Florida State University College of Medicine
Alma B. Littles, MD, Nancy L. Hayes, PhD, and Suzanne Leonard Harrison, MD

Medical Education Program Highlights
Florida State University College of Medicine is a community-based medical school with a distributed, regional campus model and a class size of 120. Our 4-year medical education program has a preclerkship phase that takes place at the central campus of Florida State University in Tallahassee and a clerkship phase that takes place at 6 regional campuses and 2 rural sites. Twenty students are assigned to each regional campus (Pensacola, Tallahassee, Orlando, Sarasota, Daytona Beach, Ft. Pierce) for years 3 and 4. Four students complete their entire third year in rural Marianna, just west of Tallahassee, and 5 students train in nearby Thomasville, Georgia. Students from the regional campuses can complete some of their clerkship training in rural Immokalee, Florida. Highlights of our program include:

- Pairing students with community faculty in an apprenticeship-like, 1-on-1 relationship for clinical training remains the most unique feature of our educational program.
- Extensive student support and resources, including full-time clinical psychologists and educators who provide academic and personal support, learning communities for study space and relationship formation, fully electronic library with 24-hour access, and regional campus facilities with a campus dean and student support staff.
- Rural Learning Experience: an immersion experience that provides a first exposure to rural communities for many of our incoming students and increases awareness of and commitment to our rural mission.
- Integration of clinical and foundational sciences in all preclerkship courses emphasizes the application of knowledge in clinical context.

Curriculum
Curriculum description

- The medical education program begins the Tuesday after Memorial Day.
- Short courses and block sequencing in the preclerkship phase allow flexibility for students who may need “catch up/make up” time.
- Year 3 includes the 6 core clerkships, a 2-week Community Medicine course, the Doctoring 3 course, which includes a longitudinal experience focused on caring for patients with chronic disease, and two 4-week flex blocks.
- Year 4 includes 3 required 4-week clerkships (emergency medicine, geriatrics, and a subinternship in either family medicine or internal medicine), a 3-week residency preparation bootcamp, and a minimum of 16 elective weeks.


Curriculum changes since 2010
In AY 2014–2015, we began implementation of our redesigned curriculum, which included changes across all 4 years. While the overall length of the curricular phases did not change, the redesign included shifts in the academic calendar, providing greater flexibility in scheduling. The most significant changes were:

- Preclerkship phase changed from a discipline-based, stacked curriculum to a fully integrated, systems-based, block curriculum.
- New activities for interprofessional learning. We added a Physician Assistant Program in AY 2017–2018, which provides opportunities to bring MD and PA students together in a variety of curricular and extracurricular activities.
- Sequential use of the NBME Comprehensive Basic Science Exam (CBSE).
- Enhanced dedicated USMLE Step 1 examination preparation time as a “course” to provide structured monitoring of readiness to take Step 1 and to identify and intercede with learners as needed.
- Converted all year 3 core clerkships to 6-week duration.
- Added two 4-week flex time blocks in year 3 to be used for clerkship makeups or remediation and to provide early elective opportunities and career exploration.
- Added preclerkship and residency preparation boot camps.
- Added new third-party learning tools for preclerkship and clerkship support.
- Developed a longitudinal integrated clerkship (LIC) for students at the Marianna site. The LIC has the same learning objectives, requirements, and assessments as clerkships at regional campuses.

Strategies for overcoming challenges in curricular changes
We will continue to address similar challenges as most medical schools, including those associated with the increasing competitiveness of the Match, students’ focus on USMLE Step 1, and the proliferation of third-party learning platforms that respond to student preferences. Our strategies include:

- Emphasis on active learning
- Partnership with a third-party platform as an integral component (not add-on) of our curriculum by:
  - Aligning with our learning objectives
  - Allowing faculty to “vet” external resources, respond to, and build on them
• Providing faculty with resources that prepare students for classroom activities and allow time to develop new classroom application activities
• Providing spaced learning tools and formative assessments
• Using NBME customized assessments in all preclerkship courses

Anticipated changes include incorporation of basic ultrasound in the preclerkship phase and training/experience in telehealth across the 4-year continuum.

Assessment
In 2017, the Curriculum Committee adopted the AAMC Physician Competency Reference Set as our education program objectives, adding a mission-based domain.

• All preclerkship system-based courses include a PICO (Patient/Problem, Intervention, Comparison, and Outcome) assignment. Each student self-identifies a learning need (based on a patient or case from class or preceptorship), researches, and reports the results via Canvas. Faculty and peers provide individual written feedback during small-group sessions or using Canvas.
• All preclerkship exams are comprised completely or in part of NBME customized assessments.
• We use 3 administrations of the CBSE to guide student self-directed study and assess readiness for USMLE Step 1.
• The end-of-year 2 OSCE was converted to a high-stakes assessment of readiness for the clerkship year. The mid-year 3 formative OSCE conducted at the regional campuses is now used to document any needed remediation as well as preparedness for Step 2 CS.
• We added a quality improvement project in year 3. Groups of 3–5 students research the quality improvement process in a hospital or practice; select an evidence-based, measurable problem; present results in the format of a medical journal article; and conclude by giving presentations to their peers.


Pedagogy
We continue to use multiple pedagogic strategies in preclerkships and clerkship phases and particularly encourage those that are evidence based for adult learners and are student focused.

Clinical experiences
• Standardized patient encounters throughout the preclerkship phase
• Preclerkship preceptorships in the offices of community physicians
• Summer Clinical Practicum, a 3-week rotation at the end-of-year 1 practicing history and physical exam and clinical reasoning skills with a community faculty member in the office setting

While inpatient training in community hospitals is an integral part of our program, the core clerkship year is, by intent, predominantly an outpatient experience with students working 1-on-1 with faculty in their offices and wherever they provide care. Our mission emphasis on primary care and underserved, rural, elderly, and minority populations is consistent with a significant proportion (60%–70%) of clinical training taking place in ambulatory settings that include private physician offices, skilled nursing facilities, managed care organizations, emergency departments, rehabilitation facilities, hospice, and home visits. Instead of a traditional “teaching hospital,” our regional campuses are affiliated with over 60 hospitals. Given that patients admitted to hospitals today are typically more complex and spend less time in inpatient areas, our model allows our students to see patients where they receive most of their care. The subinternships may be completed with a residency team or a hospitalist.

Challenges in designing and implementing clinical experiences for medical students
• Increased competition for community clinical faculty as new medical schools open across the state and region. We have a well-established and loyal group of over 2,300 clerkship faculty.
• Ensuring comparability of educational and student experiences at multiple campuses is an ongoing challenge to which we pay continuous attention.
• Maintaining revenues to compensate community-based faculty in an environment of decreasing revenues is a continuing challenge.

Curricular Governance
• The Curriculum Committee is charged with central monitoring of the educational program with responsibility for curricular design and development, implementation, and evaluation consistent with the mission of the college.
• The Year 1 and 2 Subcommittee and the Year 3 and 4 Subcommittee of the Curriculum Committee continuously review their years of the curriculum, address implementation issues, and recommend changes to the Curriculum Committee for improvement of content, integration, and evaluation as necessary.

See Figure 1—Curriculum management.

The senior associate dean for medical education and academic affairs (SADMEAA) is the chief academic officer, providing oversight and support for faculty teaching assignments and performance and overall management of the budget for the educational program. The regional campus deans are the principal academic officers at each campus and report to the SADMEAA via the senior associate dean for regional campuses.

See Figure 2—Curriculum governance.

Department of Medical Education
Units under the direction of the SADMEAA manage and support all aspects of the medical education curriculum. The Office of
Medical Education (OME) includes the directors of clinical foundations (preclerkship) and clinical programs (clerkships and electives) and their support staff. Additional curricular support comes from the directors of the medical library, instructional design, the clinical learning center, preceptorships, student counseling services, informatics and information technology (IT), and the associate dean for faculty development. Each regional campus has a regional dean and a support staff of 6 or 7 full-time employees. The education directors work with the campus deans to recruit and train the clerkship directors in their discipline, one per campus. Each clerkship director works with the campus dean to recruit and train local physicians, who are then assigned students to teach and observe.

In addition to developing calendars and Canvas sites and assisting faculty in developing materials and assessments, and implementing all courses and clerkships, OME populates the curriculum management database; prepares, administers, and analyzes course and clerkship evaluations and other surveys related to the educational program; and works directly with IT to collect and verify student performance data.

IT also consolidates statistics and presents those data to the faculty, assists in the development of technology for teaching innovations, provides classroom support and videoconferencing, and maintains a secure web-based testing environment. An IT coordinator at each regional campus supports the faculty and students.

**Faculty Development and Support in Education**

- The associate dean for faculty development oversees a system to assist the development of faculty as educators including programming offered at the central and regional campuses.
- Faculty receive mentoring and support through their departments, and each full-time faculty member receives an annual stipend to support participation in professional development activities.
- All regional campus faculty complete a core of 4 hours of faculty development before being assigned a student and must participate in ongoing faculty development to maintain their appointment/reappointment status.
- Regional campus deans, clerkship directors, education directors, and central campus faculty and administration meet for 2 days twice a year to provide and receive updates on student performance, curriculum, and current topics in medical education.

**Role of teaching in promotion and tenure**

Teaching excellence is a major factor in promotion and tenure. Many of our teaching faculty are not tenure earning, which allows intense participation in teaching and educational...
activities. For faculty members on the teaching faculty and instructional support faculty track, university policies do not require evidence of scholarly productivity for promotion. Community clinical faculty play a major teaching role for the clerkships. Their initial appointment and promotion procedures are overseen by the Committee on Clinical Faculty.

Regional Medical Campuses
Processes are in place to monitor and assure comparability at all sites:

- Collaboration exists between the director of clinical programs, OME staff, and education directors and campus deans, and regular meetings of clerkship directors, education directors, campus deans, and central campus staff ensure ongoing comparability of the educational program among the campuses.
- Learning objectives, required clinical encounters/skills, assessment methods, and grading policy for each required clerkship are the same for every site.
- Patient encounters, exam scores, and clerkship projects are reviewed by the education director, who assigns the final grade for all students on their respective clerkship at every campus.
- Students at all campuses complete the MedEdIQ evaluation of the clinical faculty and their clerkship experiences. Results are compared by campus and across campuses.
- The Year 3 and 4 Subcommittee and the Curriculum Committee review data from student performance and the learning environment at the regional campuses.

See Table 1—Regional Medical Campuses.

<table>
<thead>
<tr>
<th>Regional campus name</th>
<th>Type</th>
<th>Student enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daytona</td>
<td>Clinical</td>
<td>40</td>
</tr>
<tr>
<td>Ft. Pierce</td>
<td>Clinical</td>
<td>40</td>
</tr>
<tr>
<td>Orlando</td>
<td>Clinical</td>
<td>40</td>
</tr>
<tr>
<td>Pensacola</td>
<td>Clinical</td>
<td>40</td>
</tr>
<tr>
<td>Sarasota</td>
<td>Clinical</td>
<td>40</td>
</tr>
<tr>
<td>Tallahassee</td>
<td>Clinical</td>
<td>40</td>
</tr>
</tbody>
</table>