External Review

Department of Obstetrics and Gynaecology

University of Toronto

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External Review

Introduction

The external review, as a component of the cyclical review of the Department of Obstetrics and Gynaecology, Faculty of Medicine, University of Toronto was undertaken at the request of the Dean, Dr. Catharine Whiteside. The review was conducted on October 4th and 5th, 2012 by Dr. David Keefe, Chair of the Department of Obstetrics and Gynaecology at New York University and Dr. Wylam Faught, Medical Head of the Ottawa Hospital Cancer Program.

Much appreciated was the hospitality and the review context provided by Dr. Whiteside and Dr. Sarita Verma, and for the superb local arrangements made by academic affairs specialist, Ms. Anastasia Meletopoulos.

Documents and reports that were made available prior to, and at the review included:

- The Department of Obstetrics and Gynaecology, University of Toronto, 2012 cyclical review self study.
- The 2007 External Review of the Department of Obstetrics and Gynaecology, University of Toronto.
- The decanal and chair's response to the 2007 Department External Review.
- The 2010-11 department Annual report and the 2012 University of Toronto Faculty of Medicine Dean's report were also made available.

Copies of the interview agenda and terms of reference are appended.

The department review was conducted as Dr. Alan Bocking approaches the completion of a 2nd 5 year term in June 2013 as Chair of the Department of Obstetrics and Gynaecology at the University of Toronto.

The Department of Obstetrics and Gynaecology is the largest in Canada with 220 primary appointments, 47 cross-appointed faculty populating16 affiliated hospital sites and 4 research institutes all of which contribute to a rich academic and clinical environment. Most impressive, since the last department review in 2007, has been the expansion of the number of faculty, the continued capacity building in research and teaching, the development of a strategic plan in 2009, the establishment of the University of Toronto Institute for Human Development, and the almost unparalleled contribution, in a Canadian context, being made to global health.

EDUCATION

Undergraduate Medical Education

The leadership provided by Dr. Filomena Meffe as the Undergraduate Medical Director has been instrumental in enabling the department to provide a comprehensive curriculum and experience for the undergraduate medical students. The faculty underwent accreditation in the

spring of 2012 and based on the documents and the input provided during the current review, the obstetrics and gynecology undergraduate experience and training is very positive and is likely the benchmark against which other Canadian programs should be measured. There are 4 principle teaching sites with a number of community affiliated campuses. The first cohort of students at the Mississauga campus has already started 2 week rotations and full integration of the undergraduate program will occur in 2013. We were privileged to have a very thorough interview with representatives from undergraduate education including 6 medical student representatives.

Strengths

Committed faculty and resident educators in an environment rich in clinical material.

Faculty receive compensation for teaching and teaching administration. Site directors have protected time and funds are awarded based on accumulation of "points" to support teaching and education.

Medical students highly value the content and format of the seminar program.

Mid-rotation feedback occurs in a timely manner at all campuses.

The newly created teaching programs at Credit Valley and Trillium Hospitals have been well received by the students. Credit Valley was praised for its comfortable learning environment and opportunities for medical students to be actively involved in patient care.

The contribution of Dr. MacRury who holds a PhD in education with an interest in evaluation adds significant strength to the education program.

The Wilson Center for Research in Education which employs a number of faculty with PhD's in psychology and education provides a valuable resource for faculty development and provides career development opportunities for faculty interested in medical student education.

Weaknesses:

The responsibility to orient, mentor and evaluate a large number of community ob/gyn's who are key to delivery of the undergraduate educational program.

The large number of sites results in some variability in the medical students' clinical and seminar educational experience. Examples provided by the medical students included variability in ambulatory and surgical gynecology, low risk obstetrics and seminar quality.

Some students reporting feeling a little "lost" during the ob/gyn rotation compared to other rotations such as general medicine and general surgery. They do not always feel part of a team.

Opportunities:

Growth of the educational programs at the Mississauga Academy will provide opportunities to develop new faculty interested in education. Keys to success will be faculty development and active mentoring by the academic department and hospital department leadership.

Increasing the role of midwifery and/or family practice services in teaching normal obstetrics to medical students would increase the students' access to low risk deliveries and expose them to a multidisciplinary approach to health care.

A formal and sustained exposure of medical students to obstetrical simulation educational experiences.

Standardized programs to develop the teaching skills of the residents as much of the direct student teaching is provided by the resident staff.

Threats:

The ability to implement a comprehensive 6 week undergraduate program at the Mississauga campus in 2013, including the necessary faculty preparation and development.

Leadership succession as Dr. Meffe is stepping down from the position of Undergraduate Program Director.

Current levels of administrative support for undergraduate education may be inadequate as the size and scope of the undergraduate program expands.

Postgraduate Medical Education

The Core Ob/Gyn Residency Training Program, currently lead by Dr. Donna Steele, is the largest in Canada and has a long history of providing a comprehensive education in general obstetrics and gynecology and all the related subspecialties. The ob/gyn program, as will all others in the Faculty of Medicine, will undergo a review by the Royal College in 2013.

The department has 15 postgraduate clinical fellowship training programs, covering the spectrum of clinical subspecialties in e, including Royal College approved programs in gynecologic oncology, maternal-fetal medicine and reproductive medicine. All fellowship programs have a faculty program director and Dr. Heather Shapiro, the former Core Ob/Gyn Program Director, provides postgraduate educational oversight as the department Vice-Chair of Education.

We are able to gain valuable insight into the postgraduate programs from the Residency Program Committee, the Fellowship Director's Committee and a large number of residents and fellows currently in training.

Strengths:

Committed leadership for the residency and all clinical fellowship programs.

Clear terms of reference and objectives for the Residency Program Committee and the Fellowship Director's Committee which facilitates standardization and the discussion of issues relevant to all programs.

The breadth and complexity of clinical volume in general obstetrics and gynecology and the subspecialties that is available for clinical training.

The Clinical Investigator Program, a research training program embedded in the residency, is available for a select number of trainees focused on a clinician research career.

The establishment of Women's college hospital as an academic ambulatory care hospital.

The large size of the residency training program (13 residents/year) buffers against potential strain on residents created by medical, personal and maternity leaves.

The Resident Wellness Program's training on mindfulness, fatigue management, medico-legal issues, and support during personal crises is a model which other ob/gyn programs should emulate. Resources to support resident wellness also exist through the PGME office.

The chief resident serves on the Quality Committee and receives valuable training in this important aspect of health care.

Career planning and mentoring on a regular basis, particularly at the fellowship level.

A global health fellowship is being developed and is a component of a maturing and exciting department global health program.

Weaknesses:

Current administrative support may not be at an adequate level given the size of the postgraduate and undergraduate programs.

Fellows and residents interviewed expressed a lack of knowledge as to how to access support for biostatistics and research protocol preparation support.

Residents have minimal exposure to a "continuity clinic" type of educational experience except during their chief resident rotation in gynecology.

Surgical simulation, using the simulation laboratory, is used primarily by PGY-1 trainees, and less during later stages of training. The residents report limited access to simulation sessions such as postpartum hemorrhage and shoulder dystocia.

Opportunities:

Quality and patient safety training and experience for residents appears to be limited in terms of morbidity and mortality conference and multi-disciplinary quality committees that examine adverse outcomes and "near misses".

The University of Toronto is well positioned to develop a cadre of clinician scientists who will go on to become future leaders in our field. The Institute for Human Development, led by

Professor S. Lye and the Clinical Investigator Training Program, championed by the current chair, provide a unique opportunity to prepare University of Toronto clinicians to become world class translational scientists.

Threats:

The new Residency Program Director needs to be well supported and mentored. The presence of Dr. Shapiro as Vice-Chair Education will facilitate this mentorship and career development.

The increasing proportion of female ob/gyn trainees, combined with modern expectations for paternity and maternity leave, could place undo strain on the other residents. Residents report that the current system works well, but contingency plans should be created for unforeseen problems.

The non Royal College fellowship programs are funded by many sources including their host countries, hospital, research grants, and/or practice plans, and therefore the continued success of these valuable programs are vulnerable to the shifting fortunes of these organizations.

Some fellows and residents express concern about limited career opportunities in their area of clinical specialization, particularly in a Canadian urban environment.

Continuing Education and Other Educational Activities

The Continuing Education Program, lead by Dr. Fay Weisberg and the Faculty Professional Development Committee, chaired by Dr. Jennifer Blake coordinate and facilitate a comprehensive program of educational and development activities. These courses, seminars and retreats serve the department members as well as provide education to professional colleagues in other departments and disciplines. We had a very insightful dialogue with members of these committees.

Strengths:

Hospitals host weekly Grand Rounds, inter-hospital rounds are held by the department once per month and there are many other regular educational and learning events.

Orientation and mentorship of new faculty are strong. All new faculty receive a three year review, when they sit with a committee to discuss accomplishments and expectations.

Faculty development workshops focus on the importance of documentation and development of the faculty member's career portfolio.

Several awards are in place which recognize excellence in teaching and education.

The participation of the faculty and leadership provided by the department executive in global health programs, particularly at Moi university in Kenya.

Weaknesses:

Mentorship depends heavily on the commitment and skills of the individual hospital department chief. It will be vital that the Department Chair, in collaboration with the site chiefs and Head of Faculty Development facilitate role modeling and mentorship for the junior faculty.

Opportunities:

Opportunities for faculty to improve their teaching skills could expand. The Center for Faculty Development supports a comprehensive faculty development program, but faculty report difficulties getting free from clinical commitments to take advantage of these programs. One solution may be to incent participation in faculty development programs by recognizing this as an academic development activity.

The department, like most academic departments, would likely benefit from developing a leadership path for early and mid career faculty members. Leadership development is critical for the future success of the department. Presently, leadership development takes place at the hospital level, some in conjunction with local business schools, but the department could become more active in organizing and coordinating these activities.

Late career faculty performance is also an emerging issue. Currently this is managed at the individual hospital and division level. The mandate of the Faculty Development Committee, currently focused on development of junior faculty, could be extended to end of career mentorship. The Faculty Development Committee could assist hospitals and divisions in career planning for the late career faculty member.

Threats:

The constant clinical volumes, pressures and expectations are a consistent challenge to supporting academic faculty development.

There is a need within a very sub specialized and tertiary care environment to clearly define the role of the academic general obstetrician and gynecologist.

RESEARCH

As eloquently outlined in the 2012 self-study by Vice-Chair Research, Dr. Stephen Lye, and reenforced after meeting with the Research Committee and heads of the research institutes, the Department of Obstetrics and Gynaecology has one of the most comprehensive and integrated programs in North America.

Scope, Quality and Relevance of Clinical and Basic Science Research Activities

Strengths:

A large number of successful and committed basic and clinical scientists working in a rich academic environment supported by the university and its affiliated hospital research institutes.

Development of a Clinician Investigator Program, the recruitment of key scientists and promoting the careers of existing research faculty by the Department Chair and Division Heads.

The recent success of philanthropic initiatives in supporting research programs and positions.

The leadership provided by Dr. Stephen Lye provides major strengths to the department's research mission. The University of Toronto now is positioned to become a leader in translational studies on human development, reproductive and cancer biology at a time when research in many leading ob/gyn programs in North America is struggling.

The subspecialty divisions, particularly the Division of Maternal-Fetal Medicine and the division of reproductive sciences stand out as having significant capacity and productivity in clinical and translational research.

The division of gynecologic oncology had established significant capacity in clinical and surgical innovation research, with an emerging strength in global and health services themes.

Sunnybrook Hospital provides an environment favorable to randomized clinical trials and has demonstrated the power of departments joining forces to develop common research themes.

Development of tissue banks, including a successful placental bio bank.

Considerable strengths in health outcomes research exist in the university, through the Institute of Health Care Policy, Management and Evaluation, the School of Public Health and the Department of Family and Community Medicine.

Genomics and personalized medicine are well developed in the university. Large genomics centers exist in the University of Toronto system, i.e the Sick Kids Genome Center and the Princess Margaret Hospital Cancer Genomics Program. The university also has considerable strength in epigenetics, which will be especially important to human development.

Emerging research programs in a number clinical departments, including obstetrics and gynecology in global health outcomes.

Weaknesses:

As in most academic departments of ob/gyn, clinical faculty are torn between the competing priorities of developing their research careers and building their clinical practices. Dedicated time for research has to be provided for a small cadre of promising young investigators as they start their careers. This is being done well at the resident and fellow level, through the Clinical Investigator Program and other enhanced research training, but the transition to a successful clinician scientist career path remains a gap that is a challenge to address.

A lack of an electronic health record and clinical informatics platform common to all hospital sites is, among other things, holding back clinical research, particularly large clinical trials and research across multiple hospital sites.

Opportunities:

Patient centered outcomes and practice changing research is positioned to grow in the University of Toronto Department of Obstetrics and Gynaecology. University of Toronto affiliated hospitals have large patient volumes, visionary leadership, and great potential for providing financial support to this promising area of research. Moreover, quality and health outcomes research is directly aligned with the hospitals' mission to quality of care and patient safety. The Institute for Health Policy Management and Evaluation could play a significant role.

Research in global health holds great potential. The Departments of Medicine and Ob/Gyn currently focus their global health programs on teaching, clinical care and capacity building, but the establishment of the Institute for Global Health Equity and Innovation provides an enormous opportunity in research.

Further development of the placental bio-bank and other tissue banks across the spectrum of obstetrics and gynecology.

Further develop creative partnerships with the hospital RI`s, particularly in fundraising for research fellowships, term and endowed research chairs.

Threats:

The Department of Obstetrics and Gynaecology at University of Toronto's diverse sources of funding, combined with very successful hospital RI's is a strength but also risks creation of funding silos as institutions attempt to protect their institutional positions.

Are the Research Activities Appropriate for the Residents and Fellows in the Department?

Strengths:

"Boot Camp Research 101" for residents provides them with valuable training in developing research skills.

Residents and fellows are paired with committed faculty mentors who help develop focused questions of interest and assist trainees in connecting with appropriate research supervisors.

The department maintains an open compendium of research opportunities both inside and outside the department.

Three months of research time is allotted over the five years of residency.

Weaknesses:

Ample opportunities to develop research expertise are available for residents, but too frequently the residents cannot find time off from their clinical duties to attend. A national one day course on research is held annually in Toronto, but feedback from the ob/gyn residents is that clinical duties often prevent them from attending.

The lack of a "research friendly" electronic medical record places an increased burden on young investigators who need to complete projects in a very limited time frame.

Opportunities:

The Clinical Investigator Program. Department of Obstetrics and Gynaecology at the University of Toronto is one of the few programs in the country that are taking advantage of this tremendous opportunity.

Patient centered outcomes research and genomics research provide unique opportunities for young investigators and even trainees headed for careers in clinical practice will need to understand these emerging fields which are likely to shape clinical medicine during their lifetimes. Expertise in both these areas should be recruited into the department and imbedded in the curriculum.

Threats:

The rising costs of research, especially those discussed above, i.e. patient centered outcomes research and genomics, coupled with constraints on funding created by the ongoing worldwide recession, challenge resident and fellow research.

The lack of clinician scientists in obstetrics and gynecology, especially those at early and mid career, limits the availability of research mentors and role models.

Have Opportunities for Recruitment of Young Investigators Been Identified?

Strengths:

The Institute of Human Development and the Department's Clinical Investigator Program provide two great differentiators for the University of Toronto's Department of Obstetrics and Gynaecology and position it well to recruit promising young investigators.

The large numbers of foreign trained fellows coming to the department for one to two years of mentored research provides a synergistic research environment that can positively influence those trainees that will be embarking on academic careers in Canada.

Weaknesses:

The transition from mentored research during residency and fellowship to junior faculty posts can be a significant challenge in the current environment of scarce extramural grant funding and pressure for clinical productivity.

The large size and dispersion of expertise across many campuses and hospitals makes it difficult to initiate and sustain important collaborations.

Opportunities:

The department should identify and recruit junior investigators trained and able to lead science in the next generation focused on genomics, human development, population and health care systems research and patient safety and quality.

Threats:

The need to increase clinical productivity and the challenges of securing support for research may continue to drive young ob/gyn's away from careers in translational and clinical research.

Are the Existing Levels of Research Funding and Peer-Reviewed Publications Appropriate?

The numbers speak for themselves. University of Toronto Ob/Gyn leads all other Canadian programs and is among the top performing programs internationally in these metrics.

RELATIONSHIPS

Scope and Nature of Department's Relationship with Cognate Academic Departments in FOM, University of Toronto, Affiliated Hospitals, External Bodies and Other Affiliates.

Valuable input and feedback was provided by the chairs of the University of Toronto cognate academic departments, the leadership of the affiliated hospitals, from personal knowledge and from review of the self-study documents.

A very collegial and positive relationship with the cognate departments and affiliated hospitals.

The Department of Pediatrics and the Division of Maternal-Fetal Medicine have developed very robust clinical and research collaborations.

Medicine and family medicine both see enhanced collaboration around global health capacity building and research and the development of innovative models of care.

The Department of Radiation Oncology and the Division of Gynecologic Oncology have a very positive relationship, particularly in education and clinical care.

Collaborations with family practice and midwifery could meet the perceived need to increase medical student and resident access to low risk obstetrical deliveries.

Considerable strengths exist in women's health in a number of internal medicine subspecialties, including renal, cardiology, general internal medicine and rheumatology.

Great potential exists for ultrasound experts in the department to collaborate with members of the Department of Diagnostic Imaging.

As departments such as Medicine, Pediatrics and Ob/Gyn continue to grow and they continue to follow the decentralized, hospital-based model, the threat that the "center does not hold" becomes greater. A visionary, highly communicative, collaborative chair, such as Dr. Bocking, will be needed to keep this remarkable mix together.

Morale of Faculty, Learners, and Staff

Overall, the morale of faculty, learners and staff is exceptional. Dr. Bocking is widely respected and admired. The accomplishments of the Department of Ob/Gyn provide a great source of pride for all involved. This is clearly a winning organization.

ORGANIZATION AND FINANCIAL STRUCTURE

The current organizational structure and finances of the department were reviewed with the chair and administrative staff and valuable perspective was given on both these topics by these individuals as well as the department executive and other stakeholders.

Is the Organizational Structure of the Department Appropriate and Effective?

The structure of the department has provided a solid framework for department management and leadership. Until recently, the chair was also the clinical department chief at one of the affiliated hospitals. Given the size, scope and diversity of the department, it may not be practical or perceived as ideal to return to the previous model.

Clinical innovation, research, teaching and "new" ideas created by the university's role as the academic "intel chip" is imbedded in multiple hospitals and institutes across Toronto.

Since most of the clinical enterprise is run by hospital departments and their associated faculty practice plans, there is a risk of isolation of the hospital departments and the clinical subspecialties from the academic University of Toronto department and chair.

A Vice-Chair of Quality, Innovation and Patient Safety may facilitate academic development in this important area and increase integration with hospital clinicians and departments where much of this activity currently resides.

Given the always present fiscal constraints and the matrix funding model, much of which is not under the direct influence of the chair, Dr. Bocking and his administrative team have performed an admirable job of creating a sound financial structure for the department.

How Well has the Department Managed Resource Allocation?

A fiscal advisory committee helps to ensure that resource allocation is a fair and inclusive process.

Although a modest resource base is at the discretion of the chair and academic department, management of the financial resources appears to be very fiscally responsible.

AFP dollars provided by government now partially support the academic mission which replaced the previous purely voluntary model.

AFP dollars flow to the hospital, not the university, and thus provide minimal discretionary funding to the chair to pursue his/her department wide vision.

There may be an opportunity to seek support for the chair and her/his academic vision and goals from other sources, i.e. philanthropy.

Success in the current integrated model rests on a delicate balance between hospitals and institutes, which control most of the resources, and university leadership, who have the patience and power of persuasion to sway decisions on allocation of some of these resources.

Resources will need to be identified to support the next chair's compensation.

LONG-RANGE PLANNING CHALLENGES

Vision for the Future of the Department

How Well has the Department Articulated a Long-Range Plan?

The documents provided to us delineate a clear, visionary and very attainable strategic plan to sustain and further develop excellence in the University of Toronto Department of Obstetrics and Gynaecology.

Management, Vision, and Leadership Challenges Confronting the Department in the Next Five Years

Leadership succession provides a significant challenge, but also an opportunity to the department at this time. Through his tenacity, diplomacy and vision Dr. Bocking has created a remarkably successful department, undoubtedly one of the leading academic departments in North America. He has created a winning culture that emphasizes excellence, collaboration, integrity and accomplishment. It will be critical for the next chair to preserve and build on this culture of collaboration and accomplishment. In addition to the necessary academic and clinical credibility (an important factor in ob-gyn), the next chair will require a skill set that includes emotional intelligence, consensus building, diplomacy, ability to deal with ambiguity, personal humility and integrity, approachability, and conflict management. Next to establishing and maintaining trust, the most important trait for the next chair will be the ability to articulate a vision that engages and includes a diverse, complex and multi-sited department. Although Dr. Bocking's resounding success over the past ten years sets the bar high for the next chair, the

academic environment at the University of Toronto will undoubtedly provide the necessary foundation for success.

NATIONAL AND INTERNATIONAL COMPARATORS

Stature of the Department Compared to Others of Similar Size National Universities

The University of Toronto Department of Obstetrics and Gynaecology stands out as the premier academic department in Canada.

Stature of the Department Compared to Others of Similar Size International Universities

The University of Toronto Department of Obstetrics and Gynaecology is part of an elite group of academic departments whose clinicians, researchers, teachers and trainees shape the direction in the field of reproductive, maternal and gynecologic medicine. The University of Toronto Department of Ob/Gyn is in the same league as Harvard, Yale, UCLA, Mayo Clinic, UCSF and Stanford.

Recommendations:

- It is important that the Faculty of medicine, the Extra-departmental units, the CEO's and boards of all the affiliated hospitals and the Research Institutes share a common vision for academic obstetrics and gynecology. Regular dialogue and planning will be critical to success, especially around the recruitment of the next chair and setting the stage for the next 5-10 years.
- Quality, innovation and patient safety could emerge as a "fourth mission" of the department. A Vice-Chair for Quality, Innovation and Safety, potentially funded, in part, by the hospitals, could bring together and develop an emerging area of scholarly work to the hospital-based programs.
- Secure and stable funding for the Clinical Investigator Program with a plan for similar support at the junior faculty level for young clinician investigators.
- Further explore and develop philanthropic opportunities (fellowships, professorships, clinician-scientists), particularly in collaboration with the hospital foundations, the faculty, the alumni and the research Institutes.
- Develop innovative and collaborative models of inter-professional education and clinical care, particularly in maternal and women's health.
- The Department Leadership should pay particular attention to engaging the subspecialty divisions, especially gynecologic oncology and reproductive medicine, in the fabric of the department education, research and faculty development programs. There is a significant risk that these divisions may become isolated from the parent Obstetrics and Gynaecology Department if there isn't continued strong "federal leadership".

- There is an opportunity to completely align the department global health programs with the "boundless campaign" and the vision of the faculty and university.
- The success of the Faculty Development program and the mentorship advisory committee should be built upon and enhanced to include formal leadership development for those individuals who have the potential and desire for a leadership career path.
- It would be ideal for the Department Chair to have an increased influence on the hospital AFP's and practice plans in so far as to enhance the tangible financial support for the academic mission and vision of the department.
- Integration of the clinician-teachers across all campuses will be a cornerstone to ensure the foundation for excellence in medical student and resident education.
- Much energy will need to be devoted to ensuring standardization of the undergraduate and residency training experience and education at all the affiliated sites.
- The selection of the undergraduate program director will be crucial to the future success of the undergraduate obstetrics and gynecology program.
- The undergraduate and postgraduate training committees could explore further opportunities to more fully integrate obstetrical and surgical simulation into the educational curriculum.
- The core education programs: undergraduate, residency and fellowship likely require 3 FTE's to adequately support the large volume of administrative activity required.
- Fellows and residents should clearly understand and have access to research support including assistance with project proposals, protocol development, ethics board preparation, statistical and epidemiologic support.

In conclusion, the Department of Obstetrics and Gynaecology, under the leadership of Dr. Alan Bocking and his executive committee can be very proud, and should be congratulated on their many accomplishments in education, research and innovative clinical care over the last 10 years. The future is bright for the department; it is well positioned to continue to be a leader in academic ob/gyn and to leverage the many opportunities that are available at the University of Toronto. It was a privilege to perform the review and to interact with so many talented and committed professionals in the Department of Obstetrics and Gynaecology.

Respectfully submitted,

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