New York Medical College
Jennifer Koestler, MD, Pamela Ludmer, MD, MMEL, and Celia S. Freeman, MBA

Medical Education Program Highlights
New York Medical College School of Medicine (NYMC SOM), located in Valhalla, New York, is one of the nation’s oldest private health sciences universities (est. 1860). The SOM provides a comprehensive educational program with the goal of developing well-rounded medical students who will become resilient, compassionate, and skilled physicians. The SOM is proud of our strong foundational science education, diverse affiliated clinical training sites, and commitment of its faculty and administration to medical student education. Distinguishing features of the MD program include:

- Longitudinal clinical skills training program that provides early clinical exposure and frequent opportunities for formative and summative feedback
- Highly interactive, asynchronous online elective courses, which allow students the opportunity to explore current issues in medicine (e.g., multiculturalism in medicine, learning to teach, ethical and clinical issues in end-of-life care, practice skills in medical malpractice)
- Areas of Concentration (AOC) program, which allows medical students to engage in a scholarly project in an area of personal interest beyond the formal curriculum. Current offerings include biomedical research, biomedical ethics, medical education, and global and population health
- Comprehensive paracurricular activities (e.g., longitudinal resiliency curriculum, student wellness weeks, NYMedTalks) to support student professional development, well-being, and resiliency

Curriculum Description
The MD program is organized into 3 vertically and horizontally integrated phases: foundational sciences, clinical immersion, and advanced practice. The program also leverages the state-of-the-art Clinical Skills and Simulation Center (CSSC) throughout all 4 years of the curriculum.

The preclerkship curriculum is organized into modular blocks with foundational science and clinical content integrated across disciplines. Longitudinal themes of patient care, interpersonal communication skills, biomedical ethics, interprofessional practice, and evidenced-based medicine are woven into related coursework.


Students enter discipline-based clerkships in year 3 of the program with required rotations in internal medicine (8 weeks), surgery (8 weeks), pediatrics (6 weeks), obstetrics–gynecology (6 weeks), psychiatry (6 weeks), neurology and rehabilitation medicine (4 weeks), and family medicine (6 weeks). Students also have one 4-week elective to assist them in career exploration.

The fourth year is organized into tracks based on specialty interest, thereby allowing students to align their learning experiences with their career trajectories and enhance preparation for residency training. General requirements for fourth-year students include a mandatory subinternship with 2 additional requirements based on specialty track (e.g., emergency medicine, critical care, radiology, diagnostic medicine), 5 elective months based on specialty interest, and 2 transition courses that prepare students for the increased responsibilities associated with entry into the fourth year and residency.

Curriculum changes since 2010
Since 2010, we have enhanced the integration of our curriculum, increased the use of active learning principles, and incorporated content areas that reflect contemporary issues in health care. Specific areas that have been expanded include women’s health, LGBTQ+ health, patient safety, interprofessional collaboration, and pain management. We have also added a required History of Medicine course, providing students with an appreciation of the evolution of modern medicine. In addition, we have increased our curricular focus on research principles to enhance the development of students’ analytic and critical thinking skills.

The SOM is currently undergoing a curricular redesign to be launched in academic year 2021–2022. The new curriculum will be organized into 3 integrated longitudinal threads: biomedical sciences, patient-centered care, and health system sciences and will incorporate medical imaging, lifestyle medicine, and “back to basic science” electives in year 4. Students will have additional time early in the curriculum for career exploration and added elective time in the third year.

Medical education program objectives
The NYMC SOM curriculum, guided by our medical education program objectives, is designed to offer a breadth of foundational science and clinical training to prepare graduates for entry into competitive residency programs. Faculty of the SOM have defined a core set of competencies and program objectives to outline the expectations that medical students are expected to exhibit as evidence of their achievement by completion of the program.
Assessment changes since 2010

We have diversified our student assessments throughout the MD program to include more workplace and EPA-based assessments in clerkships, increased the number of objective structured clinical examinations, added new assessments to evaluate self-directed learning and interprofessional teamwork and collaboration, and enhanced our assessment of students’ professional competencies with graded reflective exercises and independent learning plans. In 2018, the school modified the grading in preclerkship courses to be fully pass/fail. Grading in core clerkships remains honors/high pass/pass/fail.

Parallel curriculum or tracks

The SOM introduced its first longitudinal integrated clerkship (LIC) in 2018. The LIC program is 6 months in duration and includes the following disciplines: internal medicine, neurology, pediatrics, and obstetrics–gynecology. Students spend the majority of their time in the ambulatory setting embedded with interdisciplinary teams of health care providers. Regular, unscheduled self-directed learning time is also incorporated into schedules to allow students to follow assigned patients across venues of care (e.g., consultations with subspecialists, scheduled tests, procedures) and assist in maintaining patient-practice continuity.

Pedagogy

The MD program uses a variety of pedagogical approaches to achieve medical education program objectives, including case-based learning, clinical experiences in both the ambulatory and inpatient settings, large- and small-group discussion formats, cadaveric dissection, laboratory exercises, peer teaching, preceptorship programs, role play, self-directed learning, simulation, standardized patients, and workshops.

The most significant changes in pedagogy over the last decade have been the progressive decrease in the use of traditional large-group lecture and the introduction of a flipped classroom approach; large-group interactive exercises; small-group, case-based learning formats; and low- and high-stakes simulation training. The case-based exercises throughout the preclerkship phase of the curriculum use a common architecture; are introduced in a developmental fashion; and are coordinated across courses, enabling students to develop skills that promote self-directed and lifelong learning, critical thinking, and critical appraisal. In addition, the CSSC has

20 fully equipped patient exam rooms and several large simulation rooms, which allow students to practice a broad range of skills such as physical examination, skill training using standardized patients, and team training exercises using mannequins. Multifunctional classroom space allows students to practice procedural skills on a variety of task trainers, complementing their clinical training.

In parallel to these innovations, significant enhancements were made to our instructional technology infrastructure. These include migrating to LEO, a robust health care education-specific learning management system that provides a single platform for student curricula, assessment, and individualized educational portfolios; the installation of SMART podiums and touchscreen technology; full transition to computer-based examinations; use of video capture; and migration to virtual microscopy.

Clinical experiences

The SOM uses a variety of clinical training sites including tertiary care centers, academic medical centers, community hospitals and nursing homes, Veterans Affairs medical centers, ambulatory practice sites, and rural practice locations. These facilities provide an extraordinary diversity of patients, medical conditions, and community settings that enrich students’ educational experiences.

Clinical training begins during the first week of medical school, where students are trained in cardiopulmonary resuscitation and are introduced to patient–provider communication skills. Over the course of the year, students participate in workshops with standardized patient educators to practice history taking, interpersonal communication, and physical examination skills. Students are then placed in clinical preceptorships where they have the opportunity to participate as members of interprofessional health care teams. Since 2019, first-year students also receive training as health coaches and have opportunities to practice their skills in a variety of community-based settings before being placed with primary care providers in ambulatory practices for longitudinal preceptorships.

The majority of clerkship training is in the form of block specialty clerkships. A subset of third-year students elects to participate in an LIC offered in year 3.

Standardization and coordination of the MD curriculum among our multiple training sites are high priorities and pose particular challenges. In addition, over the last decade, we have recognized increasing competition for clinical training sites from allopathic and osteopathic medical schools, offshore medical schools, and other health professions students.

Curricular Governance

The Education and Curriculum Committee (ECC) is the faculty committee with primary responsibility for the curriculum. Members are appointed annually by the SOM dean after consultation with the Executive Committee of the Faculty
Senate, who provide a preferred list of nominated members of the faculty for these service roles. Committee membership is intentionally diverse and includes representatives from basic science disciplines, clinical faculty from major clinical sites, and student representatives.

The ECC and reporting committees oversee all aspects of the curriculum including the development and review of program-level objectives, oversight of the horizontal and vertical integration of the curriculum, monitoring of the overall quality and outcomes of individual courses and clerkships, monitoring of the outcomes of the curriculum as a whole, and monitoring compliance with educational standards of the LCME. The work of this committee is facilitated by outcome data provided by the Office of Data Analytics (ODA) and is supported by staff in the Office of Undergraduate Medical Education (OME).

See Figure 1—Curriculum management.

The budget to fund the MD program is managed by the Office of Academic Affairs, with support from the dean and input from senior leadership and the offices of undergraduate medical education, medical student affairs, and faculty affairs. The annual budget process prioritizes capital requests for educational facilities and technology, faculty development, and student academic support.

**Education Staff**

The OME is responsible for providing the administrative support for the planning, implementation, evaluation, and oversight of the MD curriculum. These efforts include support of the ECC and its subcommittees, the CSSC, medical student research, medical education faculty development, education technology, and the AOC program. The ODA provides important support of ongoing continuous quality improvement efforts related to program evaluation.
Faculty Development and Support in Education
The OME and the Office of Faculty Affairs use needs assessment data to design faculty development programs to enhance teaching skills and promote the continuous growth of faculty as teachers, mentors, and educational scholars. These efforts are accomplished through skills development workshops, monthly medical education grand rounds, 1-on-1 consultations, and a faculty mentorship program. The offices additionally support faculty to attend outside programs sponsored by organizations such as the AAMC, Harvard Macy Institute, and International Association for Medical Science Educators.

The college is developing a comprehensive and interprofessional Academy of Health Science Educators, whose mission is to foster a supportive environment for educational innovation, collaboration, and scholarship by establishing a vibrant local community of practice.

The Academy of Health Science Educators aligns with the work of the Tenure, Appointments, and Promotions Committee, which formally established an educator track in 2015. Promotion in this pathway reflects special achievement in the domains of direct teaching, curriculum development, mentoring and advising, and scholarship.

Initiatives in Progress
The SOM is developing a health systems science curricular thread to include preclerkship modules on research and fundamentals of data-driven decision-making; principles of collaborative practice; population and social determinants of health; health care economics, policy, and structure; patient safety and high-value care; and quality and leadership in teams, with application of relevant concepts in core clerkships.

Figure 2 Educational staffing structure.