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Accelerated Graduation and the Deployment of New Physicians During the COVID-19 Pandemic

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Abstract

The COVID-19 pandemic has presented unprecedented challenges and opportunities for medical schools in the United States. In this Invited Commentary, the authors describe a unique collaboration between the University of Massachusetts Medical School (UMMS), the only public medical school in the state; the University of Massachusetts Memorial Medical Center (UMMMC); and the Commonwealth of Massachusetts. Through this partnership, UMMS was able to graduate fourth-year medical students 2 months early and deploy them to UMMC to care for patients and alleviate workforce shortages during the COVID-19 surge, which peaked in Massachusetts in April 2020. The authors describe how they determined if students had fulfilled graduation requirements to graduate early, what commencement and the accompanying awards ceremony looked like this year as virtual events, the special emergency 90-day limited license these new graduates were given to practice at UMMC during this time, and the impact these new physicians had in the hospital allowing residents and attendings to be redeployed to care for COVID-19 patients.

As the number of COVID-19 cases increased in Massachusetts in March 2020, the administration and faculty of the University of Massachusetts Medical School (UMMS) prepared a plan to enact social distancing and require that all students transition to distance learning, beginning on March 12, for all academic classes and school-related events. Effective March 16, all non-essential personnel, including faculty and staff, were encouraged to work from home where possible. This transition to distance learning necessitated a rapid adaptation of the methods used to deliver the curriculum for each of the 4 years of medical school (see Table 1). Implementation of the curriculum in this new format was divided into 2 phases, with the first 3 weeks serving as a transition period that led into the weeks that followed. Unique aspects of this plan included the graduation of fourth-year students 2 months earlier than previously scheduled and the delivery of a pandemic curriculum to third-year students during a transition back to clinical clerkships. In this Invited Commentary, we discuss the early graduation of fourth-year students and their deployment to the workforce to help alleviate shortages due to the COVID-19 pandemic.

Early Graduation and Deployment of the Class of 2020

For our fourth-year medical students, the Match Day celebration was conducted virtually on March 20, using social media. Massachusetts Governor Charles Baker subsequently closed all non-essential businesses on March 23. Then on March 25, the Massachusetts Secretary of Health and Human Services, Marylou Sudders, in concert with the Massachusetts Board of Registration in Medicine, met with the deans of the medical schools in the state to discuss a plan to issue emergency 90-day limited licenses to physicians who graduated early from medical school. In past years, UMMS has formally offered an early graduation date of March 31 for those students who desire it, but few take advantage of the opportunity, as most students choose the more

traditional graduation date of the first Sunday after Memorial Day. Upon notification from the state that early graduates could be granted a provisional license, academic leaders at UMMS developed a process to determine whether fourth-year students met graduation requirements and qualified for early graduation.

Fulfillment of final graduation requirements

To prepare for a potential early graduation, a review board was convened; it was composed of curriculum committee and subcommittee leadership, the associate dean of undergraduate medical education, and the senior associate dean. This review board was charged with assessing whether students had adequately met the program requirements and competencies necessary for completion of the MD degree. In keeping with the standards set by the Liaison Committee on Medical Education, which mandate that each student meet competency standards to the extent that the profession and public expect of a physician,¹ the review board thoroughly and holistically examined each student's fourth-year experiences. The group worked under the premise that their holistic review of students' experiences would ensure each individual student's readiness for graduation by taking into account the entirety of the student's work and performance. Students' experiences, including subinternships, electives, and other school-specific requirements, were reviewed for completion of the learning objectives. The review board also considered whether students who met the learning objectives across the year should be considered as having met the overall program objectives (see Table 2). For example, the advanced biomedical translational science course is a short (1 week) selective topics seminar-style course, allowing students to explore topics of interest with no unique curricular content or competency profile, and the review board concluded it was not necessary for students to fulfill the objectives of this course to meet the overall program objectives.

Extra deliberation was given to students who had yet to fulfill requirements. The review board considered these students' experiences in the context of what UMMS and the clinical system were able to provide during the early days of the pandemic, when the school and health system faced much upheaval. For example, faculty were unable to deliver the patient care experience required in the emergency medicine clerkship rotation beginning in mid-March, and therefore, after holistic review and assessment of the competence of individual students, the review board deemed that competency was met without the additional weeks of instruction that these students missed.

Following their determination, the review board deemed that all 135 students met the program objectives to earn an MD degree, and the board submitted this proposal to the curriculum committee, which has oversight over graduation requirements.

Certification of fulfillment of graduation requirements

The UMMS Educational Policy Committee met on March 30 and determined that all 135 students in the Class of 2020, who were scheduled for graduation on May 31, had completed the requirements for the MD degree, and the committee recommended to the dean that all students graduate on March 31.

The graduation ceremony was conducted virtually on March 31. Students were asked to respect the principles of social distancing and remain at home for their individual celebrations, donning their white coats, rather than traditional commencement regalia, as a symbol of their transition to the medical profession. The awards ceremony, usually held the Friday before commencement Sunday, preceded the virtual commencement ceremony, with a stepwise reveal of the award winners on our student affairs Instagram handle (@umassmedmatch). Faculty and friends prerecorded congratulatory messages for the award winners that were also shared.

At the conclusion of the awards ceremony, the commencement festivities began, mimicking as much as possible the order and traditions that the school holds dear, including introductory remarks by the chancellor; congratulatory speeches by Governor Baker, the chair of the Board of Trustees of the University of Massachusetts, and the president of the University of Massachusetts; and a reflection by the dean of the School of Medicine, all via remote videoconferencing. The class speaker shared his thoughts and reflections, and each student's name was read in full, allowing family and friends the joy of hearing the name of their loved one read aloud, preceded by "Doctor" for the first time.

This year, the graduating class was asked to create their own oath for recitation at commencement, the first time this was done. The Class of 2020 was able to complete their oath in time for inclusion in the virtual ceremony. The writing group that organized the effort led their classmates in a virtual reading of the oath. While not a traditional venue or medium for a graduation ceremony, commencement was not lacking in emotion or celebration; it provided a unique opportunity for reflection on a journey completed and one about to begin.

Deployment of limited-licensed physicians as surge contractors

In concert with our clinical partner, the University of Massachusetts Memorial Medical Center (UMMMC), UMMS created a new position for early graduates, as limited-licensed physicians called surge contractors. These graduates would be granted emergency 90-day licenses. All 135 early graduates were eligible, on a purely voluntary basis, to become contract employees of UMMMC, paid at our current postgraduate year (PGY)-1 salary level. The duration of their service would not count for credit towards meeting Accreditation Council for Graduate Medical Education requirements nor toward board eligibility, but early graduates would otherwise

function like PGY-1 residents with provisions for direct attending physician supervision appropriate to their level of training and experience.

A total of 68 UMMS graduates volunteered for this service, and 57 began practice as physicians on April 8. These new physicians matched into residency programs across the country in diverse specialties, including internal medicine, orthopedics, family medicine, surgery, obstetrics/gynecology, and many others. Of the 57 graduates who began work as physicians in early April, a total of 20 will remain in Massachusetts for residency. For these physicians, their emergency license will automatically switch from UMMMC to the Massachusetts residency program to which they matched to prevent a delay in licensure or residency start date.

On completion of orientation, early graduates were assigned to work on medicine ward teams and in intensive care units at UMMMC, backfilling for residents who were redeployed to essential COVID-19 units and a local field hospital. These graduates worked in patient care teams and were deployed in “pods” of 3 to 4 so they would be able to support each other. They were not asked to provide direct patient care to COVID-19 patients, due to their lack of experience and to preserve personal protective equipment. Their familiarity with UMMMC and our electronic medical record EPIC was invaluable to their attending physician supervisors and, thus far, they have reported very positive experiences.

The early graduates have been described by faculty and hospital leadership as “game changers.” The addition of their support has proven critical in allowing the redeployment of residents to areas of acute need. They have been invaluable to the hospital medicine physicians assigned to services without resident coverage, and their assistance has allowed for the care of a high volume of patients with rapid turnover, despite the increased acuity.

The early graduates expressed eagerness as well as anxiety about serving the patients in our community. Yet they have found their experience gratifying, as they have been welcomed as team members across the hospital and are gaining new and valuable perspectives on the effects of the pandemic on the practice of medicine. Through these experiences, they have seen the value of their contributions daily.

Additional Considerations

UMMS faculty, staff, students, and residents have engaged in a variety of responses to the COVID-19 pandemic: striving to complete our mission of educating physicians and deploying medical and other health care professionals to care for patients; performing research that has a direct impact on the health and well-being of patients; supporting faculty who are engaged in the direct care of COVID-19 patients at our affiliated clinical sites; and serving our community through a wide range of service and public sector activities. Through a unique partnership with the government of the Commonwealth of Massachusetts and the Massachusetts Board of Registration in Medicine, UMMS graduated its fourth-year students 2 months early and worked with UMMC to deploy these graduates to patient care teams in time to address the surge in COVID-19 patients in the state in April. These newly graduated physicians, working in the hospital where they did the majority of their clinical training, were able to make immediate positive contributions to the care of patients, decreasing the workload for residents and faculty physicians. Both their patients and colleagues have been well served by this initiative to graduate and deploy these physicians early.

In this Invited Commentary, we have focused on the UMMS School of Medicine. The other 2 UMMS schools (graduate schools of nursing and biomedical sciences), as well as the 2 outside business units of UMMS, Commonwealth Medicine and Mass Biologics Laboratory, also have been actively engaged in assisting state agencies with addressing the effects of COVID-19 on vulnerable populations, including patients in state-operated long-term care facilities. UMMS faculty in the Department of Psychiatry have provided ongoing behavioral health services, including in several institutions run by the Massachusetts Department of Mental Health. (Detailed descriptions of these partnerships with the Commonwealth are beyond the scope of this commentary.)

Key elements to the development and implementation of each of these responses to the COVID-19 pandemic were communication and attentiveness to the voices of all members of our community. Early on, the UMMS team recognized that enhanced, structured communication in a “command center” model would be critical for proactive planning and nimble responsiveness to all challenges, anticipated and unanticipated, during the ongoing pandemic. Beginning on March 17, the UMMS academic leadership team, spanning our 3 graduate schools, graduate medical education, and research mission, met daily (with a curricular and student focus) and twice weekly (to address the school’s mission areas), under the guidance and direction of the provost. Communicating with students about initiatives occurred via thrice-weekly community Zoom calls and with staff, faculty, and residents through weekly town halls. Through this enhanced, structured communication process, effective strategies were developed and implemented.

Medical schools, like UMMS, are engaged in a unique combination of activities that are critical to responding to pandemics such as COVID-19. Here, we have described one such initiative—UMMS’s efforts to graduate its Class of 2020 early and successfully deploy these new physicians to alleviate workforce shortages and better care for patients in Massachusetts.

Reference

1. Liaison Committee on Medical Education. Standard 6.1: Program and Learning Objectives. Functions and Structure of a Medical School: Standards for Accreditation of Medical Education Programs Leading to the MD Degree. Published March 2020. <http://lcme.org/publications>. Accessed June 2, 2020.

Table 1

Adaptations of the University of Massachusetts Medical School Curriculum in Response to the COVID-19 Pandemic, 2020

Medical school class	Activity in Phase 1	Activity in Phase 2
First year	Remote learning	Remote learning
Second year	Remote learning	Break for USMLE Step 1 study and volunteer service
Third year	Pandemic curriculum	Re-entry to clerkships with telehealth and virtual simulation
Fourth year	Early graduation	Option to serve as limited-licensed surge contractors at UMMC

Abbreviations: USMLE, United States Medical Licensing Exam; UMMC, University of Massachusetts Memorial Medical Center.

Table 2

Review of Student Course Completion to Determine if Fourth-Year Students Met Graduation Requirements to Graduate Early, University of Massachusetts Medical School, 2020

Status of ongoing courses	No. students	% of fourth-year students	Review board resolution
All courses complete	36	27%	No further review necessary
Advanced biomedical translational science course not complete	22	16%	Competency achieved with other experiences
Other minor requirements ^a pending	77	57%	Complete holistic review finalized

^aMinor requirements exclude core clerkships, subinternships, and patient care electives.