ASSOCIATION OF FACULTIES OF MEDICINE OF CANADA

2008 BLUE RIBBON PANEL MEETING SYNTHESIS REPORT

APRIL 2008

AFMC The Association of Faculties of Medicine of Canada
L'Association des facultés de médecine du Canada

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Acknowledgments:

A special thanks to Dr. Jerry Maniate (Wilson Centre, University of Toronto) for producing this synthesis report on behalf of the AFMC.

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Introduction

In 1910, Abraham Flexner, through the funding of the Carnegie Foundation, created what continues to be held up as the framework for modern medical education in North America. During the past 100 years Canada has continued to promote advances in medical education through its significant and unique contributions such as Problem Based Learning curriculum, the Educating Future Physicians of Ontario (EFPO) Project in the 1980's, and the development and implementation of the CanMEDS Physician Competency Framework. Further advances in medical education, and also the ever-present challenges associated with ensuring high-quality health care delivery, have provided impetus to re-examining the Canadian medical education system and to consider moving beyond the possibilities that Flexner envisioned nearly a century ago.

The Association of Faculties of Medicine of Canada (AFMC), with its 65 year history of being the national voice of Canada's faculties of medicine and its mission to ensure the health of Canadians by promoting and supporting excellence in health education and research, has provided the leadership to ensure social accountability through a variety of activities. The Future of Medical Education in Canada (FMEC) Project was initiated by the AFMC to examine the challenges that the undergraduate medical education (UGME) system is currently facing and to identify challenges that will develop in the near future. Through this process the FMEC Project will provide valuable information in the decision-making process to guide UGME in Canada through the next 100 years. Please see Appendix 1 for more details pertaining to the FMEC Project.

Blue Ribbon Panel Meeting

The first Blue Ribbon Panel Meeting was held in Toronto at The Old Mill on April 17-18, 2008. The participants of the Blue Ribbon Panel represented the community at large and were identified through a process of skills identification and stakeholder consultations (see Appendix 2 for invitation letter and Appendix 3 for the participant list). Also in attendance were members of the AFMC Future of Medical Education in Canada (FMEC) Project Steering Committee and a number of guest observers. The Blue Ribbon Panel members, through their broad representation of stakeholder groups, ensured that multiple perspectives were heard in the consensus process to identify the needs of the Canadian medical education system. In consultation with the AFMC, professional group facilitator Helena Axler developed an agenda and provided structure to the event without constraining the breadth of discussion.

Terms of Reference

Blue Ribbon Panel members will:

1. Represent a community perspective in providing input into this 20-month project.
2. Review draft reports from the various project panels and activities (Data Needs and Access Group, Young Leaders' Forum, literature review, stakeholder interviews and international consultations).
3. Provide input into the key issues in medical education for the future.
4. Assist with the development of draft principles for change in medical education in Canada.
5. Participate in the National Forum, which will take place in early 2009. The national forum will bring together a group of medical educators, including Deans of Medicine and Health Sciences and other key stakeholders, to analyze the results of the project, discuss them collectively and reflect upon what impact they should and will have upon medical education in the future. Through their participation, Blue Ribbon Panel members will actively contribute to high-level discussion and advice as to next steps.

Meeting Objectives

- To orient the Blue Ribbon Panel to the overall context of medical training in Canada and to the work of the ***Future of Medical Education in Canada (FMEC)*** project.
- To consult with the Blue Ribbon Panel members (within the framework of the thematic clusters) as representatives of a cross-country "community perspective".
- To review / react to work completed to date, including early findings / emerging themes.
- To generate dialogue and early thinking on draft principles for change in Canada's medical education system.
- To strategize about next steps and prepare for both our next meeting and the National Forum.

Following the initial meeting, this synthesis report was produced to describe and summarize the workshop proceedings, and will serve as one outcome of the overall Future of Medical Education in Canada initiative but will also serve as a road map for the AFMC's future work. The members of the Blue Ribbon Panel will also participate in a National Forum, that has been tentatively planned for late 2009.

Session Activity

Setting the Context

The Blue Ribbon Panel Meeting started with a time of group networking followed by welcoming and opening remarks provided by Dr. Nick Busing (President & CEO of the AFMC) and Helena Axler in order to set the context for the discussion. A round of introductions provided the participants with an understanding of the breadth of perspectives that were present at the meeting.

Dr. Busing provided valuable background information to the Blue Ribbon Panel members with a presentation on the AFMC's FMEC Project. The presentation highlighted the current purpose and goals of medical education and how social accountability is linked to this system. For example, using the definitions of core social values (relevance, quality, cost-effective and equity), Dr. Busing explained how these social values link to education, research and service (the tripartite function of medical schools). Dr. Busing also highlighted a number of the AFMC initiatives on social accountability that have been developed since the publication and release of its 2002 guide entitled ***Social Accountability: A Vision for Canadian Medical Schools.*** The background information also included placing the Blue Ribbon Panel meeting in the context of the larger AFMC FMEC Project by reviewing what has been completed to date and the next stages of the project. Please see Appendix 1 for a more detailed description of the FMEC Project.

Also provided during the initial session to the participants was additional information regarding the medical education system in Canada, including looking at the current trends of medical school enrollments, the challenges of distributed medical education, International Medical Graduates (IMGs), and the spectrum of the system (including the admissions process, undergraduate medical education (UGME), postgraduate medical education (PGME), certification, licensure and then practice).

The Blue Ribbon Panel members participated in a facilitated discussion, in which they were asked to identify current and emerging trends that will shape the future of medical education before beginning to envision a preferred future for medical education in Canada through a roundtable discussion. The meeting participants spent the remainder of the time shaping the principles which will be utilized to guide the renewal of medical education in Canada. Please see Appendix 3 for detailed workshop agenda. In addition, a glossary of acronyms or terms that may be unfamiliar is found at the end of the report.

Current and Emerging Trends

The Blue Ribbon Panel members were asked to answer the following questions in order to stimulate dialogue around the current and emerging trends shaping the future of Canada's medical education system.

> ***"As we contemplate what form medical education might take in Canada in 2028 as a reflection of changing societal needs, what are some of the issues, key challenges and opportunities that come to mind?"***
>
> ***"As we contemplate the future of medical education in Canada, what are some of the practical assumptions that we can make about the professional / regulatory / economic environments?***
>
> ***"As we think about the renewal of medical education, what other sectors, industries or regions can we learn from?"***
>
> ***"Overall, which do you think are the key trends in our changing environment most likely to influence and inform the future of medical education in Canada?"***

<u>Issues / Key Challenges / Opportunities Identified:</u>

(1) **Canadian Health Care System:**

(a) There has been much dialogue both within the profession but also at the societal level on private vs. public care delivery. There will be a need to identify and examine: publicizing of primary care; levers to drive to public care; new models for remuneration and practice; longitudinal view of the patient.

(b) The cost of the health care system will continue to increase due to: an aging population; increased costs of drugs and management; increasing gap between increase in government revenues (2-3%/year) and increase in health care expenditures (6%/year), which does not parallel other areas of government expenditures. Physicians should during the course of their training: understand the context and constraints of the system; and understand their responsibility and accountability to system.

(2) **Patients:**

(a) There will be ongoing change in the patient population (increasing diversity & multiculturalism, demographics & aging, human rights). For example, in Western Canada the Aboriginal population is booming and becoming a growing part of the workforce.

(b) Citizens must be empowered to play a greater role in planing for their own health and in the context of their health care providers, through the utilization of resources such as the Internet.

(3) **Globalization / Internationalization:** These trends will play a significant role in the free movement of people and diseases. For example, Canada will continue to see the immigration of large numbers of people from around the world and contribute to its changing demographics and multiculturalism.

(4) **Canadian communities:** There will continue to be differences between Canadian communities, such as: urban vs. rural /remote / Northern; high levels of growth and cultural vibrancy vs. out-migration and stagnation; First Nations / Inuit communities vs. other communities.

(5) **Social determinants of health:** There will be a need to ensure that we have a balance of skills and knowledge with what makes people and health care professionals healthy. We will need to explore the role of environment and background in determining the health of the individual, not just genetics. We will need to create a model that structures the system to focus on primary care, public health, disease prevention, health promotion and mental health.

(6) **Medical students:** Trainees will become: clinicians, educators, researchers, administrators, and civil servants. It is estimated that approximately 10 -15% will leave clinical practice. We will need to explore and understand the implications of the feminization of the profession (60% of incoming class).

(7) **Education and training:** There needs to be more discussion on addressing questions and issues that medical educators have attempted to raise with significant resistance over the years. For example, who trains the physicians and who pays for the physicians? How will we address the need for re-skilling? Can we transition "senior" physicians into roles of mentorship for "junior" faculty members? What type of role(s) will the physician of the future need to fill? In addition, there will be growing gaps in the medical education system between geographic areas based on access to wealth, infrastructure, resources and industry.

(8) **Health Human Resources:** We will need to distribute doctors to meet the health needs of the community, by addressing: mobility rights of the physician; identifying high need communities (rural vs. urban, First Nation communities); explore the utilization of incentives to go to high need communities We will also need to explore how to best integrate immigrant healthcare professionals into the Canadian health care system, which may developing mentorship programs, or ensuring better integration into Canadian citizenship.

(9) **Economic:** We will need to develop partnerships and relationships between patients and providers, in order to couple creation and innovation with the side of health care that use these products.

(10) **Educational Change / Leadership:** A common theme or thread through the discussions of the Blue Ribbon Panel members was to what extent do we need more of the same vs. incremental change vs. fundamental / transformative change.

Envisioning a Preferred Future for Medical Education in Canada

Utilizing roundtable discussions, the participants discussed and responded to a set of proposed statements and questions. Upon completion, the tables reported back to the larger group to formulate an elaborative vision of Canada's medical education system.

Statement #1: "No excellent health care system would be complete without..."

- Thinking about disease prevention and health promotion rather than simply about treating individual cases of illness. This requires a system that has a robust Public Health component and a robust Primary Care component.
- Creating a seamless system that:
    - Is fair, equitable (and timely) access.
    - Is nimble or rapidly responsive to demographics, cultural diversity and changes of society.
    - Has the capacity to handle current and emerging illness.
    - Incorporates inter-professional care.
    - Practices evidence-based medicine to ensure quality patient care.
    - Is citizen-focused and citizen-driven (community input, democratic, self-governance issues).
    - Examines all possible methods of delivering health care to patients (private and public models).
    - Is aligned with public need, therefore requiring the necessary data to determine the public's actual and projected needs continuously, before instituting changes.
    - Examines alternative methods of funding, including:
        - the role of commercialization
        - the access to institutionalized pools of capital (ex. Canada Pension Plan, Ontario Teachers Board, Caisse, etc...)
- Ensuring quality & safety (monitor, metrics, safety, systemic perspective)
- Developing an appropriate health human resources plan that explores:
    - Matching supply-demand
    - Ensuring adequate number of physicians and other healthcare professionals
    - Ensuring a balance of specialists and primary care
    - Ensuring a balance between urban and rural areas.
- Developing a sustainability plan (adapt new technology, products, processes)
- Educating public and providers that the health care system is a continuum of service and knowledge of how to change aspects of the system

Statement #2: "No excellent medical education system would be complete without..."

- Attention to all required traits
    - Role of selection criteria
    - High grades are not enough, we need professionals with "heart"
    - We need skilled clinicians who are also sympathetic/empathetic, know limits and refer appropriately with strong interpersonal skills.

    - Exploring the attitudes of candidates to determine suitability for medical training (for example, willingness to accept life-long learning).
- Good teaching and research
- Equitable student access to faculty members, which potentially has implications for distributed medical education (DME)
- Being responsive to diverse population needs by selecting and educating appropriate individuals
- Support for generalism
- Exploring alternative models (e.g. executive MBA) for continuing education and specialty training
- Understanding that it is a changing world, and that the physician must be a part of a team and may no longer be in charge. We need to train physicians to be leaders in a team and active participants on inter-professional teams comprised of nurses, other health professional, patients, family members. We must also explore the role of alternative providers (ex. acupuncture, chiropractor, etc...) who are being accessed by patients for care.
- Educating trainees in system thinking and system change.
- Addressing the gap in physician leadership training and the significant role that physicians can play as drivers of change and utilizing levers for change. Physicians must understand that change will occur and that they need to be resilient and participate with change. Physicians can be agents of positive change and should be given the necessary skills to accomplish this role.
- Managing societal expectations
- Exploring the current and future state of medical professionalism
- Addressing the changing demographics of medical school (women, mature students, families, etc...)
- Ensuring overall quality of medical schools
- Understanding that the medical education system is in service to the public and therefore its role must evolve with public need.

<u>Statement #3:</u> "What are your greatest hopes for medical education and the type of physician we will produce to help achieve your envisioned future for our health care system and the improved health and care of Canadians?"

- The physicians will:
    - Have cross-cultural training.
    - Be comfortable with change (flexible and resilience)
    - Be role models in society. Therefore we will need to continue to attract the best and brightest to the profession.
- We will need to demonstrate that what we do in the health care system is the best.
- "One size" does not fit all, thus the system must be capable of adapting to diverse variables.

<u>Statement #4:</u> "What do you see as the top priorities to help us achieve this medical education system?"

- We need to broaden the selection criteria, to include those who will have "heart" and reflect the diversity (cultural, regional, etc...) of our society.
- We need a flexible, adaptable system that is aligned with public need.
- Physicians must be flexible, adaptive and comfortable with change.
- Public Health and Primary Care are fundamental to the functioning of the system
- We need to explore all models of health care delivery to ensure that we meet the needs for public
- Leadership and change capacity
- Resources ($$$, more MDs, more schools / slots)
- There needs to be acceptance of the realties of the future, including that:

    - There is a generational change
    - Physicians will not work 24 hours which may have significant implications on health human resources planning
- We need an attitudinal shift both within the profession and the public to have an openness to change.
- Medical care is very different than in previous generations due to the increasing prevalence of obesity and a society that is increasingly dependent upon medications.
- Political support is required, and thus we need a lobbying / advocacy strategy and the courage to make the necessary large scale changes
- We need to identify who are the drivers of changes, and what are the levers for change.
- We need to explore the role of incentives and disincentives for entering into the profession, including:
    - Access to student loans / bursary / grants
    - Mechanisms to increase access

Emerging Themes: Early Project Learnings

Update on Environmental Scan - Literature Review and Interviews

Following the group sessions, Dr. Busing provided a brief presentation on the preliminary highlights of the literature review process that the Wilson Centre and CPASS have been leading. This included a presentation and brief discussion concerning the following points:

A. Curriculum Content

- Concepts of quality improvement
- Place of communication in medical practice
- Teaching conflict resolution
- Challenges of inter-professional collaboration
- Negative role-modeling
- Humanities and Social Sciences in the medical school curriculum
- Incorporating professionalism into admissions and into the curriculum
- Training in population health
- Effective ambulatory care models
- Best practices in chronic disease management
- Focus on community-based care

B. Pedagogical Issues Affecting the Medical Education System

- Evolving role of Academic Health Sciences Centre (AHSC) and teaching in community
- Time-based vs. competency-based curriculum
- Implementation of inter-professional education
- Simulation-based education
- Distributed medical education (DME) and research
- Adapt education to address population needs
- Expectations for professional behaviour
- Caring for colleagues
- Wellness education
- Improved faculty development
- Track quality and effectiveness of assessment tools and programs
- Tools for difficult to assess areas

C. The Culture(s) of Medicine and Medical Education

- Role of residents in UGME
- Role of UGME in the AHSC
- Role of clinical teachers
- Reflect upon the world one inhabits - social world and practice
- Learn from outside medicine
- The hidden curriculum
- Empathy and patient-centered practice

D. External Issues Affecting the Medical Education System

- Human resource planning
- Global vision
- Admission policies - type of student
- Adapting the curriculum to scientific discovery
- Evidence and scientific discovery vs. observation, experience and local culture

E. Higher Order Construct

- Pursue medical education research to support innovation
- Exposure to quantitative and qualitative research
- Knowledge Translation (KT) as a core competency, integrated into curriculum
- Role of mentorships
- Team-based inter-professional approaches in education and medical research
- Teaching and learning strategies to promote life-long learning

Members of the Blue Ribbon Panel identified a few concerns about the process to date, including:

- the need to have an implementation strategy
- the need to have the buy-in of the stakeholders
- the need to identify a few key elements that will be the levers for change
- the need to look at other cultures and countries (ex. France, Japan, Scandinavia, Europe)
- the need for more high level system thinking

Update on Data Needs and Access Group (DNAG) Meeting - March 2008

The DNAG meeting brought together stakeholders to identify and prioritize medical education information needs for the future of the Canadian medical education system. The participants were asked to articulate a vision for each of the FMEC theme areas with respect to medical education information needs. To take the visioning exercise one step further, participants were asked to identify specific indicators that would signal success in achieving the vision. See Appendix 4 for a summary of the discussions from the DNAG meeting.

Update on 2008 Young Leaders Forum (YLF) - March 2008

In March 2007, the AFMC convened the inaugural YLF in order to identify a vision for Canada's health systems in 2027. The goal of the 2007 YLF was to explore the vision, thoughts, priorities, plans and concerns of those who will serve as agents of change within Canada's health care system in coming years.

The second YLF was convened in March 2008 in order to discuss the future of Canada's medical education system. The participants were asked to articulate specific measurable indicators within the theme areas and then to give input into future vision for the medical education system. See Appendix 5 for a summary of the discussions from the 2008 YLF.

Update on United Kingdom Consultations

Drs. Jay Rosenfield and Angela Towle provided a presentation on their recent visit to the United Kingdom where they visited three medical schools and conducted interviews with key individuals with the General Medical Council (GMC) and other organizations. They spoke of the two newest medical schools (2000 and 2001), which were established by the UK to address need for more physicians. These schools have the ability to be flexible and nimble and lack both tradition and the traditional clinical department structure, which can hinder innovation.

Shaping the Principles to Guide the Renewal of Medical Education in Canada

The participants were organized into new groups in which both the Blue Ribbon Panel members and Steering Committee members collaborated to generate principles to guide medical education renewal. The groups reported back on their roundtable discussions to identify areas of convergence and divergence with a view to confirming a starting set of principles. To ensure their resonance, these principles will be tested with broader constituencies in ongoing and future consultations.

The set of draft principles might include the following:

- A focus on understanding the health care system and policy (from both a societal context and international context).
- A culture of continual change that tolerates ambiguity, and promotes a spirit of enquiry, entrepreneurship and innovation.
- Transparency and public accountability for the medical education system, including shared responsibility with the public.
- A culture of continuous improvement, that includes:
    - Evaluation
    - Open communication / collaboration
    - Incentives for changes
- A diversity of training experiences with effective interdisciplinary integration.
- Alignment with partners to advance mutual agendas.

- Comprehensive health promotion through the establishment and support of robust systems of Primary Care and Public Health.
- Medical education that is responsive to diversity (cultural, geographic, demographic).
- Medical education that is integrated with other health professional education.
- Alignment of medical education with the evolving needs of the public.
- Medical education that is enabled to be a powerful agent of change.
- Optimal utilization of resources and accountability for quality.
- Models to assure access to physicians or other health care professionals, in under-serviced areas (including but not limited to rural and remote areas)
- Flexibility within faculty members to understand that they are role models who will utilize student-centered approaches. These members will also be creating optimal learning environments.
- Flexibility within the well rounded students, so that:
    - They are resilient, flexible, adaptable, and professional.
    - They utilize a holistic approach to patient care.
    - They practice patient-focused medicine.
    - They are active participants of a team-based approach to patient care.
    - They are prepare to tolerate ambiguity.
- Training for Generalist/ Specialist balance
- Support for practice management and education for the business of medicine.
- The clinical education environment that models the practice we want.
- High level enablers of major positive change, including:
    - Collaboration
        - To codify knowledge (curriculum) that has broader impact (not just for students but for public).
        - To develop and implement internet based tools (GPs, Specialists, Populations).
        - To develop and implement core curriculum for special / cross cutting topics (ex. First Nations/Inuit/Metis health).
        - To identify attributes for success (new topic, important, technology enabled, economics).
    - Accessibility at all levels
        - To ensure the entry of diverse student body (SES, indigenous, language)
        - To deal with: 1) length; 2) cost; 3) pipeline (outreach programs, need resources)
        - To develop and implement a structured program: resources; recognize need
    - Social marketing
        - To promote the following messages:
            - Determinants of health
            - Using the health system effectively
    - Use technique of future history
        - For example, the story of social accountability

Conclusion

Next Steps

To maintain momentum from this meeting:

- "As was said" report will reflect oral and written items from the day as a verbatim record. This report will be posted on the AFMC website as a part of the FMEC Project and will serve as a project deliverable. This website will be launched shortly and will contain all publicly released documents of this project.
- A synthesis summary report will be created and will be distributed to the workshop participants to assess whether it is reflective of the discussions.
- After completion of the review process for the synthesis summary report, this report will be posted on the AFMC website.
- Principles for Change for the Canadian Medical Schools and other inputs will be reviewed by the AFMC Steering Committee to refine the draft principles.
- An early fall teleconference call of the Blue Ribbon Panel will be held to discuss the principles and other materials posted to the AFMC website on the FMEC Project.
- In January 2009, the next in-person meeting for Blue Ribbon Panel will be tentatively planned for Toronto in order to review the draft principles and refine them.
- A National Forum will be planned for March 2009 in Ottawa, when 100 stakeholders will be invited to discuss the principles and other deliverables of the AFMC FMEC Project in order to identify the steps for change.
- By March 2009, the FMEC Project will be concluded.

Appendix 1: AFMC's Future of Medical Education in Canada (FMEC) Project

Background

In 1910, Abraham Flexner, through the funding of the Carnegie Foundation, created what continues to be held up as the framework for modern medical education in North America. During the past 100 years Canada has continued to promote advances in medical education through its significant and unique contributions such as Problem Based Learning curriculum, the Educating Future Physicians of Ontario (EFPO) Project in the 1980's, and the development and implementation of the CanMEDS Physician Competency Framework. Further advances in medical education, and also the ever-present challenges associated with ensuring high-quality health care delivery, have provided impetus to re-examining the Canadian medical education system and to consider moving beyond the possibilities that Flexner envisioned nearly a century ago. The FMEC project was initiated in response to the changing nature of medical education in Canada.

Goal of the Project

To conduct a thorough review of medical education in Canada in order to promote excellence in patient care by reforming the medical education system (across the continuum) where necessary and essential.

Timeline

This Health Canada funded project was initiated in October 1, 2007 and will be completed by March 31, 2009.

Objectives of the Project:

- To equip physicians with knowledge, skills, attitudes and values to provide high quality medical care and be responsive to changing societal needs.
- To address through medical education the production of physicians in Canada to ensure the appropriate balance between generalists and specialists.
- To ensure that areas such as bioethics, professionalism, communication skills and a population health approach are emphasized to the same degree as some other aspects of medical education.
- To identify the resources needed to support changes in medical education.

Environmental Scan

The FMEC project will take a comprehensive look at Canada's medical education system through a process of an **environmental scan**, which will be completed through the partnership of the *Wilson Centre* at the University of Toronto and the Université de Montréal's *Centre de pédagogie appliquée aux sciences de la santé (CPASS)*. The environmental scan includes a literature review, key stakeholder interviews and syntheses, with a, focus on the following key themes: 1) curriculum content; 2) pedagogical issues affecting the medical education system; 3) culture(s) of medicine & medical education; 4) external issues affecting the medical education system ; and 5) higher order constructs. These theme areas encompass many facets of undergraduate medical education (UGME) in Canada. For example, population health and intra-professionalism will be explored as part of the curricular review. Distributed learning and faculty development will be covered through the review of pedagogy. Medical student diversity and health human resource needs will be considered as part of the review of external issues. These are samples of the many areas to be explored by the FMEC project.

In addition to the environmental scan, the FMEC project will also include the following components as a means of gathering additional data and feedback from all stakeholders: 2008 AFMC Young Leaders Forum; Blue Ribbon Panel; International Consultations (United Kingdom, United States; Medical Education Data Needs & Access Workshop.

Medical Education Data Needs and Access Group

The Medical Education Data Needs and Access Workshop was held in March 2008 and brought stakeholders together to discuss information and data needs for Canada's future medical education system. To help frame the initial discussion, participants were asked to review of FMEC project themes from an information needs perspective. During the workshop, participants were asked to articulate specific information needs and measurable indicators within the theme areas and to build consensus around priority information and data needs for Canada's medical education system Participants were also asked to suggest strategies that would meet information and data needs and to provide the AFMC with guidance for its future data collection work.

Young Leaders Forum

The Young Leaders Forum brought participants together in March 2008 to discuss the future of Canada's medical education system from the perspective of the future leaders of the Canadian health care system. To help frame the initial discussion, participants received a summary of themes emerging from the FMEC project and then during the workshop, participants were asked to articulate specific measurable indicators within the theme areas. The participants were also asked to give input into future vision of the future health care system.

Blue Ribbon Panel

The participants of the Blue Ribbon Panel will represent the community at large and will be identified through a process of skills identification and stakeholder consultations. The panel members will meet in April 2008 to review and discuss findings of environmental scan and to provide an analysis of possible recommendations for change and will also participate in the National Forum, tentatively planned for late 2009.

Consultations with Canadian Faculties of Medicine

The AFMC will engage the Canadian Faculties of Medicine in a consultative process to discuss recommended principles for change and to begin to build support and develop consensus.

Public Input

This will be accomplished through a number of venues and methods over the next year.

National Forum

The AFMC will convene a forum of medical educators and other key stakeholders in late 2009 to analyze the results of the FMEC project. The forum will provide participants with the opportunity to discuss the results of the FMEC project collectively and to reflect upon what impact they should have upon medical education in the future in Canada. The forum will also serve as an opportunity to develop consensus around current situation and moving forward.

Dissemination of the Project

The entire process of data collection and development of draft principles will be collated and provided through the AFMC website on an ongoing basis.

Project Evaluation

An independent evaluator will develop an evaluation plan early on in the FMEC project. There will be a midterm evaluation to allow for adjustment of activities as well as a final evaluation that will be shared with all participants.

Appendix 2: Invitation Letter

Monday 28 January 2007

Dear _____,

I am writing to invite your participation in a groundbreaking new Health-Canada funded project, *The Future of Medical Education in Canada,* which is being executed by The Association of Faculties of Medicine of Canada (AFMC). We are forming a Blue Ribbon Panel comprised of national experts from diverse sectors outside health who will provide input into this important work in a high-level advisory capacity. You have been nominated by our Steering Committee and I am writing to extend a personal invitation to join our Blue Ribbon Panel.

Not since the Flexner report of 1910 has there been a comprehensive review of medical education in Canada. *The Future of Medical Education in Canada* project will bring together key stakeholders to undertake a comprehensive review of the current status of medical education in Canada along with an international comparative dimension. This ambitious project focuses upon how the medical education system can better meet the needs of Canadians, both now and into the future. It aims to clearly delineate some of the important societal changes taking place that should be reflected in contemporary medical education and to generate a series of principles for change. The main project activities include a thorough environmental scan with comprehensive reviews of both published and grey literature, national key stakeholder interviews and comparative international consultations. Expert and public opinion will be integrated into the project via contributions from the Blue Ribbon Panel, the AFMC Young Leaders' Forum and a Data Needs and Access Resource Group, respectively. The mandate of the Blue Ribbon Panel is to respond to consultants' reports and to react to draft principles for proposed changes to the Canadian medical education system generated by the Steering Committee. Emerging themes will be actively considered at a National Forum in February 2009 and Steering Committee members will ultimately liaise with the 17 Deans of Medicine across Canada to share high-level recommendations and next steps for the Canadian medical education system.

The time has come for creative thinking regarding the future of medical education - we want to include you in this exciting work. Your commitment as a Blue Ribbon Panel expert will involve participating in two face-to-face meetings over the duration of this 20-month project (17-18 April 2008 and early 2009, respectively). As well you will be invited to participate in the National Forum in February 2009. Our meeting on 17-18 April will be held at the Old Mill in Toronto and will begin with a dinner at 6:00 p.m. on 17 April and conclude at 5:00 p.m. on 18 April.

We are pleased to be able to support your travel, accommodation and meal / per diem expenses for attendance at these three in-person meetings.

We would be delighted and honoured if you would accept our invitation to join the Blue Ribbon Panel for the *Future of Medical Education in Canada* project. We would appreciate hearing from you as soon as possible. Please find attached am executive summary of the project and list of Steering Committee members, for your information. Should you wish further details on the project, please do not hesitate to contact myself or Project Manager Catherine Moffatt.

Best regards,

Nick Busing, MD
President & CEO, AFMC

Appendix 3: Participant List

BLUE RIBBON PANEL:

- **Pat Atkinson, BA, B.Ed**

  Member of the Legislative Assembly
  Saskatoon-Nutana

- **Penny Ballem, MSc, MD, FRCP**

  Clinical Professor of Medicine
  University of British Columbia

- **Honourable James K. Bartleman**

  Former Lieutenant Governor of Ontario
  Office of the Lieutenant Governor of Ontario

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  Invited Fellow
  Centre interuniversitaire de recherche en analyse des organisations (CIRANO)

- **Hélène Desmarais, B.BA**

  Chair and CEO
  Centre d'enterprises et d'innovation de Montreal

- **Robert A. Gordon**

  President Emeritus
  Humber College Institute of Technology and Advanced Learning

- **Mary Jo Haddad, RN, BScN, MHSc, LLD**

  President and CEO
  The Hospital for Sick Children

- **Judith G. Hall, OC, MD, FRCPC, FAAP, FCCMG, FABMG, FCAHS**

  Professor Emerita of Pediatrics and Medical Genetics
  UBC & Children's and Women's Health Centre of BC
  Department of Pediatrics
  BC's Children's Hospital

- **Malcolm King, PhD, FCCP**

  Professor
  Department of Medicine (Pulmonary)
  University of Alberta

- **A. Wayne MacKay, CM, BA, B.Ed, MA, LL.B**

  Professor of Law
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- **Rob McLean, MA, CA**

  President
  MatrixLinks International Inc.

- **Honourable Stephen Owen, QC, PC**

  Vice President
  External, Legal and Community Relations
  University of British Columbia

- **Judith Wolfson, SW, LL.B**

  Vice President, University Relations
  University of Toronto

AFMC STEERING COMMITTEE:

- **Nick Busing, MD, CCFP, FCFP**

  President & CEO,
  Association of Faculties of Medicine of Canada

- **Deborah Danoff, MD, FRCPC, FACP**

  Director, Office of Education
  Royal College of Physicians and Surgeons of Canada

- **Jonathan DellaVedova**

  Vice-President, Education
  Canadian Federation of Medical Students (CFMS)
  Northern Ontario School of Medicine (NOSM)

- **David A. Gass, MD, CCFP, FCFP**

  Professor, Department of Family Medicine
  Dalhousie University

- **Anne-Marie MacLellan, MDCM, CSPQ, FRCPC**

  Director of Medical Education
  Assistant Registrar
  Collège des Médicins du Québec

- **Sue Maskill**

  Vice-President, Education and Special Projects
  Association of Faculties of Medicine of Canada

- **Mathieu Moreau, BSc**

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  Fédération médicale étudiante du Québec (FMEQ)

- **Jay Rosenfield, MD, MEd, FRCPC**

  Vice-Dean, Undergraduate Medical Education
  Faculty of Medicine
  University of Toronto

- **Angela Towle, Ph.D**

  Associate Dean, MD Undergraduate Education
  Faculty of Medicine
  University of British Columbia

- **W. Todd Watkins, BSc(Hon), MD, CCFP**

  Director, Office of Professional Services
  Canadian Medical Association (CMA)

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  Facilitator
  Helena Axler & Associates Inc.

- **Muriel Beauroy**

  Interpreter

- **Andre Moreau**

  Interpreter

- **Caroline Napier**

  Interpreter

- **Heather Sterling**

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PROJECT STAFF:

- **Claire de Lucovich**

  Project Assistant
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- **Catherine Moffatt, MEd**

  Project Manager
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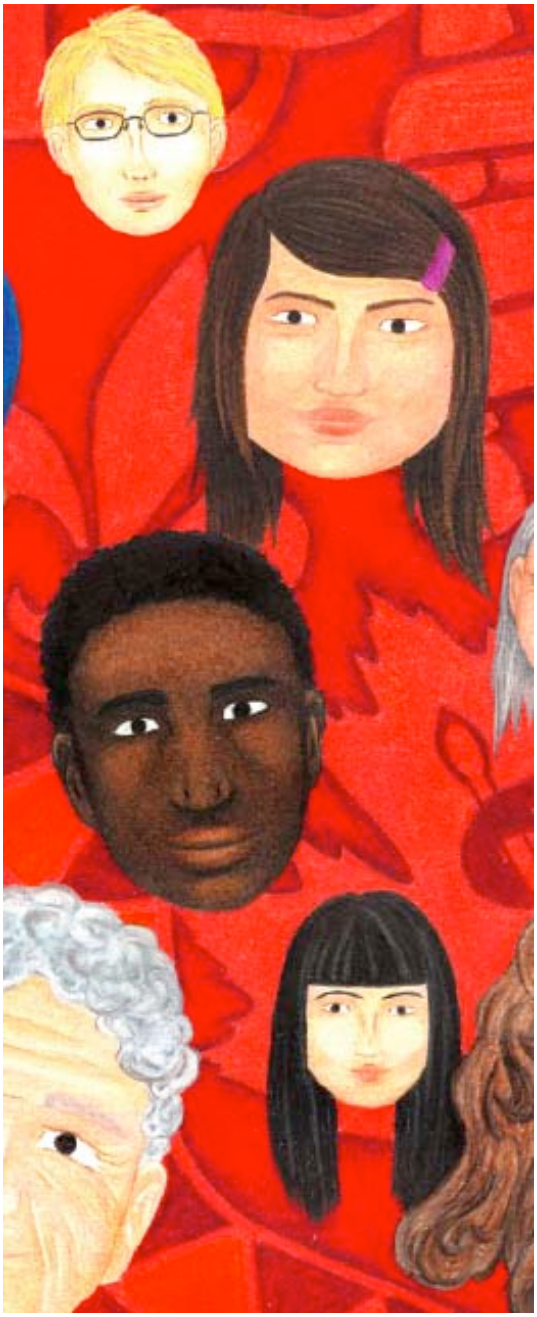

Appendix 4: Session Agenda

The Association of Faculties of Medicine/ L'Association des facultés de médicine du Canada (AFMC)

~ Blue Ribbon Panel Meeting ~

Thursday, & Friday, April 17-18, 2008
The Old Mill, Toronto, ON

Agenda

Meeting Objectives

- To orient the Blue Ribbon Panel to the overall context of medical training in Canada and to the work of the ***Future of Medical Education in Canada (FMEC)*** project.
- To consult with the Blue Ribbon Panel members (within the framework of the thematic clusters) as representatives of a cross-country "community perspective".
- To review / react to work completed to date, including early findings / emerging themes.
- To generate dialogue and early thinking on draft principles for change in Canada's medical education system.
- To strategize about next steps and prepare for both our next meeting and the National Forum.

Thursday, April 17, 2008

Time	Topic	
1800	**Reception**	
1830	**Welcome and Introduction** - Opening Remarks - Roundtable Introductions	Nick Busing
1900	**Dinner**	
1945	**The Future of Medical Education in Canada Project** - Goals - Framework underpinning the project - Scope of the project and progress to date - Medical training in Canada today - a few facts	Nick Busing
	Getting started - Confirming the Role of the Blue Ribbon Panel - Overview of Day 2 - Objectives of the day - Review of agenda and approach to the meeting	Helena Axler
2100	**Adjourn for the day**	

Friday, April 18, 2008

Time	Topic
800	**Breakfast**
830	**Welcome**
835	**Current and emerging trends shaping the future of medical education** Facilitated plenary discussion with Blue Ribbon Panel members
915	**Envisioning a preferred future for medical education in Canada** Roundtable Discussion
1005	**Health break**
1020	**Report back to plenary on highlights of visioning discussion**
1215	**Lunch** **Emerging Themes: Early Project Learnings - Moderator: Helena Axler** - Highlights of the environmental scan (Nick Busing) - Data Needs and Access Group update - Young Leaders' Forum update (Catherine Moffatt) - Insights from the UK consultations (Jay Rosenfield / Angela Towle)
1315	**Taking a pulse**
1330	**Shaping the principles to guide the renewal of medical education in Canada** - Introducing the Task - Roundtable Discussion
1415	**Report back on roundtable discussions**
1445	**Health break**
1500	**Plenary discussion continues** **Draft list of principles generated / confirmed**
1540	**Moving forward with the process**
1550	**Next steps and closing remarks (Nick Busing)**
1600	**Blue Ribbon Panel Meeting adjourns**

Appendix 5: Data Needs and Access Group Meeting Summary

Key Themes: Success Indicators / Summary Vision / Key Recommendations

Curriculum Content

Vision: A socially responsive curriculum accountable to the evolving needs of society, that measures its quality, adaptability and outputs that address sustainable HHR (clinicians, teachers and researchers).

- Measure integration of CanMEDS into current curriculum (gap analysis)
- Conduct an inventory of current databases
- Determine critical partners
- Design and implement the data integration concept (Research Institute) (see Appendix 4 - Data Stock Flow Usage Model).

Pedagogical Issues Affecting the Medical Education System

Vision: A forward thinking medical education system must take into account distributed medical education (DME), inter-professional education (IPE) and new approaches to the integration of clinical and basic sciences to assure the production of practitioners able to function in the future.

- Gather data on DME methods: classify where, what, how.
- Track eventual distribution of practitioners.

Culture(s) of Medical Education

Vision: Given the reciprocal and dynamic relationship between the culture of medical education and the health care system and society, we will achieve ongoing change in medical education that both adapts to, and drives, change in the delivery of health care.

- Measure why & how admissions filters (+/- pre-admission programs) impact outcomes with respect to: discipline choices; location; quality; retention; etc...
- Develop and implement tools to measure objective-driven standardized outcomes / competencies across a variety of learning settings / models
- Determine impact of financial accessibility issues on applicant pool and choices of matriculants.
- Each school: what mechanism for engaging all stakeholders in informing curricular decisions
- Determine how sites and teachers are currently selected prepared and evaluated.
- Assess characteristics of applicants and non-applicants that predict career choice.

External Issues Affecting the Medical Education System

Vision: Within the context of a changing health care system we will measure reciprocal (bidirectional) linkages between changes in medical education and changes in health care delivery.
Changes in medical education include, but are not limited to: admissions; inter-professional education (IPE); distributed medical education (DME); rural experiences; integrated clerkships; increased numbers in medical school.
Changes in health care delivery include, but are not limited to: the number, discipline, location, skills of physicians; engagement and retention of physicians; patient / population outcomes; collaborative practice.

- Define outcomes that relate medical education to health care.
- Design conceptual framework to map medical education components with health care system. (AFMC to take the lead)
- Develop common terminology within medical education and health care systems. (AFMC to take the lead)
- Create database linkages with common identifiers / definitions and established outcomes (measurable benchmarks, rewards, disincentives)
- Apply the conceptual framework to the development of data collection and research agenda.
- Commission literature review RE: new models of primary health care impact career choice
- Continue and expand mapping of learners and locations to outcomes (develop mapping tool)
- Define common definitions and language

Higher Order Constructs

Vision: A strategic alliance of all stakeholders (current partners) providing forward-thinking leadership, towards a sustainable, adaptable, high-quality health care system through medical education informed by research and knowledge translation.

- Establish the strategic alliance of stakeholders (i.e., CMF, government, ACHDHR?)
- Determine which health care indicators are relevant to input / output of medical education.

Data Collection & Management

Vision: To have in place high quality integrity data that will accessed and used for meaningful administrative / research / policy purposes. This will be a well-funded, sustainable endeavour.

- Map current privacy policy regulations & assess their impact on data collection policies & procedures.
- Practical model for collection, analysis & distillation of data, taking into account existing inputs & outputs (via a pilot project).
- Explore options and develop optimal mechanism for information interface among stakeholders.

Critical Recommendations

With the identification of a set of key recommendations for each key theme, the workshop participants were then asked to identify the critical set of recommendations that would be absolutely necessary to address or implement to achieve success.

- Conduct an inventory of current databases
- Design and implement the data integration concept (Research Institute) (see Appendix 5 - Data Stock Flow Usage Model)
- Gather data on DME methods: classify where, what, how.
- Track eventual distribution of practitioners.
- Develop and implement tools to measure objective-driven standardized outcomes / competencies across a variety of learning settings / models
- Design conceptual framework to map medical education components with health care system. (AFMC to take the lead)
- Develop common terminology within medical education and health care systems. (AFMC to take the lead)
- Assess characteristics of applicants and non-applicants that predict career choice.
- Establish the strategic alliance of stakeholders (i.e., CMF, government, ACHDHR?)
- Determine which health care indicators are relevant to input / output of medical education.
- Create and implement a practical model for collection, analysis & distillation of data, taking into account existing inputs & outputs (via a pilot project).

Key Messages

The Medical Education Data Needs and Access Group Workshop served as a valuable experience for participants to explore the many issues, challenges and opportunities surrounding information and data needs for Canada's future medical education system. During the discussion, the participants identified a number of key messages from the meeting that could be shared with a variety of audiences, which included:

- There is a lot of work to do.
- The need for:
  - Common terminology.
  - Data linkages.
  - Effective utilization of data.
  - Following learners through their experiences to determine their outcomes.
  - Energy, dedication, and commitment to make this become a reality.
- Sense of optimism.
- Collegiality of stakeholders - we are all sharing the same problem.
- Broad interest and appetite for this kind of discussion on how to use and collect medical education data.
- In the present area of social accountability, this kind of work had to come; we have to look at our outcomes and be more rigourous in our evaluation and more disciplined, also, in its dissemination. There is a lot of information; but, we have to be rigourous in the dissemination.

Appendix 6: 2008 Young Leaders Forum Summary

Key Themes: Success Indicators / Summary Vision / Key Recommendations

Curriculum Content

Vision: An environment in medical education that focuses on quality of life, disease prevention & health promotion for both patients and providers. Lifelong learning of clinical and non-clinical skills is integrated into all aspects of daily practice. The supports exist to permit the outcomes of curriculum content to be implemented in practice.

Key Recommendations:

- Ensure that medical education courses and / or learning objectives exist and are used in the medical education programs (e.x UGME, PGME, CME) that relate to and emphasize quality of life
- Create, offer and evaluate programs or courses on safe clinical practice (e.g. patient safety, provider errors).
- Devote a minimum proportion of the curriculum to health promotion, disease prevention and quality of life.
- Build relationship with Faculties of Arts and Social Science to offer key courses on the social and environmental determinants of health
- Offer anonymous health care provider error reporting system. Encourage research on errors reported, including dissemination to health care community and public.
- UGME will provide mandatory instruction on how to access, appraise, critically assess and incorporate new information and knowledge. Medical students will track and be evaluated on their personal learning projects.
- Develop and implement a national strategy to encourage quality of personal and professional
- Raise awareness of reputable guidelines for safe clinical practice.
- Provide joint learning opportunities for students and practicing physicians (e.x. evening seminar series)
- Promote lifelong learning throughout medical education by providing tools for self-tracking clinical and theoretical competencies (for MCC clinical presentations, and other skills, attitudes and knowledge in health care).

Pedagogical Issues Affecting the Medical Education System

Vision: We embrace flexible, competency-based pedagogical approaches with proven effectiveness. These should be geared towards lifelong learning and allow multiple entry points into the healthcare and education systems. Graduating physicians will have the skills and commitment necessary to:

- collaborate in inter-professional teams
- embrace emerging technologies / innovations
- maintain a sense of personal fulfillment
- be socially accountable in their career choices

Key Recommendations:

- Create a commons / platform for:
  - Sharing curricular content and tools.
  - Sharing research and collaborating on research projects.

    - Disseminating effective pedagogies for medical education, particularly in e-learning.
- The medical education system will be structured into learning modules in order to create a "laddered" approached which allows students to practice and then re-enter education system at various points in their career.
- Fund research programs to evaluate effectiveness of a variety of pedagogical approaches to medical education.
- Fund research / work in competency-based training (CBT):
    - To further assess resources needed to bring CBT to fruition.
    - To develop and make accessible resources required to bring CBT to fruition.
    - To evaluate ladder-concept programs.
- Introduce a mandatory component in medical education to foster inter-professional competence and collaboration.

Culture(s) of Medical Education

Vision: The culture of medical education invites and nurtures students from, while producing doctors for, all communities within our societies. It embraces a camaraderie of stewardship for the quality of life of patients and for the health of the system.

Key Recommendations:

- Reduce and / or eliminate tuition.
- Faculties need to build relations with marginalized communities to recruit students and retain graduates

External Issues Affecting the Medical Education System

Vision: When society and heath care providers agree on funding for medical education that allows for adequate resource allocation (ex. numbers of MDs, under-served communities, wait times) and accessible medical education to all socioeconomic groups. Medical education should be socially relevant including social determinants of health, patient-centeredness and have a measured positive impact on patient satisfaction with respect to health care.

Key Recommendations:

- Track demography of medical school classes and make changes to admissions criteria to increase under-represented group participation.
- Expand evaluation of students (and MDs) to include:
    - Patient evaluations.
    - Inter-professional team member evaluations.
- Involve community members in curriculum design.
- Increase training in under-serviced areas (geographic - distributed medical education) and specialties (and generalists) service learning.

Higher Order Constructs

Vision: Medical training:

- that incorporates the findings of educational research and theory
- strives to limit potential pernicious influences of corporate industry
- that is directed by individuals with training in both leadership and education
- that fosters the incorporation of system level issues, e.g. cost effectiveness and resource allocation, into decision-making.

Key Recommendations:

- Include public health training in MD training including cost effectiveness, resource allocation, etc...
- Ensure CanMEDS is integrated into UGME so as to develop leadership and teaching skills
- Develop a reward system for promoting excellence in medical education
- Promote healthy dialogue between health care educators and industry to keep influences under control
- Assist students in developing tools for ethical and responsible interactions with industry (e.g. pharmaceutical industry).

Critical Recommendations

With the identification of a set of key recommendations for each key theme, the workshop participants were then asked to identify the critical set of recommendations that would be absolutely necessary to address or implement to achieve success.

- Devote a minimum proportion of the curriculum to health promotion, disease prevention and quality of life.
- Build relationship with Faculties of Arts and Social Science to offer key courses on the social and environmental determinants of health.
- UGME will provide mandatory instruction on how to access, appraise, critically assess and incorporate new information and knowledge. Medical students will track and be evaluated on their personal learning projects.
- Develop and implement a national strategy to encourage quality of personal and professional.
- Promote lifelong learning throughout medical education by providing tools for self-tracking clinical and theoretical competencies (for MCC clinical presentations, and other skills, attitudes and knowledge in health care).
- Create a commons / platform for:
  - Sharing curricular content and tools.
  - Sharing research and collaborating on research projects.
  - Disseminating effective pedagogies for medical education, particularly in e-learning.
- The medical education system will be structured into learning modules in order to create a "laddered" approached which allows students to practice and then re-enter education system at various points in their career.
- Fund research programs to evaluate effectiveness of a variety of pedagogical approaches to medical education.
- Fund research / work in competency-based training (CBT):
  - To further assess resources needed to bring CBT to fruition.
  - To develop and make accessible resources required to bring CBT to fruition.

    - To evaluate ladder-concept programs.
- Introduce a mandatory component in medical education to foster inter-professional competence and collaboration.
- Reduce and / or eliminate tuition.
- Faculties need to build relations with marginalized communities to recruit students and retain graduates.
- Track demography of medical school classes and make changes to admissions criteria to increase under-represented group participation.
- Expand evaluation of students (and MDs) to include:
    - Patient evaluations.
    - Inter-professional team member evaluations.
- Involve community members in curriculum design.
- Increase training in under-serviced areas (geographic - distributed medical education) and specialties (and generalists) service learning.
- Include public health training in MD training including cost effectiveness, resource allocation, etc...
- Ensure CanMEDS is integrated into UGME so as to develop leadership and teaching skills.
- Develop a reward system for promoting excellence in medical education.
- Assist students in developing tools for ethical and responsible interactions with industry (e.g. pharmaceutical industry).

Key Messages

The 2008 Young Leaders Forum served as a valuable experience for participants to explore the many issues, challenges and opportunities surrounding Canada's future medical education system. During the discussion, the participants identified a number of key messages from the meeting that could be shared with a variety of audiences, which included:

- The healthcare system has to change to meet the demands of the future.
- Much of the modernization of medical education will need to be to expand beyond the biomedical model to a team-based, holistic approach to education.
- We may need to turn to creative solutions (such as laddering) to address systemic problems that are not being resolved by current products or systems.
- To meet the future demands, clinical physicians will have to change how we think and how we do it.
- We will need to be supermen and superwomen.

Glossary

A) ACHDHR

Advisory Committee on Health Delivery and Human Resources

B) AHSC

Academic Health Sciences Centre

C) AFMC

Association of Faculties of Medicine of Canada

D) CAPER

Canadian Postgraduate Education Registry

E) CMF

Canadian Medical Forum

F) CSA

Canadian Studying Abroad

G) DME

Distributed Medical Education

H) FMEC

Future of Medical Education in Canada Project

I) HHR

Health Human Resources

J) IMG

International Medical Graduate

K) IPE

Inter-professional Education

L) PGME

Postgraduate Medical Education

M) UGME

Undergraduate Medical Education