Wayne State University School of Medicine

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Medical Education Program Highlights

The educational mission of the Wayne State University School of Medicine (WSUSOM) is to develop and graduate a diverse cadre of physician leaders who are comprehensively educated to provide high-quality 21st-century health care; who are uniquely trained to provide high-quality health care in a complex, high-acuity, highly diverse, clinical, and community environment; and who, in alignment with educational goals, understand and demonstrate social accountability in support of the priority health needs of the local, state, and national communities that they serve.

Curriculum

Curriculum description

The MD program Highways curriculum is divided into 3 phases and 4 segments:
- Phase 1, the preclerkship phase, is 18 months and comprises segments 1 and 2.
- Phase 2, the clerkship phase, is 12 months and comprises segment 3.
- Phase 3, the postclerkship phase, is 18 months and comprises segment 4.

Curriculum changes since 2010

The newly implemented Highway curriculum for the WSUSOM MD program was launched in 2018 and represents an 18-12-18 model. Specific enhancements include:
- Reorganization of the preclerkship curriculum from a discipline-based to an organ systems–based format in order facilitated horizontal and vertical integration within the curriculum.
  - The segment 1 curriculum takes advantage of our gross anatomy full dissection program to ground students’ learning of human structure/function; introduces clinical practices including handoffs and certain clinical procedures, basic interpretations of medical imaging, patient safety, and team dynamics; and explores humanistic, social science, and public health concepts through a first patient project.
- Early clinical exposure and practice through a redesigned longitudinal clinical skills curriculum begins in segment 1 and progresses through advanced clinical training in segment 4.
- Students begin outpatient clinical training in primary care settings in segment 2.
- Our newly created Population, Patient, Physician, and Professionalism (P4) longitudinal course provides students a holistic view of clinical practice through the lens of multiple scientific disciplines and includes the social, behavioral, and health systems sciences. The course is built around small-group learning that is facilitated by master clinicians.
- Classroom learning is supported through service learning opportunities that are designed to integrate concepts taught in P4, clinical skills and foundational science courses.
- Additional changes are occurring in phase 2, segment 3 of our curriculum in which students rotate through their required clerkships. Recent revisions to this phase include:
  - Additional curriculum devoted to patient safety and quality improvement
  - A focus on student health and well-being to instill best practices early into students’ careers
  - A move toward improving educational opportunities in an outpatient setting
- The last 18 months of the curriculum (phase 3, segment 4) is devoted to advanced professional development and transition to residency. Revisions to this phase include:
  - Residency preparation curriculum
  - Expanded elective choices
  - Scholarly concentrations

Assessment

In 2016, WSUSOM adopted new medical education program objectives, which are organized into 8 domains. These new objectives are based on the AAMC’s Physician Competency Reference Set and Core Entrustable Professional Activities for Entering Residency.

The WSUSOM competency domains are:
- Domain 1: Knowledge for practice
- Domain 2: Patient care
- Domain 3: Practice-based learning and improvement
- Domain 4: Interpersonal and communication skills
- Domain 5: Professionalism
- Domain 6: Systems-based practice
- Domain 7: Interprofessional collaboration
- Domain 8: Personal and professional development

Along with major curricular changes, multiple forms of student assessments were implemented in addition to the traditional
single best response (multiple choice question) method of assessment. These include:

- OSCEs
- Essay/written reflection
- Laboratory practicals
- Short-answer examinations
- Oral presentations
- Workplace-based assessments
- Formative assessment

Pedagogy

WSUSOM currently uses the following pedagogical approaches. As part of an integrated curricular design, case-based and problem-based learning experiences have been added to the first and second segments. Segments 3 and 4 have been redesigned to ensure students have adequate clinical experiences in both an ambulatory and inpatient setting.

- Case-based learning
- Clinical experience: ambulatory
- Clinical experience: inpatient
- Discussion: small group (≤ 12)
- Laboratory
- Lecture
- Peer teaching
- Preceptorship
- Problem-based learning
- Self-directed learning/tutorial
- Simulation
- Standardized/simulated patients
- Team-based learning

Clinical experiences

The required clerkships are offered at 4 separate campuses using 6 hospitals and multiple ambulatory sites. All sites are in the Detroit metro area, the great majority in the city of Detroit with a few in the immediate neighboring suburb. The Detroit Medical Center and Henry Ford Medical Center are large quaternary referral centers in central Detroit that also function as primary, emergency, and critical access centers for the surrounding population. Ascension St. John is a tertiary and referral center, with an active trauma center on the east side of Detroit. The Detroit VA and William Beaumont Dearborn hospitals function in a mixed primary care and tertiary referral role. All of the hospitals (other than the VA) have verified and active trauma centers.

All students rotate at the Children’s Hospital of Michigan in downtown Detroit, in addition to ambulatory experiences in pediatrics in the city and immediate surrounding suburbs.

Family medicine and other ambulatory rotations use a network of established primary care practices in and around Detroit, along with the extensive ambulatory network of the Henry Ford Health system.

Required longitudinal experiences

Beginning with the class of 2022, there is an established clinical skills longitudinal track. This starts with clinical skills simulation and standardized patients in the Kado Clinical Skills Center during segments 1 and 2. Clinical experience is introduced in segment 2 with outpatient assignments. The segment 3 longitudinal course (Clinical Reasoning, Integration, and Skills for Practice) carries the longitudinal curriculum through segment 3. As seniors (segment 4), the students are trained and involved as educators on several levels.

Clinical experience first encounter

After intensive fundamental clinical training in a simulated environment during segment 1, the students are assigned to outpatient clinics on a biweekly schedule. They see patients with a structure of increasing expectations as they continue through the year. This is supplemented by continued simulated modules concentrating on advanced skills that can be used in the real clinical environment in a temporally integrated fashion.

Required and elective community-based rotations

The Clinical Experiential course during segment 2 assigns students to community preceptors, including the VA and federally qualified health centers. During the continuity clerkship (up to 2020) and the internal medicine clerkship (2020 onward), students are assigned to outpatient clinics in Detroit in primary care.

Curricular Governance

Curricular governance is overseen by the Curriculum Management Committee:

- In accordance with LCME Standard 8 (curricular management), the Curriculum Management Committee (CMC) is the institutional entity that oversees the medical education program as a whole and that has responsibility for the design, management, integration, evaluation, and enhancement of a coherent and coordinated curriculum.
- The CMC authority originates by delegated powers from the School of Medicine Faculty Executive Committee.
- The CMC is by design a predominately faculty committee that has full authority and final approval over curriculum for the medical education program leading to the MD degree at WSUSOM.
- The CMC is specifically organized to incorporate the characteristics of an effective central curriculum authority (“integrated institutional responsibility”); the characteristics of an effective system of curriculum management (“curriculum management”); and the requisite elements to support the design and implementation of a “coherent and coordinated curriculum” as delineated by the LCME.
- The CMC is designed to be a protocol-driven entity that emphasizes data-driven decision-making and CQI philosophy. Through its management and oversight of the undergraduate program leading to the MD degree, the CMC ensures that students learn the requisite knowledge, skills, attitudes, and behaviors consistent with the WSUSOM mission and are well prepared and highly qualified for subsequent medical licensure, postgraduate residency training, and a successful career in the field of medicine.

See Figure 1—Curricular governance organizational chart.
Education Staff

- Administrative and academic support for the planning, implementation, evaluation, and oversight of the curriculum and for the development and maintenance of the tools to support curriculum delivery, monitoring, and management is centralized within the Office of Medical Education.
- The vice dean for medical education reports directly to the dean and oversees the Office of Medical Education and all MD-related educational activities including undergraduate medical education, graduate medical education, and continuing medical education.
- Major administrative units within the Office of Education that provide support to educational programs are the Office of Student Affairs; Office of Admissions and Enrollment Management; Office of Assessment, Accreditation, and Continuous Quality Improvement; and Office of Learning and Teaching, each of which are led by deans. In addition, medical education support services provide business and logistical support to students, faculty, and administrators under the leadership of a director.
- UME is overseen by the senior associate dean for curriculum and undergraduate medical education, who reports directly to the vice dean for medical education. Lead administrators within UME include the associate dean for preclerkship curriculum and foundational sciences, the associate dean for clerkship curriculum and clinical sciences, the director for community engagement, the director for the simulation and clinical skills center, and the director for medical student research.

Figure 1 Curricular governance organizational chart.

Figure 2 Educational unit organizational chart.
See Figure 2—Educational unit organizational chart.

**Faculty Development and Support in Education**

**Professional development for faculty as educators**

Centralized professional development is offered to all faculty and educators. Opportunities include the following:

- Stanford faculty development program
- Curriculum development training
- Education and evaluation training

**Role of teaching in promotion and tenure**

WSUSOM values educational activities including teaching, educational scholarship, and other contributions as part of its promotion and tenure process. Documented excellence in medical education is expected. Education may take many forms, including classroom teaching, clinical teaching, development of curricula and educational materials, and mentorship of trainees. Publications that include trainees as coauthors are valued for teaching as well as scholarship. Mentorship of faculty is also an important role for midcareer and senior faculty. Reviews by peers and the recipients of the teaching efforts (i.e., students, residents, fellows, faculty, and staff) demonstrate excellent performance as an educator and/or mentor.