Weill Cornell Medicine
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Medical Education Program Highlights
Weill Cornell Medicine (WCM) redesigned its curriculum with the class of 2018 as the inaugural graduating class to participate in the new 4-year program:

- One focus was strategic interfaces of foundational and clinical content with patient-centered experiences from day 1.
- WCM has consistently been a leader in the proportion of graduates who enter academic medicine.
- Another hallmark of the new curriculum is the 6-month Area of Concentration (AOC) program. The AOC program provides core research skills and a structured, longitudinal opportunity for mentored scholarly projects in customized areas of interest. To date, there have been over 100 publications associated with the AOC program.

WCM has an institutional commitment to enhancing all aspects of the student learning and living environment.

- Beginning with academic year 2019–2020, WCM provides a unique debt-free education to all students with demonstrated financial need by replacing student loans with scholarships that cover tuition, housing, and other living expenses. WCM also provides support for the academic needs of the entire student body such as study resources and registration for boards exams. The core intent of the WCM program for student financial well-being is to further diversify the breadth of academic choice and opportunity for its students.
- Student mental health is another key WCM area of focus and, as a first step in establishing a national learning community and best practices, WCM hosted the inaugural National Student Mental Health and Well-Being in 2019 in New York City, in partnership with the Association of American Medical Colleges, the Associated Medical Schools of New York, and the American Foundation for Suicide Prevention. It was the first comprehensive, multidisciplinary forum to examine the specific mental health challenges and needs of medical students.

WCM launched a formal continuous quality improvement (CQI) initiative in 2017 that includes a CQI office, a CQI Steering Committee (chaired by the dean), and a CQI Student Council with student representatives across all 4 classes. WCM views CQI for the education mission as an iterative process that ensures the outcomes of the medical education program meet programmatic and accreditation goals and that the strategic plan for the education mission aligns with those of the clinical and research missions.

Curriculum

Curriculum changes since 2010
The curriculum was reorganized into 3 phases, each designed to integrate basic science and clinical medicine and to prepare the learner for the subsequent phase.

- Phase 1, foundational curriculum: This was shortened from 2 years to 1.5 through the creation of sequential learning units that combine normal and abnormal biology. The longitudinal Patient Care and Physicianship (PCP) unit integrates clinical skills instruction with basic science content.
- Phase 2, clinical clerkships: The medicine and surgery clerkships were both shortened to 8 weeks and a new 2-week clerkship in anesthesiology and critical care medicine was established.
- Phase 3, postclerkship curriculum: A major change in the curriculum was the creation of a 6-month block in years 3 and 4 for the AOC, to allow students to conduct a mentor-guided research project in basic science, clinical investigation, or population-based science. In addition, subinternship offerings expanded to include neurology and emergency medicine. New required courses were created in translational science and advanced clinical ethics.
- Additional curricular enhancements: Transition to Medical School, Transition to Clerkship, and Transition to Residency courses are focused on leaner needs at key transition points. The new curriculum also features enhanced content in cultural competency and health care disparities; student wellness; bioinformatics, patient safety, and telemedicine; interprofessional education; service learning; international elective offerings; and opportunities for accelerated master’s programs.

Medical education program objectives
WCM’s 20 program objectives are organized under 7 competencies, 6 of which are the ACGME competencies. The seventh is “scholarship.”

Assessment
Assessment changes since 2010

- Since 2010, all courses include additional formative assessments: online self-assessment quizzes, the NBME Comprehensive Basic Science Exam, and mid clerkship objective structured clinical examinations.
- Institutionally developed exams emphasize clinical reasoning skills through the use of clinical vignettes.
- Phase 1 faculty and resident rating forms have been standardized to behavioral observational anchors based on preparation, participation, and professionalism and on the ACGME competencies in the clerkships.
- The clerkship grading rubric has been made more transparent and standardized across all clerkships, with a primary focus on clinical performance and Entrustable Professional Activities and a de-emphasis on the clinical subject exams.

Pedagogy

- Faculty-facilitated peer teaching: case-based and problem-based learning, role plays, and self-directed learning sessions
- Critical thinking and analysis of the medical literature, largely through journal clubs and critical appraisal sessions
- Clinical skills: direct supervision in patient care settings, virtual and standardized patients, and interactive workshops and demonstrations
- Lectures and laboratory sessions

Changes in pedagogy since 2010

- Increased use of blended learning and flipped classroom approaches that involve e-learning modules and video podcasts with self-assessment quizzes
- A shift from problem-based learning to shorter case-based learning
- Increased interactivity in large-group sessions through 1-on-1 pair share exercises and audience participation software
- Additional structured formalized self-directed learning sessions
- E-learning resources

Clinical experiences

Clinical sites include inpatient, emergency department (ED), and ambulatory outpatient settings at academic tertiary care medical centers; academic specialty hospitals (cancer and orthopedics); and private community hospitals in diverse socio-economic neighborhoods in New York City, Ithaca, New York, and Houston, Texas.

Required longitudinal experiences

During Phase 1, all students participate in a required longitudinal patient experience, the Longitudinal Educational Experience Advancing Patient Partnerships (LEAP) course. Medical and physician assistant students work in teams led by a faculty mentor. In both an observer and advocacy role, student teams follow a panel of patients with chronic disease by participating in the care of the patient with the patient’s physician and health care team through outpatient clinic or ED visits and hospitalizations. The experience is supplemented through monthly seminar sessions conducted by faculty preceptors that include a variety of topics such as interprofessional teamwork, health disparities, insurance access, medication adherence, complementary medicine, and patient safety.

Clinical experience first encounter

Students first encounter a patient on the first 2 days of classes as part of a large-group session in the PCP unit of the Essential Principles of Medicine course. In addition to weekly in-class patient presentations, students also have clinical encounters as part of LEAP course, described above, and in the first semester of clinical preceptorships.

Required and elective community-based rotations

The Physician Organization of WCM has a network of satellite primary care and specialty practices to which students may be assigned during the required primary care clerkship or choose in the context of a clinical elective. Some students opt to fulfill primary care requirements at a community-based group in rural upstate New York or a student health center.

Challenges in designing and implementing clinical experiences for medical students

Challenges include optimizing the clinical environment for multiple learner groups (i.e., medical students, medical residents, physician assistant students) and protecting teaching time for faculty who are under increasing pressures to meet clinical and research productivity metrics.

Curricular Governance

The Executive Curriculum Committee (ECC) has primary responsibility for the curriculum. Its subcommittees oversee specific courses or phases of the curriculum. The Clinical Curriculum Subcommittee oversees the Phase 2 clerkships and the subinternships, Transition to Residency course, and clinical electives in Phase 3. The Scholarship, Science, and Ethics Subcommittee oversees the AOC, Translational Science course, Advanced Clinical Ethics course, and science electives in Phase 3. The ECC is the curricular body responsible for reviewing the curriculum as a whole annually. The CQI Curriculum Review Subcommittee also performs a more granular review of the curriculum as a whole by reviewing each required curriculum phase on a regular 3-year cycle.

See Figure 1—Curricular governance committees.

Curricular governance managed at the department level

Departments work closely with the central curriculum office to ensure that courses are staffed with appropriate teaching faculty. Financial support for teaching activities is managed at the departmental level. Those faculty who hold administrative roles in the curriculum (e.g., course director, unit leader) are provided appropriate central support for their administrative duties.
The Office of Medical Education is responsible for the planning, implementation, evaluation, and oversight of the curriculum and for the development and maintenance of the tools to support the curriculum delivery, monitoring, and management.

See Figure 2—Organizational structure.

In addition to oversight of the curriculum, the Office of Medical Education has oversight of the entire medical student experience at Weill Cornell.

- The Office of Admissions recruits and selects the incoming class to the medical college each year.
- The Office of Student Affairs oversees the Office of Student Life and the Office of Student Diversity. The student life office assists students by providing wellness programming and supporting service learning, student organizations, and community service groups. The Office of Student Diversity works closely with all medical students to promote an inclusive atmosphere and oversees pipeline programs.
- The Office of Academic Affairs provides academic and career counseling for medical students, including assisting students with preparing for the residency match. In addition, the Office of Academic Achievement provides robust academic support for all students throughout the curriculum.
- The Office of Operations and Program Development has direct operational oversight over aspects of the clinical curriculum, to include the operation of the Clinical Skills Center. In addition, all aspects of medical education operations, including budget, finance, and human resources, are managed here.
- CQI monitors and reports on curricular institutional elements across the medical education mission and assists with accreditation of the medical education program.
- CME works with the clinical departments to provide continuing professional development opportunities for WCM faculty.
- In addition, the Office of Medical Education works closely with central services such as the Office of the Registrar, Office of Financial Aid, Student Health Services, and Housing Office to ensure medical students receive adequate support.
Faculty Development and Support in Education

Professional development for faculty as educators

- WCM offers a wealth of professional development programs to improve the skills of faculty as educators, researchers, and clinicians and to contribute to discipline-specific knowledge.
- Central resources include the Office of Faculty Development, the Medical Education Office, eCornell, and the Cornell Center for Teaching Excellence in Ithaca.
- The Office of Faculty Development and the Mentoring Academy hold programs on a range of topics, including the Faculty Enrichment and Educational Development series to provide seminars and workshops to help faculty thrive in their roles.

Role of teaching in promotion and tenure

- The WCM faculty appointment and promotion system uses 2 types of academic career pathways. One is for faculty members whose primary activity is academic achievement and scholarship. The second is for faculty members whose primary activity is in clinical investigation or teaching excellence.
- In the teaching excellence pathway, excellence in teaching represents the major area of service. Promotion based on teaching quality and quantity alone, in the absence of investigative or clinical care work, is possible.
- Due to the importance of the educational mission at WCM, faculty on all pathways are evaluated for their contributions to teaching and educational activities. Faculty on the pathway recognizing academic achievement in education leadership complete an educator’s portfolio and are evaluated in 4 teaching domains.
- WCM recognizes exceptional teaching through annual awards. This includes the Excellence in Medical Education awards dinner where over 20 faculty are recognized for their teaching contributions. Named awards for teaching and mentorship are also presented at Commencement.
- Senior List at convocation recognizes 16 faculty who were nominated as outstanding teachers by the senior class.
- There are 5 Education Scholar Awards, competitive faculty development awards for educators, and multiple endowed professorships in medical education.