Collaborative Patient-Centred Practice:

Collaborative patient-centred practice is designed to promote the active participation of several health care disciplines and professionals. It enhances patient-, family-, and community-centred goals and values, provides mechanisms for continuous communication among health care providers, optimizes staff participation in clinical decision making (within and across disciplines), and fosters respect for the contributions of all providers. There is growing consensus that interprofessional collaborative patient-centred practice -across all health sectors, and along the continuum of care - will contribute to the following:

*improved population health/patient care;
*improved access to health care;
*improved recruitment and retention of health care providers: *improved patient safety and communication among health care providers: *more efficient and effective employment of health human resources; and *improved satisfaction among patients and health care providers.

Interprofessional Education
Interprofessional education has been described as learning together to promote collaboration. It involves health care providers learning to work together, sharing in problem solving and decision making, to the benefit of patients, as follows:

*socializing health care providers in working together, in shared problem solving and decision making, towards enhancing the benefit for patients, and other recipients of services; *developing mutual understanding and respect for the contributions of various disciplines; and *instilling the requisite competencies for collaborative practice

Interprofessional education should occur before and after entry-to-practice, at the level of undergraduate, graduate and continuing education, and across a continuum of care.

The specific objectives of the Interprofessional Education for Collaborative Patient-Centred Practice are as follows: *promoting and demonstrating the benefits of interprofessional education for collaborative patient-centred practice; *increasing the number of educators prepared to teach from an interprofessional collaborative patient-centred perspective; *increasing the number of health professionals trained for collaborative patient-centred practice before, and after entry-to-practice; and *stimulating networking and sharing of best educational approaches for collaborative patient-centred practice *facilitating interprofessional collaborative care in both the education and practice settings.

Significant background work was conducted in the first year of the initiative, ensuring a solid foundation from which to build IECPCP. Promising practices in interprofessional education and collaborative patient-centred practice have been identified through a literature review and environmental scan. Ten research papers exploring key concepts within IECPCP have been commissioned. In-depth consultation of provincial and territorial governments have been conducted through the National Expert Committee on Interprofessional Education for Collaborative Patient Centred Practice. Consultations with experts representing professional and national stakeholders have occurred through a series of in-depth interviews, surveys, and bilateral meetings. This foundation will assist in the further development, implementation, and evaluation of the IECPCP initiative.

REVOLUTION AND EVOLUTION IN MEDICAL EDUCATION

Jean Gray, MD, FRCPC
The AMS – Wendell MacLeod Lectureship, ACMC/CAME Meeting – Halifax, NS April 2004

Dr. J. Wendell MacLeod was born in Ontario during the Russo-Japanese War, educated at McGill University (Montreal) and Barnes Medical Centre (St. Louis), and entered private practice in Internal Medicine/Gastroenterology, first in Montreal and then in Winnipeg. He served with distinction during the Second World War, winning an OBE. In 1951, he was invited to become the Dean of the new medical school opening at the University of Saskatchewan where he served until taking up the position of Executive Secretary, (eventually becoming Director) of the ACMC in 1962. His obvious passion for history and his sense of the external forces that shape human destiny determined the historical content of this presentation. The lens through which the events were considered is the process or processes of translating the revolutionary or evolutionary event into the common practice of medicine, what the Canadian Institutes for Health Research call "The Knowledge Translation Cycle" (1).

Revolution is defined as: *a fundamental change in the way of thinking about or visualizing something: a change in paradigm.* An evolutionary event is considered to be *the process of working out or developing.* During the presentation, the audience was asked to contribute their concepts of revolutionary or evolutionary events in medical education and that input is available at http://www.acmc.ca. Events are considered in the context of the science of medicine (an understanding of the mechanisms of disease), the art of medicine (caring for the patient), and the process of medical education.

Revolutions in the Science of Medicine

Although Ignaz Semmelweis first recognized the relationship between contamination and human disease in 1846, Louis Pasteur conceived the **Germ Theory of Disease** in the 1850's through meticulous attention to experimentation and careful documentation. By 1865, Joseph Lister, an Edinburgh surgeon who was very impressed with Pasteur's ideas, had published 5 papers in the British medical journal Lancet, outlining the surgical implications of the theory and introducing the use of carbolic acid as an antiseptic in the operating room. In 1882, Pasteur's German rival, Robert Koch, published Koch's Postulates, the four conditions necessary to determine that an infectious organism caused a disease. Pasteur was a fascinating individual: complex and secretive; almost exclusively self-funded or with research money from industry sources; interested in science of importance to the French economy, from wine-making to farming; but very aware of the importance of mentorship. Some of his disciples shaped our current understanding of microbiology (a term he coined) and immunology, including Chamberland, Roux, Metchnikoff (Nobel Prize winner in 1908 for his studies in immunology), Yersin, Calmette, Guerin, Bordet, and Nicolle (Nobel Prize in 1928 for work on typhus and leishmaniasis). Despite the excellence of the research work, the medical profession was scathingly skeptical of the germ theory. Even well into the 20th century, surgeons, such as Halsted (the inventor of rubber gloves) at John Hopkins University, still refused to wear a mask as he found it too confining. It wasn't until WW I that the importance of sepsis and antisepsis (also terms coined by Pasteur) was finally recognized and implemented. The uptake of this revolutionary knowledge took well over 50 years to influence the day-to-day practice of medicine (2).

An equally exciting development that changed medicine almost overnight was the science of Wilhelm Roentgen that gave rise to **x-rays**. Roentgen had been relatively unsuccessful at almost everything he attempted until he carried out an experiment similar to ones performed by others. But he was the first to recognize the importance of the discovery. He called his frightened wife into his laboratory, placed her hand on a piece of photographic paper, and performed the world's first x-ray! He had already missed the opportunity to present his work at the Physical-Medical Society of Wurzburg meeting but prevailed upon the editor of the proceedings to hold the publication while he prepared a paper. The paper was published in December of 1895 (one week after it was completed!) and by January 1896, his wife's x-rayed hand had appeared on the front page of the Vienna newspapers. By December 1896, x-rays were admitted as

evidence in a court case and the regular use of x-rays for diagnostic purposes followed very shortly. In 1901, Roentgen won the first Nobel Prize in Physics (3).

Why was one discovery embraced immediately by the medical profession whereas the other took almost 60 years to be fully implemented? X-rays made life easier for physicians and media attention emphasized the revolutionary nature of the breakthrough, creating a demand. On the other hand, ingrained belief systems, inherent resistance to change in the profession, and the requirement to observe laborious sanitary precautions created a massive medical and surgical backlash to the germ theory.

The Art of Medicine

Although we know Florence Nightingale today as the founder of the modern profession of nursing, she was also responsible for defining the nature of hospital administration and the medical records that we associate with hospitals. She was the first female admitted to membership in the British Statistical Society for her publications that defined population health as we know it today and for the first use of the "pie graph". But she is included in this presentation because her memorable service in the Crimea established the importance of **the patient as the center of care**. In addition to attention to the care of the patient's disease or wound, Nightingale also assured that the hospital environment enhanced recovery using lounges filled with recreational activities and providing housing for the families who arrived to care for the wounded soldiers. At her own expense, she imported a noted British chef and fresh food to make sure that the wounded received adequate and appropriate nutrition. The British Army, until this time, had assumed that the wounded would somehow feed themselves! And she valued the individual patient, writing to their families if they were unable to write or at the time of their deaths. Even more remarkable, later in her career she was able to introduce major changes in the process of British hospital care while bedbound for many years with Crimea Fever, now thought to be chronic brucellosis. As a daughter of wealth and privilege, she had many well-connected contacts, both within government as well as in the aristocracy and the intelligentsia, and she coupled her network of contacts with the media coverage that she received while in the Crimea to introduce systemic change, sometimes over the objection of the medical profession (4).

The **Palliative Care Movement** arose in many locations through the 1950's and 60's, although Dame Cicely Saunders is generally felt to be the driving force behind the principles of care for the patient with cancer. Dame Saunders began her professional life as a nurse but a back injury required a new career direction and she retrained as a social worker. While in this capacity, she was challenged by a patient (who even provided some seed money), to devise a better and more humane method of caring for the terminally ill. Appreciating that she could accomplish this goal more easily as a physician, she again returned to school. As her knowledge and desire to help the dying evolved, she recognized that the management of symptoms, coupled with attention to the spiritual and mental well being of the patient, was the cornerstone of palliative care. In the 1960's, with assistance from both government and private resources, she founded St. Christopher's Hospice in London where care of the dying patient was coupled with concern for the caregiver, including both the patient's family and the professional staff providing care. At St. Christopher's Hospice, a 24-hr nursery (day care) facility was available for the children of staff members so that families of both patients and caregivers would not be separated during this difficult time. Although the Palliative Care approach to the care of the dying patient is now widely available, an argument could be made that it has not been achieved as originally conceived by Dame Saunders. The concern she demonstrated for the families of nurses and physicians doing this work has not been replicated outside of the original hospice in London (5).

These social revolutions were not readily embraced by the medical profession. Although they made major differences in the quality of care and comfort of the patient, physicians were again forced to function in a manner different from that with which they were comfortable. Full uptake of these different approaches to patient care required government intervention and the efforts of advocates, either within or outside of the healthcare professions. Even today, the original visions have not been fully realized.

The Process of Medical Education

In the middle of the 19th century, medical education in North America was heavily dependent on proprietary medical schools, built on a profit motive and often without any official attachment to a hospital for patient-based education. The creation of **John Hopkins Medical School** broke that mold and provided the first curriculum that would be recognizable in today's medical education world. Under the leadership of Dean William Walsh, an outstanding clinical faculty was gathered, including Drs. William Osler (Chair of Medicine), William Halsted (Chair of Surgery), and Howard Kelly (Chair of Gynecology). The guiding principles of this new medical school and its purpose-built teaching hospital (opened in 1893) included a strong emphasis on research, high admission standards, a 9-month academic year (proprietary medical schools only taught for 5 months), a four-year curriculum with strong basic and clinical teaching, and rigorous evaluation standards. In fact, Osler's famous Textbook of Medicine was written after he was hired at Hopkins but was awaiting the opening of the teaching hospital and the enrollment of the first class of medical students. Other universities quickly recognized the value of this educational approach and hired Hopkins graduates as medical school faculty. Within a decade, several major private university medical schools (e.g. Harvard) reformed their own curricula to match that of Hopkins (6).

But the majority of the 450-plus medical schools in North America were untouched by the developments at Hopkins. The American Medical Association, concerned about the quality and standards of medical education in the United States, approached the Carnegie Foundation for funds to conduct a survey of all North American medical schools. A schoolteacher, Abraham Flexner, who had previously done a survey of American university teaching, was selected by the Foundation to draft a report on medical education in North America. The famous **Flexner Report** appeared in 1910. The impact of the report was rapid. Within a decade, the proprietary schools had virtually disappeared, leaving about 150 public and private university-based medical schools. In addition, Flexner's insistence that medical education be strongly science-based facilitated the concentration of most biomedical science inside medical schools and fostered strong ties with industries that depended on this basic knowledge for new products. The transfer of knowledge from the laboratory to the bedside became the norm for biomedical research by the second decade of the 20th century (7).

Using these two examples, it becomes apparent that physicians in leadership positions knew that change in the process of medical education was necessary but external forces and funding were required to create the environment to facilitate that change. The vision of medical education created at John Hopkins became the criteria by which all other medical schools were judged because of the Flexner Report and remains in place 100 years later.

Evolutions in the Science of Medicine

In the 1950's, throughout the developed world, **access to federal funds** resulted in the growth and importance of the basic sciences within medical schools. The culture of biomedical research was established and research became one of the foundation pillars of North American medical schools. Alas, however, as the academic scientific enterprise became stronger and stronger, a **separation developed between the science of medicine and the practice of medicine**. As the era of genomic medicine unfolds, this gap is even more obvious. Epidemiology, however, attempted to bridge the gap between the concepts of "understanding disease" and "preventing disease", leading to the concept of **risk factors** and the possibility of modifying behaviour in order to prevent disease.

Evolution in the Art of Medicine

The last two to three decades have seen a major swing in expectations, in patients, physicians, medical students, and members of the health care team. The traditional views of the relationship between patients and healthcare providers have changed and the medical profession has not adapted readily to this swiftly shifting terrain. However, the academic medical establishment has accepted the concept of a social contract with the population served by the medical school and social accountability is now an accepted aspect of medical school function. Although nursing has always been predominantly female and pharmacy began the shift to female predominance in the 1950's, the feminization of the health professions, including medicine (a change that began in the 1970's), is an evolutionary event that has not yet reached its zenith. Observers suggest that everything from working conditions to specialty choice will evolve in medicine as more and more women enter the field. Of equal concern are the reasons why men no long**er** find the health care professions attractive or cannot meet the standards necessary for admission.

Evolution in the Process of Education

The last few decades have seen a continued recognition of the concept of lifelong learning and the educational continuum from undergraduate medical education, through the postgraduate phase and into practice. In addition, the development of problem-based learning at McMaster for the undergraduate curriculum has spawned many student-centered learning experiences for all levels of learners in the health professions. Finally, educational preparation of the faculty and scholarship in education (as demonstrated by CAME) have gradually changed the health professional educational environment and enabled medical education to become a career goal for academics and not just an add-on requirement for faculty membership.

Lessons learned

This brief review of major and minor shifts in medical thinking and their uptake into daily activity both in the practice of medicine and the education of healthcare providers suggests three conclusions:

1. Given the resistance to change in the medical establishment that has characterized many of these advances, health professional education must incorporate change management strategies into educational programs so that the graduates of tomorrow will not be as resistant to innovation and new developments as their predecessors were.
2. As the health care disciplines begin to learn together so that they can work as a team, disciplinary boundaries will and already have begun to blur. **New models** will be required to assist health professional students to foster and develop **education and research within the contemporary healthcare team**.
3. As continuing medical education evolves into the more sensible concept of continuing professional development, **the uptake of new knowledge into daily practice** must become a focus of this form of learning. The accumulation of classroom credits will no longer be sufficient if the practitioner is to acquire the knowledge and skills necessary to remain current in the rapidly changing world of health preservation and illness care.

Suggested reading:

1. CIHR. Transforming Health Research for All Canadians: Annual Report. 2002 – 2003.
2. Debre, P. Louis Pasteur. The John Hopkins University Press. Baltimore, MD. 1994
3. Kennedy, M. A Brief History of Disease, Science, and Medicine. The Writers' Collective. Cranston, RI. 2003.
4. Montgomery Dossey, B. Florence Nightingale: Mystic, Visionary, Healer. Springhouse Corporation, Springhouse, PA. 2000.
5. Saunders, C. The evolution of palliative care. Pharos. Summer 2003: 4-7.
6. Bliss, M. William Osler: A Life in Medicine. University of Toronto Press. Toronto, ON. 1999.

7. Ludmerer, K. Time to Heal: American Medical Education from the Turn of the Century to the Era of Managed Care. Oxford University Press. Oxford, UK. 1999.

WHAT IF THE STUDENTS RAN THE MEDICAL SCHOOL?

Peter McLeod

As I contemplated possible topics for today's address, it occurred to me that medical students' perceptions of the ideal medical school curriculum might yield an interesting slant on Medical education. I realize that there was medical student representation on the numerous expert panels convened during the 20th century to evaluate and make recommendations for curriculum reform. Many of those influential reports led to curriculum change – witness the swing to hospital and clinic-based education, problem-based and self-directed learning, etc….

I suspect that student influence was useful, but modest with respect to the tenor of those reports. Student opinion is always useful and often respected in Medical education discussions, but there is a limit to how seriously it is regarded by Medical faculty influentials. Constraints on student influence relate to their age, lack of experience in educational affairs and sometimes to the biases of Medical school leaders.

To solicit unfettered student perceptions and opinion I conjured up a wildly hypothetical situation. I imagined myself as the supreme Headmaster of a brand new Medical school. Furthermore, the powers that be had commissioned me to solicit students' ideas about how the medical school should look.

In reality, I sent a mass e-mail to all current McGill students listed in the Dean's office. The e-mail indicated that I would be giving a talk at a prestigious national meeting (the annual CAME meeting in Halifax, N.S.) and that student input would be appreciated in the form of a response to the following proposition: "If you had unlimited power and unlimited money, tell me, in point form, what you would do to improve the learning at your university".

Approximately one-third of the students responded. A number of the suggestions were frivolous and some were mean-spirited and personal but about 300 appeared to be products of some serious thought. These were evaluated in a semi-scientific content analysis which revealed that the suggestions fell into five broad, easily definable, categories: (1) Curriculum, (2) Helping students learn, (3) Authentic learning, (4) Assessment (5) Attitudes and behaviours.

From each of the five categories I extracted a number of representative quotes which seemed to capture the perceptions and ideas of the responders. For each category I searched the medical education literature far and wide for a few quotes by education experts. The idea was to compare the students' perceptions of what might be useful with opinions by individuals experienced in the field.

1. Curriculum:

The students' curriculum-related suggestions ranged widely between micro-management of particular classes and courses to broad mission statements. Among the most representative quotes are:

"Avoid teaching trivial pursuit medicine"
"Emphasize the apprentice model, not the lecture model"
"More emphasis on international health"
"Minimize the overlap"

From the health education literature, among the relevant curriculum-related quotations were those in an article by Bloom[1] who said the following:

"Medical schools are a variant of modern corporate bureaucracy"

"Protection of territorial domains supersedes the achievement of educational goals as the driving force of the institution"
"The scientific mission of academic medicine has crowded out its social responsibility"

The Headmaster perceives resonance between what the students had to say and what Bloom and others have posited with respect to how medical schools are run.

Bureaucracy will be minimized in our new school. Education will have a priority which equals that of research. We may even pay attention to suggestions like those of Stephen Leacock, a famous McGill Professor who said, "If I were founding a university – and I say it with all the seriousness of which I am capable – I would first found a smoking room; then when I had a little more money in hand, I would found a dormitory; then after that, or more probably with it, a decent reading room and library. After that, if I still had money left over that I couldn't use, I would hire a professor and get some textbooks".[2]

2. Helping students learning:

This subcategory drew the largest number of student suggestions. Among the most thought provoking ideas are the following:

"Too many lectures reinforce the perception that facts are important"
"Need instruction for tutors in A-V use"
"Hire teachers because of pedagogic skills, not scientific prowess Get rid of some famous figures".
"Formalize peer teaching"
"Introduce students to team work – let them work with nurses"

There is little doubt that most medical students have devoted a lot of their young lives to learning; thus the kinds of suggestions they have recommended are not surprising. They resemble the ideas put forth in the many expert consensus reports of the 20th century.

From the literature the Headmaster selected an article by Ende in the Journal of General Internal Medicine.[3] He talked about three critical educational conceptions which are relevant to helping students to learn.

"Teaching is enabling, not telling"
"Knowledge means understanding, not facts"
"Learning implies active construction of knowledge, not memorization"

Role modeling is a major contributor to medical student learning.

Of possible relevance for medical teacher role modeling is Robert Fullughm's advice to his son about raising children:[4]

"Don't worry that they never listen to you; worry that they are always watching you!"

3. Authentic Learning

Authentic learning is learning which occurs in a context which is identical to / or very closely approximates the context in which the material learned will be used. The student respondents obviously appreciate the benefits of authentic learning as illustrated by the following selected quotes:

"Early exposure to patients from day one"
"We need more teaching in ambulatory care settings"
"Learning from patients is better than learning from lifeless notes"

A relevant quote from the literature is derived from a story called "Since Daisy Creek" by Canadian author W.O. Mitchell. It is as follows:

"And what a tricky teacher he was. With what cunning slight of hand he palmed truths and insights and hid them in his students without their knowing it, to appear magically years later".

4. Assessment:

Students are never reluctant to comment about the way they are assessed. The following are representative comments in this category:

"Remove honors and outstanding and install pass / fail"
"Review all written exams – give feedback after all assessments"
"Get rid of multiple choice questions. Examine us with patients"

Another famous McGill figure, William Osler had opinions on how students are assessed. The following are particularly relevant:

"The student needs more time for quiet study, fewer classes, fewer lectures, and above all, the incubus of the examination should be lifted from his soul.

In a 1913 Lancet[5] article, Osler criticized how we use examinations saying:

"We make the exam the end of education, not an accessory in its acquisition".

5. Attitudes and Behaviour:

Many of the comments in this category stem from students' personal experiences but many also relate to a recent move to emphasize "physicianship" at our school. The following are typical:

"Teach healing not mechanics"
"Students and residents lack an understanding of the responsibilities that go with being a professional"
"Allow student control of academic dishonesty"

Opinions of the Headmaster:

The new medical school will have a curriculum and values largely influenced by what the McGill students suggest. However, I realize that there are many "meta-skills" that physicians need to learn for effective medical practice. For many of these, students could not be expected to be aware of the needs. To teach these meta-skills the Headmaster will recruit experts from across the country to give workshops in each of 10 critical meta-skills. The course will be called: **"Instruction from the Elite"** and the workshops and the expert instructors will be:

1. Networking in Medicine – Dr. Dale Dauphinee, Ottawa
2. Thinking about what it Means - Dr. Geoff Norman, McMaster
3. History and Herstory - Dr. Peter Warren, Manitoba
4. Sober Second Thought - Dr. Marcel D'Eon, Saskatchewan
5. Time Management - Dr. Jean Gray, Dalhousie
6. Hockey as a Metaphore – Dr. Allan Jones, Calgary
7. Getting Along with People – Dr. Paul Grand Maison & Dr. Karen Mann, Sherbrooke & Dalhousie
8. Zen and the Art of Bicycle Maintenance – Dr. Jacques Desmarchais, Sherbrooke
9. Technology for Teaching – Dr. Ian Hart, Ottawa
10. Mentoring – Dr. John Ruedy, Dalhousie

References:

1. Bloom, S.W.: Structure and ideology in Medical Education. Journal of Health and Social Behaviour. 1988; 4:294-306.

2. Leacock, S.: My Discovery of England. London. John Lane, The Bodley Head, 1922.

3. Ende, J.: What if Osler Were one of us? Inpatient Teaching Today. Journal of General Internal Medicine. April 1997;12(S2); S41-S48.

4. Fulghum, R.: It was on fire when I lay down on it. Ivy Books. New York, 1993.

5. Osler, W.: Lancet 1913; 2:1047-1050.

TOWARDS A MODEL CURRICULUM FOR COMPLEMENTARY AND ALTERNATIVE MEDICINE IN CANADIAN UNDERGRADUATE MEDICAL EDUCATION

Marja Verhoef, Michael Epstein, Rebecca Brundin-Mather

Over the past four years, the role of complementary and alternative medicine (CAM) in undergraduate medical education (UME) has been the subject of increasing interest among medical educators, medical students, and practicing physicians. Pilot studies suggest that most medical schools in Canada would like to increase CAM content in their curricula. Unfortunately, scarcity of finances, faculty time, expertise, and curricular time typically precludes significant increases to existing CAM content. This concern notwithstanding, the prospect of a national collaboration among Canadian medical schools to develop a model CAM curriculum has emerged as a pragmatic and feasible approach to meet this need.

Representatives of 14 Canadian medical schools attended a two-day workshop in September 2003 in Saskatoon, SK to develop a national vision for CAM in UME. The purpose was to create a curriculum that would be sufficiently flexible to accommodate the diverse needs and circumstances of individual Canadian medical schools. The curriculum was not intended to teach medical students how to practice any specific CAM therapy, nor to endorse CAM, but rather to provide future physicians with the knowledge, skills, and attitudes to enable them to discuss CAM with patients in an informed and non-judgmental manner. Key outcomes included a consensus-based mission statement, consensus-based curriculum content, and suggestions on how to introduce CAM into the curriculum.

Why include CAM in UME?

In lieu of creating a mission statement for the project, participants suggested formulating a rationale for including CAM in UME. This was based on the premise that a rationale is a more powerful way to justify to stakeholders the need to move forward with introducing CAM into UME curricula. Elements of the rationale for CAM in UME included (1) the widespread use of CAM by patients, (2) the need to facilitate disclosure of CAM use to physicians, and (3) the potential for adverse effects and interactions.

What do Canada's future physicians need to know about CAM?

During the Saskatoon workshop, much discussion centred on what Canada's future physicians need to know about CAM. Broad curricular categories included (1) topics pertaining to CAM in general (e.g., definitions, utilization, reasons for use, evidence, and implications for practice), and specific CAM systems and therapies. Participants identified Natural Health Products, Traditional Chinese Medicine, chiropractic, naturopathy, and homeopathy as the top rated practice areas for physicians to know about. They also recommended that for priority CAM practices and/or products, the UME curriculum should include a descriptive overview, evidence, safety, interactions, regulation, and clinical implications as sub-topics.

Results of the Saskatoon workshop were presented at the 2004 Annual ACMC/CAME Meeting in Halifax. In addition, we held a workshop to further explore the rationale for CAM in UME and to identify what schools can do to accommodate CAM-related curriculum content. The workshop discussion involved widespread active participation by roughly two dozen attendees.

The success of the Saskatoon and Halifax workshops has greatly exceeded original expectations. The opportunity for participants to share experiences and insights on a topic that, in some schools, is considered a fringe area, was invaluable. Additional progress has subsequently been made towards developing a uniquely Canadian CAM curriculum. At a recent meeting of selected project members, a proposed two-part CAM curriculum was reviewed. One part of this curriculum will be a consensus-based common framework that consists of three sections: Foundations for CAM, CAM Basics, and CAM in Clinical Practice. The second part will be a repository of innovative and diverse learning resources that will help support and inform the first part.

The CAM in UME project is guided by several design principles, the foremost being flexibility, critical appraisal, and Canadian content. Progress on this initiative has been due to a dedicated and expanding group of students and faculty from medical schools across Canada. Additional information about the CAM in UME project can be found at http://www.ucalgary.ca/CAMinUME, or by contacting Dr. Marja Verhoef at mverhoef@ucalgary.ca.