Cooper Medical School of Rowan University
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Medical Education Program Highlights
The Cooper Medical School of Rowan University (CMSRU), founded in 2009, accepted our charter class in 2012. Located in Camden, New Jersey, one of our nation’s most vulnerable communities, we are deeply committed to our motto “Camden is our classroom, Camden is our home.” We have graduated 5 classes in our medical education program, all of whom have exemplified our commitment to provide humanistic education in the art and science of medicine within a scientific and scholarly community. We aspire toward excellence in patient care, innovative teaching, research, and service to our community. We are proud to be the 2019 recipient of the AAMC’s Spencer Foreman Award for Outstanding Community Engagement.

CMSRU’s medical education program includes the following:
• Clinical experiences that begin in the first year as part of an integrated basic and clinical science educational program that includes didactic, case-based, and self-directed learning.
• The interprofessional ambulatory clerkship experience for first-, second-, and third-year students delivered in the student-run Cooper Rowan Clinic (CRC) and incorporates medical, pharmacy, physical therapy, and social work students.
• The hybrid third-year experience includes traditional core discipline blocks and a longitudinal integrated clerkship.
• Our systemic 4-year commitment to service learning focuses on the needs of our Camden community.
• A 4-year longitudinal course in health systems science called Scholar’s Workshop culminates in a required capstone project.
• A unique primary care 3-year track leads to primary care residency in internal medicine or pediatrics.

Curriculum
Curriculum description
The CMSRU curriculum has 2 phases. Phase 1, foundation and integration, prepares students for Phase 2, application, exploration, and advancement. In Phase 1, students develop the essential scientific knowledge along with medical practice skills and behaviors to prepare them for clinical practice. Phase 2 provides for the expansion of basic knowledge in the clinical environment and supports career development. The entire curriculum has an emphasis on evidence-based medicine, critical thinking, problem solving, clinical reasoning, understanding the social context of illness, and developing the skills of lifelong learning. Four unique components provide students with opportunities to support their development as physicians:
• An interprofessional ambulatory clerkship experience for first-, second-, and third-year students that is delivered in the student-run, faculty supervised CRC.
• A hybrid third year that incorporates traditional core discipline blocks and the Cooper longitudinal integrated clerkship (CLIC). Students complete 6-week blocks with 4 weeks devoted to inpatient experiences and 2 weeks completed in an integrated ambulatory experience with assigned preceptors from each of the core disciplines. This permits 14 weeks of continuity experience with their discipline-based preceptors over the course of the third year.
• A 4-year longitudinal Scholars Workshop course that incorporates evidence-based medicine, epidemiology, biostatistics, research methodology, quality improvement and patient safety, and health systems science, culminating in a capstone project with thesis and poster presentation.
• Students have the opportunity to take electives that connect them to the humanistic side of medicine and encourage development of cultural competence and ethical values.


Assessment
The CMSRU medical education program objectives correspond to the framework of the ACGME domains of competence. In addition, we identified 3 competencies linked directly to our mission and core values: scholarly inquiry, learning and working in teams, and health partnership. We have disaggregated our competencies into specific objectives that link to national and locally developed assessments.

See Table 1—Sample Program Objectives and Assessment Methods.

Parallel curriculum or tracks
There are 2 curricular tracks at CMSRU: a traditional 4-year track and a 3-year accelerated track.
• The 3-year accelerated track is for students who are interested in primary care internal medicine or pediatrics and is referred to as PC3.
• Students accepted into the track have a provisional acceptance into our primary care residency in internal medicine or pediatrics, fostering the continuum of medical education across UME to GME.
• The PC3 program includes 2 unique courses (an immersion in communication skills and physical diagnosis and a course
Group discussions are the focus of both the Scholars Workshop and TBL. The Foundation of Medical Practice course incorporates workshops that develop clinical skills.

Active learning groups (ALGs) encompass 6 hours weekly for first- and second-year students. The cases are developed by course faculty, reviewed by the ALG Subcommittee of the Curriculum Committee, and cofacilitated by both basic science and clinical faculty teams. There are 8–9 students per group.

Group discussions are the focus of both the Scholars Workshop and Foundations of Medical Practice courses. Faculty facilitators provide short instructional segments and discussions. The Foundations of Medical Practice course incorporates workshops that develop clinical skills.

Laboratory and application sessions are part of the core blocks in Phase 1 of the curriculum. The fully integrated nature of the basic sciences within block structures allows for dissection-based anatomy to occur from the latter part of the first-year curriculum, beginning with the skin and musculoskeletal systems block through the entire second year. In courses that do not have anatomical dissection, application sessions permit deep exploration of virtual microscopy, team-based learning activities, and simulations.

The Clinical Skills and Simulation Center provides instruction for a variety of courses and clerkships throughout the curriculum. In fall 2019, our simulation center relocated to a new 12,000-square-foot facility. Our students in all curricular years are able to take advantage of on-demand standardized patient activities. Teams of 4 students can request a 2-hour practice session to review and practice skills being developed within the curriculum, as well as prepare for their OSCEs or the USMLE Step 2 CS examination.

Clinical experiences
All of our clinical experiences are provided through our affiliation with Cooper University Health Care (CUHC). The expansive network of services and disciplines and wide breadth of patient population associated with CUHC allows students to have a variety of experiences at every level of their training.

• CMSRU students are involved in patient care and clinical reasoning activities from the beginning of the first year. The ambulatory clerkship (years 1–3) adopted an interdisciplinary team-based approach to patient care. Teams are made up of first- through third-year medical and pharmacy students. These comprehensive teams provide care for CRC patients under the supervision of faculty from both disciplines. Both medical and pharmacy students have a specific role on the team relative to their level of training. All patients receive medications via the student-run pharmacy. A social work student intern staffs the clinic and provides support for issues that surface during the patient visit such as housing or food insecurity. Two clinics per month include physical therapy students. Patients may be referred to other services at CUHC. These additional services are provided at no cost to the patient, and 1 or 2 students often accompany patients to their referral visits. This interprofessional team approach provides an invaluable service to the most vulnerable members of our Camden community.

Table 1
Sample Program Objectives and Assessment Methods

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<thead>
<tr>
<th>Medical education program objectives</th>
<th>Assessment methods (select sample)</th>
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<tbody>
<tr>
<td>Medical knowledge</td>
<td>USMLE Step examinations, NBME subject examinations, CMSRU developed written and practical examinations</td>
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<tr>
<td>Patient care</td>
<td>OSCEs, clinical assessments, CLIC, preceptor assessments, clinical oral examinations</td>
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<td>Professionalism</td>
<td>OSCEs, clinical assessments, service learning reports, presentations, narrative assessments</td>
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<tr>
<td>Interpersonal and communication skills</td>
<td>OSCEs, clinical assessments, weekly active learning group (ALG) assessments, narrative assessments, Scholars Workshop module assessments</td>
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<td>Practice-based learning and improvement</td>
<td>Service learning reflective essays, Phase 2 midclerkship formative feedback, Scholars Workshop module assessments</td>
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<tr>
<td>Systems-based practice</td>
<td>Clinical assessments, note review, Lean Six Sigma presentation, Scholars Workshop projects, examinations, Scholars Workshop module assessments</td>
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<tr>
<td>Scholarly inquiry</td>
<td>Scholars Workshop critical appraisal projects and capstone projects, weekly ALG assessments, OSCEs, presentations</td>
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<tr>
<td>Learning and working in teams</td>
<td>TBL scores, weekly ALG assessments, Scholars Workshop module assessments, Life Stages Team Work assessment, Lean Six Sigma presentation</td>
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<td>Health partnership</td>
<td>Clinical assessments, service learning reflective essays, Scholars Workshop projects, ambulatory clerkship behavior checklist</td>
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• All CMSRU students rotate exclusively through CUHC in their third-year clerkships. This permits students continuity of experience with the health system, the EMR, and patient population. The fourth-year students have 4 required clerkships: critical care, emergency medicine, subinternship with student choice of discipline, and interprofessional care of patients with chronic conditions (ICCC). A unique clerkship, ICCC addresses the specific needs of these complicated patients within several pillars of care:
  ◦ The Urban Health Institute is made up of interdisciplinary teams that support patients to ameliorate the impact of poverty and chronic stress as social determinants of health.
  ◦ ICCC hematology/oncology emphasizes goals of care in treatment and transitions to hospice.
  ◦ Geriatric medicine/postacute long-term care emphasizes how aging, compounded with multiple complex medical conditions, affects functional, cognitive, and emotional status.
  ◦ Palliative care medicine works with the inpatient palliative care service.
  ◦ Collaborative/transitional care provides a combination of experiences in family medicine practice using collaborative care teams, and with inpatient transitional care nurse teams addressing the transition from the acute care unit to home-based care.
  ◦ Metabolic and bariatric surgery provides an experience with inter disciplinary teams to support patients to reach their health goals.
  ◦ Physical medicine and rehabilitation offers experience with well-coordinated interprofessional teams that improve patient function and quality of life.

Curricular Governance
The CMSRU Curriculum Committee comprises elected and appointed faculty members with voting privileges and Office of Medical Education ex officio members, without vote. The associate dean for medical education works closely with the Curriculum Committee chair to operationalize the decisions made by the committee. There are 5 permanent subcommittees: Phase 1, Phase 2, Assessment, ALG Case Study Review, and Exam Question Review. Several ad hoc subcommittees assemble as necessary to address curricular enhancements, the biennial review of curricular phases, or the full review of the entire curriculum.

See Figure 1—Curricular governance, support, and implementation.

Education Staff
CMSRU is responsible for both undergraduate and graduate medical education. The Office of Medical Education is responsible for implementation of the educational program; assessment of students; learning support; and evaluation of courses, clerkships, and faculty. There is a separate Office for Graduate Medical Education that has oversight of GME. The Office of Student Affairs is responsible for nonacademic student support, wellness, activities, career and personal advisement, and student development. The Office of Medical Education has responsibility for the administration, planning, implementation, and evaluation of the curriculum and for the development and maintenance of the tools to support curriculum delivery, monitoring, and management. A variety of software tools are used to enhance delivery of the curriculum including one45 for our assessment, evaluation, and curricular mapping. Examsoft is used for our examination system, and Progress IQ is used to provide dashboard services of student academic success for our students, advisory college directors, and administrative team.
Faculty Development and Support in Education

CMSRU faculty development programs assist our faculty to provide exceptional educational experiences for our UME and GME learners, and promote professional vitality and growth. In addition, teaching is highly valued at CMSRU and is 1 of the 4 domains by which faculty are assessed on an annual basis and for promotion and/or tenure.

- Faculty development programs include the CMSRU medical education grand rounds series, targeted medical education-related workshops specific to UME and/or GME, and a research seminar series. On a biannual basis, CMSRU hosts a faculty development week; experts in the field of medical education are invited to address specific needs in medical education.
- Two academic tracks, the clinician–educator track and the academic educator track, endorse excellence in teaching as part of the criteria for promotion and/or tenure.
- The Scholarship of Practice and Teaching Pathway for clinical faculty provides an additional means to promotion for clinical faculty whose primary interest is in clinical medicine and teaching.