The George Washington University School of Medicine and Health Sciences

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The George Washington University School of Medicine and Health Sciences (GW SMHS) seeks to graduate “physician citizens” committed to local, national, and global public service through excellent patient care, leadership, advocacy for change and innovation, and scholarly inquiry. The MD program is dedicated to admitting a diverse group of students who will be prepared to care for patients with broad and disparate needs. GW has a robust, flexible curriculum that leverages our unique position in the nation’s capital. We aim to graduate physicians who exhibit excellent clinical skills; embody respect for the ideals of equity, diversity, and cultural sensitivity; advocate for improvements in health care systems and community health; embody high standards of professional conduct; and embrace lifelong learning. The following guiding principles are reflected in the MD program curriculum:

• Integrating teaching basic sciences, clinical sciences, public health, and population health to build critical thinking skills
• Offering a range of learning strategies to maximize student engagement and knowledge retention
• Offering early and longitudinal clinical exposure to ground learning in practice and provide meaningful engagement with patients
• Offering opportunities for reflective self-assessment and mentoring to support professional development and wellness
• Individualizing student experiences to take advantage of the unique opportunities in the nation’s capital

Medical Education Program Highlights

• Coursework for all students in patient, populations, and systems, emphasizing clinical public health
• Early exposure to clinical settings
• Close and longitudinal interactions with faculty, advisors, and mentors
• Elective opportunities in the third year and senior year
• Longitudinal primary care experiences
• Experiences unique to Washington, DC, such as curricula at the Holocaust Museum and Capitol Hill legislative offices
• Option to join a scholarly concentration in one of the following areas:
  • Clinical practice innovation and entrepreneurship
  • Clinical and translational research
  • Community/urban health
  • Disaster medicine
  • Global health/international medical programs
  • Health policy
  • Integrative medicine
  • Medical education and leadership
  • Medical humanities

Curriculum

Curriculum description

GW SMHS undertook curricular revisions for the class of 2018, predominantly emphasizing active learning, the integration of basic science and clinical content, clinical public health, an earlier start to the clinical years, third- and fourth-year electives, and a longitudinal primary care experience.


There are 3 curricular phases. The Fundamentals of Medicine phase runs from August of year 1 through January of year 2. This phase includes the introductory Foundations course followed by organ system blocks plus a concurrent 3-semester longitudinal Practice of Medicine course (that includes clinical skills and reasoning, professional development, a longitudinal clinical apprenticeship program, clinical integration case sessions, physical diagnosis, formative observed simulated clinical experiences, and informatics sessions) and a 3-semester longitudinal course series on patients, populations, and systems. During summer vacation between the first and second years, students who have opted into a scholarly concentration complete relevant experiential projects. In February through mid-April of year 2, students complete the USMLE Step 1 examination.

The second phase is Fundamentals of Clinical Practice, which begins mid-April with a 2-week Foundations course followed by clinical clerkships and electives. Most core clerkships are 6- or 8-week blocks; the primary care clerkship has a special format with a 4-week block plus an every other week longitudinal continuity clinic experience throughout this curricular phase. During 2 intersession weeks, students meet to discuss in large and small groups content that spans multiple fields (quality and safety, high-value care, teamwork, wellness, conflict of interest, business of medicine, and clinical public health topics such as obesity and the opioid epidemic).

The third phase is Transition to Advanced Clinical Practice, beginning in May of year 4, culminating in a month-long Transitions to Residency capstone course around Match Day.
Students complete an acting internship, emergency medicine, neurology (year 3 or 4), anesthesiology (year 3 or 4), and 18 weeks of electives, along with USMLE Step 2 and residency applications. All students complete a longitudinal scholarly project either as part of their scholarly concentration or related to advocacy or research in their area of interest.

Curriculum and assessment

Program objectives align with ACGME domains of competence: medical knowledge, patient care, interpersonal and communication skills, practice-based learning and improvement, systems-based practice, and professionalism.

In the past decade, we have implemented new assessments as we revised our preclinical curriculum to include organ system block exams; customized NBME examinations; formative OSCEs; reflection essays; peer feedback; and assessments in the patient, populations, and systems course such as group proposal presentations. In addition, we recently introduced pass/fail grading for every course in the preclinical curriculum. Clinical performance–based examinations are used from the first semester on. There is a comprehensive clinical performance–based exam at the end of the preclinical phase and the end of the clinical clerkship year; the latter exam is similar to the USMLE clinical skills licensing exam. Entrustable Professional Activity (EPA) self-assessments begin at the start of the clinical years, with a small EPA pilot in the fourth year.


Pedagogy

Pedagogical approaches emphasize active learning as an essential component of every teaching session. We employ several different instructional methods, including a comprehensive standardized patient and simulation program, large- and small-group lecture and discussion groups, small-group reflection, laboratories, self-directed learning, case-based learning, video prework, and team-based learning exercises. The Practice of Medicine uses small groups, fostering longitudinal relationships between students and professional development and clinical skills and reasoning mentors (8 students to 3 instructors). Throughout the preclinical curriculum, there are clinical integration sessions, with integrated case-based sessions at the end of each week. GW has early preceptorship experiences via clinical apprenticeships with specialists starting in the fall of year 1.

In the clinical curriculum, instructional methods largely occur in clinical settings (both ambulatory and inpatient) plus weekly didactics that include small- and large-group discussions, case-based learning, standardized patients and simulation, team-based learning, lectures, and online cases.

Clinical experiences

GW uses a variety of sites for required and elective educational experiences including academic and community-based hospitals and outpatient practices. Our main health systems are The George Washington University Hospital, Children’s National Hospital, The Washington DC Veterans Affairs Medical Center, Holy Cross Hospital, Anne Arundel Medical Center, United Medical Center, LifeBridge Health’s Sinai Hospital, Northern Virginia Mental Health Institute, Saint Elizabeths Hospital, Psychiatric Institute of Washington, INOVA, The GW Medical Faculty Associates (faculty practice), plus numerous community health centers, federally qualified health centers, patient-centered medical homes, and private physicians’ offices in the DC/Virginia/Maryland metropolitan region.

A diverse array of electives supports the mission to graduate “physician citizens.” Some clinical electives include:

- Introduction to Correctional Medicine, where students learn in DC correctional facilities
- Culinary Medicine, where students learn in community-based food kitchens
- Community health electives in low-resource settings to foster socially minded, culturally competent, and cost-conscious practice
- Exploring Implicit Bias in Medicine, Child Health Advocacy, Disaster Medicine, Health Policy, Narratives in and of Medicine, Quality Improvement and Patient Safety, and other electives

Senior-year students can opt to complete electives through the International Medical Programs office as well. For global health scholarly concentration students, these electives are designed to increase awareness about international health systems, global diseases, and assessment techniques for the specific health needs of countries at various stages of development. Other international clinical electives provide students with an opportunity to enrich and diversify their medical education in a different physical and social setting.

Longitudinal clinical learning experiences begin at the start of year 1 and at the start of the clinical clerkship year as follows:

- The Clinical Apprenticeship Program starts in the fall of year 1 and continues throughout the preclinical curriculum (the first 3 semesters of years 1–2). Students are placed with the same preceptor for a longitudinal learning experience focused on interviewing and examining patients in a specialty medicine clinical setting, where students apply interview and physical exam skills they are learning in the classroom.
- The Longitudinal Primary Care Clinic is a component of the primary care clerkship where students are placed with a general internist, pediatrician, geriatrician, or family practitioner for 1 half day every other week throughout the year. This combined block plus longitudinal continuity clinic allows students to appreciate the breadth of primary care diagnoses and the role of care coordination and is anchored in the yearlong teaching relationship between student and preceptor, and possibly several patients.
- During year 4, all students complete mentored longitudinal projects taking a scholarly and/or clinical public health advocacy approach.
Despite an extensive set of clinical sites and robust electives, challenges in implementing clinical experiences relate to the saturated region, with several other medical schools placing students in the area, as well as traffic and travel around greater metropolitan DC/Virginia/Maryland. Students in the longitudinal primary care clinic travel from morning clerkship responsibilities to afternoon continuity clinic, which can present a challenge depending on location.

**Curricular Governance**

Funds to cover teaching throughout the preclinical and clinical curricula are allocated from the medical school to the basic science and clinical departments. The Office of Medical Education (OME) coordinates the preclinical courses, and clinical courses are directed and coordinated by the clinical departments. The school provides funds to the department chairs, who determine their use.

See Figure 1—Curricular governance.

**Education Staff**

The senior associate dean for MD programs is responsible for curricular oversight, with an associate dean for clinical education and an assistant dean for preclinical education. The Clinical Learning and Simulation Skills Center, international medical programs, library, and student affairs also report to the senior associate dean for MD programs. The OME develops, delivers, and evaluates both preclinical and clinical curricula, and supports faculty, students, and curricular committees. The office includes a director, decanal faculty, and 8 staff members who, along with departmental coordinators for the clinical clerkships, process and post required coursework and maintain the curricular database. In addition, an Office of Evaluation director and staff support all aspects of program evaluation such as course, clerkship, and site evaluations by students and reviews of courses, clerkships, and curricular phases.

The curriculum committee (chaired by and composed of faculty) coordinates and manages the curriculum. GW uses an internally developed, online curriculum database, searchable and available to all faculty, for mapping all objectives and for tagging keywords and instructional methods.

**Faculty Development and Support in Education**

The Center for Faculty Excellence supports the school and its faculty as a leader in innovative education and training by advancing the scholarship and practice of teaching and learning. The center:

- Supports faculty in delivering high-quality, innovative teaching and learning experiences
- Develops areas of inquiry that build education theory and advance education practice
- Promotes the career development of individual faculty and students as education leaders
- Offers workshops, educational modules/videos, a teaching consult service, peer assessments, leadership programs, career development and mentorship, and medical education grants
In promotion and tenure decisions, all candidates are evaluated in teaching, scholarship, and service. Tenure-track faculty must be evaluated as very good to excellent in all areas, demonstrate “future promise,” and compare favorably to similar faculty at other research institutions. Non-tenure-track faculty must receive very good to excellent evaluations in 2 of the 3 areas, with some achievements in the remaining area.

All faculty are expected to teach. Demonstrating excellence in teaching requires effort beyond the minimum teaching expectations associated with day-to-day work. Faculty document teaching achievements in their CV and teaching portfolio as a systematic collection of materials to show excellence as an educator (teaching narrative statement, teaching and mentoring activities, teaching effectiveness, teaching impact, and professional development as an educator).

The Center for Faculty Excellence’s Academy of Education Scholars develops and recognizes excellence in education scholarship and research that advances the practice of medical and health sciences education and improves the quality of educational programs and patient care.

Academy members receive developmental assistance and feedback on their annual education research plan; quarterly individual coaching on research design, execution, and dissemination; access to resources; membership in a collaborative, supportive community of education scholars; and recognition of excellence in education scholarship. Eligibility includes all full-time, regular faculty, across all disciplines, specialties, and teaching levels. Membership is active during the time a faculty member has an approved annual research plan and is the PI on a supported education research study or related project.