The University of Illinois College of Medicine
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Medical Education Program Highlights
The University of Illinois College of Medicine is among the largest and most diverse medical schools in the United States. One of 7 health sciences colleges of the University of Illinois at Chicago (which itself is 1 of 3 universities in the University of Illinois system), its 4 campuses (Chicago, Peoria, Rockford, Urbana) have contributed to training over 40% of physicians currently licensed to practice in Illinois, including 20% who are graduates of the MD degree program. The college is among the top 3 LCME-accredited schools in graduating both Latino/ Latina and African American physicians over the last 4 decades. The university’s Urban Health Program (established 1978) and the college’s Hispanic Center of Excellence (established 1991) are mainstays of this commitment to diversity and inclusion.

The college offers a broad range of career pathways. The Medical Scientist Training Program (Chicago) and the Medical Scholars Program (Urbana) provide MD–PhD training; other dual-degree programs and scholarly concentration programs (elective longitudinal opportunities focusing on global medicine, urban medicine, and several other areas) are also available. The Rural Medicine Program enrolls approximately half the Rockford-based students and has contributed significantly to alleviating physician shortages in rural Illinois, as has the Rural Student Preceptor Program, a longitudinal integrated clerkship option in Peoria.

The MD program has been comprehensively redesigned, with the new curriculum debuting in 2017. This was in conjunction with a major restructuring of the college, expanding the programs in Peoria and Rockford to include all 4 years of the curriculum and phasing out the Urbana campus, which will close in 2022. Concomitant restructuring of the curriculum and the college structure have allowed better assurance of comparable educational experiences; streamlining administrative mechanisms for curricular management; and furtherance of our identity as a single, unified educational endeavor with statewide impact.

Curriculum
The Illinois Medicine Curriculum is a single, integrated curriculum for the Chicago, Peoria, and Rockford campuses, aligning all major aspects of course and clerkship structure, scheduling, and assessment and emphasizing interdisciplinary integration, active learning, and longitudinal assessment strategies. All content is organized around 5 themes: foundational knowledge; clinical practice; health, illness, and society; health care systems; and professional development.

The curriculum is presented in 3 phases. Phase 1 consists of 7 consecutive organ-based block courses between 5 and 10 weeks in duration that integrate normal structure and function with disease processes and 3 concurrent longitudinal courses: Doctoring and Clinical Skills (DoCS), Synthesis, and Medical Colloquia. The DoCS course is the primary vehicle for the clinical practice theme. The Synthesis course comprises single weeks that follow each block course, with a capstone segment in the final Phase 1 term. The Synthesis week following a block course provides opportunities for reflection on learning progress and strategies, cumulative integration of prior learning, and engagement in professional development theme sessions with faculty; the capstone segment fosters overall integration and consolidation and a 2-week course, Transition To Clerkships, then completes Phase 1. Medical Colloquia are selective opportunities to explore a variety of presentations, seminars, and workshops extending beyond the scope of the core curriculum and incorporating perspectives from patients, community leaders, and other professions.

See Supplemental Digital Appendix 1—Phase 1 Curriculum—at http://links.lww.com/ACADMED/A879.

Phase 2 begins in May of the second year; 44 weeks of core clerkships (in medicine, surgery, family medicine, pediatrics, obstetrics–gynecology, psychiatry, and neurology) are completed within the first four 16-week clinical terms. Phase 3 requirements include a 4-week subinternship and 12 weeks ofselective in either a medical or surgical “pathway.” A third pathway is for students in the Rural Medicine Program. During Phases 2 and 3, 24 weeks of elective credits are also required, with flexibility regarding timing. A longitudinal Phase 2/3 course, Clinical Connections and Competencies, consists of a series of small-group sessions and asynchronous online activities that give context and meaning to students’ clinical experiences, opportunities to practice and receive feedback on clinical and procedural skills, and a 2-week transition to residency capstone.

See Figure 1—Phase and term structure.

The college of medicine is a multicampus college and curriculum. The college has encompassed 4 campuses since the early 1970s, when regional sites in Peoria, Rockford, and Urbana were created through an initiative in the state legislature. The Urbana campus ceased enrollment of new students in 2015 to accommodate the formation of the new Carle Illinois College of Medicine by our sister university in Urbana–Champaign. Our last Urbana-based MD–PhD students are expected to graduate in 2022.
See Table 1—Student Enrollment by Campus.

Our new curriculum’s management structure ensures a consistent educational experience across the campuses. The College Committee on Instruction and Appraisal (CCIA) is proportionally representative of all campuses, and oversees subcommittees that provide both campus-specific management of curricular implementation and central authority for policy approval and program evaluation. Each Phase 1 course is led by a team of basic science and clinical faculty from each campus, and clerkships are linked across campuses by Education Coordinating Committees (ECCs) that plan and review students’ educational experiences across all affiliates and all campuses. A Phase 1 ECC and Phase 2/3 ECC evaluate the coordination of courses within each phase on behalf of the CCIA.

The Office of Educational Affairs, part of the central dean’s administration, evaluates comparability during each block course through weekly assessment performance review and interval evaluations by students. This office also produces course-level and phase-level program evaluation and performance data for review by subcommittees of the CCIA.

### Medical education program objectives

The program objectives are based on the Physician Competency Reference Set competency domains. Our curriculum is competency based but not time variable; we do not plan to introduce curricular options spanning fewer than 4 academic years.

In assessing student progress, we emphasize 3 approaches in particular: professional development, learning as a team, and assessment for learning. Our approach to professional development and its assessment has been informed by participation in the AAMC Core Entrustable Professional Activities Pilot Project. Early in the curriculum, we focus on professional identity formation and its role in the development of “entrustability” (discernment, conscientiousness, and truthfulness). In all 3 phases, evaluations of students are based on direct observation, with increasing expectations of professionalism in the clinical environment.

Classroom activities in Phase 1 promote learning as a team. Students work in teams of 6 in team-based learning (TBL) sessions and other case-based learning formats. The block, DoCS, and Synthesis courses maintain stable teams throughout the academic year. Participation in peer evaluation is an element of the grade in block courses and in DoCS.

Many assessment activities are low stakes, designed to instill habits of self-regulated learning and an appreciation of the skills of assessment for learning. These include students’ development of a focused learning plan before each block’s final exam, customized NBME examinations reflecting block course content, and access to a commercial adaptive learning platform that is integrated with curricular resource materials. Students receive individualized criterion-based and narrative feedback from standardized patients in a sequence of clinical simulations, beginning in Phase 1; they must also demonstrate competence in selected performance-based assessments before beginning the Phase 2 clerkships and again in Phases 2/3 as a graduation requirement.
All Phase 1 courses are graded on a pass/fail basis; clerkship grades are reported with 3 passing tiers or as fail. Several avenues for reflective practice are also incorporated throughout the curriculum. In Phase 1, these include pre- and postexamination learning plans and narrative writing about students’ medical school experiences to further their professional development. Clinical simulation is used in the DoCS course as well as in Phases 2 and 3 for both formative and summative assessment purposes.

**Pedagogy**

Throughout the curriculum, we have a consistent pedagogical emphasis on active learning; assessment for learning; knowledge application; and approaches that develop teamwork, communication, and reflective practice skills. A series of core clinical cases forms the backbone of the Phase 1 block courses, providing clinical context for integrating foundational knowledge and the other curricular themes. Each week, 1 to 3 core case sessions focus on a specific disease or symptom; some sessions are in TBL format. Students work in groups of 6, with multiple teams led by a faculty facilitator and additional faculty with specific content expertise. Students prepare for sessions with assigned readings, videos, and other resources and work through the case with their team. TBL is also being incorporated into some Phase 2 and 3 clerkships. These small-group experiences are coupled with lectures and with laboratory work, including cadaver dissection.

**Clinical experiences**

The DoCS course introduces students to both ambulatory and hospitalized patients starting in the first term of the first year and integrates these experiences into the work of faculty-facilitated small groups throughout Phase 1. Each Peoria DoCS student is now embedded in a single community-based setting for the entirety of Phase 1; a pilot project in Chicago is providing a 4-year longitudinal team-based experience for selected students. There is no university hospital in Peoria or Rockford; however, each campus has built strong relationships with the teaching hospitals and physicians in its community over the last half-century. In Chicago, the University of Illinois Hospitals and Clinics and the Jesse Brown VA Medical Center are located on campus; a wide variety of other clinical affiliates also participate.

### Table 2  
**Program Objectives and Assessment Methods**

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<tr>
<th>Medical education program objectives</th>
<th>Assessment methods</th>
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<td>Patient care: Provide patient-centered care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health</td>
<td>Formative and summative simulation experiences with feedback from faculty and standardized patients; direct observation of clinical skills in clinical settings; clerkship and subinternship evaluations; assignments related to health care systems and health, illness, and society themes; Step 2 CS</td>
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<td>Knowledge for practice: Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social–behavioral sciences, as well as the application of this knowledge to patient care</td>
<td>TBL assessments (IRAT and TRAT) of clinical cases; weekly quiz and final exam items mapped to USMLE domains and subdomains; narrative writing assignments; ungraded NBME exams; NBME subject exams in clerkships; Step 1 and Step 2 CK</td>
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<td>Practice-based learning and improvement: Demonstrate the ability to investigate and evaluate one’s care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning</td>
<td>Formative and summative simulation experiences with feedback from faculty and standardized patients; direct observation of clinical skills in clinical settings; clerkship and subinternship evaluations; Step 2 CS</td>
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<td>Interpersonal and communication skills: Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals</td>
<td>Ethics activities, weekly quiz and final exam items; faculty assessment of discernment, conscientiousness, honesty in DoCS courses, in clerkships and subinternship; CITI training; narrative writing about ethics in Synthesis and Clinical Connections and Competencies course</td>
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<td>Professionalism: Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles</td>
<td>Evidence-based medicine and population health activities and assessments; Health Care Systems SAFER projects; clerkship and subinternship evaluations</td>
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<td>Systems-based practice: Demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care</td>
<td>Health, illness, and society activities and assessments, block 8 capstone community service learning assignment; clerkship and subinternship evaluations</td>
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<td>Interprofessional collaboration: Demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient- and population-centered care</td>
<td>Assessment of professional engagement in course activities, narrative assignments about experiential learning; clerkship and subinternship evaluations; peer feedback; professional development concerns and highlights documentation</td>
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<td>Personal and professional development: Demonstrate the qualities required to sustain lifelong personal and professional growth</td>
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in student education. There is, however, considerable competition for clinical rotation opportunities from area medical schools, an osteopathic school, and schools from other states and countries.

Curricular Governance

Effective coordination of our multicampus curriculum requires a governance structure that creates a matrix of campus-level and institution-level authorities. The ECC infrastructure for each course, clerkship, and phase was described earlier. The ECCs serve as subcommittees of the CCIA, along with campus curriculum management committees that provide campus-specific oversight.

The administrative leadership of the MD program is also best described by a matrix structure. The regional deans in Peoria, Rockford, and Urbana report to the executive dean, and each regional administration includes an associate dean for academic affairs who directly manages curricular and student affairs. The campus associate deans also work together and in conjunction with the college-wide Office of Educational Affairs, led by the senior associate dean for educational affairs and associate dean for educational planning and quality improvement, and with the senior associate dean of students.

Education Staff

The Office of Educational Affairs houses the college’s resources to support college-wide committees, including the CCIA, ECCs, and Accreditation Monitoring and Quality Improvement Committee. This office houses assessment and evaluation services and supports an enterprise-wide educational database, thus centralizing student assessment, program evaluation, and curriculum-related educational research. The senior associate dean of students oversees the admissions office and centralized student support services, including registration and records, financial aid and debt management, academic support, and an office attending to medical student learning environment. The majority of these areas are also represented on each regional campus by staff reporting primarily to campus leadership and secondarily to the college-wide leadership for that administrative function.

The senior associate dean for educational affairs also oversees continuing medical education and has direct responsibility for graduate medical education at the Chicago campus. The Peoria and Rockford campuses are independent ACGME sponsoring institutions, with primary responsibility borne by the regional dean.

Department of Medical Education

The Department of Medical Education is the oldest (1959) continuously operating academic unit in the world dedicated to innovation and scholarship in health professions education. Faculty teach and conduct research in the context of master’s programs in health professions education and in patient safety leadership and a PhD program in curriculum studies. Department faculty are also active in the curriculum and, through international consultative services, have assisted in developing over 35 medical schools around the world.

Faculty Development and Support in Education

Faculty development has been essential to transformation from a primarily lecture-based curriculum to an emphasis on active learning methods. Faculty development at both the campus- and college-wide levels focuses on teaching methods, assessment, and use of educational technologies. Clinical departments receive financial support from central administration for faculty with significant roles in the preclerkship curriculum, particularly college-wide leadership roles. Both the individual and collaborative educational contributions of faculty are recognized for promotion.