# REPORT OF THE ADVISORY GROUP TO THE DEAN OF THE FACULTY OF DENTISTRY UNIVERSITY OF TORONTO

# **RE-ENVISIONING DENTAL EDUCATION AT THE UNIVERSITY OF TORONTO**

**TO**: Daniel Haas, Professor and Dean, Faculty of Dentistry

**FROM**: Richard Valachovic, President Emeritus, American Dental Education Association

Sally Garner, Senior Strategist, Operational Initiatives, University of Toronto

**CC:** Mary Choi, Assistant Dean, Administration, Faculty of Dentistry

**DATE**: May 7, 2021

We have been tasked to consider how the delivery of the Faculty of Dentistry's education programs could be re-envisioned to accomplish financial sustainability, while still achieving its core missions of research, education, and patient care.

# **BACKGROUND STATEMENT TO THE ADVISORY GROUP**

"The vision of the Faculty of Dentistry is to improve health by advancing dentistry through inspired leadership, innovation and excellence in education, research, and practice. As it carries out its mission towards this vision, it has experienced a long history of financial challenges. Although several measures have been instituted to mitigate these challenges, their continued presence raises the question of long-term financial stability."

# TERMS OF REFERENCE: AREAS OF REVIEW WITH SPECIFIC QUESTIONS TO CONSIDER

- 1. Graduate specialty programs.
  - What changes can be considered to improve the financial model?
  - Should the Faculty continue with all 10 programs?
- 2. Undergraduate programs (DDS, IDAPP).
  - What changes can be considered to reduce the costs of carrying out these programs?
  - What is the appropriate balance of appointed faculty vs clinical instructors?
- 3. Clinical education.
  - What changes in clinical operations can be considered to reduce its costs?
- 4. Intramural practice.
  - Is it in the Faculty's interests to develop this?
- 5. New programs.
  - For example, should an AEGD be implemented?

# RESOURCE MATERIALS AVAILABLE TO THE ADVISORY GROUP

- ABR Faculty of Dentistry 2021-22
- ABR Divisional Statistics 2021-22
- Strategic Plan 2014-19
- Strategic Plan Update 2019-22
- Dean's Annual Report 2018-19, 2019-20
- Faculty of Dentistry 2016-2017 External Review
- February 26, 2017 Dean's letter to Vice-Provost "re: response to external review"
- Clinic Revenues and Expenditures by Clinic and Fiscal Year (Direct Costs) 2019-2020
- Faculty of Dentistry 2020-2021 Revenue Budget
- Report of the 2018 Review Team for Clinical Operations at the Faculty of Dentistry
- 2018 Report on Clinic Organization Structure at the Faculty of Dentistry
- Job descriptions
  - o Director of Clinical Affairs (academic administrator position)
  - Director of Clinic Operations and Administration (PM position-100%)

#### INDIVIDUALS INTERVIEWED FOR THIS REPORT

# Faculty of Dentistry

- Mary Choi (Assistant Dean, Administration)
- Selina Esteves (Director of Advancement)
- Bernhard Ganss (Vice-Dean, Research)
- Daniel Haas (Dean)
- Anil Kishen (Graduate Coordinator)
- Jim Lai (Vice-Dean, Education)
- Ernest Lam (Associate Dean, Graduate Education)
- James Posluns (Director of Clinical Affairs)
- Laura Tam (Associate Dean, Undergraduate Education)

# **University Administration**

- Alex Beduz (Director, Engagement & Strategic Initiatives, Government Relations Office)
- Jeff Lennon (Director, Academic Planning & Analysis)
- Scott Mabury (Vice-President, Operations and Real Estate Partnerships & Vice-Provost, Academic Operations)
- Trevor Rodgers (Assistant Vice President, Planning and Budget)
- Mike Snowdon (Manager, Academic Planning & Analysis)

#### **INTRODUCTION**

We enter into this review of the Faculty of Dentistry with an appreciation for two compelling issues that challenge the Faculty's ability to respond to the financial exigencies that it currently faces.

# Impact of the COVID-19 Pandemic on the Faculty of Dentistry

The COVID-19 pandemic has created challenges for all educators, but particularly those that require in-person simulation and clinical interactions such as in dental education. This fact is even more complicated for the Faculty of Dentistry given the severe restrictions placed on the Faculty by Public Health Ontario and other governmental agencies. The loss of revenue to the Faculty during this pandemic from traditional revenue sources has been substantial, including clinical operations, continuing education courses, development opportunities, among others. At the same time, most of the predominate expenses continue during this period. The situation remains as this report is being written and will continue to exacerbate the challenging financial situation at the Faculty.

The impact of the pandemic on the ability of the Faculty to pursue its missions of teaching, research and patient care will likely extend for several months, but it is expected that most of these challenges will be mitigated within the next year, and the Faculty needs to be prepared for an accelerated renewal when that occurs.

#### Previous Initiatives by the Faculty of Dentistry to Address Financial Sustainability

This is not the first time that the Faculty has addressed compelling financial issues and several actions have already been undertaken over the past decade to improve the situation. We have reviewed several reports from external consultants and annual budget reviews that helped us appreciate the ways in which the Faculty has responded to these challenges in the past five to seven years. These include such initiatives as increasing the undergraduate class size, enhancing the recruitment of international students with premium tuition payments, improvements in clinical operations, information technology and quality assessment, expansion of facilities and others.

Despite that, there are certain realities that the Faculty will continue to face and for which there is no quick remedy. Hardly any dental schools in North America are confronted with these restrictions on their ability to add revenue streams to support their academic and clinical activities. These realities for the Faculty of Dentistry include: the likelihood of a continuing freeze on tuition and fees, or at best modest increases; no opportunity to add separate student fees to recover the costs of added technologies and other equipment; deferred capital expenditures required to maintain a contemporary operation; among others.

# A PROPOSED FRAMEWORK FOR RE-ENVISIONING DENTAL EDUCATION AT THE UNIVERSITY OF TORONTO FACULTY OF DENTISTRY

We have been asked to re-envision the delivery of the Faculty's education programs to accomplish financial sustainability while achieving its core missions of research, education, and patient care.

Our review has provided an opportunity for us to identity a framework with three conceptual components to re-envisage dental education at the University of Toronto. This new framework could result in increased revenue, an improved financial bottom line, an improved clinical experience for students, and enhanced reputation for the Faculty of Dentistry.

# 1. Implement a Patient-Centered Model of Clinical Dental Education

The Faculty of Dentistry is an academic health care institution that provides high quality patient care in an environment in which teaching and research occur with a focus on the student experience. This is a traditional student-centered model in an academic setting that prioritizes education and research while providing patient care to support its mission. An alternative to this approach is the patient-centered model for clinical dental education, in which patient care becomes the primary focus of the institution, and clinical teaching and research occur in support of that approach. This new model would require a significant rethinking and retooling of the current system at the Faculty of Dentistry. It would provide for ensuring that the patient experience is like that of the private practice of dentistry. Patients would be admitted to the Faculty of Dentistry and obtain a diagnosis, problem list and tentative treatment plan from experienced faculty in relatively short order. They would then be triaged into the various clinical operations of the Faculty using a team of trained patient navigators. Certain procedures may be completed by undergraduate students, others by graduate students, and others by faculty members. The ability of patients to pay for their dental care would be a consideration in their assignment to providers. Certain patients may present with conditions that are valuable for student learning and could be identified as "teaching cases" and be provided with additional discounts to charges for their care.

There are several significant advantages to a patient-centered model of clinical education. It can provide for an enhanced patient experience and a higher level of quality of care. It can result in improved efficiencies of the clinical operations of the institution with an improved financial bottom line. It can provide for improvements in student learning and satisfaction. Success in private practice for Faculty of Dentistry graduates also depends on this approach (Ref 1). Many other academic dental institutions throughout North America and the rest of the world have successfully moved to this new approach to clinical dental education (Ref 2). We believe that it should be considered by the Faculty of Dentistry as well.

# 2. Promote the Faculty of Dentistry as a "Front Porch" of the University of Toronto

The Faculty of Dentistry is a unit of what many people regard as the one of the most prestigious universities in Canada and internationally. The Faculty represents the University in many respected ways, yet it has not fully promoted its value to the University in the ways that many other North American academic dental institutions have been able to do. The Faculty of Dentistry received the prestigious 2021 ADEA Gies Award for Achievement by an Academic Institution. The Faculty provides thousands of patient visits for a patient population that includes many individuals from communities with challenges to access to care, with developmental and other disabilities, and with complex dental conditions that are difficult to treat in a private practice environment. Dental care is delivered by undergraduate and graduate students in a variety of community settings outside of the clinical operations of the Faculty. There are few other units of the University that have this opportunity to have such a large volume of direct contact with the residents of the GTA and beyond, and that can serve as a "front porch" of the University in this way. Many other academic dental institutions throughout North America and the rest of the world have adopted this approach. The Faculty of Dentistry needs to enhance its external focus in significant ways. We believe that the enhanced exposure of the Faculty of Dentistry can lead to an appreciation of the value of the Faculty to the University, to governmental policy makers, to alumni, dental corporations, friends of the Faculty, and perhaps most importantly, to the general public as well.

# 3. Expand the Recognition of the Faculty of Dentistry as a Safety Net Provider

There are few health care facilities in the GTA that provide dental care to patients with access to care challenges due to the cost of the care or the accessibility of obtaining the care. The Faculty of Dentistry is uniquely positioned to be recognized as a safety net provider to these individuals, especially at this moment in time as we emerge from the pandemic, which has only made the inequities in access to dental care even more challenging. The fees charged to patients cared for by the Faculty in the teaching clinics range on average from 40-75% of fees charged by local dentists. For some patients treated at the Faculty with unique clinical presentations, those fees may be reduced even more. Dentistry has long suffered from common perceptions related to pain and infection, and the hesitancy of individuals to seek dental care for fear of the dentist. The number one reason for not seeking dental care is that dental care is too expensive. The next highest reason is not being able to find a dentist with available appointments in their local area. Oral health is not just about being out of pain. Inflammatory responses from odontogenic sources spread throughout the body in the same way as any other source. The mouth is the entry to the gastrointestinal tract and the ability to chew properly is required to prepare food for digestion. A smile is needed to be able to speak effectively, to be considered for most jobs, and to engage with others socially. Recognizing the Faculty of Dentistry as a safety net provider could provide new opportunities for it to highlight the role that it plays in enhancing the oral health of vulnerable populations. Highlighting the role that the Faculty of Dentistry plays in providing dental care for underserved populations in the GTA could provide opportunities for additional university, governmental, and other sources of funding to support the clinical operations of the Faculty.

#### RESPONDING TO THE TERMS OF REFERENCE

We enjoyed the full cooperation of all the representatives of the Faculty of Dentistry and University administrators that we asked to interview during our review. We were provided with the data and information that we requested and access to the individuals that we needed to interview in preparation for this report.

# 1. Graduate specialty programs

We were asked to identify changes that could be considered to improve the financial model and if the Faculty should continue with all ten programs.

# Specific observations regarding graduate specialty programs.

- The Faculty of Dentistry is the only one of the ten faculties of dentistry in Canada with all ten specialties recognized in Ontario.
- The graduate specialty programs are unique among dental schools in Canada in requiring qualifying for a research-focused M.Sc. degree (research-based thesis or coursework with a research practicum) in addition to qualification for a certificate in the specialty.
- This requirement of a research-focused M.Sc. degree for all graduate students at the Faculty of Dentistry has had mixed reviews. There are some students for whom this is valuable and should continue to be made available. Some researchers and administrators at the Faculty of Dentistry questioned its continued requirement for all graduate students.
- The graduate specialty programs are complimentary in their scopes of practice and there is substantial collaboration between them in patient care and research interests.
- There is a demonstrated need for succession planning for faculty in most of the specialties to fill academic and other positions in the near- and long-term future.
- There is not a significant difference in the levels of total revenues and expenses as well as revenue to expense ratios to isolate one or more graduate specialty programs as a burdensome outlier.
- Graduate specialty program directors do not have a full appreciation of their revenues and expenses and the budgetary impact of their purchasing or human resources decisions.
- There was general agreement among those at the Faculty of Dentistry that attention should be paid to the processing of invoicing patients for the procedures that are completed.

There was general agreement among those at the Faculty of Dentistry that the
fees charged for at least some procedures in the current discounted graduate
specialty fee schedule may be substantially lower than what could be charged for
services provided in the graduate specialty programs, especially those related to
dental implants.

# Recommendations

- Move to a patient-centered model of dental education in the graduate specialty programs. These programs should be integrated into the continuum of patient care throughout the clinical services of the Faculty of Dentistry that focuses primarily on the quality of the care provided and not on the academic needs of the graduate specialty students.
- Investigate ways in which the graduate specialty students can become more involved in activities that relate to the "front porch of the university" concept.
- Hold the graduate specialty program directors accountable for their budgetary decisions related to revenue enhancement and expense reduction. Provide adequate data and information to these newly recognized "budget owners" for them to contribute to the financial sustainability of the institution.
- Discounted fee schedules for dental procedures provided by graduate specialty students should be reviewed in detail in comparison to usual and customary dental fees in the GTA, with particular emphasis on procedures related to the placement, restoration, and maintenance of dental implants.
- Reconsider the requirement that all graduate specialty students pursue a
  research-focused M.Sc. degree in addition to qualification for a certificate. This
  option should continue to be available to all graduate specialty students.
  Alternatives include a M.Sc. degree obtained through coursework alone or
  allowing some graduate students to complete a certificate only program. It is
  understood that there are financial implications to this recommendation that
  need to be addressed.
- Tie academic credit for the completion of dental procedures by graduate specialty students to documentation of invoicing patients for the dental procedures that were performed.
- Do not eliminate or change the size of any of the graduate specialty programs at this time. The issues related to their continuation are not simply financial. These graduate programs are truly global resources for the future of leadership in their specialties.

# 2. Undergraduate Programs (DDS, IDAPP)

We were asked to consider changes to reduce the costs of carrying out these programs, and to consider the appropriate balance of appointed faculty vs clinical instructors.

# Specific observations regarding the undergraduate programs.

- The delivery of patient care in the undergraduate clinic is perceived by many as being fragmented and inefficient in many ways. This is especially true related to the admission of the patient at the first visit and the subsequent early visits to determine an overall diagnosis, problem list, preliminary treatment plan and an estimation of treatment costs.
- Patients appear to be evaluated in many situations based on their specific needs that meet academic requirements (i.e., "this is a crown and bridge patient") as opposed to being evaluated based on their overall oral health and consideration of their comprehensive needs.
- There was concern expressed that there is not a system in place to ensure that patients are navigated through the undergraduate clinic to complete their care in a comprehensive and timely basis. The high rate of "did not keep" appointments in the undergraduate clinic that some noted may be related to this situation.
- Staffing of the clinics does not appear to be adequate or balanced to support the efficiency of the clinical operation that could substantially enhance revenues.
- Scheduling of patients for their appointments seems to be somewhat haphazard and responsibility appears to be on the student to arrange for patient visits.
- The clinical operation does not appear to have a focus on maximizing the capacity of the facilities available for patient care. There is substantial variability in the skills and speed of different students, but all of them seem to be in a lockstep approach that limits the opportunity for students who can excel and see more patients to do so. It was noted that the ways in which clinical competency is evaluated provides incentives for fourth year students who have demonstrated competency to refrain from further patient care.
- It was difficult to provide evidence that patients are being appropriately invoiced for the procedures that are completed, and that providing academic credit to the dental student for procedures completed is not tied to submitting invoices for the associated procedure.
- There was general agreement among those at the Faculty of Dentistry that the
  fees charged for at least some procedures in the current discounted
  undergraduate fee schedule may be substantially lower than what could be
  charged for services that are provided.
- There are a limited number of slots committed to international dental students who pay a premium tuition that is higher than that charged to Canadian students.

- There is a mix of appointed faculty and clinical instructors that relies heavily on the contributions of the clinical instructors. These instructors are mostly volunteer or minimally compensated local dentists whose primary loyalty may not be to the Faculty of Dentistry. It was noted that this has an impact on the continuity of care as one supervising dentist is not working with a dental student and a patient through the completion of a course of treatment, exacerbating the existing inefficiencies in utilizing the full capacity of the clinics.
- It was noted that various clinical instructors have different approaches to the ways
  in which dental procedures are performed and may change the treatment plan
  midway through a course of treatment to accommodate their specific approach
  to a procedure.

# Recommendations.

- Move to a patient-centered model of dental education in the undergraduate program. These programs should be integrated into the continuum of patient care throughout the clinical services of the Faculty of Dentistry that focuses primarily on the quality of the care provided and not on the academic needs of the of the undergraduate students.
- Investigate ways in which the undergraduate students can become more involved in activities that relate to the "front porch of the university" concept.
- Discounted fee schedules for dental procedures provided by undergraduate students should be reviewed in detail in comparison to usual and customary dental fees in the GTA.
- Conduct a comprehensive review of the ratio of appointed faculty and clinical instructors to ramp up the number of appointed faculty. The clinical instructors provide a valued contribution to the teaching program by bringing a real-world approach to the delivery of patient care but may not have the needs of the Faculty as their primary concern.
- Ensure the commitment of clinical instructors to a schedule of attendance over the academic year prior to reappointment.
- Develop a rigorous program of standardization and calibration for all appointed faculty and clinical instructors to ensure the continuity of teaching and patient care that is independent of the whims of individual practitioners.
- Increase the number of slots allocated to international students without increasing overall class size to realize additional revenue from the premium tuition paid by international students.

#### 3. Clinical education

We were asked to consider changes in clinical operations to reduce its costs.

# Specific observations regarding clinical education.

- We have previously identified the essentials of cost-reducing actions in the previous sections of this report.
- The key element of cost reduction will be through the recruitment of a professional director of clinical operations and administration with experience in health care who can lead the implementation of the new patient-centered model of education in the clinical settings. A job description has been posted.
- Most of the clinical education of undergraduate and graduate students occurs
  within the facilities in the "footprint" of the Faculty. There are a variety of
  additional community placements for clinical education throughout the GTA,
  Ontario and beyond. This would provide additional support for the front porch
  and safety net opportunities that we have previously addressed.

#### Recommendations.

- The role that the new director of clinical operations and administration will play in the implementation of the patient-centered approach outlined in our report will be key to its success. We would like to emphasize the importance of finding the right person to lead this initiative.
- Increase the amount of clinical education that occurs in community placements.

# 4. Intramural Faculty Practice

We were asked to consider if it is in the Faculty of Dentistry's best interests to develop an Intramural Faculty Practice.

# Specific observations regarding intramural practice.

- Intramural faculty practices are highly regarded components of most academic dental institutions throughout North America.
- These practices provide multiple opportunities for faculty:
  - o to provide clinical care to patients within the institution;
  - o to maintain their clinical skills and improve their clinical teaching;
  - o to establish credibility within the institution as a clinical scholar;
  - to be part of the continuum of care in a patient-based model of education;
  - o to supplement their compensation from the institution;
  - o to contribute to the financial sustainability of institution.

- The stellar reputation of the faculty and researchers, the best-in-class level of advanced technology, and central location of the University of Toronto Faculty of Dentistry are highly regarded in Ontario and Canada, and indeed throughout the rest of the world. The Faculty of Dentistry received the prestigious 2021 ADEA Gies Award for Achievement by an Academic Institution. The Faculty of Dentistry does indeed enjoy remarkable "brand recognition". With the appropriate marketing, referral patterns could be established to have new and existing dental patients treated within an intramural faculty practice.
- There are a variety of legal and financial structures for these practice plans:
  - o some are a legal component of the parent university;
  - o some are a component of a separate university foundation;
  - o some are components of a university-affiliated hospital or ambulatory care center.
- These practice plans also have varying levels of eligibility for faculty to work in the intramural practice. All of them to our knowledge require an appointment at some level in the Faculty of Dentistry.
  - o some limit eligibility to appointed faculty with teaching responsibilities;
  - o some limit eligibility to appointed faculty and clinical instructors with teaching responsibilities;
  - some provide opportunities for the recruitment of dentists who do have limited teaching responsibilities and are primarily providers of dental care within the intramural practice.
- There is an appointed faculty member at the Faculty of Dentistry who currently maintains a private practice within the institution and has been successful for the Faculty.
- We understand that, in the past, there may have been some differing interpretations by the University regarding the regulations permitting an intramural faculty practice within the Faculty of Dentistry. We have received reassurances from the University's central administration that there is enthusiastic support for the consideration of such a practice at the Faculty of Dentistry.

#### Recommendation.

- Proceed with the development of an intramural faculty practice plan.
- Identify the existence of faculty practice plans within the other Canadian faculties
  of dentistry. Interview the directors of any of these plans about their successes
  and challenges.
- The University of Missouri at Kansas City has a successful intramural faculty practice in a public institution with an extensive document defining its structure, rules and regulations (Ref 3).

# 5. New Programs

We were asked to recommend if any new programs should be considered such as an AEGD program.

# Specific observations regarding new programs.

- There is currently no Advanced Education in General Dentistry (AEGD) program.
- AEGD gives opportunity for fifth year of education for those graduates who may wish to further their general dental education in the structured setting of a faculty of dentistry.
- An AEGD program could be a significant contributor to the Increased revenue without substantial increase in expense.
- There are currently 83 twelve-month AEGD programs (Ref 4) accredited by the Commission on Dental Accreditation in the United States, but there are no AEGD programs recognized by the Commission on Dental Accreditation of Canada.
- Most of the clinical care provided by the Faculty of Dentistry occurs within the
  facilities of the Faculty of Dentistry at 124 Edward St. Space is already tight and
  consideration of expansion of clinical activity would likely require additional
  clinical space. We learned that there may be opportunities to develop new dental
  clinical facilities on real estate that was recently acquired by the University.

# Recommendations.

- Start an Advanced Education in General Dentistry (AEGD) program that could enhance the proposed patient-centered approach to the mission of the Faculty of Dentistry and potentially be a net contributor to the bottom line of its finances.
- Contact a group of directors of established AEGD programs for further information and best practices.
- No other new academic programs should be considered at this time.
- Consider real estate options in the local area to provide new dental clinical facilities in more efficient settings for patients.
- Increase externship sites within and outside of the GTA (including places like the
  facilities associated with the medical school in Thunder Bay) to give all students
  other types of experiences and be perceived more fully as safety net provider for
  Ontario.

#### OTHER OBSERVATIONS AND RECOMMENDATIONS

- The alumni and development office has been successful in many ways, especially in establishing relationships with the alumni for potential contributions and in a sophisticated biannual magazine that highlights the successes of the Faculty of Dentistry. But much of this activity could be expanded in its scope. In order to promote the Faculty of Dentistry as a "Front Porch of the University", these communications could be used effectively in such a campaign.
- We also learned that support from the Division of University Advancement for the Faculty of Dentistry's development unit has at times been somewhat limited while the Faculty supports central advancement financially. We learned that recent support from central advancement for a development opportunity has been helpful and appreciated.
- The continuing education programs at the Faculty of Dentistry have been highly successful
  academically, financially, and reputationally. Most of these programs are delivered in
  person by the nature of their content. The COVID-19 pandemic has had a significant
  impact on the delivery of these programs, but they are likely to start again after it is
  deemed safe to do so.

# <u>Recommendations</u>

- Consider enhancing the staffing and remit of the alumni and development office to enhance its ability to interact with alumni, corporations, and friends to increase the financial contributions from these sources.
- Continue to develop the relationship with the advancement office in central administration to provide additional support to the Faculty of Dentistry's alumni and development functions.
- Prepare for a resurgence in continuing education courses at the end of the safety precautions, especially those courses related to dental practice in a post-COVID world (e.g., enhanced PPE, teledentistry, practice management, dental treatment of patients with long-haul COVID-related symptoms, emerging technologies).

#### REFERENCES

- 1. Lee H, Chalmers NI et al. Person-centered model in dentistry. BMC Oral Health. 2018. https://bmcoralhealth.biomedcentral.com/articles/10.1186/s12903-018-0661-9
- 2. Park SE and Howell TH. Implementation of a patient-centered approach to clinical dental education: a five-year reflection. J Dent Ed. 79:523-529. 2015. https://pubmed.ncbi.nlm.nih.gov/25941145/
- 3. UMKC Dental Faculty Practice Plan. https://www.umsystem.edu/ums/rules/collected\_rules/medical/ch460
- 4. Commission on Dental Accreditation. Search Engine. AEGD Programs.

  https://www.ada.org/en/coda/find-a-program/search-dentalprograms#t=us&sort=%40codastatecitysort%20ascending&f:@codatypesubl\_coveofacet
  s\_0=[Advanced%20Dental%20Education%20Programs]&f:@programnamesubl\_coveofacets\_1=[Advanced%20Education%20in%20General%20Dentistry%2012%20Months