Medical Education in the United States and Canada, 2020

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Abstract

For the third time this century, the Association of American Medical Colleges has coordinated a collection of reports from their member medical schools that collectively reflect the state of medical education in the United States and Canada. This introduction to the September 2020 supplement to Academic Medicine provides an overview of the collection, with 145 out of 171 eligible medical schools participating in the project. The authors observe trends and similarities across the reports from participating schools, structuring the introduction to mirror the main questions posed to the schools: highlights of each school’s medical education program, curriculum description, curricular governance, education staff, faculty development and support in medical education, regional medical campuses, and initiatives in progress. Key findings from the authors include expansion of student enrichment tracks, early clinical encounters, focus on wellness, expansion in competency-based medical education, and continued evolution of approaches to assessment. The authors note that this supplement was produced before COVID-19, and although it robustly chronicles the prepandemic state of medical education, medical education has already evolved and will continue to do so. This view offers important opportunities to observe and study changes in the curricula.

In September 2000 and again in September 2010, a supplement to Academic Medicine was published presenting snapshots of medical education. The supplements served as 2 brief windows into undergraduate medical education (UME) at the turn of the century and a decade later, highlighting the wide variety of models of medical education in the United States and Canada. As Anderson and Kanter1 put it in their introduction to the 2010 supplement, “refute the claim that little has changed since the initial reforms that followed the publication of the Flexner Report.” We present here a new supplement with the same goal, offering a third brief window into UME, yet highlighting a vastly different landscape for new and existing medical schools alike encountering and reacting to the challenges and opportunities of the last decade. With the support of the AAMC and Dr. Laura Roberts, the editor-in-chief of Academic Medicine, we offer this glimpse into the complex and evolving world of medical education in 2020. Even as we write this introduction, reflecting on submissions that all arrived before the COVID-19 pandemic, UME is rapidly changing again, reminding all of us that education does not hold still long enough to neatly capture its complexities. We hope this glimpse of what has been will offer important lessons to our readers, especially compared with the previous editions of this project. As the pandemic will surely leave its mark on UME, we hope to note in future works the effects of COVID-19 on how we teach and how we learn.

The snapshots contained in this supplement present the story of medical schools in their own words, highlighting that which they deem most important to share with readers in the limited space of approximately 2,000 words and with limited writing time to prepare. Institutions present highlights of their medical education programs, curricular and assessment changes since 2010, descriptions of the structure supporting their educational programs, and their regional campuses, when appropriate. In 2010, 128 schools participated in the supplement, and this year, with a proliferation of new schools, we are pleased to share 145 snapshots, a wonderful representation of the 171 accredited medical schools at the time.

Overview of the School Reports

Highlights of each school’s medical education program

We asked authors to make decisions about inclusion based on what they feel is most important to share with a broad audience of readers. Schools have responded with a wide variety of curriculum-, student-, and faculty-related points. Many schools share descriptions of student enrichment tracks in the form of global programs, PhD studies, and service learning projects. Mentoring is also a widely shared focus, often in longitudinal models and sometimes in learning communities or house systems. Many schools describe their commitment to their states or local communities.
through mission-aligned admissions projects and socially accountable service programs. Integrated curricula are regularly mentioned. Less common but still mentioned in several instances is the intent to serve underserved or rural communities.

Curriculum description

Readers will note that authors have chosen to share details of their curricula in a variety of formats, including detailed charts, narrative descriptions, and bulleted lists. While the diversity of curricular models is apparent, there are several notable ways in which many or even most schools describe their curricula, pedagogical models, and assessment frameworks.

- **Earlier clinical encounters:** Schools describe a move toward shorter preclinical time incorporating more integrated basic science and clinical content. Students often experience clinical encounters early or even much earlier in their medical school education.

- **New content areas focusing on professionalism, preparedness, and wellness:** Schools describe new content areas focused on social and behavioral health, wellness, professional identity formation, population health, exam preparation, and preparation for residency.

- **Continued expansion of competency-based medical education:** Schools describe their learning objectives in 1 of 3 frameworks: the Accreditation Council for Graduate Medical Education core competencies, the CanMEDS framework, or the Physician Competency Reference Set framework.

- **Altered assessment landscape:** Assessment has changed in format and often in assessor, with schools incorporating peer assessors and other members of the health care team. Schools describe more opportunities for students to be assessed in low-stakes formative assessment models as well as high-stakes summative models. Schools also describe competency-based assessment models that are criterion referenced.

A common challenge expressed by schools focuses on the dispersion of learning to many clinical sites and the difficulty of assessing the quality of learning in a wide variety of sites by faculty. Some schools also share the challenge of finding faculty with the time and experience necessary to teach students in an increasingly competitive environment for clinical learning sites.

Curricular governance

As expected, most, if not all, schools describe a centralized shared curricular governance model providing consistent oversight of education, although curriculum committees or councils are often composed of a different set of faculty members with different roles on the committees. While at times this centralized structure includes representation from graduate medical education, the committees are always structured in such a way as to support the design and implementation of the undergraduate medical curriculum. Typically, basic sciences and clinical sciences are handled by different subcommittees, and other subcommittees may address assessment or other priorities of importance to the institution. The curriculum committee is always ultimately responsible for the educational program at all educational sites, although what is supported on regional campuses and what is supported on the main campus vary significantly from school to school. We strongly recommend reviewing the curricular governance figures, when provided, for a richer understanding of the variety of models displayed.

Education staff

At times organized as an office and at times structured as a department, the education staff of schools typically are responsible for all aspects of the educational program from medical school entry to graduation, including curricular oversight, student assessment, and program evaluation. The offices consist of a mix of staff and administrative faculty who often have departmental affiliations elsewhere in the medical school as well. Some schools incorporate into their office or department of medical education all aspects of student support, such as admissions, student affairs, registration/records, and advising; other schools incorporate faculty development and faculty affairs under the umbrella of the office or department of medical education. Also included in some but not all schools are technical support services such as the information technology staff who support curriculum, registration, assessment, and advising. A few schools include the grants office, library, diversity and inclusion office, combined degree programs, and medical education research. The leaders of these organizational units have a variety of titles, but they are typically vice deans or senior associate deans.

Faculty development and support in education

Faculty development takes many forms, although most schools report both face-to-face and virtual learning opportunities for a variety of teachers including faculty and others. Schools with regional campuses often have regionally hosted programs or traveling programs to support distant teachers. Some schools describe learning academies to support their educators, as well as lunch and learns, journal clubs, medical education fellowships, and certificate programs. Topics tend to be focused on education such as teaching, mentoring, curriculum, assessment, and question writing for assessments; however, other areas are often described as well, such as leadership and diversity and inclusion, including bias training. For schools choosing to describe their promotion and tenure process, teaching evaluations are almost always included in promotion and tenure portfolios along with data about clinical and administrative service and research.

Regional medical campuses

Schools report a number of models of distributed medical education, including many multicampus schools encompassing from 1 to as many as 15 regional medical campuses (RMCs). The schools offer descriptions of their campuses and, sometimes, the reasons for their model, which often is focused on service to the state’s medically underserved areas. RMCs might offer anywhere from just 1 year of education up to the full 4 years, with many schools’ RMC models consisting of 2 years of basic sciences and introduction to clinical medicine at the main campus followed by up to 2 years of clinical education at an RMC. Ensuring consistency between main campus and RMC educational programs is a challenge for each school, but they turn to data-driven methods to provide evidence of their effective models. Ultimately, the
schools describe communication between leadership, faculty, and students at all of the institutions’ educational sites as the key to success for RMCs.

Initiatives in progress
When introducing the suggested format to school authors, we received feedback that many schools would like to include some new initiatives currently ramping up but not fully implemented yet. Schools have been enthusiastic about describing their new initiatives. Some interesting examples involve artificial intelligence and big data. Many schools describe wellness initiatives, sometimes for students and sometimes for the entire medical school. Other schools share plans to implement some model of competency-based medical education including entrustable professional activities frameworks. A few schools describe transition to residency support in the form of data handovers after match and residency preparation boot camps.

Conclusion
While much remains the same as in previous years, these school reports depict clear trends including almost ubiquitous curricular renewal and redesign descriptions, challenges with finding adequate clinical teaching faculty, and recognition of the educational service of faculty in promotion and tenure. At the same time, the medical schools in this supplement describe with clarity and purpose diverse programs with an array of missions focusing at times on clinical excellence, community service, diversifying the composition of physicians, or scholarly pursuit. As Anderson and Kanter described in 2010, the stories of the schools in this supplement about their continued efforts to improve their educational programs are testaments to the faculty, administrators, residents, and students of all of the medical schools in the United States and Canada. We think Abraham Flexner would have been pleased, perhaps even amazed, at the substantive changes that have occurred not only in the past 100 years, but in the past decade.

At the dawn of a new decade, we anticipate that this supplement will serve as a reminder of the time before the COVID-19 pandemic, which is testing every aspect of medicine and medical education in the United States and Canada and, quite frankly, around the globe. Throughout the last months, we have experienced the commitment of countless educational leaders dedicated to their patients, students, faculties, and communities in an inspiring show of unity in the face of uncertainty. It is truly a privilege to present their work to you, as we remember what was and look forward to what will be.

Thank You!
We offer our most sincere thanks to all the authors who described their educational programs with clarity and enthusiasm. The deadlines were short, and they managed to submit their work on time.

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Reference

