

REPORT

External Review

of The University of British Columbia Faculty of Medicine

November 4-6, 2019

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Introduction:

The reviewers would like to thank all those who met with us including learners, staff, and academic administrators within the Faculty of Medicine including Dean Dermot Kelleher. We would also like to thank the Regional Health Authority senior leadership, representatives from the provincial government and senior university administrators, as well as Dr. Andrew Szeri, Provost and Vice President (VP) Academic and Dr. Santo J. Ono, the President and Vice-Chancellor. Special thanks to Dr. Carolyn Gotay who organized our three days of interviews and ensured a smooth running of the review. Many thanks as well to Kate Carr and Darcie Prosser who provided administrative support during our visit.

The focus of the external review was to assess the current functioning of the Faculty of Medicine and provide strategic recommendations which will move the Faculty of Medicine at the University of British Columbia (UBC) forward in the next five to ten years. Specific areas we were asked to address were: education with particular attention to the learning environment; research including the new Academy of Translational Medicine; governance models within the Faculty of Medicine and with key partners such as the regional health authorities and other academic institutions within the province of British Columbia (BC).

Education:

The external review team was impressed by the significant impact the Faculty of Medicine (FoM) has made on meeting the social accountability mandate, particularly for the undergraduate medical education (UGME) program. The School has also been focusing on four areas of diversity: Indigenous students; students from low socioeconomic families; racialized minorities; and people with disabilities.

There are plans for expansion of other health professional programs (physiotherapy, occupational therapy, and midwifery) to distributed sites across the province to leverage the expertise of the distributed education program. In addition, there is a plan for 32 students in the UGME program to be placed in the Fraser region and for collaborative team-based model of care to be piloted. The undergraduate medical education (UGME) program has produced physicians who are practicing and meeting the needs of the rural and remote communities in BC along with the Vancouver Fraser area. Support for teaching excellence was viewed as increased and that there was an acknowledgement of it at the promotions table.

UGME has recently underwent a very successful accreditation with a few areas which require monitoring. The Program has just completed the implementation of a new curriculum which has been very well received across the entire community. The UGME program is now focused on addressing social accountability. The UGME program has also been working to address the small number of unmatched medical students with a detailed and effective program. We learned that in the distributed education sites, career counselling sessions are proactively made with students by Student Affairs, whereas in the Vancouver Fraser Medical Program, students are advised of the career and elective advising clinic dates (several are available) and they are asked to make the appointments themselves. We met with learners who were very positive about the program and the excellent teaching, faculty and resources. They had some concerns including that although the one in 4 ratio for on call shifts is met, they often have to do one in 2, or one in 3 call shifts for concentrated periods of time. The learners indicated that they have difficulty accessing food after hours. The UGME learners who are placed in distributed sites have to spend the initial four months in Vancouver and sometimes find it difficult to find accommodation in Vancouver.

The other health professional graduate programs in the FoM have significant strengths with respect to delivering high quality education. However, they believed that due to their size and resources compared to the UGME program, it is very challenging for them to complete accreditation, admission, and evaluation activities. Nonetheless, all of them are fully accredited. Some programs have been able to tap into evaluation resources from the FoM. Midwifery is a new profession in BC and is developing its own infrastructure within the Department of Family Medicine. They provide their own continuing professional development (CPD) and have an international bridging program. In the future, midwifery would like to have its own school. Virtually all the graduates of the Midwifery (and international bridging program) have remained in BC to practice with up to 10% of them locating to rural areas. Audiology has also been providing more training in northern communities and would also like to expand their programs into the north and is starting a summer program which they extend to international students. The leaders of the health professions programs were open to the idea that given the size of their respective programs, that some activities (including, for example, accreditation and admissions), might more efficiently be addressed by a centralized office or resource.

The leaders of the health professional programs were unanimous that they had a seat at the leadership tables and that their voices were heard. They believed that the position of the Associate Dean, Health Professions was an extremely helpful role, and they would like this to continue to be strengthened. This Associate Dean works on policies and ensures lack of duplication across programs. The expansion of the other health professions to the distributed sites will require leadership at each site. There has been a proposal that the Regional Associate Deans' would provide a facilitative and oversight function for the other health professions, but there is concern that they do not have the capacity to add more responsibilities to their already busy portfolios. There is also concern that the expansion of the health professional schools will not receive adequate funding to deliver education at the various sites.

The postgraduate medical education (PGME) program has 370 year-one entry-level positions with 288 being reserved for Canadian graduates. As of the 2019/2020 academic year, they have approximately 24 Visa Trainees. About 55 percent of the UG students from UBC continue in residency programs in BC. This program works closely with the government to look at human resource planning using data generated by the government. They indicated they were the only jurisdiction in Canada that received extra funding to be able to implement competency-based medical education (CBME) in the specialties. They implemented CBME in family medicine programs several years ago. The PGME accreditation visit is scheduled for March 2020. The residents spoke about the excellence of the programs, the vast array of clinical settings and distributed sites. They did however perceive that they are not given enough opportunities to teach UGME students. Similar to the UG students, residents also had concerns about the lack of availability of food services in the evening while they are on call. They also believed that the faculty members are not aware of the resident contract with respect to hours worked. A main issue for PGME is supporting faculty in the distributed sites so they understand CBME.

The CPD office provides continuing medical education and faculty development for health professionals including medicine, physical therapy, occupational therapy, and midwifery. They have a large department of 45 staff and provide a vast array of faculty development offerings including small group, face-to-face, workshops, skills-based, blended learning, online learning, and conferences. They have an excellent faculty development program for distributed faculty. They are largely a cost recovery unit but the Dean's Office does provide some support, and some events they run for departments generate modest surpluses which are held by the departments. . They work closely with information technology specialists to increase the online course offerings. They are looking at other revenue

generating opportunities, including the e-learning space. The CPD office's role relating to the Practice Ready Assessment (PRA-BC) program is to provide a 10-day orientation program for candidates. UBC CPD coordinates and delivers a comprehensive orientation program designed to aid PRA-BC candidates in transitioning to life and practice in rural B.C. Additionally, UBC CPD provides a training and development program for the BC-licensed family physicians who will evaluate PRA-BC candidates during their three-month clinical field assessment period. PRA physicians come from various countries from around the world such as Nigeria, Libya, Egypt, Pakistan and South Africa and are Family Physicians who upon graduation from the program practice in rural BC communities on return of service contracts.

With respect to graduate student education, there were several significant areas of concern: the overall health and wellness of graduate students; the need to evolve the curriculum; more inclusion of graduate students in the larger FoM; financial support; and advocacy for graduate students. A survey of all research graduate students was conducted, and graduate wellness was identified as a significant area of concern. There is no standardized, effective way to provide mental health and wellness support for graduate students. The Associate Dean, Graduate Studies has worked with the graduate students to develop a proposal that has been submitted for funding to obtain wellness support resources. Graduate students who are on campus have more resources, whereas off campus they may only have access to a counsellor one day per week. Those off site also felt they did not have access to recreational facilities and wondered if the university could work with organizations in the community to subsidize membership at such facilities. The graduate students off campus also do not have access to learning rooms or libraries, particularly after hours.

The graduate students had the perception that they pay tuition fees, but they do not see the benefits. They do not feel integrated into the larger FoM, as there are few opportunities to interact. They would welcome town halls to be able to understand what is happening in the medical school and to have an opportunity to voice their concerns. The curriculum needs to evolve so there is less redundancy and that there is a "hub and spoke" model, whereby there are common foundational courses in research methodologies across graduate programs. Although the students receive a lot of information about career opportunities, they believed that they were not made aware of opportunities to obtain faculty appointments. Some graduate students also indicated there was a lack of research space.

Another area of concern is graduate student funding which is variable across units with some MSc students fully funded while others are minimally funded. Also, the minimum stipend for PhD graduate students appears to be very modest (approx. \$18,000), particularly given the cost of living in Vancouver and in comparison to benchmarked institutions. Low remuneration very likely limits the diversity of the students and recruitment. Other UBC faculties may waive tuition fees which would be beneficial for the FoM graduate students. The graduate students believed the FoM needed to better advocate for them, for example: obtaining more scholarships, awards and bursaries. There should be more communication between the FoM and the Office of Graduate and Postdoctoral fellows.

The distributed education programs are well established and provide equitable education to undergraduate medical learners, postgraduate learners and a few graduate students. The sites appear to be well run by the Regional Assistant Deans (RADs) who see their primary mandate as undergraduate medical education, but they also facilitate postgraduate education, graduate education and research. The RADs who are affiliated with other universities in BC also hold leadership roles in these other universities which they see as very positive. Attention needs to be given to the capacity of the RADs to oversee the development and delivery of other health professional programs.

The School of Population and Public Health offers Master of Public Health (MPH) and Master of Health Administration (MHA) programs that are different from research based graduate programs. The panel supports the School's proposal to explore accreditation. The School does provide a large amount of teaching in the foundational research training for graduate students across the FoM. However, faculty members and students do not feel well represented in the current FoM structure.

The learning environment is the focus of a great deal of attention across the Faculty, particularly learner mistreatment. The Dean has established a 'Dean's Task Force on Respectful Environments', led by the Executive Vice Dean. The Task Force is developing an overarching roadmap with emphasis being placed on prevention rather than reaction. Faculty issues relating to Professionalism were part of the portfolio of the Executive Associate Dean, Clinical Partnerships and Professionalism until June 2019; this position also had responsibility for Equity, Diversity and Inclusion (EDI). In June 2019, Partnerships was transferred to the Vice Dean Health Engagement portfolio and EDI transferred to the Executive Vice Dean portfolio. The Faculty now has a dedicated Professionalism Office led by the interim Senior Advisor to the Dean, Professionalism; permanent leadership of the Office is presently being confirmed. The Office provides education, addresses complaints, works with department/unit heads on how to deal with situations in this area, and assists individuals in finding appropriate resources. The goal is ultimately to change culture. Currently, they have instituted anonymous reporting. Ensuring a safe, respectful learning environment is the responsibility of everyone. One of the limitations on dealing with learner mistreatment by faculty is that professionalism issues are isolated from promotion. There is also a lack of dialogue between academic and clinical leaders about mistreatment. It was reported that tenured faculty members are seen as immune from the consequences of unprofessional behaviour.

Recommendations:

- Continue to advance distributed education in health professions in addition to medicine. Extra funding will be necessary.
- The FoM should better communicate their effectiveness and unparalleled success of its education programs, including distributed medical education, on providing health care for people and communities in BC.
- The FoM needs to provide more evidence of its impact on health outcomes in BC.
- For UGME and PGME learners, the faculty and staff need to be aware of and adhere to the call expectations.
- For learner mistreatment, key performance indicators need to be established, monitored, and reported on a regular basis.
- For PGME, faculty development is needed in the distributed sites with respect to CBME.
- The health professional programs may benefit from shared support for admissions processes, student affairs and accreditation.
- For graduate students, resources are needed within the FoM and across the university to improve wellness and focus on mental health.
- Off-campus graduate students require more specific attention to ensure their experience is equivalent to that on campus.
- The University needs to address low stipends for graduate students.

Faculty Issues:

There has been a reduction in the number of full-time research faculty, primarily PhD faculty or MD/PhD faculty, over the past ten years. Given the FoM's financial difficulties, new full-time faculty positions were not funded. In response to the decreasing Faculty numbers, the Provost has flowed an additional \$8 million for 36 new hires to the FoM, of which all positions have already been allocated and 11 filled. There has been a transparent, fair and equitable process to decide on new faculty hires. The health professional schools and other units within the FoM believe they have been actively involved in the process, and this has been positive for them. There appears to be an emphasis on hiring early career faculty, which might be to the detriment of recruiting and retaining non-tenure track mid-career faculty members with proven track records. To continue to enhance research excellence and productivity, it is estimated that the FoM needs a minimum of 100 additional new positions.

There are multiple categories of faculty member appointment including: grant-tenured, partner- and clinician scientist faculty. This results in a multi-tiered system which would benefit from simplification. Many of these faculty members feel undervalued and are at risk of leaving the University; a loss of significant talent which will have a negative effect on the research output and educational activity of the Faculty. In the current model, base funding for clinician scientists, critical to translational medicine, is also perilous in some cases, specifically those who are grant tenured. The reviewers were advised that the Vice Dean, Health Engagement and Executive Director Faculty Affairs have been charged to develop a proposal regarding funding for clinician scientists drawing on models that have been shown to be effective in other jurisdictions.

There are close to 10,000 clinical faculty distributed across the province, and they are critical to educating physicians and other health professionals for the province of BC. The remuneration for the clinical faculty teaching in the MD programs has not increased in 10 years, despite multiple increased demands on their time. This has resulted in difficulties recruiting and retaining faculty to teach FoM learners. The majority of clinical faculty are on fee-for-service and often have limited space to host learners. In the past, some physician groups were on Clinical Academic Service Contracts (CASCs), but few of those remain – most clinical contracts have limited protected time for academic activities. . Some of the physicians who do in-class and small group teaching can bill the faculty \$90 per hour, but clinical teaching is done without additional remuneration when clinical contracts incorporate protected time. There was unanimous agreement that there needed to be some remuneration and protected time for clinical faculty. Clinical faculty members who would like to be involved in research are eligible to apply for and hold grants; they are also eligible to supervise graduate students but must get approval from the Faculty of Graduate Studies. Nonetheless, some clinical faculty members reported not being approved as either principal investigators on grant or as primary supervisors for graduate students and lack of clarity about the processes and different practices in specific units.

Recommendations:

- The FoM requires a minimum of 100 additional new positions, with a balance between early- and mid-career faculty members.
- There needs to be a review and streamlining of career tracks.
- It will be important to develop a robust health professional human resource plan with health authority partners and government which provides funding and protected time for clinician scientists.

- The FoM, working along with the Provost's office, needs to develop a plan to determine how many grant-tenured faculty should be converted to full time tenure track faculty, positions based on merit and performance.
- The category of Partners should be discontinued.
- The clinical faculty category should be reviewed, with the goal of implementing best practice from other jurisdictions.

Research:

The FoM has a long tradition of research excellence. Through their strategic planning process, they have created a more focused research approach and environment which identifies five research priorities in which they will excel including: cancer, brain and mental health, heart and lung health, population health, and chronic disease. The three themes underpinning the research priorities are: life sciences; life course and aging; and prevention and complex disease management. There are a number of innovative faculty who have translated their work; for example, into patents and spin off companies. The FoM is embarking on the development of an Academy of Translational Medicine which is in the early stages of development. This initiative will require that Team Science is rewarded and recognized. The Faculty of Medicine has 20 centers and 4 institutes. The establishment of these centers and institutes has facilitated collaborations between the Regional Health Authorities, their foundations and the FoM. The FoM also has a strong MD/PhD program admitting 3-5 students per year. Growing this program to 10 students per year would be desirable to continue to build capacity for clinician scientists, but additional stipend support would be required.

Concerns were raised about the lack of space for researchers and graduate students, and its fair allocation. Start-up funds are challenging to obtain and require creative ways to obtain funds such as endowments, hospital foundations, and department funds if possible. There was a perception that there was no consistent approach for distribution of funding to pass from the University to the FoM, and then to the Departments/Units. The matter of indirect funds or lack of them, was noted on several occasions. The process for allocating indirect funds and overheads from UBC appears opaque and may differ for hospital-based laboratories.

Recommendations:

- Team science needs to be recognized and rewarded.
- The Academy of Translational Medicine requires intensive planning and development including a Good Manufacturing Process (GMP) facility located in Vancouver.
- The University should address the lack of clarity of distribution of indirect costs and overheads to various units and centres which support FoM researchers.
- A robust and transparent research space planning and allocation process is required.

Governance and Relationships:

The FoM is a complex environment with multiple distributed campuses, relationships with Regional Health Authorities (RHAs) and Provincial Health Authorities, other faculties at UBC, other academic institutions notably University of Northern BC (UNBC), and the University of Victoria (UVic), the provincial government primarily with the Ministry of Health (MoH) and the Ministry of Advanced Education, Skills and Training (MAEST). To govern numerous professional schools and programs

(medicine, physiotherapy, occupational therapy, speech and language/audiology, population and public health, medical genetics, biomedical engineering, and midwifery) the Faculty requires an extensive governance structure. New senior leadership positions were created by the current Dean -- including the Executive Vice Dean and the Vice Dean Health Engagement, as additions to the existing Executive Associate Deans for Clinical Partnerships and Professionalism (until June 2019), Education and Research. Although the senior leadership team is collegial and works collaboratively together to move the strategic plan of the FoM forward, there is often confusion about people's roles and responsibilities. There was a perception that it was hard to get things done as people did not know who to contact in the Dean's Office; and that the system was overly bureaucratic, hard to navigate, and took an extraordinarily long response time. However, some believed that the new human resource platform was a good step forward in streamlining hiring. The development of the strategic plan was seen as an important collaborative process and that having the strategic plan has been helpful for departments to be able to prioritize their activities and move the departments forward.

The FoM has strong relationships with most faculties across campus. Faculty in several of the other clinical faculties hold joint appointments with the FoM as well as research collaborations, with faculty members in the Schools of Nursing and Kinesiology (particularly with the Department of Family Medicine). The other deans were complimentary about the commitment and collegiality of the Dean.

Deans were unanimous in their support for the newly-created innovative School of Biomedical Engineering, which is a collaboration between the Faculty of Applied Science and the FoM. This School uses a unique funding and governance model, with parts of the unit being managed through faculties of Applied Science and Medicine. The Sauder School of Business has been partnering with the Health Authorities to offer a physician leadership program and they are developing an accelerator. A member of the Sauder School of Business has been engaged in the planning of the Academy of Translational medicine. The Sauder School of Business would like to do more with the FoM in the areas of innovation and entrepreneurship. The Faculty of Science interacts with the FoM in two interdisciplinary graduate programs: bioinformatics and genomic medicine, as well as in the Michael Smith Laboratories and Life Science Institutes. The faculty members in the Department of Biochemistry and Molecular Biology and Cellular and Physiological Sciences do a lot of teaching in the Faculty of Science, but they perceive they do not get recognition or much remuneration in the FoM for their teaching in science.

In the past year, the Dean has assumed the role of Vice President Health for UBC. In this role, he reports directly to the President and Vice Chancellor Dr. Santa Ono. The Vice President Health is responsible for the coordination of health education and research provincially for UBC. There are three main priorities for the Vice President Health: education (collaborative health education, collaborative team-based care (i.e., TBC at UBC); research (interdisciplinary research clusters); and external relationships with RHAs and appropriate ministries). An Associate Vice President Health has just been hired. The Vice President Health office is currently in the processing of hiring directors for the three priority areas. It also plans to pilot some collaborative health education initiatives in the Fraser Region. The faculties were in support of the newly-created position of Vice President Health with much support for Dean Kelleher and his approach, despite some individuals remarking that philosophically they did not believe this role needed to be held by the Dean of Medicine.

The FoM had significant past financial issues which have improved under the current Dean. He has implemented a number of changes and has decentralized the funding to departments. Department heads now have control over the budget, but the operating budget they receive is based on a historical budget allocation model which should be revisited. Several of the units are in deficit and need to look at

creative ways to increase their funding. Some departments are running summer programs for international students. Other clinical divisions are tithing their members. Others look for funding for endowments or reach out to the various hospital foundations for funding. There appeared to be no consistency in strategies to increase revenues across departments.

Several department heads expressed concern over long delays in hiring. It appears that searches for department heads are usually internal because these departments lack funds required for external searches. The leadership model for departments varies across departments; for example, some department heads are academic department heads as well as having leadership roles within hospitals, while others are solely academic department heads. Some department heads felt they had good access to the Dean, while others indicated that the Dean is not visible enough. The department heads were unanimous that there needs to be UBC representation on hospital boards, as this is currently lacking.

Currently, the academic health care “system” is fragmented. To develop seamless academic integration across the BC health system, the proposed model of an Academic Health Sciences Center (AHSC) affiliated with an Academic Health Sciences Network (AHSN) should be pursued. The AHSC would be based in Vancouver and would include UBC, Vancouver Coastal Health, Providence Health Care and the Provincial Health Services Authority (PHSA). Although attempts have been made to develop a strong governance structure for an AHSC, this has not been accomplished. The governance structure needs to address both academic issues and clinical service delivery. This is a top priority.

Recommendations:

- Greater visibility of the Dean is needed, with better communication across the FoM.
- The complexity and apparent bureaucracy of the Dean’s office needs to be simplified.
- The Dean should have a board seat on the Vancouver-based health authorities, particularly PHSA, and should be included in the selection for future CEOs of these organizations.
- UBC representation is needed at multiple levels of the regional health authorities (i.e., standing board committees and task groups).

Equity, Diversity and Inclusion:

Despite efforts to hire early career faculty to address gender imbalance, considerable gender disparity remains. There are few women and individuals from other underrepresented groups in senior leadership roles in the Faculty, particularly at the Department Head level. In recognition of this issue, the FoM has recently created a new position of Assistant Dean, Equity, Diversity and Inclusion. The Assistant Dean’s office will develop a strategy to address equity, diversity and inclusion (EDI) for all learners, faculty and staff. This initiative has been appropriately stimulated and informed by the Canadian Dimensions program (Canada’s version of the United Kingdom’s (UK) Athena Swan) and the tri-council research funding agencies’ demand for EDI in research chairs.

Making advances in this area will require baseline data, monitoring and regular reports in addition, to the plan to address EDI. A robust leadership program and succession plan will be important for academic leadership. The FoM appears to be behind other faculties on the UBC campus in addressing equity and diversity issues. The FoM will benefit by drawing on the expertise and resources of the UBC Office of Equity and Inclusion.

There has been considerable work done on addressing EDI in the admissions process for undergraduate medical education and the health professions schools. For the 2019/2020 academic year, intake for Indigenous students is 4.5 percent of the entering class. The admissions program aims to deepen and extend the pipeline programs, particularly in the North, for the various identified groups including low socioeconomic students. One notable example is the plan to offer pipeline programs in elementary school where the FoM can expose students to medicine and other health professions. The faculty also is working to remove barriers for people with disabilities.

Recommendations:

- A specific strategy needs to be developed for EDI which may include mentorship, leadership development, and succession planning for academic administrative roles.
- A positive EDI culture needs to be owned by learners, staff and faculty members across the FOM.
- Data, measurement and metrics are essential and require regular monitoring.
- Specific attention to the needs of the Indigenous population is essential, including following the recommendations of the Truth and Reconciliation Commission.
- Despite clear progress in recruiting Indigenous students to the MD program, these efforts must be enhanced and extended across all educational programs and all underrepresented groups. Appropriate support must be provided for these learners throughout their education.

Concluding comments:

The UBC Faculty of Medicine is an impressive enterprise with clear evidence from students, faculty, and staff, of immense pride across the community for the outstanding work that it does. It is obvious that members are glad to be there and a part of Faculty. The success of the province-wide distributed program is among the best examples worldwide. The Faculty continues to be a research powerhouse, among the very best in Canada, and recognized internationally. The leadership of the Dean is broadly recognized and valued. The success of the new strategic plan and faculty renewal under his leadership are transforming the Faculty and will move it to an even higher international standing. The partnerships with other faculties and with the regional health authorities are strong and will only be enhanced with the newly established Vice President Health role. The Faculty should rightly communicate more broadly its exceptional achievements and its remarkable impact on the health to the people of BC.