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## Challenges and Responses to Podiatric Medical Education and Patient Care Requirements at the New York College of Podiatric Medicine During the COVID-19 Pandemic



The New York College of Podiatric Medicine (NYCPM), similar to other medical colleges, was placed in an emergency situation virtually overnight when all live student education was suspended and patient care activity became severely restricted. NYCPM is located in East Harlem where during mid-March 2020 the incidence of COVID-19 exponentially increased on a daily basis. East Harlem and the surrounding areas have been the "ground zero" of this pandemic in the United States amounting more cases than any other locality in the nation.

The initial and pre-eminent concern was for the health and safety of students, residents, faculty, and staff as well as providing ongoing necessary podiatric medical services to our patients. Consistent with what other medical colleges in our area were instituting, all students were withdrawn from clinical rotations and all lectures, discussion groups and testing switched to a virtual platform. Fortunately, many if not most of our formal lectures were previously video captured, therefore making it relatively easy to make them available. New and updated lectures were remotely recorded by faculty and assigned for viewing along with the prior recorded presentations, resulting in a 100% success rate in delivering the formal lecture curriculum for all classes. Several data bases of archived presentations from outside associations and organizations served to augment our own lectures. Journal clubs, case presentations, and live review sessions were held using Zoom and Webex platforms.

Assessment by necessity likewise was accomplished remotely using exam software with appropriate safeguards to maximize validity and reliability for multiple choice questions. Students are being remotely supplied with supplies to be used in workshops that will occur in a virtual environment. A particular challenge resulting in a novel solution was how to administer the end of Third Year Capstone Assessment which follows the development and acceptance of uniform standards of competence for graduating podiatrists as well as new trends in national board examination development.

The Capstone Assessment event consists of 3 components: a composite written exam in core clinical disciplines; two (2) live standardized patient (SP) encounters, and medical note writing where the student is expected to exhibit understanding, integration, and mastery of the sum of didactic experiences of the previous 3 years of training within the written exam. The practical examination with the SPs focuses on demonstration of communication/interviewing skills of a patient with a podiatric problem, physical examination skills, clinical problem solving, as well as communication of findings, diagnoses, and recommendations. The note writing portion of the assessment allows the student the opportunity to demonstrate his/ her ability to accurately record the details of the SP encounter. The Capstone Assessment not only helps prepare the junior student for national board examinations given in the senior year, but constitute a valuable self-assessment opportunity prior to the student graduating to external senior clerkship experiences. As such, it is required that students successfully complete this experience in order to be promoted to the senior year.

Due to the coronavirus pandemic, major changes needed to be made to the Capstone Assessment due to the inability of direct student/SP contact. Given the unique, human-to-human delivery mode of this exam, it was important to take the precautionary steps to protect the health of the students, SPs, and staff. A testing solution will employ a telehealth model where examinees and SPs would interact online via Zoom was developed.

Prior to the actual SP encounter, Third Year students will have a three hour review of communication skills conducted by senior faculty members. Subsequently, the class will be broken up into online Zoom groups of ten students and one SP to practice communication and history taking skills. This will culminate with all students via Zoom taking the actual Capstone Assessment. Each student is expected during a timed period to take a history and display their communication skills with his/her SP who immediately thereafter filled out evaluation instruments about the content of the history obtained and the communication and interpersonal skills. All students will then be required to compose a patient note about their findings which will be evaluated by podiatric faculty.

With regard to patient care, all outpatient podiatric visits were conducted by faculty and residents in our affiliated hospitals via telemedicine except for postoperative patients and true emergencies. Elective surgical procedures in both general hospitals and ambulatory facilities state-wide were cancelled in an effort to realign medical staff to the anticipated surge in admissions and patients requiring intensive care. This proved, unfortunately, to become reality, and our own training center, Metropolitan Hospital Center, rapidly became inundated with COVID-19 patients (NYC has seen nearly 60,000 cases and more than 27,000 deaths have occurred at the time of this submission). The Post Anesthesia Care Unit was converted into an intensive care unit for COVID-19 patients, and all surgical staff were diverted to these new treatment areas and (often new) clinical responsibilities.

The 9 podiatric residents, all of whom have had significant earlier experience working with Medicine and Surgery Department attendings and residents, were tasked to assist directly in emergency room assessment of potential COVID-19 patients as well as the day to day management of admitted COVID-19 and general surgery patients. Insertion of intravenous and central lines, monitoring ventilator settings, patient positioning, and medication delivery for these patients became the daily norm. Emergent medical and surgical care of patients with lower extremity pathology due to diabetes or trauma (often with COVID-19 co-morbidity) continued. Expansion of duty hours, adaptation to the use of personal protective equipment and new chains of command stressed, but did not break the resident's dedication to duty despite two of them becoming ill themselves. Residents acquired skill in telemedicine triage and consultation.

Now in May, there has been a decrease in COVID-19 admissions with some normalization of patient care at the hospital, but one can reflect positively on how the current standards of PMSR training have facilitated resident involvement in this critical time. Their contributions have been acknowledged by all departments and many levels of administration.

It is too early to determine when NYCPM will return to live education, but one thing for certain will be the continuation of distance learning to some degree for the foreseeable future.

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