University of Toronto
Faculty of Medicine

Distributed Education
External Review

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PURPOSE

The purpose of the review was to examine the state of Distributed Education at the University of Toronto (U of T), Faculty of Medicine and consider principles that should guide further distributed education. We were asked to provide advice about the challenges and opportunities of distributed education in relation to moving forward on expansion of undergraduate and postgraduate medical education programs (see Appendix 1 "Terms of Reference").

PROCESS

The review team reviewed background documents in advance (see complete list of background documents in Appendix 1); met by teleconference; and requested additional material for clarification. The review took place over a two-day period and included meetings with key faculty leadership from medicine and other health sciences programs, as well as other key stakeholders (see Appendix 3 "Review Schedule"). On-site visits were made to several community affiliates and to the Mississauga Academy. The review team met with students and residents.

The discussions we had and input we received were outstanding. Throughout the interviews there was an appreciation of the fact that the Decanal team is interested in creating an integrated system and we heard an overwhelming commitment from everyone to get the system right.

BACKGROUND

The University of Toronto, Faculty of Medicine is the largest medical school in Canada and is one of the leading health sciences networks for research and education in North America, with a global reputation for excellence and innovation. The Faculty is part of a dynamic network of health organizations that includes 10 fully affiliated institutions and 19 community affiliated hospitals and health care sites. The Faculty is unique in its pairing of a single medical school with 29 partner institutions, all in one geographic Greater Toronto Area (GTA), representing the largest, most rapidly growing population base in Ontario[1].

[1] For example, regions within the GTA have grown at a faster rate than the rest of the province. Between 2001 and 2006, York Region grew by 22% and Peel by 17% (compared to approximately 7% population growth in other regions of Ontario). U of T is the primary producer of physicians to these regions, representing 65–83% of Ontario trained family physicians and 66–80% of Ontario trained specialists.

In recent years the Faculty of Medicine has experienced immense growth in medical education (see Appendix 2 “Backgrounder for Review of Distributed Education”):

- Undergraduate medical student first year intake increased by 25% (49 first year positions) from 1999/00 to 2007/08. U of T and the government announced this year that an additional 35 first year positions will be added.

- To date, undergraduate expansion has been accommodated through an organizational structure of three Academies: Fitzgerald, Peters-Boyd and Wightman-Berris. Academies provide the hospital-based portions of the curriculum in a supportive, student-focused learning environment.

- A fourth new Mississauga Academy is being developed and will open in 2011 with 54 medical students per year. The Mississauga Academy will be located on the University of Toronto Mississauga Campus and is a partnership with Credit Valley Hospital and Trillium Health Centre. The Academy will provide a unique milieu for community-based training that will add to the complement of primary care and generalist physician specialists in Ontario.

- Postgraduate resident first year intake increased 62% (141 first year positions) from 2000 to 2009, including significant growth in

    - International Medical Graduates (53 first year positions); and

    - Family Medicine residents. Between 2003-04 and 2006-07, 49 new first year positions were added to 63 existing first year positions. Beginning in 2008-09, another 49 first year positions will be added, representing a total first year Family Medicine increase of 156%. To accommodate this expansion, five new family medicine teaching units will open in community-affiliated hospitals in Mississauga, Markham, Barrie and Newmarket.

- Undergraduate and postgraduate expansion has been accommodated in both fully and community affiliated hospitals. In 2007-08, fully affiliated hospitals had grown to 100,000+ learner days each and long-standing community affiliated hospital learner days ranged from 17,000 – 20,000 (see Appendix 2).

The Faculty also provides:

- A new Physician Assistant program that will start January 2010. This is a U of T/ Michener Institute/Northern Ontario School of Medicine collaborative program funded by the Ministry of Health and Long-term Care, pending final approval by the Ministry of Training, Colleges and Universities.

- Interprofessional Education, which aims to lead the advancement of IPE through education and research initiatives.

- World-class MSc and PhD graduate research programs of study and top-ranked health professional masters programs in a wide range of biomedical and health-related fields such as the Rehabilitation Sciences.

- Medical Radiation Sciences, which has introduced an exciting new curriculum involving enriched interprofessional education and enhanced clinical simulation practice.

The Faculty's size and structural complexity provides both opportunities and challenges, many of which were raised in this review. A key opportunity is the ability to harness the many strengths, experiences and networks of the Faculty to achieve quality care and assist government in addressing health human resource issues. On the other hand, coordination and organization across this vast network is also a major challenge. Other challenges include: responding strategically to a growing population in the current economic climate; managing rapid growth in undergraduate and postgraduate positions while there has been a reduction in number of hospital beds and teaching opportunities; lack of infrastructure and funding; and the near/far travel time and transportation issue across the GTA and 29 affiliated institutions.

Despite these challenges, U of T continues to meet societal needs in a major way by:

- Supplying 47% of Ontario trained family physicians and 52% of Ontario trained specialists.
- Graduating family physicians and specialists that work in all LHINs across the province.
- Training more than 50% of the Ontario physician pool for many high priority specialties.
- Providing the majority of high priority specialists in Ontario: 74% of Community Medicine specialists, 62% of Geriatricians, 58% of Orthopedic Surgeons, 52% of Radiation Oncologists.

U of T has the largest number (73) of RCPSC and CFPC accredited programs in Canada and the best fill rate of all Canadian medical schools in the CaRMS Match.

U of T's programs and initiatives reflect a health human resources partnership between the university and government, a partnership that aims to align academic responsibility with social responsibility. All Canadian Faculties of Medicine play a profound role in shaping our health care delivery system. At the national level, a review is underway to look at The Future of Medical Education in Canada, which will lay the foundation for an ongoing process to ensure that the curriculum in Canadian Faculties of Medicine is well aligned with societal needs.

What is the role of distributed education in achieving the Faculty's social responsibility to quality care? How are U of T's many community affiliated hospital partners – which are located in highly populated urban areas, and many of which are becoming more highly specialized in the services they provide – integrated into the education delivery system?

In 2006, Dr. Adrian Brown was appointed as the Director of Distributed Medical Education for the Faculty and in the same year, Molly Verrier was appointed Director of

Distributed Education for Rehabilitation Sciences. They have worked closely with programs and hospitals to help manage and facilitate distributed education.

In January 2009, U of T signed a Memorandum of Understanding with the Rural Ontario Medical Program to enable U of T trainees to access rural learning opportunities.

This review provides an opportunity to clarify where the Faculty is going with a complex group of partners, review some of the challenges – such as unresolved financial issues that have left some expansion initiatives in limbo - and begin to plan an integrated educational continuum. The university is well positioned as an integrating force and through this integration can be transformative in health care delivery in the province and in Canada.

STRENGTHS

1. Within the Faculty of Medicine there are a number of examples of successful long-standing and new collaborations between the university and community affiliated hospitals, such as:

- ✓ Rehabilitation sciences has long-standing experience with integrating partners (155 facilities and 1200 rehab professionals) and a systematic approach to delivery of curriculum with affiliated sites.

- ✓ Family Medicine expansion has been highly successful. Five new teaching units are being established in community affiliated hospitals and the new academic community leaders feel well integrated and supported. The government provides enhanced capital and operating funding for this expansion, which has created strong educational infrastructure at both departmental and hospital levels.

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- ✓ The Academy structure has provided initial integration of long-standing community affiliated hospitals [North York General Hospital (NYGH), St. Josephs Health Centre (SJHC) and Toronto East General Hospital (TEGH)] to provide undergraduate experiences.

- ✓ A number of Clinical Departments (e.g. Pediatrics, Surgery, etc.) have well developed clerkship and postgraduate experiences in community affiliated hospitals.

2. An increasing number and diversity of hospitals and other health care settings, and health care practitioners within these settings, express a desire to be part of the U of T educational system at the undergraduate, postgraduate and health sciences levels, offering significant new opportunities.

3. The long-standing community affiliated hospitals are committed long-term to education across the continuum for all health professionals and are interested in development of a shared vision with the Faculty. Physician leaders at these sites express real good will and are committed to a quality care agenda.

4. Decanal support of community affiliated hospitals and integrated education is viewed as transformational. On-site visits by the Dean have made a big difference. Decanal

support for the Department of Family and Community Medicine was critical to Family Medicine's success, as was having a department appointed community physician leader involved in the development of the new sites. This community physician role needs to be closely tied to departmental expertise in accreditation requirements, learning objectives, evaluation, etc.

5. University Department Chairs recognize and are committed to social responsibility.

6. Many medical students, residents and health science students have a genuine desire and enjoyment of community educational experiences.

FINDINGS

The following sections summarize the key findings from our two-days of interviews.

1) LANGUAGE

- **Confusion exists around the language "distributed education" or "distributed medical education".**

  During the course of the review we learned that the terms "Distributed Education" or "Distributed Medical Education" are multi-factorial, mean different things to different people and are often used interchangeably with "community" or "ambulatory". "Distributed medical education" has the connotation of learners being "sent out" from a hub, rather than describing a collection of multiple players participating in the education of medical students and residents. The term can lead to an "us vs. them" and "second class citizen" mentality.

  This terminology did not necessarily represent the actual educational collaborations in place, nor where the Faculty seems to be headed in the future. The reality is that distribution of learners occurs in both urban and smaller community settings, and issues of distribution, such as distance and travel time, can be equally problematic within the GTA as in more distant community settings.

  A culture shift is required, so that medical students and residents embrace community experiences, instead of the present situation wherein many students seem to expect that they will be based exclusively in downtown Toronto. This review provides the opportunity to begin to use different language to reflect an integrated model of learning experiences across undergraduate, postgraduate, health sciences programs and institutions.

2) VISION

- **While the Dean of Medicine has a clear, articulated vision for "distributed medical education" or what we will now call "integrated medical education", there is no shared common vision within the Faculty.**

  Many questions arose in response to discussions about the vision. Is the Faculty's vision to build capacity for expansion of medical education to meet HHR social responsibilities? What is the pedagogical argument for moving learners to different

sites: more breadth and clinical exposure; an effort to increase generalist postgraduate choice; etc? Should the Faculty be expanding and distributing? How big should the Faculty grow?

With a clearly articulated vision, the Faculty can begin to answer these questions. Consideration needs to be given to pedagogy, where many would suggest that everyone should have community experiences, not just when capacity gets tight.

- **Components of a vision are already described by leaders and stakeholders, e.g. continuity of care, quality of care, preparation for practice, career choice, case mix, health human resources related to population growth, etc.**

  Considerations that we heard for the vision include:

  - Link to transformation of health care and quality.
  - Integrate the opportunity for educational experiences across the continuum of care.
  - Need a clear pedagogical approach for why integration is occurring.
  - Look at aligning the strategic plans of hospitals and the Faculty.
  - Look at new missions that include community partners.
  - Consider a network of networks approach to integrating across undergraduate, postgraduate and health sciences and with all hospital partners.
  - U of T can have more than one mission that drives pedagogy.
  - Address issues of hidden curriculum.
  - Pay attention to the Future of Medical Education and other transformational initiatives.
  - This is an opportunity for U of T to lead innovation in its next accreditation.
  - The Mississauga Academy can be a leading edge example of innovation in an integrated education continuum.
  - Consider a statement that every student must spend a certain amount of time or have a defined set of experiences in a community site to achieve specified learning objectives.
  - Consider phasing-in change through a more deliberate approach with a few programs.
  - Look at a 20-year vision that reflects the ongoing evolution of hospitals.

- **To date there has been no articulated vision that can lead to a faculty-wide plan for Academy or Departmental relationships with community affiliates. This has led to confusion and ambiguity. The Academies and Department Chairs are seeking guidance.**

- **The Dean has advanced the integration agenda by being visible to community affiliates.**

  Visits to community affiliates by the Dean and other leaders within the Faculty are viewed positively and give a clear signal of engagement.

- **A "network of networks" approach is more desirable than a "hub and spoke" model.**

There is real interest in the concept of a partnership model with a shared vision. U of T can innovate and be a national leader with a new network model.

- **There are already some very successful integrated educational programs within the Faculty.**

  There is extensive community-based teaching in some areas – family medicine (FM), pediatrics, undergraduate ASCM, rehabilitation sciences, etc. Some community hospital departments have significantly increased capacity for learners, for example, TEGH anesthesia now has 4 clerks and 8 residents from a number of programs (PGY5 thoracic, PGY2 FM, etc.) Community hospitals provide excellent case mix and teaching opportunities. There is recognition by everyone that community hospitals provide access to "bread and butter" medicine.

- **While the Faculty is prepared to continue its mandate within the GTA and province, it is increasingly open to collaborative arrangements with other universities to achieve desired societal outcomes.**

  The Faculty has established partnerships with other post-secondary institutions (e.g. Ryerson and George Brown re: nursing, Michener re: medical radiation sciences, Northern Ontario Medical Program re: physician assistants) and is open to exploring others (e.g. York re: medical students).

- **There is readiness by Faculty and departmental leaders to engage in change of processes towards an integrated system, however, there is reluctance without financial or government support.**

  Sufficient financial resources are required to fully achieve a Faculty vision. Currently there are no resources to support an integration mandate within departments or community affiliates. There are insufficient administrative structures to support an integrated system (central coordination, as well as local administrative support).

- **The issue of "hidden curriculum" could be a factor in the successful implementation of integrated partnerships with community affiliates.**

  We heard a few examples of hidden curriculum, e.g. active discouragement by faculty of community experiences, particularly at the subspecialty level; and, students don't believe the data that shows that location of rotations does not impact CaRMS outcomes.

- **While there is an absolute requirement to adhere to accreditation standards, the Faculty vision must ensure there is opportunity to experiment with new integrated delivery models, e.g. at the Mississauga Academy (see #4 below).**

3) COORDINATION AND STRUCTURE

- **There is a disconnect between undergraduate and postgraduate structures and lack of congruence across the faculty and departments and between community affiliates.**

The terms “silos”, “confusion”, “transparency”, and “equity” arose during the review. U of T is one Faculty yet new community affiliates find it confusing to have many visitors and multiple players from the university, leaving an impression that the Faculty is disorganized.

At the undergraduate level, the Academies work very well together, with a collaborative, non-competitive approach. Academies are responsible for Year 1 and 2 of the curriculum, and then Departments have primary responsibility for implementing clerkship while the Academies maintain a student affairs role.

At the postgraduate level, processes vary considerably from one Department to another. Some frustration was expressed by community affiliates with the varied experience they have by Department in terms of flow of residents, continuity of residents, faculty appointments and promotions. There are no long-term commitments with respect to number of learners and community hospitals often lose learners first if the system contracts.

While long-standing community affiliates feel included in the Faculty mission, there is inequity and lack of transparency in the execution of the mission. Overall, they would like to see consistency, transparency and equity. Resolution of organizational structures is required to better coordinate and integrate across the education continuum.

As medicine starts to engage new community partners it will be important to keep the other Faculty health sciences programs in the loop. Coordination of the Medical Radiation Science (MRS) program occurs through a site coordinator working directly with the Chair of Radiation Oncology. MRS has a major need for clinical placements. This is also the case for rehabilitation programs and the new Physician Assistant Program.

The University Partners of Academic Rehabilitation (UPAR) and its subcommittees encourage communication across all partners. We heard that the Director, DE Rehabilitation Science role provides great leadership and that their partnership approach makes sense and works well. We heard that a number of opportunities could be explored with Rehabilitation Sciences:

- Shared CVH/THC opportunities.
- Opportunity to do things differently (rehab is practiced differently in community hospitals, i.e. it is imbedded in acute care).
- Look at the continuum of care, a patient centred model. Integrate this into the Academy. It will be value added for hospitals and communities.
- Build a new model of electronic infrastructure. Potentially look at a pilot with private funding.

- **The DME Director has successfully led the development of open channels of communication with community affiliates through a network and point-person approach. The next stage of implementation of a vision and integration will require more Faculty infrastructure and a senior level position within the Faculty.**

- **There has been excellent progress with establishment of affiliation agreements. There should be consideration of program engagement in this process.**

- **There appears to be some development in the area of appointments for community-based faculty, although more streamlined processes are desired.**

4) MISSISSAUGA ACADEMY

- **The lack of funding commitment from government for hospital capital and operating costs at Credit Valley Hospital (CVH) and Trillium Health Centre (THC) and the past perceived "on-again off-again" status of the Mississauga Academy perpetuates uncertainty.**

  While there is clear commitment from senior leaders at the two hospitals, uncertainty has made it hard for many people to engage in the project. The uncertainty also feeds opposition, allowing naysayers to continue to have a voice. For others, however, there has been a shift from fear of change to a practical reality of need for information.

  There are now 24 months to get this major project implemented, including an accreditation consultation visit coming up in March 2010. Areas that need to be addressed include: specific attention to faculty development, development of a joint operational plan to help the hospitals with what they need to do, curriculum development (awaiting the new undergraduate curriculum expected this fall) and funding (see below). The hospitals and physicians want to be sure they launch an excellent program.

  There is a close collaboration and trust between the two hospitals. They are committed to making this work and want to be proud of the product. They are looking for funding, respect and infrastructure.

- **The Mississauga Academy is understood, structured and resourced differently from the Faculty's other Academies in order to achieve its specific objectives (i.e. to train learners to practice in an integrated system for the Mississauga region). Quality indicators are needed from the outset.**

  There is an opportunity to be leading edge with the Mississauga Academy in terms of true integration across undergraduate, postgraduate, health sciences and the two hospitals. It is viewed as a great "green field" site. A clear vision and concrete outcomes are needed. It was noted that change management is needed on both sides – at the hospital new sites and within the Faculty – if we are to strive for and achieve a partnership and integrated model.

- **The success of family medicine at CVH was referred to as the "FM conversion phenomenon" for those clinicians who have found interaction with the family medicine residents to be a positive experience, raising interest and enthusiasm for other opportunities to interact with learners.**

The horizontal FM curriculum (i.e. 3 half-days per week in the FM unit providing continuity of care to FM patients for the duration of the 2-year program) is a great experience for residents. The residents also have lots of one-on-one experiences with specialists in the hospital. Monthly communications meetings between residents and their faculty help ensure problems are addressed.

5) COMMUNITY AFFILIATES

- **There are a number of "mature" community affiliated hospitals that have many years of experience and engagement in undergraduate and residency teaching for U of T.**

- **Community affiliated hospitals provide extensive teaching but there is little coordination or consistency of learners across programs.**

  The mature community affiliates operate as teaching hospitals for U of T programs, but there is no coordination between programs. For example, there may be 8 learners in one department such as anesthesia, coming from 5 different programs, each unaware of the other teaching load. As well, plans from the central program site to distribute or pull back learners often appear last minute and ad hoc. The community affiliates need consistency of learners and advanced planning in order to deliver the best possible educational experience.

  Generalist case mix and fewer trainees are obvious advantages of the community affiliates for learners. However, student and residents at community affiliated hospitals identified the excellence of the actual teaching by faculty as a significant reason for their choice of location. Barriers exist for individual physicians to participate in teaching, including frustration with the faculty appointment process which requires faculty appointments to be renewed annually. Agreements for clinical repair for physicians teaching in new sites appear disrespectful to physicians in longstanding clinical affiliated hospitals who have been teaching with no remuneration and may destabilize existing longstanding relationships.

- **Community affiliated hospitals have their own reasons for wanting to be involved in medical and health sciences education. These aims can serve as partnership "glue". While the teaching connection usually operates at the level of departments, enhanced connection at a more senior and integrated level is seen as a desirable next step.**

  Community affiliated teaching hospitals have invested into education infrastructure – for example, fundraising for classroom teaching space and facilities. Reasons for hospitals to engage in education include addressing their social responsibility; recruitment/retention of health care workers; creating a pipeline effect for practitioners into the community; enhancing quality of care; providing care for unattached patients and for population growth; excellent educational opportunities available; better functioning hospitals through creation of a learning environment; positive, rewarding experience for physicians and health care workers leading to better morale; enhanced prestige; increase in hospital foundation fundraising opportunities; more opportunities for partnerships and government projects; development of research strategy and building of research capacity; enabling

community physicians to engage in teaching without full academic (research) mandate; and ensuring that hospitals will flourish and grow. The senior administration of the community affiliated hospitals have benefitted from the network developed by Dr. Brown and from the visits from the Dean, and now see the potential to develop a closer and more integrated organizational connection with the U of T.

- **There is interest in new community hospitals in becoming affiliated with U of T.**

  A number of new community hospitals have expressed interest in affiliating with U of T. This represents an opportunity for expansion, but there does not appear to be a clear connection between the affiliation of new sites and the overall vision for integrated clinical education. Community affiliates offer the opportunity to develop new pedagogical models, to link with the surrounding community and community agencies, and to develop new opportunities for research.

6) FUNDING

- **While government may believe it is adequately paying for medical education, current funding amounts and structures don't work.**

  Funding is a real barrier to achieving a vision of integration with community-affiliated hospitals. Repeatedly we heard about the lack of funding for i) educational infrastructure in community affiliates (administrative support, seminar rooms, space for residents, etc.) and ii) community physician compensation (academic community physicians still have to pay overhead on their clinics when they are not seeing patients because they're busy teaching). Clerkship teaching is seen as the biggest challenge in terms of amount of time to teach.

  Where preceptor payments are made available, there is lack of consistency, e.g. the Physician Assistant Program will pay preceptors, whereas Medical Radiation Sciences has no funding.

  In Mississauga, there needs to be clear/genuine recognition by government of the value of the physicians and the hospitals and that accommodating 54 x 4 years undergraduate learners (plus postgraduate learners) in two very busy hospitals is a big challenge.

  Funding has not been made available to CVH or THC to resource the time and space needed to get the clinical elements of the new Academy off the ground in the hospitals. The two hospitals submitted a planning budget (operating and capital) to government quite some time ago, but have not received a response. The hospitals have absolutely no wiggle room in the current fiscal environment to fund this initiative. There is no likelihood of private contributions in this economic climate. Hospital leeway to provide any resources is gone. They need the Faculty's help to advocate for funding.

  The $42.04 / learner day that will be provided by government to community affiliates is not sufficient to support operations.

It was noted by long-standing community affiliates that the Mississauga Academy funding discussions are being carefully monitored and could be destabilizing to the rest of the system if funding becomes available from government for newer sites, but not long-standing sites. Another scenario was mentioned: if another university is able to provide funding that U of T does not have, long-standing sites may look to new partnerships where money is available (e.g. NYGH partnering with a new York University medical school).

To the extent possible in today's fiscal climate, there is agreement that leveraging public/private partnerships should be pursued. Hospitals need help from the Faculty in this area.

It was stated a number of times that the Faculty cannot attract resources until there is a clear vision of integrated education.

7) INFORMATION TECHNOLOGY (IT)

- **Use of OTN is insufficiently reliable to enable IT connectivity and to facilitate integration across sites.**

  The Faculty is behind in its use of IT and communication networks. Where used, OTN has been found by some to be unsatisfactory at times in terms of delivering curriculum and reliability.

  Videoconferencing and other IT approaches need to be available and utilized much more broadly, not just between sites that are widely distributed. An IT approach will enable more effective use of educational resources within the greater Toronto area, where distances between hospitals that appear close may result in lengthy travel time that impedes the effective engagement of local learners in academic sessions. Technology will help create virtual communities across the integrated network of educational sites.

8) RESEARCH

- **There is interest and opportunity for community affiliates to contribute towards the Faculty research agenda.**

  Although Department Chairs want learners to participate in research at all sites, the opportunity available at community affiliates has not been fully recognized (note: this is not the case in Rehabilitation Sciences where we heard that 70% of rehabilitation graduate students do their research in community hospitals). Community affiliates bring in a huge population base and provide an opportunity to link research in areas like chronic disease management, etc. Long-standing affiliates are very interested in building their research capacity, as will be newer sites 3-5 years down the road.

  It was noted that innovation in education and research is not managed with respect to intellectual property (IP) and this can be a sticking point in terms of multi-university relations.

PRINCIPLES

Based on the findings and with a view to ensuring successful implementation of the recommendations, we strongly encourage adoption of principles of:

- Equity and transparency across institutions, programs and departments.
- True partnership.
- Innovation and leadership in the creation of new delivery models.
- Collaborative models that engage all parties in strategy, planning and implementation.
- Placement of students to best meet their pedagogical needs across the continuum (notwithstanding the context of HHR, capacity, etc.).

CONCLUSION AND RECOMMENDATIONS

The University of Toronto, Faculty of Medicine is a highly complex grouping of academies, departments, programs and hospitals that ultimately provide education through a cadre of excellent clinical teachers. The Distributed Education Review provided an opportunity to examine how things currently work with community affiliated hospitals and to seek input on how to move forward in a highly organized and integrated way in the context of program expansion, quality of care and addressing societal health care needs.

The recommendations that follow outline a move towards a pedagogically based educational integration within the Faculty and with hospital partners. This will be achieved by:

- Creating a Faculty vision for integrated education.
- Developing a coordination model that reflects the education continuum.
- Seeking adequate financial supports.
- Establishing Faculty infrastructure and a senior leadership team.
- Working on various enablers.

RECOMMENDATION 1: LANGUAGE

Use language of "integrated education" rather than "distributed education". Integrated education must be pedagogically driven.

The best learning occurs in <u>both</u> community-affiliated hospitals (access to continuity of care) and fully affiliated tertiary settings. It is not an either-or situation. What is needed is an integration of educational experiences across the continuum.

There needs to be change management in language and culture across all participants.

RECOMMENDATION 2: VISION

Create a vision for an integrated educational continuum across the Faculty and partner institutions.

A vision and plan needs to be articulated for the entire Faculty, which will allow the Faculty to become more strategic. Until a common vision is articulated and adopted, it will be very difficult to plan, seek funding or implement change across the Faculty. With a clear vision, people can respond. With an unclear vision, people hesitate and hold back.

Link the vision to hospital affiliation agreements and develop criteria for implementing new agreements, e.g. need a critical mass of learners, significant involvement with health sciences, family medicine and other educational programs.

RECOMMENDATION 3: COORDINATION

Create a system of organized, structured coordination within the Faculty and with hospital partners.

Develop mechanisms to reduce confusion and improve equity and transparency. Within the Faculty there is need for a forum for policy-making and strategic thinking to discuss coordination, integration and pedagogy.

Teaching needs to be part of the role description of community affiliates. Community affiliates are interested in education plans with long-term commitments. Community affiliate leaders need to be integrated into Academy and Department committees.

RECOMMENDATION 4: ACADEMY STRUCTURE

Revisit the vision and structure of the Academy model, including opportunities to leverage the strength of the Academy structure to create a Network of Networks that could be accessed by undergraduate, postgraduate and other health sciences programs.

A Network of Networks is an opportunity for the Faculty to innovate and lead nationally.

The following questions are provided to stimulate discussion:

- With the evolution of maturing long-standing community affiliates, would there be consideration given to unlocking historical undergraduate attachments and relocating core undergraduate experiences from fully affiliate hospitals (highly specialized focus) to community affiliates?
- What about a reverse model? For example, a 12-student pilot at a mature community affiliate where the majority of clerkship occurs at the community affiliate and 1-2 rotations occur at a full affiliate.

RECOMMENDATION 5: MISSISSAUGA ACADEMY

Use the Mississauga Academy as a pilot site for integration and continuity across undergraduate and postgraduate programs. Assess this model and use lessons learned in relation to recommendation #4 above.

In addition to creating an integrated health sciences system in the Mississauga Academy, there are a number of practical issues to address to facilitate a successful launch of this new Academy in 2011:

- Engage physicians in curriculum development.
- Provide faculty development and make it accessible in the evening and on weekends.
- Examine the pros and cons of introducing all 54 students in 2011 vs. a phased-in ramp-up.
- Highlight how the hospitals will provide an excellent learning environment for residents, and then resolve how residents will track through CVH and THC.
- Involve Rehabilitation Sciences in interprofessonal education in Mississauga.
- Establish an integrated VP Health Science Education role in the Mississauga hospitals.
- Consult with existing sites, such as North York or the Windsor Program of the Schulich School of Medicine & Dentistry, to solicit advice and experience with transition of physicians from community-based practice to major involvement in teaching.
- Ensure residents are prepared for teaching medical students, in accordance with the accreditation requirements.

RECOMMENDATION 6: FACULTY INFRASTRUCTURE

Create a senior leadership role in the Faculty with the portfolio of integrated health sciences education.

The senior administrative leader would be charged with:

- Authority to develop and implement the Faculty vision and a plan for integrated health sciences education.
- Establishing and seeking buy-in for the pedagogy of integrated health sciences education.
- Facilitating culture change.
- Improving transparency and equity.
- Ongoing coordination and communication amongst partners.
- Creating operational processes, such as creating policy manuals; establishing and tracking educational outcomes for the integrated approach; helping Medical Radiation Sciences advocate for minimum standards/ infrastructure to be met in order to have MRS students on site such as space, accommodation, and access to computer; streamlining appointment processes for community physicians;

integrating continuing professional development, IPE and faculty development into the career path of all community academics; etc.

RECOMMENDATION 7: FUNDING

Advocate for funding resolution at a number of levels: provincial resolution of operating funding for undergraduate and postgraduate expansion; provincial resolution of community physician compensation; and response by government to the Mississauga Academy budget proposals.

Funding should be linked to outcomes in terms of quality, continuity of care and social responsibility.

Funding is a significant issue for the Mississauga Academy, which must be resolved if implementation is to occur. Lack of funding will also make it very difficult to advance the notion of an integrated health sciences vision across the Faculty.

A timely resolution to the funding issues will prevent a confrontational situation, particularly with community-based physician teachers who feel undervalued. While the funding issue is being addressed, the Faculty, departments and programs should continue to demonstrate their respect and valuing of the contributions of their community partners, including recognition through faculty appointments, library access, athletic facilities, etc.

RECOMMENDATION 8: INFORMATION TECHNOLOGY

Improve quality of information technology across the Faculty to support the vision of educational integration.

The Faculty needs to implement videoconferencing capabilities using their own provider and dedicated lines with high quality transmission. Newer web-based options should also be explored.

Other use of information technology to support integration across all teaching sites would include library access for all community affiliate staff involved in education.

RECOMMENDATION 9: RESEARCH

Recognize the research opportunities brought to the table by community affiliates through their patient population base.

Community affiliates bring opportunities for research across the continuum of care, including agencies outside of hospital. This is particularly relevant to chronic disease research, including development of models of care. There is also potential to study special populations that have particular health conditions or problems of access.

APPENDIX 1

University of Toronto
Faculty of Medicine
Distributed Education Review: August 24-25, 2009

TERMS OF REFERENCE:

- To examine over a 2-day period the status of Distributed Education (DE) at the University of Toronto Faculty of Medicine.

- To provide advice to the Dean, Education Deans and heads of health professions programs about the principles that should guide further DE for the University of Toronto, Faculty of Medicine with particular consideration to the Academy system that geographically divides the current Undergraduate Medical Education program into four academies.

- Review and recommend an operational, administrative and academic structure that can best facilitate the expansion of multiple education programs including medicine, rehabilitation sciences, medical radiation sciences and physician assistants.

- To advise on the challenges and opportunities for the Faculty of Medicine as it relates to the expansion of the UGME and PGME programs, with an emphasis on the coordination of systems cross-faculty; including the organization of faculty appointments, site visits and accreditation, communication between and among sites and programs, allocation of clinical placements, and evaluation of teaching and funding of clinical preceptors.

- To provide advice on best mechanisms of collaboration with external partners across geographic divisions within the existing collaborative culture across the province and within our community.

- To provide a written report by September 15 2009.

SUPPORT:

Strategic and on-site support to be provided by DME consultant Mary Kay Whittaker and Dr. Adrian Brown, Director of DME

Administrative Support to be provided by Morag Paton, Administrative Coordinator of the Council of Education Deans

DOCUMENTS FOR REVIEW (to be provided in appendix binder/separate reports)

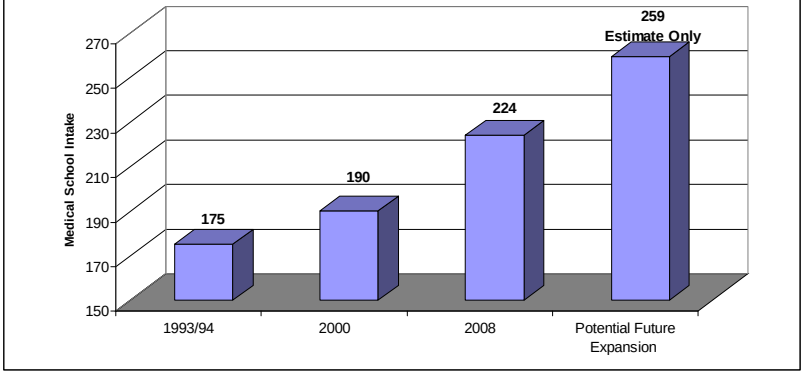
- Academic Report; Rehabilitation Sciences Sector
- Chart book on Teaching Days in GTA Community Hospitals
- COFM DME Principles
- CVH DME Implementation Plan for UofT on Mississauga Academy (PWC May 2008)
- Dean's Report: Heath Starts Here
- FM briefing note including new site checklist
- Job descriptions Director of DME; Director of DE Rehabilitation Sciences
- Medical Radiation Sciences backgrounder on clinical placements
- PA program backgrounder on program and clinical needs
- PGME Annual report 2008-09
- Policy for Clinical Faculty
- POWER POINT presentation

- Principles and Report from DME Working Group
- Queen's/U of T Lakeridge draft agreement
- Rehabilitation Sciences environmental scan and backgrounder on clinical training sites
- ROMP MOU
- Strategic Plan Whitepaper Document
- Summary of review of DME Director and office April 2009
- TAHSN Report on Capacity (April 2009)
- Template Affiliation Agreements for Community Affiliates
- UGME Academy Governance document 2009
- U of T DME Business Case submitted to MOHLTC (Feb 2009)

Backgrounder for Review of Distributed Education Faculty of Medicine University of Toronto

August 24-25 2009

Undergraduate Expansion



UofT PGME 2008-09 Enrolment by Department and Training Level

All Funding Sources, All Registrations, Distinct Trainee Count, April 2009

DEPARTMENT	FELLOWS	PGYs	TOTAL
Anaesthesia	115	96	**211**
Community Medicine	0	34	**34**
Critical Care - Adult	37	16	**53**
Diagnostic Radiology	81	65	**146**
Family Medicine	18	301	**319**
Laboratory Medicine	32	57	**89**
Medicine	259	430	**689**
Obstetrics & Gynecology	32	58	**90**
Ophthalmology	38	25	**63**
Otolaryngology	24	27	**51**
Paediatrics	218	131	**349**
Psychiatry	37	150	**187**
Radiation Oncology	34	26	**60**
Surgery	231	245	**476**
Other	29	15	**44**
Total	**1,185**	**1,676**	**2,861**

PGME Programs = 74 Active

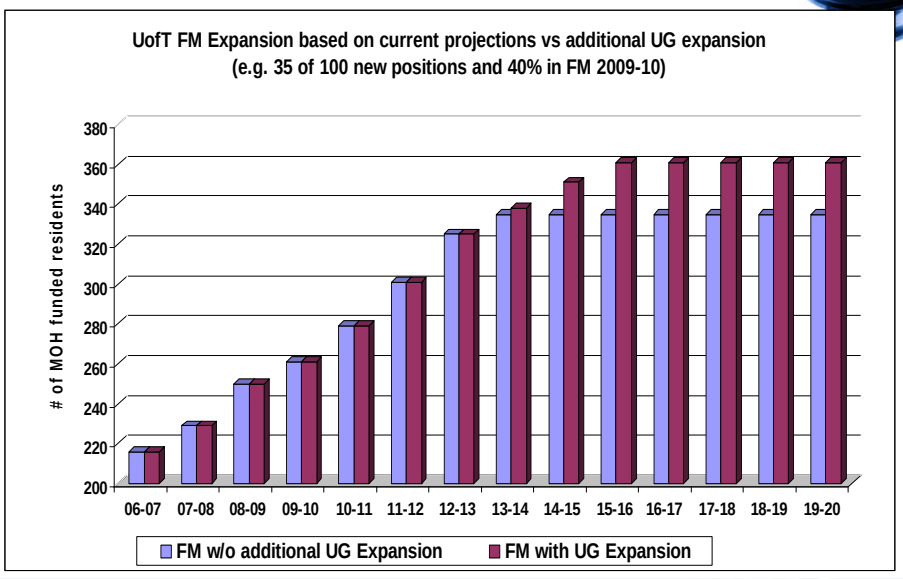
- 68 Royal College Accredited Programs
- 4 CFPC Family Medicine Programs
  - Family Medicine
  - FM Emergency Med
  - FM Care of the Elderly
  - FM Enhanced Skills (Anesthesia, Obstetrics, Addictions, etc…)
- 1 Clinician Investigator Program
- 1 Conjoint RC/CFPC Program – Palliative Medicine

Enrolment Increase (FTE) 2000-2008

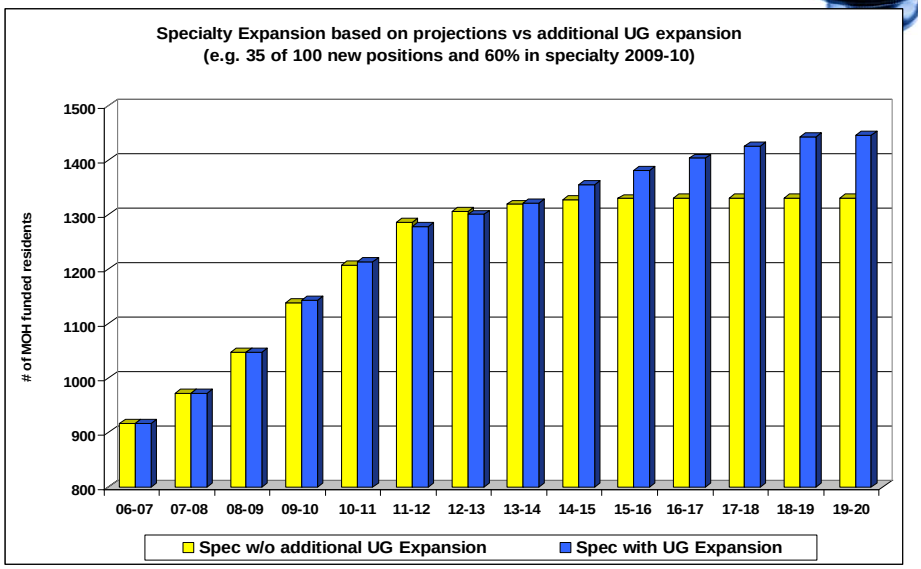
Training Level and Funding Type	2000-01	2002-03	2004-05	2006-07	2008-09	*% Change 2000 - 2008*
CMG Residents	883	879	959	1007	1153	*31%*
IMG Residents	47	49	79	135	214	*355%*
Total MOH	**930**	**929**	**1038**	**1142**	**1367**	*47%*
Other* Residents	144	127	118	142	179	*24%*
Spons Residents	81	122	141	112	89	*10%*
TOTAL RESIDENTS	**1155**	**1179**	**1297**	**1396**	**1635**	*42%*
Fellows - Cdn/PR	212	242	243	243	279	*32%*
Fellows - Spons	21	33	50	83	88	*319%*
Fellows - Visa	317	341	438	527	569	*79%*
TOTAL FELLOWS	**550**	**616**	**731**	**853**	**936**	*70%*
Total FTE	**1705**	**1794**	**2028**	**2249**	**2571**	*51%*

*Other = leaves, chief residents, CIP, provincial/foundation funding, etc...

Projected Family Medicine Growth with Undergraduate Expansion



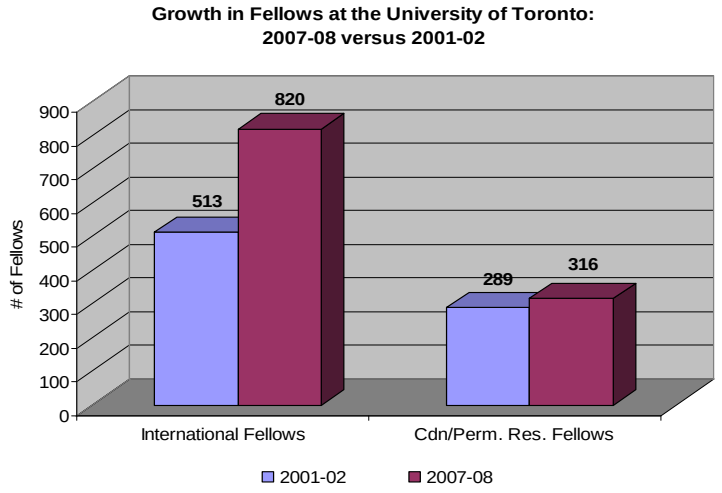
Projected Specialty Growth with Undergraduate Expansion



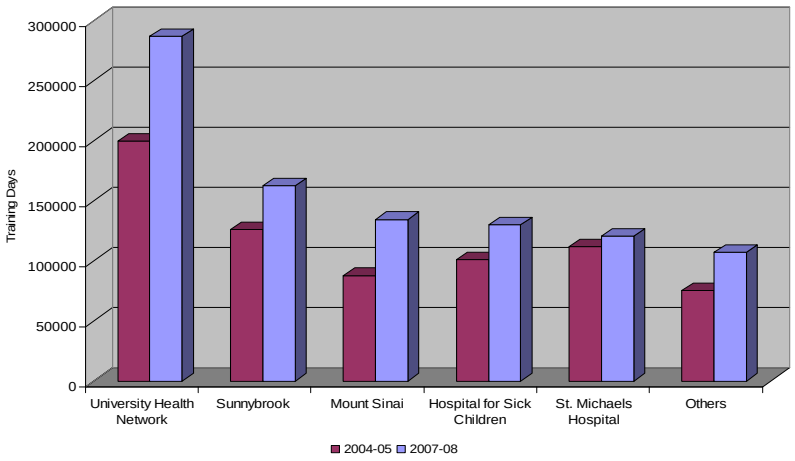
27 Affiliated Institutions

Full Affiliate	Community Affiliate	Community Affiliate: Specialty Care
Baycrest Centre	Credit Valley Hospital	Bridgepoint Health
Bloorview Kids Rehab	Humber River Regional	George Hull Centre
CAMH	Lakeridge Health Network	Hincks Dellcrest
Mount Sinai Hospital	North York General	Providence Healthcare
St. Michael's Hospital	Royal Victoria Hospital	St. John's Rehab
Sick Children's Hospital	St. Joseph's	Surrey Place Centre
Sunnybrook HSC	Scarborough Hospital	West Park HC Centre
Toronto Rehab Institute	Southlake Regional	
University Health Network	Toronto East General	
Women's College	Trillium Health Centre	

Growth in Fellows: Domestic and International



Teaching Days at TAHSN Hospitals: 2004-05 vs. 2007-08



Reaching Capacity

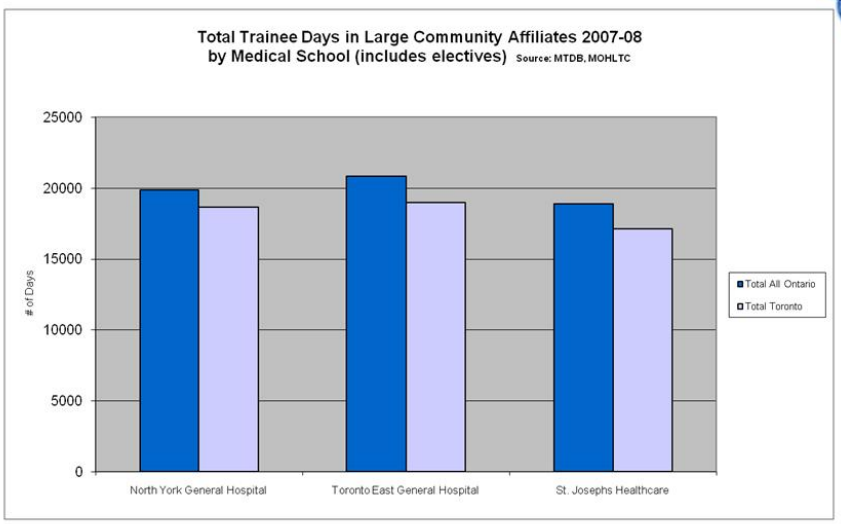
- CaRMS intake (year over year increases – CMGs):
  - 2006-07: 19
  - 2007-08: 26
  - 2008-09: 11
  - 2009-10: 5 (FM only)

- Residency Transfers Request
  - 2002/03: 28 Requests and 24 Accommodated (86%)
  - 2008/09: 45 Requests and 18 Accommodated (40%)

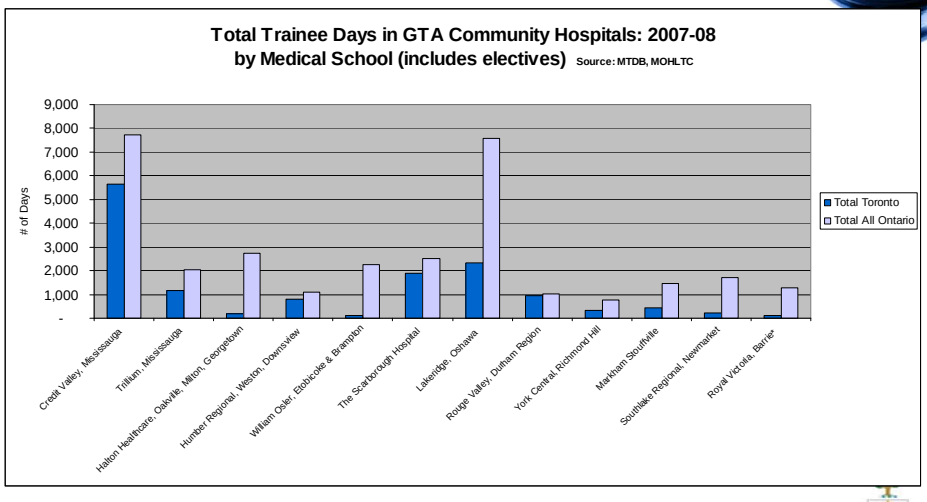
- Continued pressure to take Re-entrants; Repatriation candidates; Advanced IMGs

- Increasing need for remediation

Medical Trainee Days in Large Community Sites:
Toronto vs. All Ontario



Medical Trainee Days in GTA Community Sites:
Toronto vs. All Ontario (excl. NYGH, TEGH, St. Joes)

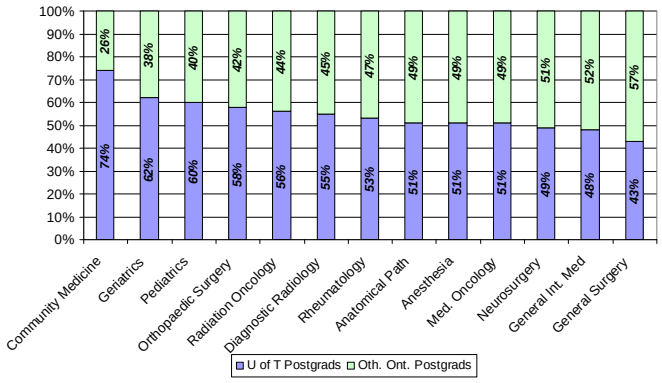


Demand for Toronto as a Training Site

- High demand and high quality entry Residency Programs
  - CaRMS: U of T has the lowest # of vacancies after first iteration: 0 in 2007 and 1 in 2008.
- Largest number of RCPSC and CFPC accredited Programs in Canada: 73
- Greatest intake to medical subspecialty training (R4 match) of any Canadian medical school (22% of total)
- Largest proportion of highly specialized and emerging subspecialty training programs and trainees such as Neonatology; Surgical Oncology and Colorectal Surgery (42% of Canadian trainees)

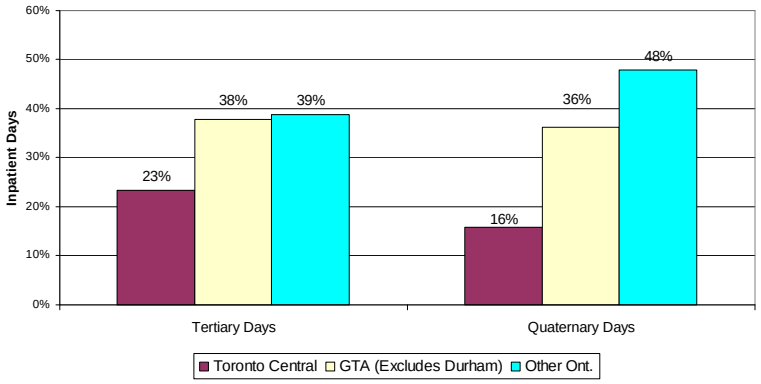
Impact of U of T: Specialists trained at U of T.

2005 Active Ontario Trained Specialists in Ontario:
% trained at U of Toronto versus other Ontario Schools
(Postgrad Exits 1982 - 2004) Source: OPHRDC



Impact of U of T: TAHSN hospitals as a provincial resource

Tertiary and Quaternary InPatient Days at TAHSN Hospitals by LHIN Residence of Patient, 2005/06



Future Pressures

- Continued expansion in medical training positions
- Physician Assistant Education Program – coming on stream January 2010 (pending approval)
- Simulation can only replace some components of clinical training
- Distributed Medical Education strategies are being developed but will not negate need for learning experiences at TAHSN teaching sites: 2-pronged strategy
- Unknown impact of new CPSO pathways (non-certified physicians with restricted licenses practising under supervision and requiring assessment)

APPENDIX 3

UofT Faculty of Medicine
Distributed Education Review - Detailed Schedule

Pre-Review Meeting - Sunday, August 23, 2009

TIME	ACTIVITY and PARTICIPANTS	LOCATION	Topic
6:30 pm	Dinner, table booked under Drs. Bates and Herbert Attendees include Dr. Sarita Verma, Dr. Jay Rosenfield and Mary- Kay Whittaker Dean Catharine Whiteside to join at 7:30 pm	Lounge at Hemispheres Restaurant inside Metropolitan Hotel	Vision of DE

Day 1 of 2 – Monday August 24, 2009

TIME	ACTIVITY and PARTICIPANTS	LOCATION	Topic
7:15 am	Dr. Verma picks up Drs. Herbert and Bates at Metropolitan Hotel	Metropolitan Hotel Mezzanine Lounge	
7:30 am	Meet with Dean and Vice-Provost, Dr. Catharine Whiteside	MSB, Room 2109	Vision of DE
8:00 am	**Council of Education Deans and colleagues**: Dr. Jay Rosenfield, Vice Dean, Undergraduate Medical Education Dr. Andrea Sass-Kortsak, Vice Dean, Graduate Affairs Dr. Sarita Verma, Deputy Dean and Vice Dean, Postgraduate Educ. Dr. Mara Goldstein, Electives Director, UGME Dr. Kevin Imrie, Assoc Dean, PG Admissions and Evaluation Dr. Mark Hanson, Assoc Dean, UG Admissions and Student Finance Dr. Leslie Nickell, Assoc Dean, Student Affairs, Office of Health Prof Dr. Susan Edwards, Director Resident Wellness	MSB, Room 2317	Context and challenges from admissions to appoint-ments and accredit-ation
9:00 am	Sarita Verma, Deputy Dean Leslie Bush, Assistant Vice-Provost, Health Sciences Sector	MSB, Room 2317	Affiliation agreements and ongoing coordination
9:30 am	Dr. Adrian Brown, Director of Distributed Medical Education	MSB, Room 2317	Experience thus far and environment al scan

TIME	ACTIVITY and PARTICIPANTS	LOCATION	Topic
10:30 am	**BREAK – walk down to 500 University Ave.**		
11:00 am	Molly Verrier, Director of DE Rehabilitation Sciences	500 University, Suite 602	Rehab activity
11:30 am	Dr. Pam Catton, Director Medical Radiation Sciences Program Dr. Maureen Gottesman, Medical Director and Ms Elizabeth Whitmell, Physician Assistant Progam	500 University, Suite 602	MRS and PA needs for placements-current and future
12 noon	**Lunch with UG Academy Directors and Undergraduate Medical Education Directors:** Dr. Vincent Chien, Fitzgerald Academy Dr. Pamela Coates, Mississauga Academy Dr. Jacqueline James, Wightman-Berris Academy Dr. Leslie Nickell, Peters-Boyd Academy Dr. Martin Schreiber, Pre-clerkship Director	500 University, Suite 602	The Academy system and DE pressures
1:00 pm	**Selection of PGY1 Entry Program Directors** Dr. Ida Ackerman, Radiation Oncology Dr. Adelle Atkinson, Pediatrics Dr. Wayne Gold, Dr. Glen Bandiera - Internal Medicine Dr. Karl Iglar, Family Medicine Dr Kevin Imrie, Associate Dean PGME Dr. Jeff Jaskolka, Diagnostic Radiology Dr. Mark Levine, Anesthesia Dr. Heather Shapiro, Obs Gyn Dr. Ari Zaretsky, Psychiatry	500 University, Suite 602	Chellenges with expansion and distribution
2:00 pm	**Community Affiliate Representatives** Ms. Connie Day, Assoc VP. Medical Administration, Credit Valley Dr. Norman Hill, VP Medical Affairs, Trillium Dr. Alfio Meschino, Chief of Staff, Toronto East General Dr. Tim Rutledge, Director of Medical Education, North York General Dr. Yaron Shargall, Director of Medical Education, St. Joseph's HC Dr. John Wright, CEO, The Scarborough Hospital	500 University, Suite 602	From the community point of view
3:00 pm	**BREAK – walk up to the Medical Sciences Building**		

TIME	ACTIVITY and PARTICIPANTS	LOCATION	Topic
3:15 pm	**Tele/Video Conference with Southlake, and Royal Victoria Hospital**	MSB 3175	
3:45 PM	**Meet with Faculty Sr. Administrators**: Morag Paton, Coordinator of Education Deans Caroline Abrahams, Director of Policy and Analysis –PGME Tim Flannery, Clerkship Administrative Director - UGME Riet van Lieshout, Administrative Manager, UGME Loreta Muharuma, Director, PGME Judy Irvine, Faculty Registrar, UGME	MSB 3175	Operational issues- the infrastruct-ure
4:30 pm	**Department Clinical Chairs, Vice-Chairs** Dr. Stacey Bernstein, Department of Paediatrics Dr. Jennifer Blake, Department of Obstetrics and Gynecology Professor Patrice Bret, Chair, Department of Medical Imaging Dr. Patrick Gullane, Chair, Dept. of Otolaryngology Dr. Allan Kaplan, Department of Psychiatry Dr. Wendy Levinson, Chair, Department of Medicine Dr. Simon Raphael, Department of Laboratory Medicine and Pathobiology Dr. Richard Reznick, Chair, Department of Surgery	MSB 3175	Funding issues and DE context from their point of view
5:30 pm	Dr. Verma escorts Drs. Herbert and Bates back to the Metropolitan		
5:00 to 7:00 pm	FREE TIME		
7:00 pm	Dinner with the Reviewers – Drs. Jay Rosenfield and Sarita Verma		

UofT Faculty of Medicine
Distributed Education Review - Schedule
Day 2 of 2 – Tuesday August 25, 2009

TIME	ACTIVITY and PARTICIPANTS	LOCATION
6:30 am	Mary Kay Whittaker picks up Dr. Herbert at Metropolitan Hotel and travel to Mississauga	Metropolitan Hotel Mezzanine Lounge
7:00 a.m.	**Breakfast at UTM with Dr. Pam Coates** - UTM Campus, South Building Room 3130 (Council Chambers)	UTM
7:30 a.m.	**Meet with Physician Leaders, Chiefs, Site Coordinators, Program Directors -** UTM Campus, South Building Room 3130 (Council Chambers) Jean Hudson, CVH Alice Cheng, Medicine, CVH – Core Tutor – ASCM2 Melanie Binnington, Peds, THC Steven McKenzie, Neurology, THC David Clarkson, FM, CVH Manish Maingi, Medicine, CVH Mike Wong, THC Bachir Tazkarji, FM, THC Pam Coates, UTM Academy Director Connie Day, VP, CVH Suzanne Legault, Psychiatry, THC Paul Philbrook, FM, CVH Matt Gysler, Chief of Staff, CVH Dalip Bhangu, OB, THC	UTM
9:00 a.m.	**Meet with UTM Senior Leadership** -UTM Campus, South Building Room 3130 (Council Chambers) Pam Coates, Academy Director Gage Averill, Dean Paul Donoghue, CAO	UTM
9:30 am	Travel to CVH with Dr. Coates	TRAVEL
10:00 am	Meet with Family Medicine and Specialty Residents (MEC) Paul Philbrook, Chief of FM Karen Chen, FM PGY2 Nina Yashpal, FM PGY2	CVH
10:30 am	Tour of CVH	CVH
11:00 am	Travel to THC with Dr. Coates	TRAVEL

TIME	ACTIVITY and PARTICIPANTS	LOCATION
11:30 am	Meet with Hospital Admin Leadership (over lunch) – THC/CVH Michelle DiEmanuele, CEO, CVH Pam Coates, Academy Director Matt Gylser, Chief of Staff, CVH Ron Noble, CVH May Chang, THC Norm Hill, THC	THC
12:30 pm	Tour – Family Medicine/Program Directors/Residents Mike Kates, Chief of FM Bachir Tazkarji, FM Program Director	THC
1:00 pm	Leave THC	TRAVEL
1:30 p.m.	Arrive back downtown	TRAVEL
TIME	**ACTIVITY and PARTICIPANTS**	**LOCATION**
7:15 am	Dr. Brown picks up Dr. Bates and travels to North York General	Metropolitan Hotel Mezzanine Lounge
8:00 am	Meet with Tim Rutledge, Director of Medical Education	NYGH
8:45 am	Meet with Chief of Staff/Department Heads- NYGH Bonnie Adamson, President and C.E.O Dr.Tim Rutledge, Director of Medical Education Dr.Alan Stewart, VP Medical Affairs Dr.Donna McRitchie, Chair of Medical Advisory Committee Dr.Perle Feldman, PG Program Director DFCM Dr.Tom Ungar, Chief of Psychiatry Dr.Lea Velsher, Dept. of Medical Genetics Dr.Glen Berrall, Chief of Paediatrics Dr.David White, Chief of Family Medicine Dr.Liz Lamere, Chief of Diagnostic Imaging Dr.Burton Knight, Dept. of Medicine Residents/Students	NYGH
9:45 am	…	NYGH
10:15 am	BREAK and travel to Toronto East General	
10:45 am	Dr. Alfio Meschino, Chief of Staff Dr. Marcus Law, Director of Medical Education	TEGH
11:30 am	Dr. Paul Hannam, Chief of Emergency Services Dr. George Porfiris, Education Lead, Emergency Medicine Dr.Henderson Lee, Education Lead, Anaesthesia Residents	TEGH

TIME	ACTIVITY and PARTICIPANTS	LOCATION	
1:30 pm	Mary Kay Whittaker and Dr. Adrian Brown escort Drs Herbert and Bates to PGME Boardroom for lunch with: Professor Dina Brooks, Acting Chair of Physical Therapy Professor Donna Barker, Lead Clinical Coordinator, Rehab Sector Professor Mary Gospodarowicz, Department of Radiation Oncology	500 University Suite 602	Rehab, MRS clinical placements
2:30 pm	Dr. Lynn Wilson, Chair, Department of Family and Community Medicine Dr. Paul Philbrook, Distributed Medical Education Coordinator, DFCM Dr. Erika Catford, Director, Teaching Practice, DFCM (by teleconference)	500 University Suite 602	FM experience
3:00 pm	Meet with Dr. Karen Leslie, Director, Centre for Faculty Development	500 University Suite 602	Strategies for roll out to distributed sites
3:30 pm	BREAK AND PREPARATION TIME		
5:00 pm	EXIT REPORT WITH DRS. WHITESIDE, VERMA AND ROSENFIELD		
5:30 pm	Dr. Verma escorts Drs. Herbert and Bates back to Metropolitan		