2015 International Medical Education Leaders Forum

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A record-breaking number of guests attended the eighth annual International Medical Education Leaders Forum that was held in Vancouver, Canada, on October 21, 2015.

This annual, invitational meeting has become a highly-anticipated opportunity for leaders in medical education to come together to discuss challenges, share learning and consider ways forward to advance physician training and professional development in their home countries.

This year’s program and theme were framed around the 2010 Lancet Commission Report, *Health professionals for a new century: transforming education to strengthen health systems in an interdependent world*. Guest speaker and report co-author, Dr. Lincoln Chen, shared insights from the report using China as a primary case study.

Afterwards, meeting guests engaged in roundtable discussions on four current challenge and opportunity areas within the health professions: (1) mobilization of leadership; (2) specialization versus generalization; (3) competency-based medical education; and (4) shaping health education to fit global health issues.

The day ended with friendly provocation for participants to find ways to continue the dialogue and discussion between annual meetings.

“*What binds us together in this is we believe that education in health and medicine is a key to service and research to the betterment of mankind.*”

— **Andrew Padmos, MD, FRCPC, FACP**, CEO, Royal College of Physicians and Surgeons of Canada
To open the day, one individual from each organization represented at the meeting briefly shared a challenge that their organization/association is currently facing or that is on the near horizon. This provided a valued opportunity for attendees to learn more about their colleagues. This part of the program was first introduced at the 2014 gathering, and continues to lay a foundation of comradery that carries through the rest of the meeting.

A summary of some common challenges that were shared is outlined below.

For more details on the challenges faced by each organization, see Appendix A.

**SAMPLE THEMES**

Common challenges shared by participants include

- implementing competency-based medical education;
- accreditation and standardization of training (including meeting international accreditation standards);
- social accountability, distributed education and ensuring training meets population needs;
- faculty and curriculum development, and assessment tools;
- workforce revalidation/maintenance of licensure discussions, and
- working effectively within current political and financial/budgetary realities.
“Unhappy professionals will not generate happy patients, so you have to be able to see the educational and health system not just as serving the patient but also as serving the professional...” – **Dr. Lincoln Chen**
Dr. Chen’s co-authored 2010 Lancet Commission Report that challenges medical education systems around the world to embrace major reforms to ensure their graduates are competent and equipped for modern medical practice, continues to attract a great deal of interest. In his plenary, Dr. Chen briefly walked the audience through the legacy of early-20th century reports like The Flexner Report, before using China as a primary case study to highlight some of the Lancet Report’s own recommendations for systems-level reforms in this century.

Prominent lessons from the Flexner 100-year experience
According to Dr. Chen, there are three important lessons to glean from the effects of the pioneering 1910 Flexner (and other, similar) reports that led to major reforms in the education in health professionals:

1. The extraordinary power of knowledge in impacting positive change (e.g. as evidenced by the introduction of science into the professions, and subsequent increase in human life expectancies).

2. The caution that professionalism has both bright and dark aspects: health professionals are instruments to assure quality and advance health but are also sometimes a barrier (e.g. stewards of knowledge vs. monopolize knowledge, financial self-interest, professional chauvinism, etc.). Advances need to be shared; inequities in health need to be considered.

3. The importance of greater promotion for thinking and a framework for learning (e.g. institutional and instructional design).

Dr. Chen and his colleagues conclude in the Lancet Report that, in the future, we need to move to a new generation of reform that links together the educational and the health systems as interconnected parts, not isolated units.

Transformative learning leads to transformative change
Today’s professional and educational systems are trying to address a changing dynamic where, among other things, patients are no longer passive recipients of knowledge and services. Medicine also contends with an inherent tension between being both an industry (about 10% of the total global GDP) and accountable to society (e.g. social contract). The challenges currently facing the medical profession cannot be dealt with using the static educational systems that have been inherited. For meaningful change, transformative learning is needed — including the creation of leaders, teams and change agents.

Virtuous circles and China case study
China is the world’s largest health educational and production system, home to more than two million of the 10 million total physicians and nurses in the world. Like all health care systems, it attempts to produce three outcomes:

1. Good health,
2. Financial protection and
3. Patient satisfaction.

Dr. Chen explained that the country is currently facing a particular challenge with patient satisfaction, linked to changing expectations of patients, the organization of its three-tiered health system (imbalances in training and compensation for their physicians, etc.). While
the Chinese government is attempting to remedy these systems-level ("vicious circle") challenges, it will take time. Until the mismatch between the educational and health systems is fixed, patient and physician dissatisfaction will persist.

Dr. Chen’s example of China was used to illustrate that you can take a systems-approach to any country to determine where there is "mutual negative feedback" that is creating a vicious cycle and then what needs to be done to achieve a virtuous cycle.

**Some final takeaway points**
Patient and professional satisfaction are linked. At the end of the day, health services are a people’s business of both patients and the professions.

- The professions are the managers of a labour-intensive industry.
- You can’t run a health care system with unhappy professionals.
- When both patients and professionals are satisfied, you get a more harmonious health care system.

Dr. Chen concluded is saying that new global forces are at work. There is a need for transformative leadership to produce teamwork and then to create in every country a virtuous circle (between education and the health care system) where both patient and professional satisfaction are achieved.

**QUESTIONS/DISCUSSION**

Group discussion teased out further details about China’s medical education system, clarified the importance of a systems-approach (need to match content of the education with the work environment) and the value of leadership qualities, particularly in negotiations (example of pharmaceutical and insurance industries negotiating healthier portion of American health care funds due to their stronger negotiating skills). Dr. Chen also said that there are no specific outcomes measures for transformative learning.
Four challenge areas were selected for groups to discuss during the meeting’s roundtable sessions. The themes were drawn from a survey of IMELF participants.

Two tables per theme were randomly selected to present their answers to the larger group; those presentations are summarized in the pages that follow.

For more details on the discussions held by other tables, see Appendix B.

2015 roundtable themes

1. **Mobilization of leadership** *(presented by tables 4 and 6)*
2. **Specialization versus generalization** *(presented by tables 1 and 3)*
3. **Competency-based medical education** *(presented by tables 7 and 11)*
4. **Shaping health education to fit global health issues** *(presented by tables 8 and 12)*
**Mobilization of leadership**

**SUMMARY OF DISCUSSIONS** (Tables 4 and 6)

- Can enhance leadership with courses (e.g. how to run a business, how to teach leadership, etc.), mentorship and embedding these efforts in education and faculty development at the grassroots level; need a systems-approach because leadership is all-encompassing and you need to be an active learner to be transformative.

- Need to understand what effective leadership looks like, raise awareness and articulate need.
  - Need to understand culture and leadership’s impact on it (poor leadership = poor performance and poor culture… recall the saying, “the fish rots from the head”).
  - Self-awareness and ability to reflect is also important in cultivating leaders; also important to note that true leaders have followers (not just positional leaders).

- A lot of leadership qualities are generic and transportable/transferable, but some unique aspects are based on context of being health workers (e.g. the social contract between the profession and the community).

- Collaboration can be promoted with more meetings like IMELF and sharing of best practices and lessons, as well as other networking opportunities and spaces for a community of practice leaders. Also a challenge for greater investment in professional education and creating spaces for people to be innovative.

**BROADER GROUP DISCUSSION**

Group discussion questioned how to sustain the energy of the IMELF group, with participants calling for (1) greater investment for leadership of medical education globally and whether a future IMELF meeting might be devoted to making a statement (case) for this; (2) courting more inter-professional participation to begin to develop and embed the notion of physician leadership in learning and curriculum at the system level; and ultimately (3) the call for more reflection time to determine where the meeting is going. It was also noted that leadership must be valued if governmental funding is to be secured.
Specialization versus generalization

SUMMARY OF DISCUSSIONS (Tables 1 and 3)

- There is a need to define “generalist” and “specialist” – is generalism all generalist specialists or just primary care?

- Realities are country-specific and context-specific. There is a general sense that there are stronger trends towards greater specialization.

- Matching health human resources to the geographic needs is important.
  - Most graduates stay where they did their GME training, so could work to get more training where it is needed
  - Also the idea of making training more “generalism plus (+)” (e.g. advanced expertise and enriched practice)
  - Physicians could graduate as a generalists and upscale learning according to local needs through modular training that fulltime clinical practitioners could also have access to.

- Generalists are generally seen as undervalued in health care (e.g. not seen as producers of new knowledge; system doesn’t reward generalists).

- Education is important to increase perceived value of generalists, train more generalists and also to educate patients (who will often choose a specialist over a generalist because of perception).

- Part of changing public support and perceived value of generalists will require changes to remuneration and political changes.

- A social accountability mandate as a principle could also help commitment to generalism.

BROADER GROUP DISCUSSION

Group discussion brought up interesting points about the time to introduce generalization and specialization in training, the importance of involving stakeholders in this discussion, as well as a caution in framing the groups as opposing (e.g. generalization and specialization, not versus).
Competency-based medical education

SUMMARY OF DISCUSSIONS (Tables 7 and 11)

- If true CBME is to exist, we must remove the time-based approach altogether; we will need adequate systems to transition people out of one and into the other.

- Some systems are already implementing CBME, but it takes time (e.g. Canada, Oman, Australia, United States)

- There is a need to define outcomes and metrics of competency to determine if outcomes are met.
  - General sense that a variety of metrics would be useful.
  - Direct observation and feedback are seen as perhaps the most valuable, but not done frequently enough.
  - Determining how to assess competency within a health care team is important.
  - Need for IT support.

- Faculty development remains the biggest weakness in CBME implementation.

- CBME should be a global quest, but most standards should be adapted to the local context (no one-size-fits-all, definitions of competency would vary).
  - Various countries are already implementing CBME, but at different speeds.
  - There are some basic core competencies that can be considered “global.”
  - Global CBME approach is important for portability of practice.

- Institutional and instructional changes are necessary, important and interdependent. Perhaps too great a focus on instructional, so far, and not enough on institutional.

BROADER GROUP DISCUSSION

Group discussion questioned what the return on investment for CBME is and whether evidence exists that it results in improved patient outcomes. We practice evidence-based medicine but do we practice evidence-based medical education? Also, a caution was issued for medical educator leaders to not get too granular in defining the professional identity.
Shaping health education to fit global health issues

**SUMMARY OF DISCUSSIONS (Tables 8 and 12)**

- Generally felt that the Lancet report recommendations have not been implemented in the system, but some of the principles have been adopted such as a renewed social accountability mandate.

- As a global resource, CanMEDS informs training in many countries; ultimately need institutional collaboration to achieve systemic change. Also, sometimes ownership of information impedes sharing.

- Before engaging in global resource provision, you must know the local requirements. It is important to deliver something supplemental to augment and build local-capacity — you should not undermine the local system.

- Globalization generally thought to augment excellence in medical education – with the caveat that interventions must be adapted to the local context (e.g. it could dilute if “visiting learners” impede opportunities for local trainees).

- Inter-professional team training can be embraced if it is embedded in the training and then becomes part of the culture. It is important to recognize existing silos and that specific competencies don’t belong to any one group.
  - Simulation should be exploited for training, team-building and role-playing.
  - Could be worthwhile to have other professional experts (outside of medicine) step in and help with the education of physicians.

**BROADER GROUP DISCUSSION**

Group discussion brought up the example of an international consortium whose raison d’être is to transform health care systems by measuring and reporting patient outcomes using global standards (goal of having 50 standards that cover 50 per cent on global disease burden). Big data was also heralded as the new frontier for measuring health care outcomes – what about health education outcomes? Big data could have huge value here, as well. Finally, a clarification on the potential for globalization to dilute the educational experience was given with the example of needing to be mindful of global differences in the science of medicine and respecting different cultural expectations in the the practice of medicine.
IMELF 2015 was an opportunity for representatives from a diverse range of organizations working in medical education to gather and discuss achievements and short and long-term opportunities and challenges. A focus on transformative leadership and matching training to service needs, underlined much of this year’s program. With many new faces at this year’s event and the most diverse and highest participation to-date, the Royal College is looking forward to seeing everyone again at next fall’s meeting in Niagara Falls, Canada.

QUICK LINKS

- IMELF 2015 meeting pages »
- IMELF 2015 participant biographies »

READING MATERIAL

2010 Lancet Commission Report

- Health professionals for a new century: transforming education to strengthen health systems in an interdependent world

“This meeting has become a very important part of our life and we’re pleased that it is important for you, as well. We will take your feedback very seriously and try to craft an even better, more exciting meeting next year.”

– Andrew Padmos, MD, FRCPC, FACP
APPENDIX A: ORGANIZATION BULLET ROUNDS

A brief summary of challenges that international medical education and accrediting organizations are facing within the next five years, as shared by participants at IMELF 2015.

Note: Organizations are listed in the order that they were presented.

1. Australian Orthopaedic Association
The organization recently undertook a review process to overhaul its training program and their biggest challenge will now be to implement that new program.

2. Royal Australasian College of Physicians
The organization faces a challenge in determining how best to select candidates to train at the college, in light of heightened interest in people wishing to undertake physician training.

3. Australian and New Zealand College of Anaesthetists
The organization is challenged implementing changes to workforce revalidation, as they do occur; half their surgery is done in private practice so determining how to deliver that in the private sector will be challenging.

4. Canadian Federation of Medical Students
The organization is challenged by ensuring that medical education is socially-accountable, aligns with the vision that medical students bring into medicine and that what medical student are taught aligns with their desired professional identity.

5. Bangladesh College of Physicians and Surgeons
They are currently challenged with accrediting more than 10,000 candidates to get them into the second part of their training.

6. Université Laval
The school’s biggest challenge is going to be implementing competency-based medical education into its 47 training programs.

7. Medical Council of Canada
The organization’s big challenge is to implement its assessment review task force.

8. Canadian Resident Matching Service (CaRMS)
The organization’s main challenge will be to design processes and to identify the necessary data to help decision-makers (applicants and programs) to introduce change in the system.

9. University of Toronto
As the pilot competency-based training program in orthopedics transitions, the school is challenged with making improvements in faculty development and assessment tools, in
particular. They are also working with their specialty committee to help transition all orthopedic training programs in Canada to become competency-based, as per the Royal College Competence by Design mandate, and are working with colleagues at the American Board of Orthopedic Surgeons to see how they transitioned to competency-based training.

10. University of Alberta

One challenge for the school is the reengagement of clinical faculty.

11. College of Physicians and Surgeons of Manitoba

Like many of the other Canadian regulatory bodies, the organization is challenged by the introduction of a broad-based, formal regulation for all health care providers (part of a revalidation movement).

12. University of British Columbia

After undergoing a substantial growth and expansion in the distribution of both its undergraduate and postgraduate medical education, the school will now focus on consolidation and will be challenged by determining how to grasp opportunities and challenges that come along with that process.

13. Memorial University

A major challenge for the school is competency-based medical education, specifically how to deal with the weaker residents (appeals and remediation).

14. University of Calgary

From the postgraduate perspective, the school is challenged by the implementation of competency-based medical education. More broadly, the Cumming School of Medicine is initializing its strategic plan and is working to strengthen its local and global partnerships, and to enhance its focus on social accountability.

15. Collège des médecins du Québec (CMQ)

In light of Quebec’s recent transformation in how care is delivered, the organization is facing the challenge of ensuring that the quality of residency training stays the same or improves within that new environment and the reality of decreased health care resources.

16. Queen’s University

A big challenge for the school is to get approval to transition all of its Royal College specialties to competency-based education over the next two years.

17. University of Ottawa

Competency-based medical education was identified as a big challenge, specifically the associated IT challenges with implementing CBME. The university has been working with its IT Department and PhD educationalists to develop electronic tools that can facilitate assessments being done on iPads and computers.
18. **McGill University**

Competency-based education is the school’s biggest challenge, in particular within a difficult reform to the province’s health care system and a bunch of cuts. The school perceives an opportunity for true collaboration with allied health care professionals and colleagues across the country and globally to build and effectively use existing resources.

19. **University of Saskatchewan**

The school’s biggest challenge is to have an effective system of distributed medical education at the undergraduate and postgraduate levels.

20. **Canadian Nurses Association**

One of the association’s main challenges is the implementation of its strategic plan that is centered on primary health care and the advancement of the certification of its specialty nursing programs.

21. **Northern Ontario School of Medicine**

The school is challenged with transitioning from being a start-up to a sustainable business model of distributed, community-engaged learning. They are looking for ways to continue to support, develop and engage its 1300+ clinical faculty across Northern Ontario.

22. **McMaster University**

The school is trying to find ways to build on its history of innovation in medical education as they enter into Competence by Design and competency-based medical education and to try to make sure that they bring that strength forward in their planning and implementation.

23. **Pontificia Universidad Católica de Chile**

One of the university’s biggest challenges is to achieve excellence in international standards of its 65 postgraduate programs and to spread that experience in the rest of Latin America.

24. **Peking University First Hospital (PUFH)**

The hospital has collaborated with the Royal College for the past 3-4 years and is working to introduce CanMEDS across the country. Their main challenge is accreditation from the Royal College.

25. **Hong Kong Academy of Medicine**

Their biggest challenge is credentialing, regulating what physicians can do, where they do it and when they do it.

26. **The Hong Kong Academy of Anaesthesiologists**

Their biggest challenge is their ongoing process to revise their curriculum, which is more than 10 years old. They are updating it to a competency-based curriculum.
27. Royal College of Surgeons in Ireland

Like many surgical training bodies, they face the challenge of continuing to make a surgical career practical for trainees – particularly those in “generation X.” They are also working to identify an approach to deal with bullying and harassment within the culture of surgical training.

28. Kuwait Institute for Medical Specialization (KIMS)

The biggest challenge for this institute is to continue to progress in its collaboration with peers and the Royal College of Physicians and Surgeons of Canada; and advancement of work in assessment, faculty development and communication.

29. Lebanese American University

The school implemented CanMEDS seven years ago and its biggest challenge is accreditation at the graduate and postgraduate level, as well as looking at ways to collaborate with the Royal College of Physicians and Surgeons of Canada to continue to deliver world class education in a small country.

30. Facultad de Medicina UNAM

One challenge is to have the global medical education research community output that’s put in scholarly journals and starting it within our own medical education for the university.

31. Patan Academy of Health Sciences

Their main challenge is determining how to deal with the unstable political situation and still manage to get leaders to innovate and commit to improve the health of populations.

32. Tribhuvan University Institute of Medicine (Nepal)

One challenge for the institute is how to improve their postgraduate medication training, without taking attention away from undergraduate education.

33. University Medical Center Groningen

The school recently introduced a new undergraduate and graduate medical program based on CanMEDS and the Lancet Commission report. Their greatest challenge is to now include leadership in their medical programs to educate young doctors to become change-agents.

34. Royal Australasian College of Surgeons

Two main challenges: (1) working with their specialty societies to eliminate bullying, harassment and discrimination from their training programs; (2) determine how to assess the progress and stage of their trainee, provide effective feedback and a more collaborative model of training as they move further into competency-based training.

35. West African College of Surgeons

Their challenge is to harmonize the standards of training between Anglophone and Francophone members, as well as move as much of their training as possible out of big teaching hospitals and into community hospitals.
36. Oman Medical Specialty Board

Their biggest challenge is getting international accreditation for all of their programs.

37. College of Physicians and Surgeons Pakistan

Their challenge is to maintain an accreditation standard – find enough places and maintain them among an ever increasing number of postgraduate schools.

38. Philippine College of Physicians

Their biggest challenge is working with specialty and subspecialty groups; it’s common practice to have different specialties organizing their own subspecialties, the problem is trying to convert that and take only eight specialty societies to try to harmonize and standardize their specialists.

39. King Saud bin Abdulaziz University For Health Sciences

The school’s challenge is to make all residency training programs in their organization comply with international accreditation standards.

40. Sudan Medical Specialization Board

They are challenged with responding to a growing demand for health care and medical specialty in the country and region, while at the same time maintaining and improving the quality of its medical program.

41. Karolinska University Hospital Institute (University of Sweden) and residency programs in Stockholm

They cover all 2000 residents in 50 programs, which is itself challenging and now complicated by a transformation in the health care system for the university in Stockholm: they are abandoning the department as the ultimate viewpoint for the speciality and moving to an extreme value-based health care system. This change poses many challenges, particularly for planning new curriculum.

42. University Hospital of Wales

This university representative candidly shared that their biggest challenge is to prevent their government from destroying what she thinks is the best residency program in existence.

43. General Medical Council

Their main challenges relate to the three "G’s": (1) Goldilocks bureaucracy: how to create a regulatory framework that enables all educators to do the right thing as lean and efficiently as possible; (2) Globalization: the European Union allows free movement of people but doesn’t always ensure that the standards are equivalent; (3) Global views around professionals: there has been great work done around competency and granulating health care practice, but would like to see how we can perform a global view around professionals and how we promote excellence and not just tolerate competence.
44. Royal College of Physicians of London

The college drafted its charter almost 500 years ago and has taken on the challenge of trying to redefine what the role of the hospital is in today’s society. This has implications for the balance between generalism and specialism, the relationship between hospitals and communities, and for education. A second speaker (medical director of joint Royal Colleges) added that a challenge is to reform all of their curricula to deliver the patient challenge of aging, chronic disease management and complexity and at the end of the day trying to reverse or improve a little bit overspecialization.

45. Royal College of Physicians of Ireland

The college recently had an external review and the greatest challenge is implementing competency-based medical education and retention of their trainees, many of whom leave the country to practice elsewhere.

46. Royal Australian and New Zealand College of Psychiatrists

Their challenge is implementing a competency-based scholarly program.

47. Federation of State Medical Boards

One current challenge is medical education of regulation at medical school level and post-medical school; they are also in discussion with medical regulatory colleagues about revalidation (or maintenance of licensure).

48. Sultan Qaboos University

They have a local challenge of unifying their programs for accreditation by an international institution.

49. ACGME International

Their challenge is to help members through accreditation and to reach standards they wish and need for their citizens.

50. French Federation of Medical Specialties (Fédération des Spécialités Médicales)

There are now three representative structures that work together. They are challenged by continuing professional development and thinking about recertification of doctors and to professionalize the professional experiences of each specialty.

51. China National Medical Education Center

A major challenge for them is implementing reforms to improve the efficacy of their tests and to make better links between medical education and the examination.

52. Association of Faculties of Medicine of Canada

Their major challenge is to take all the wonderful work done by their medical education partners and accreditors and find a way to implement that in an environment where schools are dealing with reduced resources and funding.
53. The College of Family Physicians of Canada

Their major ongoing challenge is to ensure their residency curriculum and training accreditation standards and subsequent continuing professional development provides the cognitive, procedural and cultural skills and attitudes needed to provide generalist care and comprehensive care to establish enduring relationships with patients and communities of different sizes in Canada.
APPENDIX B: ROUNDTABLE DISCUSSION SLIDES

Below is a compilation of roundtable responses under each of the four assigned themes, arranged by table number.

I. Specialization vs Generalism
II. Mobilization of Leadership
III. Shaping health education to fit global health issues
IV. Competency Based Medical Education (CBME)

Specialization vs Generalism

- Table 1
- Table 3
- Table 5
- Table 7
- Table 11
- Table 15
- Table 17

Table 1

- How have you utilized the Lancet report to implement the transformation in your system?
  - China:
    - Exam board representation
    - Current – two stages (clinical skills, clinical writing), both taken one year after graduation from medical school; physician association in charge after residency and exams are institution-based
    - Transformation – research on multi-stage exams
    - System and culture – specialization
  - Lebanon:
    - Four-year medical degree (North American model); 12 residency programs – passing defined by the program
    - Transformation – accreditation for medical degree and residency programs
    - System and culture – specialization
  - Canada:
    - Good mix of generalist and specialist, but still push for more specialization

- With increasing trend toward specialization, how can a system of education ensure best care of populations?

  - Create a culture where generalists are valued and respected
  - Help population understand the benefits of generalist care – educate patients
  - Value and benefit to the patient
  - Value to trainees – should consider making a generalist a specialty
  - In China – want to see specialist
    - Believed to be more educated
• Specialist = smarter
  o Specialists are paid more
- Huge culture shift
- Educate the population!

• **Is generalism valued in health care/educational systems? Why or why not?**
  - China – no; specialist seen as smarter, paid more, knows more, more experience
  - Lebanon – no; specialist seen as smarter, paid more, knows more, more experience, has studied more/more educated
  - Canada – yes; must go through family doctor to see specialist; many would like to be able to avoid family doctor if they could

• **What system requirements are required to commit to generalism?**
  - Public support
  - Change in perception/value of generalist
  - Remuneration
  - Political changes

**Table 3**

• **How have you utilized the Lancet report to implement the transformation in your system? – not on topic, our use of report**
  - Netherlands: Medical students (400) divided into four communities of practice (e.g. global health, sustainable health care etc.) with faculty of similar interests – one group has focus on generalists – emphasis on geriatrics
    o Sharing (e.g. on leadership development)
  - Australia: moving towards CBME in postgraduate (hybrid model)
  - Mexico: Our ability to enact recommendations when we are in positions of power in politics
  - TISLEP – international collaborative for MD leadership development, co-production with patients and learners, but should we be doing inter-professional leadership curriculum development?

• **With increasing trend toward specialization, how can a system of education ensure best care of populations?**
  - Different patient outcomes vs equity of access (geography)
  - Subspecialization
  - Intensive care – physical and logistic (e.g. anesthesiologists covering intensive care)
  - Patient-centered – good triage, handover, team – GP/consultant
  - Educational standards & team-based care
  - Credentialing standards
  - Regionalization/hybrid networks/other practitioners – configuration of service that is patient-centered
  - Surveillance of standards – big data
  - Traveling doc
Is generalism valued in health care/educational systems? Why or why not?
- Covert pressure – hidden curriculum, prestige, not rewarded, not accepted by patients/families
- On the other hand we want a primary care provider/generalist providers in our teams
- Our MD profession - Influences of public perception
- Episodic clinics vs continuity clinics

What system requirements are required to commit to generalism?
- Education
- Regulation
- Public perception – realization of value

Table 5
How have you utilized the Lancet report to implement the transformation in your system?
- Yes, in general terms
  - Move to competency-based education
  - Breaking down silos between teams= intraprofessional
  - Meeting needs of community (Northern Ontario School of Medicine, social accountability mandate)

With increasing trend toward specialization, how can a system of education ensure best care of populations?
- Matching human health resources training to overall geographic needs, get graduate training where they are needed (most graduates practice in area where they did GME training)
- Making generalism more desirable through ‘generalism plus’ idea (i.e. advanced expertise in an area)
- Graduate as generalist, upscale according to local needs through modular training

Is generalism valued in healthcare/educational systems? Why or why not?
- Not universally
- Problem is we don’t consider population health needs when someone decides their specialty training
- Arrogance of the individual?
- Reward system does not value generalism
- Challenge includes selection criteria to medicine
- Need more accountability between MD and publically-paid system where for example a FHT would be responsible to geographic area rather than cherry picking patients
- In some systems it is valued (Northern Ontario School of Medicine)
- Think that specialties are only ones who generate new knowledge
- Competency-based model could work either way

What system requirements are required to commit to generalism?
- Social accountability mandate, make it a principle:
- Practice at peak of scope of practice
  - Cycle back to health service needs

Table 7

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - Two levels: front line care and system level
  - Assumption that we need more generalists: is there consensus?
  - Have we done the population a disservice by specializing to the extent that we have in all professions?
  - Increasing complexity in patients’ health care needs
  - How do we help generalists meet special needs in terms of care?
  - Ensure that those patients who do need specialists have access to them.
  - Multidisciplinary approach may be preferable to a generalist approach (better integration of family physicians and specialists).
  - A strong primary care level is essential to preventive medicine.
  - Lancet report hasn’t necessarily been used, as such, much of the work has been common sense.
  - Integrated teams (across professions) are important for knowledge sharing in order to better meet the needs of patients.
  - Specialists should constantly be working with students.

- **With increasing trend toward specialization, how can a system of education ensure best care of populations?**
  - Many public health interventions have had a greater impact on health – these are not necessarily within the purview of physicians who have more impact on individual health.
  - Young physicians working in the periphery are forming stronger networks.
  - Values are fundamental
  - Networks of care: integration of public health with health care workers (systems)
  - Technology can help diminish distances (break isolation) in order to favour networks.
  - Policy and infrastructure are key (ex. SARS crisis in Ontario because public health infrastructure was underfunded).

- **Is generalism valued in healthcare/educational systems? Why or why not?**
  - It’s not valued
    - The teachers are specialists.
    - Research and publications are done by specialists.
    - Very difficult to be a good generalist.
    - Not as respected as specialized medicine.
    - Too much lip service paid to generalists but they’re not compensated adequately.
    - Patient expectation to see a specialist even though it may not be necessary.

- **What system requirements are required to commit to generalism?**
  - Power, politics and pounds.
  - Student debt pushes med students towards specialization.
Table 11

- How have you utilized the Lancet report to implement the transformation in your system?
  - Improvement has been in the big cities/western style medical schools; 1960-70’s China became isolated.
  - Strictly to be curriculum-centered
  - Recently seeking to apply problem-based learning – early 2000’s, 2006-08
  - Difficult to move such a large system quickly
  - Caring about narrow processes
  - The report provided a context for change
  - Using PBL to drive team-based approach

- With increasing trend toward specialization, how can a system of education ensure best care of populations?
  - Learning team-based care is key
  - Collaboration
  - Consider how to ensure focus on people/humans and not solely the disease condition
  - Ensure students know how to use problem solving to serve the whole patient

- Is generalism valued in healthcare/educational systems? Why or why not?
  - In big tertiary hospitals perhaps not due to complexity
  - Doctor – you don’t belong to me
  - The system may reinforce the physician to specialize
  - Different systems are structured to ‘flow’ patients first through generalists
  - In some systems, the specialist is seen as ‘more’ expert

- What system requirements are required to commit to generalism?
  - In undergraduate, provide experience in community health centres
  - General practitioners be part of the education process
  - Value research and publishing focused on generalism
  - Build generalism into accreditation
  - Commonly available information will support a ‘generalism’ approach (i.e. Electronic Patient Records)

Table 15

- How have you utilized the Lancet report to implement the transformation in your system?
  - How to change?
  - In certain areas – balance of generalist/specialist is reversed
  - What about rewards/salary/promotions/academic
  - Value similarly
    - But still disagreements regarding longer training being valued more highly
  - Why is specialty training longer than generalist training??
  - Design training paths based on outcomes?
  - Efficiency of training?
- Context of training matters; patient populations are very different

- With increasing trend toward specialization, how can a system of education ensure best care of populations?
  - Academic structure is an issue
    o Research, promotion requirements
    o Specialist societies in silos
  - Define what is needed for generalist competencies
    o Curriculum/labs/imaging/therapeutics/continuum of care
  - Not in the structure of current training in Canada at present
  - Maintain general competencies once in practice – (e.g. general intake of GI for a percentage of time)
    o Don’t lose the general competency
  - Systems issues – access choices made by patients vs gatekeeper role of generalism
  - Start with outcomes – if patient choosing inappropriate specialist → gap of care

- Is generalism valued in healthcare/educational systems? Why or why not?
  - Sweden - seven medical themes in hospital and five functional areas
    o many different specialties in each thematic area
  - Aligns with Greenway Report
    o no training programs in Cardiology, for example
    o start all with general training and then specialization based on workplace-based requirements – more of a CME approach
  - How to train for this?
  - Competencies for generalism – specialists should have them also
  - Always look at the patient as a whole

- What system requirements are required to commit to generalism?
  - Define generalism
    o Challenging
    o Distinguish generalism vs generalist
      ▪ “ist” Individual practice broad-based
      ▪ “ism” Important for all
      ▪ How to meet broader needs of community
  - Early general training leads to more/better patient-centered care
  - Reform the UME curriculum – define exit competencies for generalism
    o Then specialize
    o Internship a “waste of time”
    o Where to train for this?
    o Are the tertiary hospitals the “right place” for generalist competencies

Table 17
- How have you utilized the Lancet report to implement the transformation in your system?
  - Moving toward competency-based education moving to using general competencies
  - First issue – what does it mean to be competency-based and understanding the concept not only from residency education but also faculty development
  - Time-based versus competency-based
- Education-focused
- Shared understanding of evaluations and measurement systems
- Issues around remediation
- Second issue – implementing the new CanMEDS with common competencies across all specialties

- **With increasing trend toward specialization, how can a system of education ensure best care of populations?**
  - Begin to understand role is leader and transforming education to provide opportunities to develop competency
  - Is the problem that after residency the learner is not ready for practice and is using a fellowship to gain competence to practice and how can training programs address this?
  - Need better communication channels between generalists and specialists, better systems to allow this to happen
  - No value placed on generalism and how do academic medical centers contribute to devaluing? Community-based training is a solution

- **Is generalism valued in healthcare/educational systems? Why or why not?**
  - Not enough
  - Training takes place in specialized setting by individuals that are super specialists
  - No overarching goal for generalist training

- **What system requirements are required to commit to generalism?**
  - Does generalism require a higher level of competence than some of the more technical aspects of medicine? Should general clinical training follow more specialized education?
  - Selection of candidates may favor specialization. Also the culture within the training and curriculum values specialization.
  - There is a hidden curriculum that needs to be addressed?
Mobilization of Leadership

- **Table 2**
- **Table 4**
- **Table 8**
- **Table 10**
- **Table 11**
- **Table 12**
- **Table 14**
- **Table 18**

**Table 2**

- How have you utilized the Lancet report to implement the transformation in your system?
  - Categorical no
  - Informing, yes, Kuwait
  - Partially, yes, Sudan
  - Centralised system weak - link in this policy particularly
  - Philosophy driving policy...

- How can you enhance leadership capacity?

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<thead>
<tr>
<th>SYSTEM</th>
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<tbody>
<tr>
<td>» Monoculture</td>
<td>» Raising awareness</td>
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<td>» Unconscious bias</td>
<td>» Articulate need</td>
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<tr>
<td>» Leadership cultures</td>
<td>» Include Outcomes</td>
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<td>» Transactional leadership</td>
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<td>» Champions</td>
<td>» Include in curricula</td>
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<td>» Credentialing</td>
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<td>» Standards</td>
<td>» Caution on over regulation – Goldilocks</td>
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<td>» Fellowships</td>
<td>» Importance standards</td>
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- Is there anything unique about leadership in medical education?
  - Generic vs contextual
  - Safety and patients
  - Types and principles
  - Followership and leadership
  - Credibility as a professional
  - No longer a proper doctor
  - Dual role in leadership
  - Uniqueness of service provider and education
• **What specific strategies can global education leaders do to promote collaboration?**

  - Collegiality
  - Networking
  - Community of practice leaders
  - FMLM HMI
  - Leadership is lonely
  - Sharing novel practice
  - FIRE and pilot GMC
  - Criticality – academic discourse

**Table 4**

• **How have you utilized the Lancet report to implement the transformation in your system?**

  - No one had used the report; however there was use of the concepts
    - Regulator at the table noted the requirement as part of the continuing professional improvement of physicians
    - Curriculum being developed in various programs in Australia, Canada and United Arab Emirates

• **How can you enhance leadership capacity?**

  - Not everyone is a leader – but should be identified through education process (as early as medical school but also later – internship and residency)
  - Different levels of leadership. How do you facilitate the development of leadership which includes “followership”?
  - Leadership occurs in different environments and has different requirements – within practice, within the profession within the team within the system.
  - Simulation and stimulation is critical to leadership development.
  - Often the educational colleges leave it at the program or discipline level.

• **Is there anything unique about leadership in medical education?**

  - Trust is required
  - Followership is critical
  - Respect and listening, while not unique to medical systems, is absolutely essential when dealing with different professions in the same system
  - Ability to recognize their limitations and the power of their societal position
  - Avoid “generalization of expertise”; even extends to teaching, the cultural recognition of wisdom “Hakeem”

• **What specific strategies can global education leaders do to promote collaboration?**

  - Promote leadership - system doesn’t tend to recognize the role of medical leadership. Leadership is not valued as much as the clinical work – requires better recognition
  - Divergence between education and health funding: Iran has ministry of health and medical education; Memorial University in Newfoundland has funding for medical
school from Ministry of Health); Australian hospitals pay the postgraduate student but not the teachers.
- Examples of drivers of change: “Queens Conference” of 1965 placing postgraduate education under University oversight; increasing the role of accreditation driving change – happening internationally; United Arab Emirates has accreditation from the MOH, often their main driver of change; Ait was noted that NHS recognizes role in education and provides time for professional development, not happening as much in Australia.

- **What specific strategies can global education leaders do to promote collaboration?**
  - Group meetings such as IMELF to create political environment supportive of medical education
  - Sharing lessons from political decisions - Canada’s increase in numbers of undergraduate students resulted in almost all physicians becoming teachers – this drove the need for new skills and professional development
  - Supporting medical education as a legitimate professional development – illustrated by issue that most postgraduate teachers are often voluntary and therefore professional development is not as available, supported or rewarded

**Table 8**

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - Generally no, but many of the Commission concepts have been enacted
    - **Interprofessional education**
      - Australia: forum on health professional education generated new models and reduced barriers (e.g. kids with mental disabilities: students in medicine, physio etc., and families both gained new knowledge)
      - Ireland, professional educators know of Lancet report but also coincidence that educational system was also moving in many similar directions (e.g. clinical scenario populated by learners from different professions)
    - **Transformational learning**
      - Moving all beyond PBL may confuse so need to parse out
      - Via CanMEDS collaboration centers

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - King Abdulaziz Medical City: CanMEDS collaboration centers as example of Leadership
  - **Competency-based education**
    - Australia: embracing CBME in many disciplines and has mobilized the leadership
    - China: Royal College/Peking University collaboration agreement, use CanMEDS; faculty development; and train the trainer inculcates leadership; competency-based medical education
• How can you enhance leadership capacity?

- Australia, UK: popular in health services settings to promote targeted (to specific individuals) and tailored (to the context/needs of health service/community) leadership learning opportunities and participating in organizational leadership (shape health system and learners’ needs)
- King Abdulaziz Medical City: Canadian Medical Association’s Physician Manager Institute program helpful; developing future leaders could be done through CanMEDS Leader Role
- Beijing First Hospital: Government has recognized need (problem) and provides financial support to residents in recognized (accredited) programs; process of assessment will weave leadership throughout through CanMEDS and collaboration with Hospital; past Rockefeller programs

• Is there anything unique about leadership in medical education?

- No
- If take EPAs, lights are turning on throughout the world and provides a pathway for leadership that did not exist before
- Has medical educational leadership delivered to other leaders? Looking at car manufacturing and other domains, the answer is still no
- Fail to learn from other sectors (e.g. Harvard-Macey program was founded on lessons from other sectors, building teams)
- Caution to evolve medical leadership to embrace broader vision

• What specific strategies can global education leaders do to promote collaboration?

- Looking at international support in Africa (for example, care must be given to identify true needs of recipient)
- Inter- and trans-professional, international, institutional levels of collaboration
- Open silos: Leaders must be ready to go beyond the interests of their professional group
- Collaboration between different countries is essential (e.g. dealing with pandemics, tackling innovation)

Table 10

• How can you enhance leadership capacity?

- Teach > medical skills/competencies
- Focus on system leadership as well as personal leadership capacities – CanMEDS 2015 roles
  - People need competencies and skills
  - Empowerment; increase level of leadership knowledge
- Personal, local leadership
- Provide dedicated time to develop as a leader
- Define stakeholders for education and who is responsible for what
  - Clarity of roles responsibilities - where should leadership be?
- Set expectations of leadership skills and increase awareness of everyone to take on leadership roles
- Develop pride in profession
- Focus on altruism – need to be proud of profession and grow profession
- By federating and mobilizing energies towards one target
- Still need some degree of practice; in touch – credibility!
- Encourage individuals to be change agents
- Capitalize on the multiplier effect
- Incentives for leadership experience, educational experience – all should be valued
- Recognition for being a leader
- Don’t just focus on formal/positional vs. informal leadership
- Culture change to embrace, recognize, promote
- Mentorship, coaching, support

- **Is there anything unique about leadership in medical education?**
  - Many leaders in medicine have a different job – wear variety of hats
  - Leaders (positions) are often unpaid; volunteers
  - Not always the "best" leaders who are the leaders in medical education – they have volunteered to do this; but not always prepared, skilled
  - Never trained necessarily to be a learner or teacher or...
  - Apprenticeship model
  - Contexts, environments are variable – academic, community, etc.
  - Globalization influences
  - Culture; local needs are different – shared/common principles – but implementation is local
  - Change in attitudes – with new generations of HCPs
  - Social accountability; expectations of physicians – how do we build this culture? In a more fragmented system
  - People go into leadership out of self-respect; people want to give back
  - Philanthropic leadership – do it because you want to do it, no personal expectation of reward – How can you enhance leadership capacity?
  - addressing the root cause (not necessarily between money)

- **What specific strategies can global education leaders do to promote collaboration?**
  - Share with other professionals
  - Learn from others
  - Reference and learn from common trends, past studies
  - Bring in studies about global differences, similarities
  - Help each other to prevent “brain drain”
  - Enhance communications
  - Focus on two-way exchange of ideas, problems
  - Decrease hierarchy between professionals
  - Include in curriculum
  - Focus on themes, principles
  - Build communities for networking, exchange
  - Engage in national forums, summits – such as IMELF
  - Create partnerships

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - (Assumption is that we have!)
  - No one had specifically used this report – but have focused on themes that come out of it
- Don’t just teach information – but leadership attributes
- Multiplier effect

**Table 11**

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - Philanthropic leadership – Asia- Australia
  - National forums – tested in Chile – curriculum reform- meeting society needs -shortened training- link between education and health system-
    - seeking one curriculum – common standards – in Bangladesh plus invited Lincoln Chen to Bangladesh
  - Academic summit - Conference of medical education – standardized – Lebanon – created medical schools – two to six
  - Government relations – Advocacy – Ministerial Summits – bring regulators and government together – Canada

- **How can you enhance leadership capacity?**
  - Deliver courses on leadership, how to run a business, how to teach leaders; grassroots education- Canada
  - Include leadership in medical school curriculum- Lebanon – role model; address cost of care;
  - Redefining what it means to be a leader – emphasis to become change agent
  - Leverage CanMEDS – to next level – in the curriculum
    - Leaders needs to have a system approach – more than your own feel
  - To be transformative – need to be active learner

- **Is there anything unique about leadership in medical education?**
  - Balanced view
  - Hippocratic oath – medicine is a public good – social contract
  - Education and medicine – obtain balance – serve community
  - Communication with patients as well as fellow professionals
  - Ethics also is key
  - Cottage industry – medicine is resistant to change? – Difficult to standardize
  - Leadership is transportable

- **What specific strategies can global education leaders do to promote collaboration?**
  - More IMELF – Share best practice and learn from others
  - Global education – concerted effort needs to be made in leadership development
  - You don’t know what you don’t know

**Table 12**

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - (representatives from Chile, Canada, Nepal, Bangladesh) Generally and principally ‘yes’ but specifically ‘no’ for the most part; The discussion was that specifically, the
Lancet report has not been used formally to implement the transformation of systems- many drivers of change to consider;
  - Canada, specifically: Used the framework for social accountability – how are you training your future doctors to how they are actually going to be involved in the system (mobilizing leadership needs to start from day one not when you enter a clinic)
  - Discussion points generally:
    - Training for leadership is bigger than running a clinical team – it’s a broader focus than this (e.g. understanding politics, policy and the health system; we do this to the Royal College, AFMC, etc.)
    - Systems that are supportive of leadership development
    - Social accountability linked to social determinants of health
    - Internationally the table discussed that there are programs embedded in each curriculum to teach about leadership and how to leverage position to make and impact change in society and health.
    - Medical training is different in different contexts – mobilizing leadership is context-specific – how do we work to (moving from diploma programs to a culture of teaching and curriculum)

• **How can you enhance leadership capacity?**

  - Institutional level
  - Specified resources to promote curricular and system changes
  - Cultural changes (takes time)
  - Government leadership
  - Partner with health ministers to identify provincial/ local needs to align education (it’s about patient care/needs of society)
  - Context matters – developing world and first world are different
  - What are the skills needed for ‘leadership’? In some jurisdictions placement in leadership not always based or selected appropriately – are the current leaders best equipped to move systems and socialize change?
  - System
  - Currently there is no infrastructure in place to support new ‘leadership positions’ per se (how do we train leaders to be great leaders?)
  - Are there thoughtful pathways for leadership tracks and selection / succession planning?

• **Is there anything unique about leadership in medical education?**

  - What is leadership defined as here? (e.g. administrative duties? Change agent? Etc.)
  - There will always be generic competencies for any leader regardless of field or discipline BUT there are unique competencies in medical education (respect, trust, position, social contract)
  - What happens to those who leave the profession to engage in leadership ‘outside of medicine’ (losing clinical credibility)
  - The unique positioning of some leaders in medical education and the importance within the training environment allows for a ‘ripple effect’ if leadership is robust. Change can permeate through training into professionals in practice;
  - Physician as leaders is unique (so is nurse practitioner, etc.) – how do we express this clearly – what is the unique role the physician brings? Do physicians know their unique position?
What specific strategies can global education leaders do to promote collaboration?

- Be ‘truly’ open to collaboration
- Share and promote resource exchange and use (e.g. innovations and implementation not the same in all countries) – be contextually savvy
- Obligation of wealthy/resource rich countries to share and exchange ideas more willingly (altruistic)
- Without this – collaboration is rhetoric
- Identify a global agenda with defined partners
- Careful selection of partners built on trust and mutual respect
- Social accountability from a global perspective
  - Education opportunities for cross-opportunities and learning
  - Sharing of online educational resources

Table 14

How have you utilized the Lancet report to implement the transformation in your system?

- Implementation of CBME
- Introducing Leadership for change
- Workplace-based assessment for working in teams when the environment allows

How can you enhance leadership capacity?

- Making leadership training an accreditation standard.
- Entice and reward involvement in leadership roles.
- Everyone to receive a basic level of leadership training.
- Coaching and Mentoring of the leadership role.
- Fostering and encouraging those with a good skill set to become involved and to offer them resources to become organizational leaders and CEO’s.
- Advanced planning and identifying potential future leaders (targeted recruitment).

Is there anything unique about leadership in medical education?

- Lack of faculty
- Understanding the local/national health care system.
- The physician has responsibility without authority!

What specific strategies can global education leaders do to promote collaboration?

- Leading by example – role modeling.
- International exchange and the sharing of best practice/resources.
- Sharing struggles to learn from others. Who has already addressed the issues and has created some solutions. Be prepared to share what you are not doing well.
• How have you utilized the Lancet report to implement the transformation in your system?

- Delegate responsibility to regions to utilize standards and e logbook for standardization of training - Pakistan
- Monitor progress – top down
- How identify leaders?
- Leadership training as competency requirements in Pakistan
- Not sure responded to report in Alberta – remote community setting become surgical training site and aboriginal recruitment
- Training fellowships for leaders in UK
- Leadership transcends medicine apply outside context important
- Co-leading

• How can you enhance leadership capacity?

- Leadership course for faculty in collaboration with leadership college
- Partnership with others – important aspect of who we are?
- University or Royal College led or more wide Faculty of Medical Leadership and Management
- Context everything – where you are based rural vs university
- HK – mentorship and role modelling
- Who are role models – men or women? Need to see diversity
- ? not suitable, are they modelling the wrong thing (e.g. money from Pharma)
- Leadership with integrity important
- Values are core

• Is there anything unique about leadership in medical education?

- Balance between patient and student is difficult
- How do you lead being the second fiddle
- Patient safety
- Economic imperatives driving training now – do less operations if training
- Context in medical education
- Being honest
- Stepping up to deal with problems
- Failure to fail must go with leadership
- Competency allows going back a step
- Stop before the end
- Ruin career

• What specific strategies can global education leaders do to promote collaboration?

- Sharing information
- Rotating training into other training centres and contexts
- E-collaboration
- Skype
- Podcasts
- Promoting global health with residents – go to other countries and learn in different environment bring skills back
- Cross pollination
- Sharing resources
- International accreditation
- Examining in other countries
- International Infra structure to enable backbone of collaboration

**Table 18**

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - Australian and NZ College of Anesthetists and CFPC are living the report principles – the challenge is to sustain. Note in Australia and NZ the residency programs are delivered not by universities, but by accredited hospitals and hospitals are accredited by specialty colleges. Universities have predominant undergrad role.
  - CNA: system elements only at graduate/post doc level
  - AFMC: FMEC is the “new” Flexner. How do principles and vision permeate into various faculties of medicine in Canada

- **Is there anything unique about leadership in medical education?**
  - Credibility in a practice-based discipline is largely based on clinical credibility (although credibility can be earned in other ways and not entirely through practice or credentials).
  - Must always recognize there is a patient “in the education equation.”
  - Educators must understand the system; focus not only health care, but also health (e.g. public health, determinants of health, social accountability, etc. almost a “cultural piece”).

- **What specific strategies can global education leaders do to promote collaboration?**
  - At CFPC we are involved with Besrour Global Health
  - CNA: part of International Congress of Nursing. Lots of networking within this. Opportunities for shared competencies, curricula, etc. Note all of this requires resources. Similarly for AFMC. A tremendous willingness
  - Australia/NZ: meetings such as IMELF very important. Much collaboration between Canada and Aus/NZ Colleges in this regard
  - Need common IT standards so that curricula can be shared.
Shaping health education to fit global health issues

- Table 2
- Table 4
- Table 8
- Table 10
- Table 11
- Table 12
- Table 14
- Table 15
- Table 16
- Table 18

Table 2

- How have you utilized the Lancet report to implement the transformation in your system?
  - No but...

- How can global resources be used locally to improve medical education?
  - Accreditation standards and processes and guidelines shared, licensed, customized
  - Professional guidance – Good medical practice,
  - Generic professional capabilities
  - CanMEDS
  - E-learning
  - Faculty sharing

- Does globalization augment or dilute excellence in medical education?
  - Yes
    - Sharing, Collegiality, Collaboration
    - Mobile global workforce and Increasing regulatory equivalence
    - As long as ethical recruiting
  - No
    - Globalization undermines cultural and local characteristics - sterile or universal
    - Policy tourism
    - Assumes one size fits all
    - Solutions need to be locally relevant
    - If recruitment unethical

- How can we truly embrace inter-professional team training?
  - Multi-professional standards for professional curricula
  - Inter-professional Outcomes focused on team learning
  - CAIPE outcomes
  - Cultural component – medicine needs to be more open minded less insular
  - Valuing it
  - Measuring it
  - Studying it
  - Linkage to safety
  - Faculties of Health Professions... ban Medical Schools!
Table 4

- How have you utilized the Lancet report to implement the transformation in your system?
  - What are the global issues – the cultural and health diversity of peoples and the mobility of people especially health care workers
  - Recognizing there is a difference between active recruitment “poaching” and personal freedom to be move countries
  - Australia in the process of defining global health competencies for Anesthesia.
  - UAE is cosmopolitan but 85% of physicians and health care workers are from other countries which creates cultural sensitivity issues (nurses only 3% Muslim). Some have no experience with evidence-based medicine or critical appraisal. Have to set up with workshops, mentoring.
  - Many countries are not looking at education and service from a perspective of the system and this is a continuing barrier.

- How can global resources be used locally to improve medical education?
  - Providing education locally rather than taking practitioners to the major centers. Bring expertise to the care environment rather than take the provider to the learning environment. Supports competence-based education
  - Local graduates need to balance between the need to know about global heal vs the need to manage specific clinical problems. Focus must be on the local health needs with knowledge of the global.
  - CanMEDS a good example of resource adapted to local environment in Australia whereas, in UAE there are individuals who know about them but not widely applied. Another example is Australia’s surgical expert review on harassment is being used in Canada to modify curriculum

- Does globalization augment or dilute excellence in medical education?
  - Mobility, accessibility, internet distribution of knowledge – may augment and dilute.
  - When used for poaching, it is bad for both service and education in country of origin
  - Importing international physicians may negatively impact health education – become different role models. Professional development is necessary and may be a barrier
  - Visiting learners may dilute the experience of local learners. They may also come with inappropriate levels of knowledge. (high school students in the OR in underserviced environments)
  - Diversity of population might benefit from globalization. Canada has communities from various countries and globalization of health care may benefit them
  - Aboriginal population treatment in different countries (both negative and positive) provides insights and learnings

- How can we truly embrace inter-professional team training?
  - Recognize that competencies don’t belong to a particular profession
  - Global health issues especially outbreak control demonstrates and promotes inter-professional teams
  - Experiences in different countries’ systems may enhance IP learning
  - Learning from the patient – about their area of expertise improves their relationship. Also their involvement in the team care.
  - Major barrier is the professional silo
- Professions have separate acculturation processes
- Different professions have different age cohorts progressing at different rates
- Regulatory bodies are separated
- Educational programs are often in different physical and care arenas

Table 8

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - Generally no: core/underlying concepts remain to be resolved
  - Commitment to curb “active recruitment” from under-resourced countries?
  - Movement of medical practitioners is difficult: foreign credential recognition, acculturation
  - Conflict between aspirations of regulators and medical education goals
  - Low success with cultural competency and safety in curriculum

- **How can global resources be used locally to improve medical education?**
  - CanMEDS: informs training in many countries from undergraduate to continuing professional development
  - CanMEDS Collaboration Centers
  - Institutional collaboration to achieve systemic change

- **Does globalization augment or dilute excellence in medical education?**
  - Augments, when adapted to indigenous context
  - Caution with regard to “free” services that do not focus on local capacity building
  - Dilutes, when “visiting learners” impede opportunities for local trainees
  - Caveat: a right balance is mutually enriching
  - Consider attached funding

- **How can we truly embrace inter-professional team training?**
  - Recognize extent of silos
  - Recognize differences in local context (type of health professions differ in various jurisdictions)
  - Recognize that competencies don’t belong to one group
  - Exploit simulation: critical scenarios, role playing, etc.

Table 10

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - Lots of principles being followed already – not necessarily “because of” the Lancet report
  - Was it the Lancet commission report that stimulated – e.g. Northern Ontario School of Medicine – or did it just give exemplars?
• **How can global resources be used locally to improve medical education?**
  - What do “global resources” mean? (i.e. owned by one country OR collaboratively owned as global, shared)
  - Build capacity of local people by sharing expertise
  - Integrate global resources based on fit into local
  - E.g. WHO guidelines, SARS, MERS, Ebola
  - Global community collectively creating a training model for longitudinal clerkships within training – international movement
  - “Transaction costs” if a hiring organization takes an HCP – pay the training organization of that HCP to reinvest in system
  - Sharing resources is beneficial – but HCP mobility also a risk
  - Give a head-start to get a system going; reduces time; not reinventing the wheel; don’t need to create from scratch as you start somewhere
  - Recognize that there are often two-way benefits of learning

• **Does globalization augment or dilute excellence in medical education?**
  - Augment
  - Any time bring more people to table with different ideas – then borrow ideas – improve on them!
  - Different whatever your perspective in time is – it can ‘help’ at first since some might not have anything, but potentially not sustainable for local inference
  - Translation into local is required
  - Can’t see how would really dilute – yet – with too much info, hard to filter

• **How can we truly embrace inter-professional team training?**
  - Need to build culture of respect for others
  - Teambuilding
  - Invite all types of roles in; get all involved
  - Team accreditation, CPD for teams
  - Shadowing other roles to see the process/system/how each HCP role contributes
  - Create concept of “team” early in medical education – not just in practice
  - Specialty societies – include all roles in membership (e.g. cardiology – cardiologists, nurses, dieticians, etc.)
  - Involvement is key (e.g. involve nurses in multidisciplinary rounds of physicians – same for physios, etc.)
  - CPD conferences – IPE focus – need to look at joint accreditation, recognition of credits across professions ... encouragement to learn together
  - Helpful if have shared learning goals (i.e. focus on something you all do AS a team – e.g. communications, M&M)
  - Simulation with IPE participants
  - Switch up roles in simulation or real case (e.g. resident surgeon becomes scrub nurse)
  - IPE Debrief – need to debrief together, not in silos
**Table 11**

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - Second Version Latin American ICRE conference – focus on social accountability- 500 plus medical schools- Chile
  - Report validated assumptions – and enabled better prioritization of previously identified issues
  - Alignment of accreditation standards to contemporary issues

- **How can global resources be used locally to improve medical education?**
  - Technology and digitization has enabled access to information anywhere, anytime – efficient
  - ICHOM – value based outcome measures
  - IMELF and TILSEP
  - Open access journals
  - Benchmarking outcomes

- **Does globalization augment or dilute excellence in medical education?**
  - Sharing of best practice generally is positive, though it must be customized to local conditions
  - Commercializing medical education requires a careful, balanced and prudent approach
  - Faculty development through alliances and developing faculty through access to international systems
  - Learning culture, realizing that there are different conditions in different countries

- **How can we truly embrace inter-professional team training?**
  - IPE – Inter-professional education Training to work with pharmacists and nurses – collaborate and team approach
  - Transitions of care between professions – regulatory clarity about who is liable
  - Government relations advocacy – increase
  - Expose teams to inter-professional team training early
  - Provide Leadership education and training
  - Doctors to be trained in non-clinical leadership

**Table 12**

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - Generally and principally ‘yes’;
  - Otherwise - the Lancet report has not been used formally to implement the transformation of systems - many others drivers of change to consider;
  - Used the framework for social accountability lens – how are we training future doctors to practice medicine within the context of societal needs (mobilizing leadership needs to start from day one not when you enter a clinic)
• **How can global resources be used locally to improve medical education?**
  - What is meant by ‘global resources’? (knowledge capital, online educational resources & open access information, curriculum, professionals, etc.)
  - Share and provide access to educational materials developed within resource-rich schools (support faculty struggling in resource poor schools); (e.g. MOOCs (massive online educational resources);
  - Challenge for this is copyright, privacy, intellectual property variations in jurisdictions;
  - Involve local people/change agents in prioritizing & implementing resources as partners to build capacity (avoid the parachute model);
  - Share learnings and understandings from educational innovations (e.g. Competency-based medical education) through workshops and training;

• **Does globalization augment or dilute excellence in medical education?**
  - (used this definition) Globalization defined as “a process of growing interdependence that represents a fundamental change from a world of individual and independent states to a world of state interdependence” WHO
  - Migration of doctors is a critical issue for retention and integration into ‘home systems’, in this way globalization is a double-edged sword;

• **How can we truly embrace inter-professional team training?**
  - Embedding explicitly within curriculum re: inter-professional team training (experiences, training, culture);
  - Engender culture of respect & understanding – move beyond rhetoric;
  - Move away from teaching in medicine solely physicians – who is the expert?

**Table 14**

• **How have you utilized the Lancet report to implement the transformation in your system?**
  - Focused global outreach in focused locales.
  - Sharing of educational training. Knowledge sharing to facilitate local development.
  - Facilitate the training of medical and other personnel in their own country.

• **How can global resources be used locally to improve medical education?**
  - Facilitating access to online resources.
  - Facilitating the sponsoring of third world medical leaders to attend international educational meetings such as IMELF.

• **Does globalization augment or dilute excellence in medical education?**
  - Enhances by sharing of different approaches and expanding horizons
  - Concern about the loss of personnel who do not return from overseas experiences.

• **How can we truly embrace inter-professional team training?**
  - A challenging issue!
  - Work based team training requires commitment from the employer.
Use collaborative quality improvement projects as a focus for team training. Improved patient outcomes will reinforce the utility of such team training. Reinforcing the principles of professionalism and collaboration will facilitate a better team experience (the 10 commandments!)

Table 15

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - U of T Collaboration with Ethiopia
  - Local context used in program development
  - UBC CanHelp – edu tech-enabled learning and online curriculum provided to developing countries
  - Oman New systems based curriculum using CBE
  - Newly implemented, no outcomes to date
  - Sweden – transition to training in functional areas and theme based approach

- **How can global resources be used locally to improve medical education?**
  - Sharing of resources
  - Open source curriculum
  - Asynchronous delivery; use of technology
  - Methods and curriculum transparent so can compare
  - Aspirational to have a universal curriculum for basic medical training?

- **Does globalization augment or dilute excellence in medical education?**
  - Augmenting:
    - take the best of the best...
    - use similar frameworks, principles and adapt locally
  - Possibility of reduced global standards??
  - But not bringing the bar down...
  - Small steps to improve in some areas – but locally capacity building critical
    - small changes can have a large impact
  - Remote analysis/dx/learning with use of simple technology – cell phones etc.
  - Still require appropriate credentialing processes with regards to level of training/education
  - Use of MOOCS – but low completion rates and variable retention
    - BUT? Integrate with hybrid methods – local facilitators/visiting faculty – enhance engagement
    - book knowledge not enough – need to be able to have the clinical experience to integrate

- **How can we truly embrace inter-professional team training?**
  - Simulation opportunities
  - Variability in clinical reality is a challenge
  - Must be accountable to local system needs
  - Fit for purpose
  - Structure of care delivery
  - Understand scope of practice of team members
Table 16

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - International accreditation – increase cross border experience and reduce poaching of resources from unserved populations
  - Distribution issues for doctors – train where might want to work
  - Export competence and outcome based training
  - External collaboration supports less developed systems
  - E-learning and shared learning over internet
  - The content and the how of implementation of system change
  - Diseases are different

- **How can global resources be used locally to improve medical education?**
  - Social media
  - IT technology
  - Open electronic library access
  - Open access lectures
  - Journals open source
  - Mismatch of resources locally ensure infrastructure
  - Population education and education of women
  - Preventing disease
  - Locally relevant and not harmful

- **Does globalization augment or dilute excellence in medical education?**
  - Enhances when understand problems
  - Competition open to global health care
  - Drives standards up – global competition
  - Learn from elsewhere /others depth and breadth
  - As resources shrink learn to work lean
  - Teaching without resources

- **How can we truly embrace inter-professional team training?**
  - Classroom learning together
  - Integrate early – think of as health science providers
  - Simulation-based education helps team learning
  - Reduce power base and tribalism
  - Big cultural change
  - Integrated training with different roles taking longer
  - Mixing roles (e.g. prescribing)
  - Mixing scope of practice to free up doctor time
  - Practicing at a higher level
  - Understanding others roles
  - Understanding the determinants of health and the needs challenges faced
  - Whose global issues – make do within communities
  - Learned helplessness
Table 18

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - In retrospect, reinforcing what we are doing at CFPC and inAus/NZ regarding education/service link, and social accountability
  - NOSM work predated the report
  - Report is useful in distilling issues clearly, recommending institutional reform
  - In some institutions report may have precipitated action
  - Learnings have not moved to nursing realm and perhaps to other allied health realms. Important CNA be at meetings like this

- **How can global resources be used locally to improve medical education?**
  - Sharing informational resources
  - Partnering and collaboration between countries to develop curricula, etc.
  - Need supporting IT but how that info is applied is important
  - Organizational and institutional social accountability cultures are important
  - Almost always there are bilateral learnings
  - Easier route to high quality care, models, through learning from others.

- **Does globalization augment or dilute excellence in medical education?**
  - Cannot be “one size fits all”
  - Context-specific application of globalization learnings
  - Globalization could, in the best of worlds, lead to international training standards that confer portability for all medical school grads into residency programs. This might be a two-edged sword

- **How can we truly embrace inter-professional team training?**
  - Need a work environment where teams actually exist in clinical practice
  - Define roles/responsibilities
  - No “teams for teams’ sake”
  - Must be patient at the centre, with appropriate services (i.e. providers) around
  - Universities themselves may not be fertile places to model teams and team training.
Competency Based Medical Education (CBME)

- **Table 1**
- **Table 3**
- **Table 5**
- **Table 7**
- **Table 11**
- **Table 17**

**Table 1**

- **How have you utilized the Lancet report to implement the transformation in your system? (intersect between education and the health system)**
  - Although not explicitly stated or known, we are all using components of the Lancet report to implement CBME
  - In Canada, competency framework existed before CBD – CanMEDS 2005 was based on competencies
  - China – conducting research on competency-based exams

- **What are the metrics required to show competency?**
  - Ultimate – performance in the clinical area; scorecard; adverse events; quality and safety
  - CBD standard - EPA’s and milestones
  - Depends on the competency – some can be clearly measured and assessed whereas others are more abstract
  - Exams – clinical skill test

- **Is the quest a global one? Why or why not?**
  - Yes!
  - Recent discussions include ‘competency’ as a concept
  - Traditional exams look more at ‘medical expert’ competencies, versus intrinsic competencies
  - Need to also look at clinical reasoning and competency with skills

- **Is institutional or instructional change more important in the transformation to CBME? Why?**
  - Institutional
  - Change the way people approach the issue – top-down approach
  - Instructional
  - Grassroots – more sustainable
  - Both!
  - Context very important

**Table 3**

- **How have you utilized the Lancet report to implement the transformation in your system?**
  - International Collaboration on CBME – how many countries represented?
  - Consultation with other stakeholders
• **What are the metrics required to show competency?**

- Assessment and program evaluation
- Formative and summative assessment
- E.g. DOPs, 360, observation, traditional tests, simulations
- Cumulative performance, look at trends
- Narrative comments: feedback with observation
- All competencies not just medical expert – professionalism, communication etc.
- Program evaluation:
  - Outcome measures – meeting patient needs, longitudinal, big data, satisfaction – learner experience, learning environment, faculty experience

• **Is the quest a global one? Why or why not?**

  - Yes – society ready and wants it – social accountability,
  - Will need to be context/community specific/cultural context/specialty specific
  - Some things are core and others are specialty-specific
  - Worries about transfer across borders – need to ensure credentialing

• **Is institutional or instructional change more important in the transformation to CBME? Why?**

  - Equally important
  - Institutional – professional society etc. stakeholders, need them as enablers
  - Instructional – implementers, granularity

**Table 5**

• **How have you utilized the Lancet report to implement the transformation in your system?**

  - In Canada, Royal College mandated: orthopedics, medical oncology, ENT have started already, defined rollout over the next few years. Family medicine implemented two years ago.
  - In Hong Kong: College of Surgeons has begun CBME; College of anaesthesia is planning for it. Each specialty has its own College that makes its own plans for educational approach.
  - US in phase three. Working toward milestones 2.0. 6 ACGME milestones apply to everyone. Starting to use competency-based language in accreditation (competent, proficient).

• **What are the metrics required to show competency?**

  - Depends on specialty: First define the competencies and milestones needed.
  - Repeated observation over time.
  - Map back to IHI Triple Aim: population health, cost of care, patient experience
  - Need self-assessment and reflection: this is the approach to mastery
  - Leading indicators vs lagging indicators
  - Knowledge: multiple choice, vignettes, case based oral
  - Skills: How to anticipate what is coming down the pipe?
  - Other sources: MSF
• **Is the quest a global one? Why or why not?**
  - Yes: global concepts of teaching around competence, e.g. developing world teaching breastfeeding in a community

• **Is institutional or instructional change more important in the transformation to CBME? Why?**
  - Need both

**Table 7**

• **How have you utilized the Lancet report to implement the transformation in your system?**
  - CBME is being implemented in U.S., U.K., Pakistan (assessment phase) and Canada
  - Outcomes have to be clearly defined.
  - Move away from the concept of time-based competency.
  - In some countries, we’re moving in the right direction but there is still much to be done (hybrid design).
  - Still in development and has to be proven as the best way to train physicians.
  - ROI: will it lead to better care?
  - Is CBME a determinant of health?
  - There are grey zones – how does CBME allow us to deal with uncertainty?
  - How do you assess if the competency has been acquired?

• **What are the metrics required to show competency?**
  - Milestones, direct and observation, evaluation, multiple observers, committee work, skills, attitudes, 360s, feedback (including patient);
  - Define the role of the healthcare team;
  - Ensure that residents feel they are in a safe learning environment.
  - Ensure we have the resources and the metrics.

• **Is the quest a global one? Why or why not?**
  - Yes
  - We all need a doctor who can do the right thing for the patient.
  - Improved outcomes
  - From competency to excellence – do we want physicians to be good or great?
  - Should competency be relative to resources, regional disparities, cultural considerations, etc.?
  - Critical thinking no matter what the situation is.

• **Is institutional or instructional change more important in the transformation to CBME? Why?**
  - Both are important
  - They are interdependent
  - Institutional:
    - Policies and procedures have to allow observation and metrics
**Table 11**

- How have you utilized the Lancet report to implement the transformation in your system?
  - Competency-based medical education is very new to China
  - First question is – what does CBME mean?
  - The report played an important role to begin the journey
  - Report provided the concept to build on
  - Lancet report influenced the national policy

- What are the metrics required to show competency?
  - Formative assessments
  - OSCI as an assessment tool to measure multiple competencies in different contexts
  - Multiple dimensions – not right or wrong
  - Metrics about learning
  - The ability to deal with issues in a comprehensive way
  - Judgment must be applied to measure

- Is the quest a global one? Why or why not?
  - Countries will apply it differently
  - It should be a global one Why – CanMEDS was very helpful in creating a patient but it took 15 years for it to develop
  - Developing jurisdictions can learn from those who have walked the path
  - And – the experience of developing jurisdictions will inform the development of competencies over time
  - Recognize that change will need to be managed

- Is institutional or instructional change more important in the transformation to CBME? Why?
  - Both are important for different things
  - Institutional is leader driven – authority policy and resources
  - Curriculum, faculty development and assessment
  - When you start – having institutional authority and resources is a key enabler
  - Policies without the work underneath is insufficient

**Table 17**

- How have you utilized the Lancet report to implement the transformation in your system?
  - Yes, to plan and implement CBME. It helps recognize that competence is readiness to practice.

- What are the metrics required to show competency?
  - The struggle of what are the metrics of competency and how best to measure them is the fundamental question.
  - Defines scope and core elements of a particular specialty. This is very valuable
- Develop tools based on basic guesses, use consensus to develop outcomes and evaluate and validate these measures to determine if the tools work as expected.
- Competency measures are most difficult and expertise from experts in assessment is needed.
- Narrative evaluations are most valuable.

• **Is the quest a global one? Why or why not?**
  - Yes, competency-based education should be applied globally; however, the standards should not be, but should be adapted to local context.
  - There may be some basic competencies that are global.

• **Is institutional or instructional change more important in the transformation to CBME? Why?**
  - Institutional because cultural change is needed and this lies at the institutional level.

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