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Medical schools don't change; people do Les facultés de médecine ne changent pas; les gens le font

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In my first graduate course on organizational behavior, my professor told us that, "Change management is people management." This aphorism stuck with me through our examination of Taylorism, Theory X/Theory Y, and all the way through transformational leadership because it consistently held true.

Change is described and studied in every academic discipline because it is both constant and hard. While the same can be said for change management in health professions education, change in this sector is distinctive because the system is vastly more complex than in other industries. Systems theory demonstrates that the whole is greater than the parts. In medical education, the parts are mostly people: learners, academic physicians, community physicians, basic scientists, instructional designers, a variety of practitioners and researchers, educational administrators, hospital administrators, accreditors, public health officials, legislators, and most importantly, patients. That's a lot of change to manage. As Schmidt et al. describe in this issue, change happens to both people and organizations in interdependent stages.¹ That's a lot of complex change to manage.

We say that "we can't manage what we can't measure." And multi-domain measurements are more accurate than single domain change studies because they provide a more robust picture of educational change. Baig et al. developed an instrument to measure the variables affecting medical curriculum integration, individual instructors' integration behaviors, and the current curriculum integration level as defined by Harden's Integration Ladder.² The Concern-Based Adoption Model (CBAM) by Hord and Hall is another model to measure educational change across multiple domains.³ At the Medical College of Georgia, we are using the three diagnostic instruments of CBAM to measure longitudinal personal perceptions of change (Stages of Concern Questionnaire), individual change behaviors (Levels of Use Interviews), and organizational outcomes (an Innovation Configuration Map) during the design and implementation of a new curriculum. It is coincidental but certainly prudent that both Baig et al.³ and our team at MCG are measuring two people-oriented domains and one organizational domain. Institutional outcomes are the objective, but change is a verb, and people make it happen.

The other contributions in this issue illustrate that successful change isn't just performed by people; people themselves must change as well. Change management isn't just about ensuring that the people involved understand the objectives and the process. Diffusion of Innovation theory (Rogers)⁴ established that people must individually evaluate and accept a change. Michaud-Létourneau et al. identified that communication, structure, and knowledge are all required to transmit and facilitate the objectives of a curricular change.⁵ Price et al. point out that faculty developers should link the teaching development of faculty who will support curricular change to the Prochaska stage of change where each faculty currently resides: an approach focused on people.⁶

Both Lee et al.⁷ and Li et al.^{8,9} posit that a further step of embedding change into the system may be possible by equipping the upcoming generation of medical education leaders and change-makers with knowledge of the system itself or with leadership development through instruction on change management. The conclusion we can draw from these contributions is this: we need to pay more attention to change in medical education, which means paying more attention to people.

In addition to our special issue contributions, this issue also includes our regular medical education articles. You'll notice we've *changed* Major Contributions to Original Research to better reflect the intent of those articles.

Original Research

It's a 'two-way street': resident perspectives of effective coaching relationships in the clinical learning environment by Jessica Trier et al.¹⁰ explored residents' perceptions of teacher-resident coaching relationships. The results showed that residents felt effective coaching occurred when the relationships were safe, meaningful, and collaborative. The authors concluded that effective coaching needed to be reciprocal and bidirectional.

<u>COVID as a catalyst: medical student perspectives on</u> <u>professional identity formation during the COVID-19</u> <u>pandemic</u> by Williams-Yuen and team¹¹ explored the impact of COVID-19 disruptions on medical students and their physician identity. They studied student personal identity formation after the sudden halt of clinical experiences. They uncovered several themes, such as reevaluating the student-as-contributor role when students could not participate clinically.

Validity as a social imperative: users' and leaders' perceptions by Mélanie Marceau and team¹² explored the concept of validity as a social imperative in health professions education in Canada. Their interviews found that the participants perceived the concept as acceptable. While recognizing some challenges in putting the concept to practice, such as cost, time, and effort, validity as a social imperative may represent how health professions education is adapting to respond to the complexity of assessments.

Brief Reports

Internal medicine residents' and program directors' perception of virtual interviews during COVID-19: a national survey by Nicole Relke and co-authors¹³ studied the experiences of residents, program directors, and interviewers during virtual match interviews. Their study showed that due to reduced cost, stress, pandemic infection risk, and environmental impact from virtual interviews, most residents and program directors/interviewers would prefer to continue with virtual medicine subspecialty match interviews in the future.

Black Ice

Four ways to get a grip on making robust decisions from workplace-based assessments by Wilkinson¹⁴ outlined a system-based approach to making high-stakes decisions from in-course workplace-based. His approach addressed the "failure to fail" problem through a conditional pass that allowed assessors to communicate uncertainty and identify students who were not yet ready to progress.

Alexandra Ansell wrote <u>Five ways to get a grip on the need</u> to include clinical placements in Indigenous settings¹⁵ to advocate for these placements in Indigenous settings, so medical students understand and are prepared to provide culturally safe healthcare to meet the needs of Indigenous peoples. Ansell added that clinical placements in Indigenous settings might also increase the recruitment of healthcare professionals in rural and remote settings by increasing comfort and familiarity.

Canadiana

Lauren Capozzi and team wrote, <u>Physical activity RX:</u> <u>development and implementation of physical activity</u> <u>counselling and prescription learning objectives for</u> <u>Canadian medical school curriculum</u>.¹⁶ They discussed the physician's role in prescribing and promoting physical activity to improve the overall health of Canadians. They noted that inadequate training prevented physicians from promoting physical activity. Therefore, they outlined learning objectives, such as physical activity guidelines for the general population, as a starting point for including physical activity counselling in medical curricula across Canada.

Providing optimal care for active youth in Canada by Laura Purcell et al.¹⁷ commented on the need for increased sport and exercise medicine (SEM) training and clinical exposure in Canadian pediatric residency programs. They noted that a national sports and exercise medicine curriculum would ensure community pediatricians can care for sports-related injuries to youth and adolescents.

You Should Try This

<u>Use of wearable point-of-view live streaming technology</u> <u>for virtual physical exam skills training</u> by Teitelbaum et al.¹⁸ created a first-person point-of-view virtual teaching tool using a chest-mounted smartphone. The students reported increased confidence and overall session satisfaction compared to students in a group with a fixedcamera third-person perspective. Longitudinal advocacy training for medical students: a virtual workshop series by Hardy, Boulos, and team¹⁹ presented the Longitudinal Advocacy Training Series (LATS) to address the gap in the health advocacy curricula across Canada. It is the first-ever Canadian program designed by students for students. The authors reported a high participation rate (9.7% of enrolled Canadian medical students) and high participation satisfaction (87.6% of participants).

Kis, Endres, et al. wrote <u>"Teddy Bear Hospital Project"</u> <u>school visits improve pre-clerkship students' comfort</u> <u>explaining medical concepts to children</u>.²⁰ They used the Teddy Bear Hospital Project to assess whether using teddy bears to model healthcare visits to children would increase pre-clerkship medical students' comfort in communicating medical concepts to children. Their results showed a statistically significant increase in comfort in sharing medical topics with young children.

Commentary and Opinions

Balancing service and education for the medical trainee: how can we do better? by Luckshi Rajendran²¹ argued for integrating service obligations and clinical learning in medical education. Rajendran commented on the need to include "service" activities such as administrative paperwork and scheduling as part of the education process rather than a distraction from it.

A new revolution in clinical education: is it time to move on from Oslerian bedside teaching? by Ting et al.²² discussed the use of technology-assisted learning and global health. They challenged using strictly conventional methods in favour of a more balanced combination of both conventional and technology-assisted learning.

Kim and Kirpalani wrote the commentary, <u>The Model</u> <u>Minority Myth: a threat to Asian Canadians in higher</u> <u>education</u>.²³ They described the deep-rooted history of Anti-Asian discrimination and stereotypes in Canada. They reflected on the implications for the Asian Canadian community and the impact this has on learners in medical education.

Letters to the Editor

Re: A chance for reform: the environmental impact of travel for general surgery residency interviews²⁴ by Mohmand and Prucnal was a letter building on Fung et al.'s article²⁵ that highlighted the need to reconsider the necessity of returning to in-person interviews following the lifting of COVID-19 travel restrictions. Mohmand and Prucnal noted the environmental impact of CaRMS tours

and called for further study of the benefits of virtual interviews.

Images

<u>Fractals</u> by Tashya Orasi and team²⁶ used mixed mediums, colours, and composition to create fractals—shapes that reflect some part of the whole. They used these fractals as a metaphor for the complex health care systems. Their art draws on research supported by the *Social Sciences and Humanities Research Council* and the *New Frontiers in Research Fund*.

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