It is the policy of the University of South Carolina, School of Medicine to engage in ongoing quality improvements of all School of Medicine policies, programs and processes to ensure the achievement of the mission and the effective monitoring of the medical education program's compliance with accreditation standards.

2022 University of South Carolina School of Medicine Program Assessment and Continuous Quality Improvement Report

Academic Year 2020-2021

Mary Foertsch, PhD

## TABLE OF CONTENTS

Program Assessment Plan Activities and LCME Elements	2
2022 Program Assessment and CQI report	5
LCME Elements Addressed in 2022 CQI Review	6
Standard 2: Leadership and Administration	6
Standard 3: Academic and Learning Environments	6
Standard 5: Educational Resources and Infrastructure	6
Standard 8: Curricular Management, Evaluation, and Enhancement	7
Standard 9: Teaching, Supervision, Assessment, and Student and Patient Safety	7
Standard 10: Medical Student Selection, Assignment, and Progress	7
Standard 11: Medical Student Academic Support, Career Advising, and Educational Records	8
LCME Status Report	8
LCME DETERMINATIONS OF COMPLIANCE WITH ACCREDITATION STANDARDS	
Program Assessment Results for Academic Year 2020-2021	13
LCME ELEMENT 2.4: Sufficiency of Administrative Staff	
LCME ELEMENT 3.2: Community of Scholars/Research Opportunities	
LCME ELEMENT 3.3: Diversity/Pipeline Programs and Partnerships	
LCME ELEMENT 3.4: Anti-discrimination PolicyError! Bookmark not	ot defined.
LCME ELEMENT 5.8: Library Resources/Staff	
LCME ELEMENT 5.12: Required Notifications to LCME	
LCME ELEMENT 8.3: Curricular Design, Review, Revision/Content Monitoring	
LCME ELEMENT 8.4: Evaluation of educational Program Outcomes	
LCME ELEMENT 9.4: Assessment System	
LCME ELEMENT 10.1: Premedical Education/Required Coursework	
LCME ELEMENT 10.3: Policies Regarding Student Selection	
LCME ELEMENT 10.5: Technical Standards	95
LCME ELEMENT 11.1: Academic Advising	97
LCME ELEMENT 11.2: Career Advising	
LCME ELEMENT 11.3: Oversight of Extramural Activities	
Summary of Current Activities and Status	
Attachment A	114

### **PROGRAM ASSESSMENT PLAN ACTIVITIES AND LCME ELEMENTS**

It is the policy of the University of South Carolina, School of Medicine to engage in ongoing quality improvements of all college policies, programs and processes to ensure the achievement of the mission and the effective monitoring of the medical education program's compliance with accreditation standards.

Such improvement initiatives, while far-reaching in scope, include a focus on planning and continuous quality improvement (CQI) processes undertaken to optimize the medical education program's 1) response to evolving resources and knowledge bases, and 2) compliance with all accreditation standards.

The Director, Program Assessment and Continuous Quality Improvement is responsible for managing the process, as well as receiving and analyzing relevant data. Standing committees and senior administrators within the college contribute to the monitoring effort, and additional associated personnel provide coordination and support the process.

The Associate Dean for Medical Education and Academic Affairs ensures that appropriate resources are allocated for these activities, including personnel, information technology systems and infrastructure for the collecting and reporting of data.

Areas for monitoring and/or improvement are identified from the following categories:

- 1. Elements that have been cited as "not in compliance" or "compliance with monitoring" during previous accreditation visits.
- 2. New elements or elements in which Liaison Committee on Medical Education (LCME) expectations have evolved (as communicated through Association of American Medical Colleges meetings, the LCME website or other communication from the secretariats).
- 3. Elements that are affected by review or changes to SOM policies.
- 4. Elements that explicitly require regular monitoring or relate to regularly occurring processes.
- 5. Other components brought forth as a result of the program evaluation process, and items brought forward to the Curriculum Committee as areas of concern from the faculty or students, including results of institutional or national surveys such as internal questionnaires, student feedback surveys and the Graduation Questionnaire.

Monitoring of specific elements and data is accomplished with a work plan that indicates the details being monitored, appropriate time intervals and the group responsible.

The Director, Program Assessment and Continuous Quality Improvement is a resource member on the Curriculum Committee, Strategic Planning Committee, Executive Committee, and member of the Core Student Assessment Subcommittee which is a subcommittee of the Curriculum Committee.

The SOM Program Assessment and Continuous Quality Improvement Plan describes a series of program assessment activities that systematically address outcomes at specific points in a multi-year cycle, how data is collected and analyzed, and how the loop is closed by identifying and integrating implications for change.

The assessment plan includes the following information:

- 1. How outcomes were assessed
- 2. Data collection and analysis
- 3. When and how often outcomes were assessed
- 4. Results
- 5. Closing the loop and implications

1. How outcomes were assessed. To determine how objectives were assessed, it was necessary to look at what students are required to do to demonstrate what they have learned. These activities are the assessment tasks—activities used to assess student learning of the objective. Typical course-embedded tasks included papers, projects, presentations, performances, and specific parts of examinations, to name a few. For most courses, a national standardized test served as the most appropriate assessment task. Sometimes the measure is the average score on a task for all students. A commonly used instrument is a rubric. Other assessment because they measure a perception of learning as opposed to more direct forms of student learning (course-embedded tasks, national tests, etc.)

The process for assessing attainments of the desired competencies is both formative and summative in nature. Course content and processes focus on the competencies using traditional classroom and technologically enhanced instructional strategies and measuring achievement of the competencies most commonly through objective tests, written assignments, and laboratory or simulated applications. In many cases the competencies are ultimately applied to the practice setting in the clerkship or practice experience program. Surveys are administered regularly at the end of courses. These surveys help to document the development of skills as well as students' views on instruction, services, policies, and resources. As with most schools of medicine, a primary outcome assessment tool is performance on the USMLE Step Examinations. The data compare overall performance on the Step Examinations by medical students nationally. Examination passage rates are evaluated to assure appropriate curricular development of student's knowledge and skills. The provision of a continuous performance level provides evidence of the effectiveness of the overall curriculum. Note: Grades are assigned to students based on performance in a course. To outside entities, the content of a course is unknown; therefore, what students learn is unknown. By providing data by learning objectives are developed for programs, not just courses, thus, the learning outcomes of a program are more explicit with assessment information.

**2. Data collection and analysis.** Data was collected and analyzed by the Director of Program Assessment and Continuous Quality Improvement, the Curriculum Committee and its subcommittees, the Associate Dean for Medical Education, the Assistant Deans for Preclinical Curriculum and Clinical Curriculum and Assessment, Medical Student Education-Florence, and Course and Clerkship Directors.

Data elements currently available were used for program-level assessment. These include:

- □ Faculty developed exams, assignments, and projects
- Papers and other written assignments and presentations (presenting research study findings)
- □ Materials describing curricular practices (syllabi, exams, textbooks)
- Trends in student exam performance on critical examinations over time
- Standardized test performance

- □ Surveys, interviews of faculty and students
- Student clerkships and group work
- Capstone coursework
- SOM policies

**3.** When and how often outcomes were assessed. Quantifiable and measurable outcomes for the achievement of curricular competencies are described in each course syllabus and determined by the course instructors. As noted in Attachment A, several performance indicators were used to evaluate student achievement at progressive points throughout program matriculation. Periodic course examinations were the most common method employed to evaluate students' achievement of course objectives. Laboratory exercises, assigned readings, papers, projects, and presentations were also commonly employed throughout the curriculum to measure student mastery of skills and the application of knowledge. A number of these evaluation points have mandated passage criteria with necessary remediation to pass the course or proceed to the next year.

**4. Results and implications.** The reporting function of assessment includes setting up a repository for the data which also includes reporting the changes made to enhance student learning. Planning for documentation is essential not only for anyone to view results of assessment and generate reports, but also for ensuring that the process continues should a key faculty or staff member leave the institution

**5.** Closing the loop. Someone has to be responsible for assessment analysis. The data needs to be aggregated and reviewed to identify where learning should/can be improved. However, the responsibility for "closing the loop" ultimately rests with the faculty. Therefore, a process for communicating the results of assessment to the faculty should be part of the assessment plan. Otherwise, the results could end up sitting on a shelf or buried in a database without any follow-up. The follow-up is what is known as "closing the loop". In the analysis, the objectives that need the most improvement are identified. In closing the loop, strategies for creating change to enhance student learning are developed. Closing the loop occurs when a change was made in a program based on program assessment data. In some cases, the development of an action plan may be necessary when addressing a serious problem.

An action plan should be submitted to the Associate Dean for Medical Education and the Director for Program Assessment and Continuous Quality Improvement. It should include the following elements.

- A clearly stated goal and clearly define objective. Taking into consideration not only the importance of the goal, but also how reachable it is considering the time frame and resources available.
- Use a team to create the action plan. This won't be appropriate in certain cases but brainstorming with team members can help create a stronger plan of action. And while creating a plan, it may be necessary to seek input from others outside the team as well.
- Choose action steps that are concrete, measurable, and attainable. These steps should be clearly defined, not vague ideas.
- □ Identify who is responsible for each action step and who will be supporting them. Support people are not responsible for the outcome of an action step, but they assist in the process.
- □ Provide a clear schedule for completing action steps. Your final goal may be a short-term project or take years to complete. It's important to break down the timeline for each step along the way. List the resources necessary for accomplishing action steps. If sufficient resources are not currently available, include a plan for their acquisition.

- Review and update your action plan as it is implemented. As you track the progress of your plan, make any changes needed as they arise.
- Communicate with key people about the plan's progress and effects as it is carried out.

A template for an action plan is available electronically from the Director for Program Assessment and Continuous Quality Improvement and appears below.

#### Action plans will be included in the CQI report next year.

#### 2022 PROGRAM ASSESSMENT AND CQI REPORT

The 2022 CQI report is for the academic year 2020-2021 and includes prioritized focused review on 15 LCME elements. Elements marked with a single asterisk (\*) were designated by LCME in need of monitoring; elements marked with two asterisks (\*\*) were found by LCME to be unsatisfactory. All other elements were either rated satisfactory by the LCME or are being reviewed for the first time.

- 2.4 Sufficiency of administrative staff \*\*
- 3.2 Community of scholars/research opportunities\*
- 3.3 Diversity/pipeline programs and partnerships\*
- 3.4 Anti-Discrimination Policy (New)
- 5.8 Library Resources/Staff (New)
- 5.12 Required Notifications to LCME (New)
- 8.3 Curricular Design, Review, Revision/Content Monitoring
- 8.4 Evaluation of Educational Program Outcomes
- 9.4 Assessment System (Update)
- 10.1 Premedical Education/Required Coursework (New)
- 10.3 Policies Regarding Student Selection (New)
- 10.5 Technical Standards (New)
- 11.1 Academic Advising\*
- 11.2 Career advising\*
- 11.3 Oversight of extramural activities\*

## LCME ELEMENTS ADDRESSED IN 2022 CQI REVIEW

Fifteen LCME elements are included in this report for the 2020-2021 academic year.

### STANDARD 2: LEADERSHIP AND ADMINISTRATION

#### LCME ELEMENT 2.4: Sufficiency of administrative staff

A medical school has in place a sufficient number of associate or assistant deans, leaders of organizational units and senior administrative staff who are able to commit the time necessary to accomplish the missions of the medical school.

### STANDARD 3: ACADEMIC AND LEARNING ENVIRONMENTS

#### LCME ELEMENT 3.2: Community of scholars/research opportunities

A medical education program is conducted in an environment that fosters the intellectual challenge and spirit of inquiry appropriate to a community of scholars and provides sufficient opportunities, encouragement, and support for medical student participation in the research and other scholarly activities of its faculty.

### LCME ELEMENT 3.3: Diversity/pipeline programs and partnerships

A medical school has effective policies and practices in place, and engages in ongoing, systematic, and focused recruitment and retention activities, to achieve mission-appropriate diversity outcomes among its students, faculty, senior administrative staff, and other relevant members of its academic community. These activities include the use of programs and/or partnerships aimed at achieving diversity among qualified applicants for medical school admission and the evaluation of program and partnership outcomes.

### **LCME ELEMENT 3.4: Anti-Discrimination Policy**

A medical school has a policy in place to ensure that it does not discriminate on the basis of age, disability, gender identity, national origin, race, religion, sex, sexual orientation or any basis protected by federal law.

## STANDARD 5: EDUCATIONAL RESOURCES AND INFRASTRUCTURE

### LCME ELEMENT 5.8: Library Resources/Staff

A medical school provides ready access to well-maintained library resources sufficient in breadth of holdings and technology to support its educational and other missions. Library services are supervised by a professional staff that is familiar with regional and national information resources and data systems and is responsive to the needs of the medical students, faculty members, and others associated with the institution.

### LCME ELEMENT 5.12: Required Notifications to LCME

A medical school notifies the LCME of any substantial change in the number of enrolled medical students; of any decrease in the resources available to the institution for its medical education program, including faculty, physical facilities, or finances; of its plans for any major modification of its medical curriculum; and/or of anticipated changes in the affiliation status of the program's clinical facilities. The program also provides prior notification to the LCME if it plans to increase entering medical student enrollment on the main campus and/or in one or more existing regional

6

campuses above the threshold of 10 percent, or 15 medical students in one year or by a total of 20 percent in three years; or to start a new or to expand an existing regional campus; or to initiate a new parallel curriculum (track).

## STANDARD 8: CURRICULAR MANAGEMENT, EVALUATION, AND ENHANCEMENT

## LCME ELEMENT 8.3 Curricular Design, Review, Revision/Content Monitoring

The faculty of a medical school are responsible for the detailed development, design, and implementation of all components of the medical education program, including the medical education program objectives, the learning objectives for each required curricular segment, instructional and assessment methods appropriate for the achievement of those objectives, content and content sequencing, ongoing review and updating of content, and evaluation of course, clerkship, and teacher quality. These medical education program objectives, learning objectives, content, and instructional and assessment methods are subject to ongoing monitoring, review, and revision by the faculty to ensure that the curriculum functions effectively as a whole to achieve medical education program objectives.

## **LCME ELEMENT 8.4: Program Evaluation**

A medical school collects and uses a variety of outcome data, including national norms of accomplishment, to demonstrate the extent to which medical students are achieving medical education program objectives and to enhance medical education program quality. These data are collected during program enrollment and after program completion.

## STANDARD 9: TEACHING, SUPERVISION, ASSESSMENT, AND STUDENT AND PATIENT SAFETY

### LCME ELEMENT 9.4: Assessment System

A medical school ensures that, throughout its medical education program, there is a centralized system in place that employs a variety of measures (including direct observation) for the assessment of student achievement, including students' acquisition of the knowledge, core clinical skills (e.g., medical history-taking, physical examination), behaviors, and attitudes specified in medical education program objectives, and that ensures that all medical students achieve the same medical education program objectives.

## STANDARD 10: MEDICAL STUDENT SELECTION, ASSIGNMENT, AND PROGRESS

### **LCME ELEMENT 10.1: Premedical Education/Required Coursework**

A medical school has in place a system with central oversight that monitors and ensures completion by all medical students of required clinical experiences in the medical education program and remedies any identified gaps.

### LCME ELEMENT 10.3: Policies Regarding Student Selection/Progress and Their Dissemination

The faculty of a medical school establish criteria for student selection and develop and implement effective policies and procedures regarding, and make decisions about, medical student application, selection, admission, assessment, promotion, graduation, and any disciplinary action. The medical school makes available to all interested parties its criteria, standards, policies, and procedures regarding these matters.

### **LCME ELEMENT 10.5: Technical Standards**

A medical school develops and publishes technical standards for the admission, retention, and graduation of applicants or medical students in accordance with legal requirements.

## STANDARD 11: MEDICAL STUDENT ACADEMIC SUPPORT, CAREER ADVISING, AND EDUCATIONAL RECORDS

## LCME ELEMENT 11.1: Academic Advising

A medical school has an effective system of academic advising in place for medical students that integrates the efforts of faculty members, course and clerkship directors, and student affairs staff with its counseling and tutorial services and ensures that medical students can obtain academic counseling from individuals who have no role in making assessment or promotion decisions about them.

## LCME ELEMENT 11.2: Career advising

A medical school has an effective career advising system in place that integrates the efforts of faculty members, clerkship directors, and student affairs staff to assist medical students in choosing elective courses, evaluating career options, and applying to residency programs.

## LCME ELEMENT 11.3: Oversight of extramural activities

If a medical student at a medical school is permitted to take an elective under the auspices of another medical school, institution, or organization, a centralized system exists in the dean's office at the home school to review the proposed extramural elective prior to approval and to ensure the return of a performance assessment of the student and an evaluation of the elective by the student. Information about such issues as the following are available, as appropriate, to the student and the medical school in order to inform the student's and the school's review of the experience prior to its approval:

Potential risks to the health and safety of patients, students, and the community

- The availability of emergency care
- □ *The possibility of natural disasters, political instability, and exposure to disease*
- □ The need for additional preparation prior to, support during, and follow-up after the elective
- □ The level and quality of supervision
- Any potential challenges to the code of medical ethics adopted by the home school.

## LCME STATUS REPORT

The school's current accreditation status is as follows: LCME Determination - End indeterminate term and continue full accreditation of the medical education program for the remainder of the eight-year term. Required Follow-Up for the School Status report due by August 17, 2020, Next Full Survey Visit 2024-25 academic year. The Medical School Directory on the LCME website, lcme.org/directory has been updated to reflect this change in the next survey visit date.

The LCME requested a status report original due by August 17, 2020, but delayed until March, 2021 due to the COVID-19 pandemic. The status report contained the following summary: In the July 1, 2019 letter, the LCME voted to end the indeterminate term and continue full accreditation of the medical education program for the remainder of the eight-year term. A status report was request by August 17, 2020 on accreditation elements that remained unsatisfactory or satisfactory with a need for monitoring. Due to COVID-19, a request to delay this status report until December 1, 2020 was granted. Please see the requested information as noted below:

Satisfactory with a Need for Monitoring

- Element 1.1 (strategic planning and continuous quality improvement)
- Element 2.4 (sufficiency of administrative staff)
- Element 3.2 (community of scholars/research opportunities)
- Element 8.3 (curricular design, review, revision/content monitoring)
- Element 9.1 (preparation of resident and non-faculty instructors)
- Element 11.2 (career advising)
- Element 11.3 (oversight of extramural electives)
- Element 12.1 (financial aid/debt management counseling/student educational debt)

## Unsatisfactory

• Element 3.3 (diversity/pipeline programs and partnerships)

Detailed data and responses are provided for each of these elements in the section below. Although significant progress has been made in many areas, we acknowledge that despite great investment of time and resources, our outcomes to date are disappointing in two areas. Regarding Element 2.4 (sufficiency of administrative staff), multiple changes have been made on behalf of our student body. Over the past two and one-half years, four talented assistant deans have been added to our education team, with a fifth joining us on December 1, 2020. We added a new Manager of Student Services who has connected well with students, and we are adding an additional staff member who will begin in January 2021. With our Student Success and Wellness Center now fully operational, student attendance at exam reviews has improved and first-time pass rates at all levels of the USMLE Step exams have increased to above the national averages. Over the past nine months, SOM administration has led weekly calls with student leaders from all four medical school classes and we have hosted more frequent town halls. Our Student Services Department added a weekly student newsletter in 2019, and in early 2020 a monthly SOMC newsletter was added. Despite a UofSC hiring freeze since March 2020, we requested and received permission from the University to pursue hiring additional support staff in Student Services and the Student Success and Wellness Center. Considering these very deliberate investments in student support, we were particularly disappointed in the feedback received this summer from the 2020 Graduation Questionnaire. We realize that many of the new student resources added over the past 30 months were added after our 2020 graduating class had completed their preclinical education, meaning that the 2020 class has had little exposure to some of these new leaders. We have established a Climate Task Force to provide guidance on steps that the SOMC can take to further build partnership among our students, faculty, and administration. Despite all of these changes, we recognize that the feedback from our graduating class of 2020 on the Graduation Questionnaire was very concerning. We also realize that it was substantially worse than the subsequent M-IV internal pulse survey which we conducted several weeks later, just prior to graduation. Both surveys had fairly high response rates, and the causes for the disparities remain unclear, although we speculate about possible confounding factors under Element 2.4 below. Regardless of the cause for the disparities in this new data, more progress is clearly needed in solidifying our student support. We remain committed to pursuing all reasonable steps to ensure we are supporting our students in the manner they deserve.

We also have devoted intense efforts to address Element 3.3 (diversity pipeline programs and partnerships), but have failed to see the substantial changes in the make-up of our faculty or senior staff that we had hoped to achieve. Over the past three years, our leadership has taken a multi-modal, evidence-based approach, with multiple concurrent actions aimed at trying to attract under-represented minority faculty and senior staff to the SOMC. Our efforts have ranged from strengthening our recruitment processes to investing in faculty development/retention strategies, all the while deliberately working to build a culture of inclusion. Despite the understanding that such changes often take time, we are disappointed that we have not seen the desired gains in percentages of under-represented minorities within our faculty. One factor impacting this is that for the past three years, new clinical faculty are hired within the health system rather than the SOMC; therefore, our SOMC faculty hiring efforts are focused primarily on our basic science departments and within medical education. We remain devoted to advancing diversity in the coming years, and we continue to explore additional strategies on how we can better achieve the desired results.

### LCME DETERMINATIONS OF COMPLIANCE WITH ACCREDITATION STANDARDS

At its February 15-18 2021 meeting, the Liaison Committee on Medical Education (LCME) reviewed the status report submitted on December 1, 2020 on behalf of the medical program leading to the MD degree at the University Of South Carolina School of Medicine, Columbia.

The status report addressed the program's performance in the following elements: Element 1.1 (strategic planning and continuous quality improvement), Element 2.4 (sufficiency of administrative staff), Element 3.2 (community of scholars/research opportunities), Element 3.3 (diversity/pipeline programs and partnerships), Element 8.3 (curricular design, review, revision/content monitoring), Element 9.1 (preparation of resident and non-faculty instructors), Element 11.2 (career advising), Element 11.3 (oversight of extramural electives), and Element 12.1 (financial aid/debt management counseling/student educational debt).

Based on the information provided, LCME voted as follows:

Required Follow-Up for the School	Status report due by December 1, 2021
Next Full Survey Visit	2024-25 academic year

Table 1.1 represents the program's current compliance with each of the standards as of March 8, 2021. LCME determinations of compliance with standards that were not addressed in the status report were taken from the most recent LCME review of the program's compliance with those standards.

Table 1.1: LCME S	andards Determination	1
-------------------	-----------------------	---

Standard	LCME Determination
Standard 1: Mission, Planning, Organization, and Integrity	С
Standard 2: Leadership and Administration	СМ
Standard 3: Academic and Learning Environments	СМ
Standard 4: Faculty Preparation, Productivity, Participation, and Policies	С
Standard 5: Educational Resources and Infrastructure	С
Standard 6: Competencies, Curricular Objectives, and Curricular Design	С
Standard 7: Curricular Content	С
Standard 8: Curricular Management, Evaluation, and Enhancement	С
Standard 9: Teaching, Supervision, Assessment, and Student and Patient Safety	С
Standard 10: Medical Student Selection, Assignment, and Progress	С
Standard 11: Medical Student Academic Support, Career Advising, and Educational Records	СМ
Standard 12: Medical Student Health Services, Personal Counseling, and Financial Aid Services	С

C = Compliance, CM = Compliance with a Need for Monitoring, NC = Noncompliance

Table 1.2 contains the specific areas cited within each standard that are included in this report and their current status.

Element	LCME Determination
Element 1.1. (strategic planning and continuous quality improvement)	S
Element 2.4 (sufficiency of administrative staff)	U
Element 3.2 (community of scholars/research opportunities)	SM
Element 3.3 (diversity/pipeline programs and partnerships)	SM
Element 3.6 (student mistreatment	S
Element 4.3 (faculty appointment policies)	S
Element 6.1 (program and learning objectives)	S
Element 7.1 (biomedical, behavioral, social sciences)	S
Element 8.3 (curricular design, review, revision/content monitoring	S
Element 9.1 (preparation of resident and non-faculty instructors)	S
Element 11.2 (career advising)	SM
Element 11.3 (oversight of extramural electives	SM
Element 12.1 (financial and debt management counseling/student educational debt	S

S = Satisfactory, SM = Satisfactory with a Need for Monitoring, U = Unsatisfactory

If the LCME determines a program to be in noncompliance with a standard while the program's performance in an associated element is found to be unsatisfactory, the total time for correction of the deficiencies in compliance and performance will be two years. If the LCME determines a program to be in compliance or compliance with a need for monitoring with a standard but if the performance in an element within that stated is unsatisfactory, the program must achieve a status of satisfactory or satisfactory with a need for monitoring I that element within a maximum of two years; if that does not occur, the LCME will find the program to be in noncompliance with the relevant standard. The LCME requires that the LCME document compliance with all LCME accreditation standards within two years of the LCME meeting at which the noncompliance determination was made.

## PROGRAM ASSESSMENT RESULTS FOR ACADEMIC YEAR 2019-2020

## LCME ELEMENT 2.4: SUFFICIENCY OF ADMINISTRATIVE STAFF

A medical school has in place a sufficient number of associate or assistant deans, leaders of organizational units and senior administrative staff who are able to commit the time necessary to accomplish the missions of the medical school.

When/How Often Implemented: Twice annually.

Source(s): The primary data source is the AAMC GQ and school administered surveys that were designed by the LCME.

<u>Methodology</u>: The Medical School Graduation Questionnaire (GQ) is a national questionnaire administered by the AAMC. The GQ was first administered in 1978 and is an important tool for medical schools to use in program evaluation and to improve the medical student experience. The content of school administered surveys was determined by the LCME.

<u>*Results:*</u> Table 2.4a shows the percentage of students who were satisfied/very satisfied (aggregated) with the Office of the Associate Dean of/for Students. Table 2.4b shows the percentage of students who were satisfied/very satisfied (aggregated) with the Office of the Associate Dean for Educational Programs/Medical Education.

As shown in Table 2.4a, the results across the board in all three areas surveyed were far above satisfaction levels in 2020 and close to the national average in 2021. Student satisfaction with the activities of this office has risen in the past year.

	School and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of students who were <i>satisfied/very</i> satisfied (aggregated) with the Office of the Associate Dean of/for Students.											
	GQ	2016	GQ 2017		GQ 2018		GQ 2019		GQ 2020		GQ 2021	
	Schl %	Nat %	Schl %	Nat %	Schl %	Nat %	Schl %	Nat %	Sch1%	Nat%	Schl%	Nat%
Accessibility	61.7	79.3	63.8	79.5	55.6	78.6	76.3	80.0	52.8	79.5	80.3	79.0
Awareness of student concerns	57.5	72.9	58.6	72.7	37.1	71.1	69.8	71.7	41.6	72.0	68.9	71.2
Responsiveness to student problems	50.7	71.5	56.1	72.1	35.2	70.0	66.6	70.3	36.7	69.4	65.6	68.9

#### Table 2.4a: Office of the Associate Dean of/for Students

	GQ	2016	GQ	2017	GQ 2018		GQ 2019		GC	Q 2020	GQ 2021	
	Schl. %	Nation %	Schl %	Nation %	Schl %	Nation %	Schl %	Nation %	Schl %	Nation %	Schl %	Nation %
Accessibility	63.0	73.7	74.1	74.3	64.6	72.5	69.8	73.7	48.6	74.2	77.0	74.3
Awareness of student concerns	54.8	70.0	65.5	70.1	56.9	68.1	65.1	68.7	37.5	69.2	75.4	69.31
Responsiveness to student problems	52.8	67.5	63.8	68.4	44.6	65.9	63.5	66.4	33.4	66.5	72.1	66.4

#### +Table 2.4b: Office of the Associate Dean for Educational Programs/Medical Education

Table 2.4b shows a significant increase across in student satisfaction in all three areas surveyed with the Office of the Associate Dean for Educational Programs/Medical Education in 2021 compared to 2020. The average percentages are **above** the national averages in all three areas in 2021.

The LCME noted that prior to 2018, "there were recent significant declines in students' perceptions about the office of the dean for education and the dean of students in the areas of accessibility, awareness of student concerns, and responsiveness as reported in the AAMC Medical School Graduation Questionnaire (AAMC GQ). Three additional positions were approved and hired for the office of education since receipt of the AAMC GQ results; and the dean reports conversations with specific leaders directed at improvement in the dean of students office. During the survey visit, students reported improvements over the past year but reiterated issues with responsiveness remain."

The SOM was asked by the LCME in 2020 and 2021 to provide the results of a survey of students in all classes on satisfaction with the Office of Student and Career Services in the following areas using the scale for the survey:

% very satisfied + satisfied; % dissatisfied + very dissatisfied; % no opportunity to observe (N/A). Included are response rates for each curriculum year in the following areas:

- a. Accessibility
- b. Awareness of student concerns
- c. Responsiveness to student problems

Table 2.4c compares the number and percentage of students who responded N/A and dissatisfied/very dissatisfied (combined) with the accessibility of the Office of Student and Career and Student Services in 2020 with those who responded in 2021.

As shown in Table 2.4c, the level of dissatisfaction with accessibility to the Office of Student and Career Services is lower in 2021 than in 2020, except for the M-III respondents. It is possible that the higher level of dissatisfaction expressed by the M-III class is related to the interruption of clerkships by the COVID pandemic.

Table 2.4d compares the number and percentage of students who responded N/A and satisfied/very satisfied (combined) with the accessibility of the Office of Student and Career and Student Services in 2020 with those who responded in 2021.

## Table 2.4c Office of Student and Career Services—Dissatisfaction with Accessibility (Columbia Campus) 2020,2021

responded	ata by curr l n/a, <b>dissa</b> t and Care		Source: School administered LCME Survey 2020, Spring 2021							
Medical	Number	of Total	Number and	1 % of 1	Dissatisfied and Very					
School Class	Responses to this item/Response rate		2020	-	2021 (	Spring)	2020		2021 (Spring)	
	2020	2021	Ν	%	Ν	%	Ν	%	Ν	%
MI	58/57%	73/72%	15	26	3	4	6	10	3	4
MII	70/74%	73/73%	14	20	5	7	13	19	4	6
MIII	82/80%	52/52%	8 10 2 4				7	8	6	12
MIV	73/88%	67/69%	5	6	2	3	9	13	5	6

Source: School administered LCME Survey 2020, Spring 2021

As shown in Table 2.4d, the percentage of respondents who reported being satisfied/very satisfied with accessibility to of the Office of Student and Career Services rose dramatically in 2021 when compared to 2020. The response rate for the M-The response rate for M-I students was lower than the response rate for the other three classes surveyed in 2020. The response rate also dropped for the M-III students in 2021.

The LCME student survey regarding dissatisfaction with accessibility to the Office of Student and Career Services (Table 2.4d) shows that none of the survey respondents expressed dissatisfaction with the Office of Student and Career Services accessibility on the Florence campus in 2020 or 2021.

## Table 2.4d: Office of Student and Career Services - Dissatisfaction with Accessibility (Florence Campus) 2020 and 2021

	•	urriculum year and dissatisfied (com				-	•		<b>^</b>	ed n/a,
Medical School	Respon	r of Total ses to this		ber and	% of N/A	1	Number and % of Dissatisfied and Very Dissatisfied			
Class	item/Re	esponse rate	2020		2021 (Spring)		20	20	2021 (Spring)	
	2020	2021 (Spring)	N	%	Ν	%	N	%	Ν	%
MI										
MII										
MIII	8/73%	5/57%	0	0	0	0	0	0	0	0
MIV	9/75%	6/46%	0	0	0	0	0	0	0	0

Source: School administered LCME Survey 2020, Spring 2021

## Table 2.4d: Office of Student and Career Services – Satisfaction with Accessibility (Columbia Campus) 2020 and 2021,

Provide data by curriculum year and campus on the number and percentage of students who responded n/a, satisfied/very satisfied (combined) with the accessibility of the Office of Student and Career Services.

Medical School	Number Response		Number a	nd % of	N/A Resp	onses	Number and % of combined Satisfied and Very Satisfied				
Class	item/Response rate		2020		2021 (Spring)		202	20	2021 (Spring)		
	2020	2020 2021(Spring)		%	Ν	%	Ν	%	Ν	%	
MI	58/57%	73/72%	15	26	3	4	37	56	67	91	
MII	70/74%	73/73%	14	20	5	6	43	61	64	88	
MIII	82/80%	52/52%	8	10	2	12	67	82	44	85	
MIV	73/88%	67/69%	5	6	2	6	59	81	61	91	

Source: School administered LCME Survey 2020, Spring 2021

Table 2.4e shows LCME survey respondents' satisfaction with accessibility to the Office of Student and Career Services in 2020 and 2021.

# Table 2.4e: Office of Student and Career Services – Satisfaction with Accessibility (Florence Campus) 2020 and 2021

	Provide data by curriculum year and campus on the number and percentage of students who responded n/a, <b>satisfied/very satisfied (combined)</b> with the accessibility of the Office of Student and Career Services.										
Medical School	1.00000	r of Total ses to this	Numb Respo		% of N/A		Number and % of Satisfied and Very Satisfied				
Class	Class item/Resp	esponse rate	2020		2021 (Spring)		2020		202	1 (Spring)	
	2020	2021 (Spring)	N	%	N	%	N	%	N	%	
MI											
MII											
MIII	8/73%	5/57%	0	0	0	0	7	88%	5	100%	
MIV	9/75%	6/46%	0	0	0	0	6	67%	6	100%	

Source: School administered LCME Survey 2020, Spring 2021

Survey respondents from the Florence Campus reported greater satisfaction in 2021 than in 2020 with the accessibility to the Office of Student and Career Services. The number of respondents in 2021 was lower than in 2020.

As shown in Table 2.4f, the percentage of respondents expressing satisfaction with the Office of Student and Career Services awareness of student concerns rose in 2021, except for the M-III respondents who rated their satisfaction with Student and Career Services awareness of student concerns lower in 2021 than in 2020.

## Table 2.4f: Office of Student and Career Services – Satisfaction with Awareness (Columbia Campus) 2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a, **satisfied/very satisfied (combined)** with the Office of Student and Career Services awareness of student concerns.

concerns.													
Medical School Class	Number o Response item/Resp	s to this	Numb Respo		% of N/	A	Numbe % of S and Ve Satisfie	atisfied ery	Number and % of combined Satisfied and Very Satisfied				
Clubs	nom nos		20	20	2021 (	(Spring)	20	)20	2021	(Spring)			
	2020	2021 (Spring)	N	%	N	%	N	%	N	%			
MI	58/57%	73/72%	15	26%	2	3%	37	64%	55	75%			
MII	70/74%	73/73%	4	6%	2	3%	42	60%	59	81%			
MIII	82/80%	52/52%	3	4%	0	0%	72	87%	42	81%			
MIV	73/88%	67/69%	4	5%	1	2%	50	69%	53	79%			

Source: School administered LCME Survey 2020, Spring 2021

Table 2.4g contains the percentage of LCME survey respondents who expressed dissatisfaction with the Office of Study and Career Services' awareness of student concerns on the Columbia campus.

## Table 2.4g: Office of Student and Career Services – Dissatisfaction with Awareness (Columbia Campus) 2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a, **dissatisfied/very dissatisfied (combined)** with the Office of Student and Career Services awareness of student concerns.

concerns.										
Medical	Number o	f Total	Numbe Respor	er and % uses	of N/	A		ber and % atisfied	6 of Dissati	sfied and Very
School Class	Responses to this item/Response rate		2020 2021 (Spring		l (Spring)	2020			2021 (Spring)	
	2020	<b>*</b>		%	N %		Ν	%	Ν	%
MI	58/57%	73/72%	15	26%	2	3%	6	10%	16	22%
MII	70/74%	73/73%	4	6%	2	3%	24	34%	12	16%
MIII	82/80%	52/52%	3 4%		0	0%	7	9%	10	19%
MIV	73/88%	67/69%	4 5%		1	2%	20	27%	13	19%

Source: School administered LCME Survey 2020, Spring 2021

Dissatisfaction among M-II and M-IV respondents fell dramatically in 2021 compared to percentage of responses in 2020 on the Columbia campus. M-I and M-III 2021 survey respondents expressed greater dissatisfaction with awareness of student concerns in 2021 than in 2020.

The percentage of M-IV 2021 survey respondents from the Florence campus expressed a higher level of satisfaction with the Office of Student and Career Services awareness of student concerns compared to that of 2020. Conversely, M-III satisfaction dropped in 2021 compared to 2020.

## Table 2.4h: Office of Student and Career Services – Satisfaction with Awareness (Florence Campus) 2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a, and satisfied/very satisfied (combined) with the Office of Student and Career Services awareness of student concerns.

Medical	Number o	of Total	Number	and % c	of N/A Res	ponses	Number Very Sat		ombined S	atisfied and
School Class	Response		2020 2021		2020		202	21 (Spring)		
	2020	2021	Ν	%	Ν	%	Ν	%	Ν	%
MI										
MII										
MIII	8/73%	5/57%	0	0%	0	0%	8	100%	4	80%
MIV	9/75%	6/46%	1	11%	0	0%	5	56%	6	100%

Source: School administered LCME Survey 2020, Spring 2021

Table 2.4i shows the M-IV survey respondents' dissatisfaction with the Office of Student and Career Services awareness of student concerns at the Florence campus.

 Table 2.4i: Office of Student and Career Services – Dissatisfaction with Awareness (Florence Campus) 2020, 2021

Medical School	Number o Response		Number Respons	and % o	of N/A		Number a Dissatisfi		Dissatisfie	d and Very
Class	item/Resp	ponse rate	202	20	202	21	202	20	2021 (Spring)	
	2020	2021	Ν	%	N	%	Ν	%	Ν	%
MI										
MII										
MIII	8/73%	5/56%	0	0 0%		0%	0	0%	1	20%
MIV	9/75%	6/46%	1	11%	0	0%	3	33%	0	0%

Source: School administered LCME Survey 2020, Spring 2021

Fewer M-IV 2021 respondents expressed dissatisfaction than those surveyed in 2020, while dissatisfaction rose in 2021 compared with 2020 respondents on the Florence campus.

Table 2.4j shows the percentage of 2020 and 2021 respondents who expressed dissatisfaction with the responsiveness of the Office of Student and Career Services in Columbia.

## Table 2.4j: Office of Student and Career Services – Dissatisfaction with Responsiveness (Columbia Campus) 2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a, dissatisfied/very dissatisfied (combined) with the responsiveness of the Office of Student and Career Services.

Medical	Number o	f Total	Number a Response		f N/A		Number and % of Dissatisfied and Very Dissatisfied				
School Class	Responses item/Resp	s to this	202	0	2021		2020		2021 (Spring)		
	2020	2021	Ν	N	%	Ν	%	Ν	%		
MI	58/57%	73/72%	9	15%	2	3%	6	10%	16	22%	
MII	70/74%	73/73%	4	6%	2	3%	19	28%	12	16%	
MIII	82/80%	52/52%	5	6%	0	0%	5	6%	10	19%	
MIV	73/88%	67/69%	4	5%	1	2%	20	27%	13	19%	

Source: School administered LCME Survey 2020, Spring 2021

Survey results indicate that dissatisfaction dropped among M-II and M-IV respondents in 2021 compared with those who took the survey in 2020. Dissatisfaction increased in 2021 among M-I and M-III respondents compared with respondents in 2020.

In 2021, Table 2.4k shows that respondents satisfaction with the responsiveness of the Office of Student and Career services in Columbia increased across the board when compare with respondents' satisfaction ratings in 2020.

## Table 2.4k: Office of Student and Career Services –Satisfaction with Responsiveness (Columbia Campus) 2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a, satisfied/very satisfied (combined) with the responsiveness of the Office of Student and Career Services.

Medical	Number o	f Total	Number Respons	and % o	f N/A		Number a Satisfied a			-
School Class	Responses item/Resp	s to this	202	20	20	021	202	20	2021	(Spring)
	2020	2021	Ν	%	N	%	Ν	%	N	%
MI	58/57%	73/72%	9	15%	6	8%	43	74%	58	80%
MII	70/74	73/73%	4	6%	2	3%	47	67%	50	69%
MIII	82/80	52/52%	5	5 6%		10%	72	88%	39	75%
MIV	73/88	67/69%	4	5%	1	2%	50	69%	53	79%

Source: School administered LCME Survey 2020, Spring 2021

Table 2.4l shows survey respondents' satisfaction with the Office of Student and Career Services responsiveness to student concerns on the Florence campus.

# Table 2.4l: Office of Student and Career Services – Satisfied with Responsiveness (Florence Campus) 2020, 2021

	Provide data by curriculum year and campus on the number and percentage of students who responded n/a and satisfied/very satisfied (combined) with the responsiveness of the Office of Career Services.												
Medical School Class	Number of Responses item/Respo	to this	Number a Responses		N/A		Number Very Sa		of Satisf	ied and			
	2020	2021	2020	0	20	21	202	20	2021 (Spring)				
	2020	2021	N	%	Ν	%	Ν	%	Ν	%			
MI													
MII													
MIII	8/73%	5/56	0	0	0	0	8	100	3	60			
MIV	9/75%	6/46	1     11     0     0     6     67     6     100										

Source: School administered LCME Survey 2020, Spring 2021

As shown in Table 2.41, the MIV students surveyed expressed higher satisfaction than the MIII students on the Florence Campus, with responsiveness to the Office of Student and Career Services to student concerns in 2021. Compared with responses gathered in 2020, a lower percentage of M-III respondents were satisfied in 2021. Among M-IV respondents, the reverse was true, with 100% expressing satisfaction in 2021 and only 67% in 2020. This is a pattern that repeats throughout the Florence campus surveys.

Table 2.4m shows respondents' satisfaction with the accessibility of the Office of Curricular Affairs in 2020 and 2021 at the Columbia campus.

		iculum year ed (combine								responded n/a,	
Medical	Number o Responses	1 1000	Numb Respo	per and 9	% of N/	A	Number and % of combined Satisfied and Very Satisfied				
School Class	item/% Re rate	esponse	2020		2021	(Spring)	2	020	20	21( Spring)	
	2020	2021	N	%	N	%	N	%	N	%	
MI	58/57%	73/72%	7	12%	12	16%	46	79%	58	79%	
MII	68/72%	73/73%	5	7%	6	8%	50	73%	59	81%	
MIII	82/80%	52/52%	4	5%	4	8%	73	89%	42	81%	
MIV	72/88%	67/69%	0	0%	5	7%	72	100%	58	87%	

Table 2.4m: Office of Curricular Affairs – Satisfaction with Accessibility (Columbia Campus) 2020, 2021

Source: School administered LCME Survey 2020, Spring 2021

Overall, the percentage of survey respondents who reported they were satisfied/very satisfied with the accessibility of the Office of Curricular Affairs in Columbia dropped for the M-III and M-IV respondents in 2021 compared to the ratings in 2020. There was an increase in the percentage of 2021 MII respondents compared with their peers in 2020. The satisfaction rating of 79% remained unchanged in 2021 from 2020 on the Columbia campus.

Table 2.4n shows respondents' dissatisfaction with the accessibility of the Office of Curricular Affairs in 2020 and 2021 at the Columbia campus.

## Table 2.4n: Office of Curricular Affairs – Dissatisfaction with Accessibility (Columbia Campus) 2020, 2021

	Provide data by curriculum year and campus on the number and percentage of students who responded n/a, dissatisfied/very dissatisfied (combined) with the accessibility of the Office of Curricular Affairs.													
Medical	Number of Responses	f Total to this item/%	Numb Respo		% of N/A			and % of o Dissatisf		l Dissatisfied				
School	Response	rate	20	20	2021 (Sp	oring)	20	20	202	1( Spring)				
Class		I												
	2020	2021 (Spring)	Ν	%	Ν	%	Ν	%	Ν	%				
MI	58/57%	73/72%	7	12%	12	16%	5	9%	3	4%				
MII	68/72%	73/73%	5	7%	6	8%	13	19%	8	11%				
MIII	82/80%	52/52%	4	5%	4	8%	5	6%	6	12%				
MIV	72/88%	67/69%	0	0%	5	7%	0	0%	4	6%				

Source: School administered LCME Survey 2020, Spring 2021

As might be expected, dissatisfaction with accessibility increased in Columbia for the M-III and M-IV 2021 respondents and decreased for the M-I and M-II respondents when compared to 2020 survey respondents.

Table 2.40 shows respondents' satisfaction with the accessibility of the Office of Curricular Affairs in 2020 and 2021 at the Florence campus.

## Table 2.40: Office of Curricular Affairs – Satisfaction with Accessibility (Florence Campus) 2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a, satisfied/very satisfied (combined) with the accessibility of the Office of Curricular Affairs.

Medical	Number o	of Total	Numb Respo		% of N/A				combined / Satisfied	
School Class	Response item/Resp		2020		2021 (S	pring)	20	)20	2021 (	Spring)
	2020	020 2021 (Spring)		%	Ν	%	Ν	%	Ν	%
MI										
MII										
MIII	8/73	4/44%	0	0	0	0	8	100	3	75%
MIV	9/75	6/43%	2	22	0	0	7	78	6	100%

Source: School administered LCME Survey 2020, Spring 2021

A lower percentage of survey respondents from the Florence Campus expressed satisfaction with accessibility of the Office of Curricular Affairs in the MII class at the Florence campus in 2021 compared with 2020. However, a higher percentage of M-IVs in 2021 than in 2020 reported satisfaction.

As shown in Table 2.4p, the Florence M-III and M-IV survey respondents were also asked about their satisfaction with the Office of Curricular Affairs accessibility in 2020 and 2021.

 Table 2.4p: Office of Curricular Affairs – Dissatisfaction with Accessibility (Florence Campus) 2020, 2021

	Provide data by curriculum year and campus on the number and percentage of students who responded n/a, dissatisfied/very dissatisfied (combined) with the awareness of the Curricular Affairs of student problems.													
Medical	Medical     Number of Total     Number and % of N/A Responses     Number and % of Dissatisfied and Very Dissatisfied													
School	Response	Responses to this 2020 2021 (Spring) 2020 2021 (Spring)												
Class	item/Response rate													
	2020	2021												
MI														
MII														
MIII 8/73% 4/44% 0 0% 0 0% 1 25%														
MIV	9/75%	6/46%	0	0%	1	11%	0	0%						

Source: School administered LCME Survey 2020, Spring 2021

A higher percentage of M-III students expressed dissatisfaction in 2021than is 2020 and a lower percentage of m-IVs expressed dissatisfaction in 2021 than in 2020.

Table 2.4q shows the percentage of respondents at the Columbia campus who were satisfied/very satisfied with the Office of Curricular Affairs' responsiveness in 2020 and 2021.

## Table 2.4q: Office of Curricular Affairs – Satisfaction with Responsiveness (Columbia Campus) 2020, 2021

	Provide data by curriculum year and campus on the number and percentage of students who responded n/a satisfied/very satisfied (combined) with the responsiveness of the Office of Curricular Affairs.													
Medical	Number o	of Total	Numb Respo		% of N/A	A			of combine					
School Class	Response item/Resp	s to this	20	20	2021 (\$	Spring)	20	20	2020 (Spri	ng)				
	2020	2021 (Spring)	Ν	%	Ν	%	Ν	%	Ν	%				
MI	58/57%	73/72%	6	10%	16	22%	41	71%	44	61%				
MII	67/72%	73/73%	1	2%	5	7%	39	57%	43	59%				
MIII	III 82/80% 52/52% 4 5% 2 4% 70 86% 33 6													
MIV	MIV 73/88% 67/69% 4 5% 3 5% 51 70% 52 78%													

Source: School administered LCME Survey 2020, Spring 2021

A lower percentage of respondents in 2021 than in 2020 expressed satisfaction, with a higher percentage of M-IV respondents expressing satisfaction. There was a slight difference of 3 percent between the M-II 2020 and 2021 responses.

Table 2.4r contains the percentage of 2020 and 2021 survey respondents who were dissatisfied/very dissatisfied with the Office of Curricular Affairs responsiveness on the Columbia campus.

## Table 2.4r:Office of Curricular Affairs – Dissatisfaction with Responsiveness (Columbia Campus) 2020,2021

		iculum year and or dissatisfied (con								
Medical	Number of	of Total	Numb Respo		% of N/A	A			of combine d Very Diss	
School Class	Response item/Resp	s to this	20	20	2021 (\$	Spring)	20	20	2021 (Spri	ng)
	2020	2021 (Spring)	N	%	Ν	%	N	%	Ν	%
MI	58/57%	73/72%	6	10%	16	22%	11	19%	12	17%
MII	67/72%	73/73%	1	2%	5	7%	28	41%	25	34%
MIII	82/80%	52/52%	4	5%	2	4%	8	9%	17	33%
MIV	73/88%	67/69%	4	5%	3	5%	18	25%	12	18%

Source: School administered LCME Survey 2020, Spring 2021

The percentage of M-II and M-IV respondents who said they were dissatisfied with the responsiveness of the Office of Curricular Affairs in Columbia dropped in 2021 compared with 2020. There was a substantial increase in the dissatisfaction of M-III respondents in 2021 compared with 2020.

Table 2.4s shows M-III and M-IV survey respondents expressing satisfaction in the Office of Curricular Affairs' responsiveness in 2020 and 2021 at the Florence campus.

### Table 2.4s: Office of Curricular Affairs – Satisfaction with Responsiveness (Florence Campus) 2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a and satisfied/very satisfied (combined) with the responsiveness of the Office of Curricular Affairs awareness.

Medical	Number o	of Total	Numb Respo		% of N/A		Number and Very		f combined d	Satisfied
School Class	Responses item/Resp	s to this	20	20	2021 (S	pring)	202	20	2021 (S	Spring)
	2020	2021 (Spring)	Ν	%	Ν	%	N	%	Ν	%
MI										
MII										
MIII	8/73%	4/44%	0	0%	0	0%	8	100%	2	50%
MIV	9/75%	6/46%	1	11%	0	0%	7	78%	6	100%

Source: School administered LCME Survey 202, Spring 2021

The percentage of survey respondents expressing satisfaction in the M-III class dropped in 2021 compared with those who responded in 2020, but rose for the M-IVs.

Table 2.4t contains the percentage of M-III and M-IV respondents at the Florence campus who expressed dissatisfaction with the responsiveness of the Office of Curricular Affairs in 2020 compared with 2021.

 Table 2.4t: Office of Curricular Affairs – Dissatisfaction with Responsiveness (Florence Campus) 2020, 2021

	•	iculum year and satisfied (combin	<b>.</b>	on the n	number and	l percenta	age of stud	lents who	o responded	d n/a,
Medical	Number o	of Total	Numb Respo		% of N/A				f combined Very Dissat	
School Class	Response		20	020	2021 (S	pring)	202	20	2021 (Spring)	
	2020	2021 (Spring)	N	%	Ν	%	N	%	Ν	%
MI										
MII										
MIII	8/73%	4/44%	0	0%	0	0%	0	0%	2	50%
MIV	9/75%	6/46%	1	11%	0	0%	1	11%	0	0%

Source: School administered LCME Survey 2020, Spring 2021

The percentage of respondents expressing dissatisfaction was higher in in 2021 than in 2020. However the percentage of M-IV respondents expressing dissatisfaction in 2021 dropped from the percentage reported in 2020.

#### Closing the Loop and Implications. Conclusions will be reported out by offices surveyed.

<u>Office of Student and Career Services</u>: Higher levels of satisfaction were reported for the Columbia campus in the areas of Accessibility, Awareness and Responsiveness. The return rate on the survey for the Florence campus was lower than expected but showed a pattern of lower satisfaction among the M-III respondents in 2021 compared with 2020. Conversely, the M-IV respondents showed a higher percentage of satisfaction in 2021 than in 2020. The changes that have been implemented within the past few years are beginning to show improvements in the satisfaction ratings of the Office of Student and Career Services. A reorganization of this office may also increase satisfaction levels. This office will continue to be monitored.

<u>Office of Curricular Affairs</u>: There is still dissatisfaction with the Office of Curricular Affairs in a number of areas surveyed but particularly in the area of responsiveness to student concerns. This may be due to curriculum changes that are in process and students feeling the need for more transparency in terms of what is going to change and how it will affect them. The M-III respondents were less satisfied overall in Florence in 2021 than they were in 2020. This office will continue to be monitored.

## LCME ELEMENT 3.2: COMMUNITY OF SCHOLARS/RESEARCH OPPORTUNITIES

A medical education program is conducted in an environment that fosters the intellectual challenge and spirit of inquiry appropriate to a community of scholars and provides sufficient opportunities, encouragement, and support for medical student participation in the research and other scholarly activities of its faculty.

<u>When/How Often Implemented</u>: The primary data source is the AAMC GQ which is administered annually by the AAMC; school collected research publication data; LCME mandated research survey.

<u>Methodology</u>: The Medical School Graduation Questionnaire (GQ) is a national questionnaire administered by the AAMC. The GQ was first administered in 1978 and is an important tool for medical schools to use in program evaluation and to improve the medical student experience; The LCME required the SOM administer a survey of current student satisfaction with research and other aspects of the program.

<u>Results:</u> Note: Differences equal to or less than 3 percentage points were not shaded.

Tables 3.2a through 3.2g show the student satisfaction with various aspects of the SOM's research program by campus.

Table 3.2a:	AAMC	GQ	Research	with a	Faculty	Member	

School and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of students reporting participation in a research project with a faculty member.

GQ 2	2016	GQ 2	2017	GQ 2	2018	GQ 20	019	GQ	2020	GQ	2021
School %	<u>Nat. %</u>	School %	<u>Nat %</u>	School %	<u>Nat. %</u>	School %	<u>Nat. %</u>	School %	Nat. %	School %	<u>Nat. %</u>
31.60	74.10	37.90	77.30	41.10	78.8	47.0	80.90	58.1	85.2	38.1	52.7

Source: AAMC GQ Survey

The AAMC GQ asked survey respondents if they participated in a research project with a faculty member. Only 38% reported engaging in research with faculty compared to 52.7% nationally. It is worth noting that the national average dropped 32.5% from 2020 to 2021. While the school's satisfaction levels have been below the national average since 2016, the fact that the national average showed a significant decrease may be attributed to the disruption in schedules caused by COVID-19.

Table 3.2b shows the percentage of survey respondents who expressed satisfaction with the availability of research opportunities on the Columbia campus in 2020 and 2021.

		iculum year and ca ed (combined) with							responded	n/a, and
Medical	Number o	of Total	Numb Respo		% of N/.	A		per and % o		
School Class	Response item/Resp	s to this	20	20	2021	(Spring)		2020	2021 (\$	Spring)
	2020	2021 (Spring)	Ν	%	Ν	%	Ν	%	Ν	%
MI	58/57%	73/72%	5	9%	6	8%	30	51%	28	38%
MII	67/72	73/73%	10	15%	11	15%	29	42%	25	48%
MIII	82/80	52/52%	5	6%	6	12%	38	47%	24	46%
MIV	73/88	67/69%	4	5%	12	18%	42	58%	32	48%

#### Table 3.2b: Satisfaction with Availability of Research Opportunities (Columbia Campus) 2020, 2021

Source: School administered LCME Survey 2020, Spring 2021

A lower percentage of M-I and M-IV respondents surveyed about the availability of research opportunities on the Columbia Campus said they were satisfied/very satisfied in 2021 than in 2020. A slightly higher percentage of M-II respondents reported satisfaction with the current availability of research opportunities in 2021 than in 2020. The M-III class showed little change from 2020 to 2021 in terms of satisfaction, reporting 47% and 46%, respectively, and the M-IV class' satisfaction decreased 10%.

Table 3.2c shows the percentage of those surveyed in 2020 and 2021 on dissatisfaction with the availability of research opportunities on the Columbia campus. Much higher percentages of M-I and M-IV students in 2021 than in 2020 expressed dissatisfaction with the availability of research opportunities. A lower percentage of M-II and M-III respondents reported dissatisfaction in 2021 than in 2020.

## Table 3.2c: Dissatisfaction with Availability of Research Opportunities (Columbia Campus)

Provide data by curriculum year and campus on the number and percentage of students who responded n/a, dissatisfied/very dissatisfied (combined) with the availability of research opportunities.

Medical	Number o	of Total	Numb Respo		% of N/	A		per and % o tisfied and		
School Class	Response item/Resp	s to this	20	20	2021	(Spring)		2020	2021 (\$	Spring)
	2020	2021 (Spring)	Ν	%	Ν	%	N	%	Ν	%
MI	58/57%	73/72%	5	9%	6	8%	23	40%	39	53%
MII	67/72	73/73%	10	15%	11	15%	29	42%	27	37%
MIII	82/80	52/52%	5 6%		6	12%	39	47%	22	42%
MIV	73/88	67/69%	4 5%		12	18%	27	23%	34	48%

Source: School administered LCME Survey 2020, Spring 2021

The percentage of survey respondents on the Florence campus in 2021 and 2020 who reported satisfaction with the availability of research opportunities is shown in Table 3.2d.

	•	-		*			ercentage o earch oppor		s who respon	ided n/a,
Medical	Number of	of Total	Number Respons		of N/A		Number a and Very		combined Sa	tisfied
School	Response	es to this	202	20	2021 (	(Spring)	202	20	202	21
Class	item/Resj	ponse rate								
	2020	2021	Ν	%	Ν	%	Ν	%	Ν	%
MI										
MII										
MIII	8/73	5/56	2	25	1	20	4	50	3	60
MIV	9/75	6/46	2	22	2	33	4	45	3	50

## Table 3.2d: Satisfaction with Availability of Research Opportunities (Florence Campus)

.

Source: School administered LCME Survey 2020, Spring 2021

....

As shown in Table 3.2d, higher percentages of satisfaction were found among Florence Campus respondents to the survey question concerning the availability of research opportunities in 2021 than is 2020. It should be noted that the number of respondents to this question was low in 2021.

Table 3.2e contains the percentages of respondents who reported dissatisfaction with availability of research opportunities in 2021 and 2020 from the Florence campus.

## Table 3.2e: Dissatisfaction with Availability of Research Opportunities (Florence Campus)

Provide data by curriculum year and campus on the number and percentage of students who responded n/a, and dissatisfied/very dissatisfied (combined) with the availability of research opportunities.

Medical	Number o	of Total		mber and % sponses	of N/A			and % of c Satisfied	combined	Satisfied
School	Response	s to this		2020	2021 (	Spring)	20	20	2021	(Spring)
Class	item/Resp	oonse rate	N	0/	N	0/	N	0/	N	0/
	2020	2021 (Spring)	N	%	N	%	N	%	N	%
MI										
MII										
MIII	8/73	5/56	2	25	1	20	4	25	1	20
MIV	9/75	6/46	2	22	2	33	4	33	1	17

Source: School administered LCME Survey 2020, Spring 2021

Overall, the percentage of respondents who reported dissatisfaction was lower in 2021 than in 2020.

Table 3.2f shows the percentage of respondents on the Columbia campus who expressed satisfaction with the availability of funding for summer research opportunities in 2021 and 2020.

## Table 3.2f: Satisfaction with Availability of Funding for Summer Research Opportunities (Columbia Campus)2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a, satisfied/very satisfied (combined) with the availability of funding for summer research opportunities.

	Number o	of Total	Number a	nd % of N	/A Respo	onses	Number Very Sa	and % of contract	ombined Sa	tisfied and
	Response		202	20	2021 (	Spring)	2	2020	2021	(Spring)
Medical School Class			Ν	%	Ν	%	N	%	Ν	%
MI	58/57%	73/72	10	17	6	8	30	52	28	38
MII	67/71	73/73	14	21	11	15	30	45	35	48
MIII	82/80	52/52	16	20	6	12	38	47	24	46
MIV	73/88	67/69	10	14	12	18	42	57	32	48

Source: School administered LCME Survey 2020, Spring 2021

The percentage of respondents who said they were satisfied with the availability of funding for summer research opportunities was lower in 2021 than in 2020 for both M-I and M-II classes. The percentage of respondents for M-II and M-III class respondents was essential unchanged in 2021 from what was reported in 2020.

Table 3.2g shows the percentage of survey respondents' dissatisfaction with the availability of funding for summer research opportunities on the Columbia campus in 2021 compared with 2020.

## Table 3.2g: Dissatisfaction with Availability of Funding for Summer Research Opportunities (Columbia Campus)2020, 2021

	Provide data by curriculum year and campus on the number and percentage of students who responded n/a, dissatisfied/very dissatisfied (combined) with the availability of funding for summer research opportunities.													
	Number o	of Total	Number a	nd % of N	/A Respo	nses		and % of co y Dissatisfie		ssatisfied				
	Response item/Resp	s to this	202	20	2021 (	Spring)	2	2020	2021	(Spring)				
Medical School Class			Ν	%	N	%	N	%	Ν	%				
MI	58/57%	73/72	10	17	6	8	18	31	39	53				
MII	67/71	73/73	14	21	11	15	23	35	27	37				
MIII	82/80	52/52	16	20	6	12	27	33	22	42				
MIV	73/88	67/69	10	14	12	18	21	29	33	34				

Source: LCME School administered survey 2020, 2021

Source: School administered LCME Survey 2020, Spring 2021

Table 3.2g shows a higher percentage of respondents expressing dissatisfaction with funding for summer research opportunities in 2021 than in 2020 for the M-I, M-III, and M-IV classes surveyed.

On the question of availability of funding for summer research opportunities on the Florence Campus, a higher percent of respondents in each class surveyed in 2021 reported they were satisfied/very satisfied (Table 3.2h) compared with 2020.

 Table 3.2h: Satisfaction with Availability of Funding for Summer Research Opportunities (Florence Campus) 2020, 2021

		nriculum year and satisfied (combin								
Medical	Number	r of Total	Num	ber and %	% of N/A	Responses			of combine Very Satisfie	
School Class	Respon	ses to this sponse rate	2020 2021 (Spring)					2020	2021 (S	pring)
	2020	2021 (Spring)	N % N %					%	Ν	%
MI										
MII										
MIII	8/73%	5/56%	4	50%	1	20%	50	38%	3	60%
MIV	9/75%	6/46%	3 33% 2 33% 33 11% 3							50%

Source: School administered LCME Survey Spring 2021

On the Florence Campus, the percentage of M-III respondents who reported they were dissatisfied/very dissatisfied (Table 3.2i) grew in 2021 compared with 2020. A much lower percentage of M-IV respondents (17%) said they were dissatisfied/very dissatisfied in 2021 than in 2020 (55%). It should be noted that the number of respondents was low in 2021.

## Table 3.2i: Dissatisfaction with Availability of Funding for Summer Research Opportunities (Florence Campus) 2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a and dissatisfied/very dissatisfied (combined) with the availability of funding for summer research opportunities.

opportunites.												
Medical School Class	Number of Total Responses to this item/Response rate		Number and % of N/A Responses					Number and % of combined Dissatisfied and Very Dissatisfied				
			2020		2021	(Spring)	2020		2021 (Spring)			
	2020	2021 (Spring)	N	%	Ν	%	N	%	Ν	%		
MI												
MII												
MIII	8/73%	5/56%	4	50%	1	20%	1	12%	1	20%		
MIV	9/75%	6/46%	3	33%	2	33%	5	55%	1	17%		

Source: School administered LCME Survey Spring 2021

Table 3.2j shows the percentage of survey respondents' in 2020 and 2021 satisfied with the availability of information on how to become involved in research on the Columbia campus. Satisfaction levels dropped in 2021 compared with 2020 for the M-I and M-IV respondents. M-II and M-III satisfaction levels remained relatively unchanged from 2020 to 2021.

## Table 3.2jSatisfaction with Availability of Information on How to Become Involved in Research(Columbia Campus) 2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a and satisfied/very satisfied (combined) with the availability of information on how to become involved in research.										
Medical School Class	Number of Total Responses to this item/Response rate		Number and % of N/A Responses				Number and % of combined Satisfied and Very Satisfied			
			2020		2021 (Spring)		2020		2021 (Spring)	
	2020	2021 (Spring)	N	%	Ν	%	Ν	%	Ν	%
MI	58/57%	73/72%	2	3%	3	4%	32	55%	33	45%
MII	68/72%	73/73%	6	9%	4	6%	34	50%	34	47%
MIII	82/80%	52/52%	3	4%	0	0%	39	48%	26	50%
MIV	73/88%	67/69%	3	4%	3	6%	48	66%	34	50%

Source: School administered LCME Survey Spring 2021

Dissatisfaction with the availability of information on how to become involved in research on the Columbia campus grew in 2021 compared with 2020 for M-I, M-II, and M-IV respondents (Table 3.2k).

## Table 3.2k Dissatisfaction with Availability of Information on How to Become Involved in Research (Columbia Campus) 2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a and dissatisfied/very dissatisfied (combined) with the availability of information on how to become involved in research.

Medical	Number of Total Responses to this item/Response rate		Number and % of N/A Responses				Number and % of combined Dissatisfied and Very Dissatisfied				
School Class			2020		2021 (Spring)		2020		2021 (Spring)		
	2020	2021 (Spring)	Ν	%	Ν	%	N	%	Ν	%	
MI	58/57%	73/72%	2	3%	3	4%	24	42%	37	51%	
MII	68/72%	73/73%	6	9%	4	6%	28	41%	35	48%	
MIII	82/80%	52/52%	3	4%	0	0%	40	48%	26	50%	
MIV	73/88%	67/69%	3	4%	3	6%	22	30%	30	45%	

Source: School administered LCME Survey Spring 2021

# Table 3.2m: Dissatisfaction with Availability of Information on How to Become Involved in Research (Florence Campus) 2020, 2021

		lum year and cam sfied (combined)								
Medical	of Total	Number and % of N/A Responses				Number and % of combined Satisfied and Very Satisfied				
School Class	Number of Total Responses to this item/Response rate		2020 2021 (S		Spring)	2020		2021 (Spring)		
	2020	2021 (Spring)	Ν	%	Ν	%	Ν	%	Ν	%
MI										
MII										
MIII	8/73%	5/56%	0	0%	0	0%	3	38%	1	20%
MIV	9/75%	6/46%	1	11%	1	17%	2	22%	3	50%

Table 3.21 shows the percentage of respondents from the Florence campus in 2020 and 2021 who reported satisfaction with availability of information on how to become involved in research. A higher percentage of M-III respondents reported being satisfied/very satisfied in 2021 than in 2020. The percentage of M-IV respondents reporting satisfaction dropped in 2021 compared with 2020.

# Table 3.21: Satisfaction with Availability of Information on How to Become Involved in Research (Florence Campus) 2020, 2021

Provide data by curriculum year and campus on the number and percentage of students who responded n/a and satisfied/very satisfied (combined) with the availability of information on how to become involved in research.

Medical	Number of Total		Number and % of N/A Responses			Number and % of combined Satisfied and Very Satisfied				
School Class	Response item/Res	es to this ponse rate	202	20	2021 (3	Spring)	202	20	2021 (S	pring)
	2020	2021 (Spring)	Ν	%	Ν	%	Ν	%	Ν	%
MI										
MII										
MIII	8/73%	5/56%	0	0%	0	0%	5	62%	4	80%
MIV	9/75%	6/46%	1	11%	1	17%	6	67%	3	50%

Source: School administered LCME Survey Spring 2021

Table 3.2m shows the percentage of respondents from the Florence campus in 2020 and 2021 who reported dissatisfaction with availability of information on how to become involved in research.

A higher percentage of M-IV respondents reported being dissatisfied/very satisfied in 2021 than in 2020. The percentage of M-III respondents reporting dissatisfaction dropped in 2021 compared with 2020.

The SOM has committed to a sustained effort to expand the access and scope of research opportunities for medical students and has initiated several programs to build a sustainable community of research scholars.

One of the main access points for medical students is through our Research Center for Transforming Health and the Student Opportunity for Academic Achievement through Research (SOAR) program. During Fall M1 year, students and faculty mentors apply and are matched by interest area. Student SOAR activity begins the summer after M1 year. Weekly seminars provide exposure to research concepts. Small stipends are provided to students and faculty, and both faculty and student mentoring and milestones are utilized throughout this 8-10 week experience. This includes but not limited to:

- 1. Basics of study design and hypothesis testing
- 2. Basic statistics and critical analysis for research
- 3. Ethics and research
- 4. Human and animal subjects in research
- 5. Informed consent and research
- 6. Basics on oral presentation of research findings
- 7. Construction and formatting a research poster
- 8. Fundamentals of manuscript preparation

Students who attended all eight seminars are provided a certificate in Advanced Training in Translational Research. The SOAR program has just now completed the 6<sup>th</sup> year in operation and started with 43 students applying to this program with 16 available slots in 2016. This past year (2021), a total of 71 students applied to SOAR, which is a 65% increase. This reflects a growing awareness and interest in engaging in medical research with our COM-1 students. We expanded the number of formal rotations and funded opportunities to 35 in 2021, reflecting a 150% expansion of research opportunities in the SOAR program. The sustained and expanded support of the SOAR program has resulted in 44 regional/national presentations and 14 peer reviewed publications in which the medical student and SOAR mentor were the principal authors.

Research outcomes for the medical students are presented in two formal events: the Biomedical Seminar Series (Fall- oral presentation) and University of South Carolina Discovery Day (Spring- poster presentation). This has resulted in an outstanding opportunity for our SOM students to present their research and interaction with other students and colleagues. To date, this has resulted in over 180 podium/poster presentations from the SOAR program.

While the SOAR program has been expanded in terms of support for students and mentors, we have reached a ceiling effect. That is, we have more students applying to the SOAR program than available qualified mentors. This is despite expanding the scope of the SOAR program to encompass outside of SOM research sites and focused opportunities in simulation and population health. These experiences encompass multiple environments including several different health systems (Veterans Health Administration, Grand Strand Health System, Greenwood Genetics). In order to directly address this issue, we have continued one program that develops clinical faculty in a structured research mentoring program (EPS-see below) and started a second program to support academic-physician interactions (Seed Program-see below).

The challenges over this past year included limited face to face interactions, and limiting multiple persons in a laboratory setting. Nevertheless, the feedback from the SOAR program continues to improve and we have used survey instruments for that purpose.

The largest challenge we have in terms of expanding research activities within the SOM and COM students in particular, is the number of mentors and opportunities at the SOM and our major health partner Prisma. This also feeds into the need to continue a sustained effort in developing a community of scholars in academic medicine. The major initiatives are outlined below.

### **Emerging Physician Scientist Program (EPS)**

In order to build a cadre of physicians within the SOM that can provide the foundation for clinical research skills throughout our healthcare system. The EPS program is a 15-month program that provides early career or transitioning physician scientists with an opportunity to gain experience and mentorship in translational research. The EPS program supports physician faculty investigators with guidance to foster career development and create a pathway to being successful in obtaining extramural support. Key components of this program include education and training, along with pilot project funding, intended to in-form a successful extramural grant application ready for submission by end of program.

A total of 17 physicians have applied to the EPS program, with a wide range of specialties including family medicine, neurology, cardiology, internal medicine, pediatrics and obstetrics/gynecology. All of the enrolled physicians will benefit from:

- Didactic education and training in translational research and grant development
- Support and mentorship in project development and implementation
- Funding for pilot project that can be scaled up and/or used to establish a larger project
- Support and mentorship for successfully extramural support submission

### New Clinical Research Initiatives at the SOM- The Prisma-UofSC Health Sciences Seed Program

This funding aims to advance the collaborative research relationship between UofSC and Prisma Health to pursue new and innovative research that improves health. Projects should focus on improvement of health system performance, population health, or biomedical science that translates to clinical practice and improved patient outcomes. Applicants had to propose a research project that would serve as support for an extramural research grant application, and recipients are expected to disseminate their work locally, regionally, and/or nationally.

For this collaborative seed grant initiative, the projects required an investigative partnership between a University of South Carolina- Columbia faculty employee and a clinical collaborator from Prisma Health.

Funding for the pilot grants were provided by the UofSC Vice President for Research, the UofSC School of Medicine Columbia, the UofSC College of Pharmacy, the UofSC College of Nursing, and the UofSC College of Engineering and Computing. Projects were funded up to \$20,000.

The RFA was released in November 2020, with final applications due February 5, 2021, and awards made in March/April 2021. Award amounts are up-to \$20,000 per project. An established peer reviewed process was put in place in which multidisciplinary review panels ranked over 25 applications in which 8 were funded. The table attached outlines the projects and the overriding theme of UofSC faculty and Prisma interactions.

### 2021 Transformative Research Seed Grant

This was a new initiative this year.

This funding aims to advance the collaborative research relationship between UofSC and Prisma Health to pursue new and innovative research that improves health. Projects should focus on improvement of health system performance, population health, or biomedical science that translates to clinical practice and improved patient outcomes. Applicants had to propose a research project that would serve as support for an extramural research grant application, and recipients are expected to disseminate their work locally, regionally, and/or nationally.

For this collaborative seed grant initiative, the projects required an investigative partnership between a University of South Carolina- Columbia faculty employee and a clinical collaborator from Prisma Health.

Funding for the pilot grants were provided by the UofSC Vice President for Research, the UofSC School of Medicine Columbia, the UofSC College of Pharmacy, the UofSC College of Nursing, and the UofSC College of Engineering and Computing. Projects were funded up to \$20,000.

The RFA was released in November 2020, with final applications due February 5, 2021, and awards made in March/April 2021. Award amounts are up-to \$20,000 per project.

#### Breakdown of Funding Sources Commitments:

UofSC Office of the Vice President for Research- Agreed to support up-to \$50,000.

UofSC School of Medicine Columbia- Agreed to support up-to \$60,000

UofSC College of Pharmacy- Agreed to support up-to \$30,000. Projects supported by the COP had to include COP faculty members.

UofSC College of Nursing- Agreed to support up-to \$30,000. Projects supported by the CON had to include CON faculty members.

UofSC College of Engineering and Computing- Agreed to support one project at \$20,000. Projects supported by the COE had to include COE faculty members.

#### Application Review Process:

Twenty-one (21) applications were received.

Additional initiatives that will be taken to expand our community of scholars and provide future opportunities for our SOM students include:

- Continued collaboration with the Greenwood Genetics Program- joint faculty appointments.
- Development of a "Health Delivery Science" discipline within the Research Center for Transforming Health
- Continued multidisciplinary seminars on team science
- Formalizing travel support for medical student presentations at national meetings

*Implications:* There was a higher level of student satisfaction with the availability of research opportunities on the LCME required student survey compared to the AAMC GQ survey results. The results on both surveys fall below the national averages and are limited at our institution and this issue should be addressed in terms of funding and faculty release time to pursue research with students. While the LCME survey results were higher than the AAMC GQ results, the percentage of satisfied/very satisfied respondents was still lower than expected.

# Closing the Loop:

This element was rated SM by the LCME in March, 2021. The data from the 2021 GQ Questionnaire indicate low student satisfaction levels with the availability of research opportunities with faculty while the LCME 2020 mandated student survey shows somewhat higher levels of satisfaction. The AAMC GQ survey shows school results far below the national average. It is important to note that the respondents to the LCME school administered survey had the benefit of the changes that have been instituted recently, including securing new sources of research funding and the development of service programs in lieu of research projects. The COVID-19 pandemic continued to have a negative effect on research opportunities and availability of funding in 2020 and the spring of 2021. This area will continue to be monitored.

# LCME ELEMENT 3.3: DIVERSITY/PIPELINE PROGRAMS AND PARTNERSHIPS

A medical school has effective policies and practices in place, and engages in ongoing, systematic, and focused recruitment and retention activities, to achieve mission-appropriate diversity outcomes among its students, faculty, senior administrative staff, and other relevant members of its academic community. These activities include the use of programs and/or partnerships aimed at achieving diversity among qualified applicants for medical school admission and the evaluation of program and partnership outcomes.

# When/How Often Implemented: Annually

Source(s): The data collected by the Office of Diversity and Inclusion and Human Resources

<u>Methodology</u>: Information on diversity issues is collected by the Office of Diversity and inclusion and Human Resources.

**Results:** The LCME requested the following information as part of the SOMs annual report:

- 1. For the 2020-21 academic years, describe the programs related to the recruitment and retention of faculty and of senior administrative leadership from school-defined diversity categories. In the description, including the following:
  - a. The funding sources that the medical school has available
  - b. The individual personnel dedicated to these activities and their time commitments
  - c. The organizational locus of the individuals involved in these efforts (e.g. the medical school dean's office, a university office)

40

The SOMC Dean's Office continues to support an Associate Dean for Diversity and Inclusion, Dr. Carol McMahon, who devotes 20% of her time to the diversity and inclusion program of the school. She leads the Diversity and Inclusion Implementation Committee for the SOMC and also serves on the UofSC campus-wide Diversity and Inclusion Council. Over the past year, Dr. McMahon helped to organize and oversee summer reading experiences on racism in medicine, which were very well received by our students. With our strategic planning process in the SOMC focusing explicitly on diversity and inclusion this year, Dr. McMahon has played a more active role, serving as a member of our Strategic Planning Leadership Council (new this year) as well as in her standing role as a member of the Strategic Planning Steering Committee. Dr. McMahon is personally leading the strategic work group focusing on creation of a culture of inclusion in the SOMC. Financial support for our strategic planning efforts around diversity and inclusion, including funding for an outside facilitator for the process, is provided by the Dean's Office (support increased this year compared to prior years).

The SOMC also continues to support an Assistant Dean for Diversity and Inclusion, Dr. Robert Rhinehart, who devotes 20% of his time to the diversity and inclusion program of the SOMC. Also serving as the Registrar for our SOM and Director of our Office of Admissions, Dr. Rhinehart devotes much of his effort to creating and maintaining pipeline programs that increase interest in SOM admissions among minority students. This year, he is also serving as a member of our Strategic Planning Leadership Council, and is serving as the leader of the work group which is examining strategies for the recruitment and support of diverse students in the SOMC.

During the 2019-2020 academic year, several initiatives were advanced to promote enhancement of the diversity of our faculty and senior administrative staff. These initiatives fall into three inter-related areas: hiring practices, faculty development, and promoting a culture of diversity.

### Faculty Hiring:

Basic Science and Research Faculty Diversity Pipeline Incentive Program: This program, initiated in 2019 by the Office of the Dean, provides a one-time allotment of \$50,000 in start-up funds to any department that successfully recruits a URM faculty member (AA, Hispanic) to a UofSC FTE faculty position (applies to basic science faculty and tenured/tenure-track faculty hires in clinical departments). A department is eligible for multiple supplements if multiple hires are made. This program supported the addition of one under-represented minority faculty member in 2019-2020.

Understanding that some of our basic science faculty are hired from post-doctoral fellow positions, the Office of the Dean also began providing \$25,000 support annually for up to two years to any department that successfully recruits a URM postdoctoral fellow. A department is eligible for multiple supplements if multiple hires are made. This program supported the addition of one under-represented minority post-doctoral fellow in 2019-2020.

Our diversity and inclusion deans, human resources leaders, and basic science department chairs have collaborated with the Dean's Office to develop these programs. Funding for these initiatives is new funding, and is being supplied by the Office of the Dean, with a firm commitment to continue the funding for at least three years, and with the hope that these programs will continue indefinitely. These economic incentives are being focused on the basic science faculty and other research faculty, as the greatest need to increase under-represented minority faculty lies in these areas. While the funds for these programs come from the Dean, the chairs of the three basic science departments are actively involved and largely responsible for their implementation. Clinical faculty for the SOMC demonstrate greater levels of diversity than our basic science faculty, but since clinical faculty are now hired by the health system, not directly by the SOMC, these new hires are no longer reflected in our diversity data.

Search Committees Processes: Over the course of the past year, the SOM Associate Dean for Diversity and Inclusion has offered implicit bias training to several faculty search committees as well as our Admissions Committee. In addition, search committees have made extra efforts to expand pools of applicants to include minority candidates. During our search process

for a new chair of the SOMC Department of Obstetrics/Gynecology in late 2019 and early 2020, the search was extended for an additional two months to allow our recruiters to personally contact approximately 200 additional faculty in Obstetrics/Gynecology departments throughout the Southeast U.S. This dedicated effort did yield one additional diverse applicant, but his academic experience (assistant professor) did not rise to the appropriate level of experience for a department chair role.

When selecting leaders, we continue to consider not only opportunities to improve racial diversity, but also ways to improve gender diversity. One female interim department chair was named during AY 2019-2020 and another female interim department chair was named already in AY 2020. Two additional female department chairs have been reappointed to three year terms during the past six months.

For the 2020-2021 academic year, the SOMC strategic plan – developed throughout 2016 and initiated in 2017 – is being re-examined with a focus on strengthening the strategic initiatives related to diversity, inclusion, and equity in education, research, clinical care, and community engagement. To that end, the leadership and membership of the strategic planning committee has been revised and expanded to include those from different backgrounds, areas of expertise, and training. One of the three strategic work groups that has been established is developing recommendations on actions to enhance our hiring, development, and retention of diverse and talented faculty members. A second work group will be working on strengthening a culture of inclusion, while the third work group identifies strategies to strengthen our student recruitment and support programs. We believe all three of these focus areas will work synergistically to attract new diverse faculty to SOMC.

For the past few months, SOMC has been actively recruiting an NIH-funded basic science faculty member who currently has NIH funding for leading a diversity pipeline initiative in the basic sciences. This employment offer is being supported with a combination of funding provided from the Dean's Office, UofSC Provost's Office, and the Department of Pharmacology, Physiology and Neuroscience. He has accepted our offer, and is expected to be on campus by February 2021. We look forward to partnering with him to further advance our diversity pipeline programs in the basic sciences over the coming years.

# Faculty Development:

The School of Medicine Dean's Office is investing in the development of a diverse group of faculty leaders. Over the past three years, four under-represented minority faculty have attended AAMC Minority Faculty Development Courses (incremental funds were devoted in AY2019-2020). All faculty who have attended have returned to our SOM stating that the experience was transformative. All of these faculty have made ongoing contributions to leadership, with one serving on our Executive Committee and two serving on our Strategic Planning Committee. We would have enrolled additional minority faculty in the AAMC Faculty Development Courses this year; however, in-person events were cancelled due to COVID-19.

In 2019, the SOM Dean's Office sponsored Dr. Sharon Weissman as a participant in the Infectious Disease Society Leadership Institute, intended to strengthen leadership skills within rising stars from within the infectious disease faculty community (this was new incremental funding to promote gender diversity). In summer of 2020, Dr. Weismann assumed the role of interim chair of the Department of Internal Medicine (our largest department), and is currently providing outstanding leadership in this capacity.

With encouragement and (new) financial support from the Dean's Office, our faculty Women in Science and Medicine Group was reinvigorated over the past 15 months, under the leadership of one of our basic science faculty members, supported by a committee of 15 women faculty, staff, and students. Earlier this year, they sponsored the first of what will become an annual Women in Medicine and Science Conference. Due to COVID-19, the event this year was conducted virtually, with almost 200 participants.

#### Culture of Diversity:

We recognize that attracting and retaining diverse faculty and staff at the University of South Carolina requires a multifaceted approach. In addition to deliberate search strategies and ongoing faculty development efforts, we must foster a welcoming climate that draws individuals from diverse backgrounds as well as a culture of inclusion that assures all faculty, staff, and students that they will be able to contribute to their full capacity

Supported by the SOMC Diversity and Inclusion Implementation Committee, the SOMC has hosted several diversity seminars, open to SOM students, faculty, and staff as well as individuals from the University main campus, and the community over the past three years. A wide range of topics have been presented at these seminars by both local and national speakers. We have had to temporarily pause our diversity seminars due to COVID-19, but we hope to resume them in the coming months when deemed safe to do so.

During AY 2019-2020, an ad hoc committee on Diversity in the Arts was charged by the SOM Dean to develop recommendations on methods to diversify the images portrayed on the walls within our School of Medicine, which embarrassingly were all images of white males. After an interruption of the committee's work due to COVID-19, in early fall of 2020 the committee recommended that seven African American men and women be honored on a Wall of Luminary Leaders in Medicine and Science to be installed in the lobby of our SOM educational building in early 2021 (to coincide with Black History Month). Later in 2021, an additional group of five men and women will be added to this display, with additional individuals added in future years. This grouping of men and women representing multiple races will be seen by all prospective students and faculty entering our SOM, hopefully prompting them to reflect that perhaps there is also a place for them in the SOMC.

In spring of 2020, following a few isolated incidents within the SOM in which disruptive behavior was exhibited by individuals associated with the SOM, we established a Climate Task Force comprised of a diverse group of faculty, staff, and students to outline steps the SOM can take to promote a more consistent climate of civility. Following a period of interruption due to COVID-19, this task force is using existing data elements and input from focus groups to identify opportunities to improve the alignment of our actions with our institutional values. This effort is being led by our Office of Continuous Professional Development, utilizing support from the Dean's Office.

Finally, as noted previously, largely in response to the national dialogue on racial inequities and the impact of racism on medicine, the SOM Executive Committee determined that new SOM strategic planning efforts for AY 2020-2021 should be focused on enhancing our culture of diversity and inclusion. One of the three strategic work groups is specifically developing recommendations on actions to advance a culture of inclusion

2. Summarize the recent activities of the university diversity Council and the medical school Diversity and Inclusion Implementation Committee during 2019-20 that were directed at enhance the recruitment and retention of faculty and senior administrative staff in the school-defined diversity categories.

The University Diversity Council (or CADO for Council of Academic Diversity and Inclusion Officers) has been focused principally on the academic climate for current and prospective faculty members through a variety of workshops and webinars:

- *Recognizing and Responding to Racial Trauma in Academia* concerning the history of racial trauma and race-related stress and how they manifest in the classroom.
- Professional Development Series on Racial Literacy (e.g. what does colorblind mean or anti-racist vs not racist).
- Ongoing revision and development of formal procedures for conducting faculty and staff searches that align with best practices in advancing diversity (College of Education).
- *Disability as Diversity: Changing the Narrative on our Campus* concerning working with the University Disability Resource Center.

• Creating a set of goals (Equity and Inclusion Plan approved by the BOT 3/2020) that included a focus on Composition (campus diversity by improving the number of full-time URM faculty across academic units).

At SOMC, the Associate and/or Assistant Deans for Diversity and Inclusion have provided bias training and participated on several search committees, specifically:

- Director, Center for Translational Cardiovascular Research (bias training).
- Assistant Dean for Clinical Curriculum and Assessment (committee member).
- Assistant Dean for Medical Student Education in Florence (bias training).
- Assistant Dean for Continuing Professional Development and Strategic Affairs (bias training).
- Assistant Dean for Clinical Learning (committee member).
- Director, Ultrasound Institute (bias training).
- Director, Research Center for Transforming Health (bias training).
- Department Chair for Obstetrics/Gynecology (bias training).

Due to the altered working environment imposed by the COVID-19 pandemic and in view of national events showcasing racial hostilities, recruitment efforts have been directed at addressing the climate of racism, justice, bias, and equity. As a result, the Office of Diversity and Inclusion has conducted several workshops or presentations for the:

- Department of Pathology, Microbiology and Immunology (general discussion, faculty development).
- Dean's Executive Advisory Committee (fundraising).
- SOMC Strategic Planning Committee (general discussion).
- Department of Pediatrics (faculty development).
- Department of Neuropsychiatry and Behavioral Science (resident training, faculty development).
- 3. Complete the following tables for the indicated academic years:

Table 3.2a: Diversity Categories	
Provide the specific diversity categories identified in medical school poli	cies that guide recruitment and retention activities
for faculty and senior administrative staff.	
Diversity Categories	
Faculty	Senior Administrative Staff*
African American Men	African American Men
African American Women	African American Women
Hispanic	Hispanic
Women	Women

\*See the *Glossary of Terms for LCME Accreditation Standards and Elements* in the *Functions and Structure of a Medical School* document for the LCME definition of senior administrative staff.

# Table 3.2b: Offers Made for Senior Administrative Staff Positions

Provide the total number of offers of senior administrative staff positions made to individuals in the school's identified diversity categories. Add rows as needed for each diversity category.

		AY 2020-21			AY 2021-22		
School-identified Diversity Category	# of Declined Offers	# of Staff Hired	Total Offers	# of Declined Offers	# of Staff Hired	Total Offers	
African American Men	0	0	0	0	0	0	
African American Women	0	0	0	0	0	0	
Hispanic	0	0	0	0	0	0	
Women	0	2	2	0	1	1	

Table 3.2a:   Offers Made for	Faculty Positions						
Provide the total number of offe	ers of faculty posit	tions made to inc	dividuals in the	school's identif	fied diversity ca	tegories.	
Add rows as needed for each di	versity category.						
	AY 2020-21 AY 2021-22						
School-identified	# of Declined	# of Faculty	Total Offers	# of Declined	# of Faculty	Total Offers	
Diversity Category	Offers	Hired	Oners	Offers	Hired	oners	
African American Men	0	0	0	0	0	0	
African American Women	0	0	0	0	0	0	
Hispanic	0	0	0	0	1	1	
Women	0	2	2	0	4	4	

LCME requested information for the 2020-21 academic year on the number and percentage of employed faculty and senior administrative staff in each of the school-identified diversity categories.

Faculty and Senior Administrative Staff Beginning of AY 2020-21					
School-Identified	Employed/	Senior			
Diversity Category	Full-time Faculty*	Administrative Staff			
African American Men	4 (2.0%)	2 (5.4%)			
African American Women	8 (4.0%)	2 (5.4%)			
Hispanic	4 (2.0%)	0			
Total Under-represented Minorities	16 (8.0%)	4 (10.8%)			
Women	81 (40.5%)	14 (37.8%)			

\*Includes only those individuals employed by UofSC SOM, does not include those minority and women faculty employed by Prisma Health or other affiliated health systems.

Implications: The LCME has changed the status of this element from Unsatisfactory to Satisfactory with Monitoring.

<u>*Closing the Loop*</u>: The SOM has a taken a number of steps to increase faculty/staff diversity. Increasing diversity among students and faculty still remains a priority.

# **LCME ELEMENT 3.4: ANTI-DISCRIMMINATION POLICY**

A medical school has a policy in place to ensure that it does not discriminate on the basis of age, disability, gender identity, national origin, race, religion, sex, sexual orientation or any basis protected by federal law.

# When/How Often Implemented: Annually

*Data Source(s)*: The data sources include policies, written communication with course directors, students, faculty, and town meetings minutes.

Methodology: Qualitative analyses of sources.

<u>*Results*</u>: In the fall of 2019, a number of events occurred over the course of several months that highlighted issues related to professionalism. The issues arose in a number of areas across the SOM; some involved faculty members, some involved students, and some involved staff members. Although each incident received attention and follow-up, a general consensus was that a more coordinated effort to address the issue was warranted.

In In In response to the professionalism issues, Dean Hall established an advisory task force, with representation from students, faculty, staff, and administration, to advise SOM leadership on opportunities to enhance professionalism within the school. The task force will be asked to summarize existing policies, programs, and other resources related to professionalism, best practices for improving the culture of professionalism within the medical schools, specific gaps in practices or resources within our SOM which might be addressed to improve professional behavior, recommended actions to address these gaps.

In response to incidents of racism on the main campus, the task force released the following letter to all members of the SOM:

#### School of Medicine Columbia Response to Recent Episodes of Racism and Inequity

Dear School of Medicine faculty, staff, and students,

All within our School of Medicine family and our community have been deeply affected by recent events that highlight ongoing racism within our society. The senseless death of George Floyd is a potent reminder that we are still far from the American ideal of achieving "liberty and justice for all." Inequitable treatment and illicit use of power at the expense of the powerless brings harm to the victims, while collectively breeding anxiety, fear, mistrust, hopelessness, and depression.

As a school of medicine, we must acknowledge these issues serve as barriers to achieving a just society, and exercise our responsibility to be part of the solution. Many of the health disparities that continue to plague our surrounding community find their roots in hundreds of years of oppression of minorities. It is shameful that many of our neighbors do not have equal access to needed health care services and struggle to find adequate housing. As health care professionals and healers, this is our space. We neither ignore the validity of the concerns nor observe from the sidelines offering advice; we can and must join with millions who are prepared to work together to combat racism and bias, and to find real and lasting solutions.

Our School of Medicine leaders have talked at length about actions we can take within the School of Medicine in partnership with the communities we serve. This is an ongoing discussion that will in time lead to a more extensive list of opportunities and commitments. However, we wanted to share with you some initial actions that the School of Medicine plans to take in the coming weeks.

- New student orientation for incoming medical students and graduate students is immediately being revised to include additional material related to racial bias, cultural competency, equity, and inclusion. Using assigned readings related to recent events, students will be challenged to reflect and share how their learning can enhance their ability to make a difference as health professionals.
- New elements are being added to the medical student curriculum focusing on better understanding of health disparities and interventions available to address those disparities. We will continue to seek additional enhancements to our medical school and graduate program curricula that effectively explore the impact of racism on health and health outcomes.
- 3. Prior to students returning to campus for the fall semester, faculty will be reaching out to some groups of students seeking their input on how to improve equity and inclusion within the School of Medicine. These discussions will continue during the fall semester.
- 4. We will reinvigorate the Diversity and Inclusion Committee, through which faculty, staff, and students will be able to provide ongoing input about proactive steps we can take to improve the climate of diversity and inclusion within our school.
- 5. For the coming year, the top fundraising priority for the School of Medicine will be the raising of funds for minority student support. The Dargan Scholarship fund was established to honor Dr. Everett L. Dargan, a renowned surgeon who served as an early African-American faculty member in the UofSC School of Medicine. In establishing this endowment, Dr. Dargan's dream was that more minority students would have the opportunity to pursue a medical career in South Carolina. To learn more about supporting scholarships, visit the <u>Give to Medicine webpage</u>.
- 6. The School of Medicine's Ad Hoc Committee on Diversity in the Arts, which was formed this spring, will be asked to facilitate the development of a display highlighting exemplary minority faculty, staff, alumni, and benefactors of the School of Medicine, whose contributions have advanced our school's mission and values. This display will become the cornerstone of ongoing efforts to highlight the enduring contributions of dozens of individuals of all genders, races, and backgrounds whose efforts have established the foundation

47

- 7. For the coming year, the School of Medicine Strategic Planning Steering Committee will focus primarily on enhancing our strategies to build a more robust culture of diversity and inclusion. These efforts will examine ways to facilitate meaningful dialogue and deeper understanding, while seeking opportunities to improve our student pipeline programs, hiring practices, and faculty and staff development efforts.
- 8. The Dean's Executive Advisory Council, a diverse group of community leaders, alumni, and friends of the School of Medicine, regularly advises the SOM. We will be reaching out to them to solicit their input on further steps we can take to strengthen our culture of diversity and inclusion.

We harbor no illusions that the answers to these profound issues are simple. However, despite the almost unfathomable pain and sorrow experienced by so many in the past two weeks, we are hearing a new theme of "hope" introduced into conversations over the past few days. Many share a growing sense that our nation seems to understand that we must move beyond rhetoric to real change. There is a belief that perhaps we now have a critical mass of individuals interested in being a part of the solution, enough that together we will become part of a better future. We commit to working with each of you toward building such a better future in the coming weeks, months and years.

Les Hall, MD

Dean

Carol McMahon, MD Associate Dean for Diversity and Inclusion

The AAMC released the following statement.

### AAMC Statement on Police Brutality and Racism in America and Their Impact on Health

*Washington, D.C., June 1, 2020*—David J. Skorton, MD, president and CEO of the AAMC (Association of American Medical Colleges) and David A. Acosta, MD, AAMC chief diversity and inclusion officer, released the following statement:

"For too long, racism has been an ugly, destructive mark on America's soul. Throughout our country's history, racism has affected every aspect of our collective national life—from education to opportunity, personal safety to community stability, to the health of people in our cities large and small, and in rural America.

Over the past three months, the coronavirus pandemic has laid bare the racial health inequities harming our black communities, exposing the structures, systems, and policies that create social and economic conditions that lead to health disparities, poor health outcomes, and lower life expectancy.

Now, the brutal and shocking deaths of George Floyd, Breonna Taylor, and Ahmaud Arbery have shaken our nation to its core and once again tragically demonstrated the everyday danger of being black in America. Police brutality is a striking demonstration of the legacy racism has had in our society over decades. This violence has eroded trust of the police within black and other communities of color who are consistently victims of marginalization, focused oppression, racial profiling, and egregious acts of discrimination.

Our country must unite to combat and dismantle racism and discrimination in all its forms and denounce race-related violence, including police brutality. Enough is enough.

As healers and educators of the next generation of physicians and scientists, the people of America's medical schools and teaching hospitals bear the responsibility to ameliorate factors that negatively affect the health of our patients and communities: poverty, education, access to transportation, healthy food, and health care.

Racism is antithetical to the oaths and moral responsibilities we accepted as health professionals who have dedicated our lives to advancing the health of all, especially those who live in vulnerable communities.

As leaders of anchor institutions in our communities, academic medicine's physicians, educators, hospital leaders, faculty, researchers, learners, and staff must lead by example and take bold action in partnership with the communities we serve:

- We must acknowledge and speak out against all forms of racism, discrimination, and bias in our environments in our institutions, communities, and society.
- We must stand in solidarity with the black community and speak out against unjust and inhumane incidents of violence.
- We must demonstrate empathy and compassion and acknowledge the pain and grief that the families and the communities of these victims are experiencing.
- We must take the lead in educating ourselves and others to address these issues head on.
- We must be deliberate and partner with local communities, public health agencies, and municipal governments to dismantle structural racism and end police brutality.

- We must employ anti-racist and unconscious bias training and engage in interracial dialogues that will dispel the misrepresentations that dehumanize our black community members and other marginalized groups.
- We must move from rhetoric to action to eliminate the inequities in our care, research, and education of tomorrow's doctors.

"The AAMC stands against racism and hate in all its forms, and we call on academic medicine to stand together on this issue. We are committed to harnessing all of our resources to catalyze meaningful and lasting solutions. We can no longer be bystanders. We must not be silent. But while our solidarity is necessary, it is not sufficient. Together, and in partnership with the communities we serve, we must work together to heal our nation."

https://sc.edu/study/colleges\_schools/medicine/internal/academic\_programs/md\_program/mistreatment/index.php

NUMBER: EOP 1.04 SECTION: Equal Opportunity Programs

SUBJECT: Non-Discrimination Policy

DATE: November 17, 2003

REVISED: October 7, 2014

Policy for: All Campuses

Procedure for: All Campuses

Authorized by: Bobby D. Gist Issued by: Equal Opportunity Programs

I. Policy A. The University of South Carolina does not discriminate in educational or employment opportunities or decisions on the basis of personal characteristics that are not relevant to an individual's abilities, qualifications, or job performance. Under federal and state law, these characteristics include age, race, color, sex, gender, religion, national origin, genetics, veterans' status, and disability status. It is the policy of the University that an individual's sexual orientation be treated in the same manner. B. This policy prohibiting discrimination on the basis of sexual orientation does not apply to the University's relationships with outside organizations including the federal government, the military, ROTC, private businesses, and state government agencies, including benefit and retirement plans administered by those

organizations. II. Procedure A. Faculty, staff, or students of the University having a complaint of discrimination on the basis of sexual orientation should notify the Equal Opportunity Officer on the campus of the University at which they are employed or enrolled. III. Reason for Revision Policy updated to ensure compliance with State and Federal law.

#### In addition, the following policies are in effect:

LCME Standards 3.4 – Anti-Discrimination Policy

3.6 - Student Mistreatment

10.6 - Content of Informational Materials

#### Scope

University of South Carolina (UofSC) School of Medicine Columbia students, faculty, and staff Policy Statement The UofSC School of Medicine Columbia does not discriminate in opportunities for qualified persons on the basis of race, ethnicity, religion, creed, sex, gender identity, national origin, age, disability, sexual orientation, pregnancy, childbirth or related medical condition or veteran status.

#### **Reason for Policy**

To provide UofSC School of Medicine Columbia community clarity on equal opportunity and antidiscrimination. The School is committed to providing a workplace and educational environment, programs, and activities free of discrimination and harassment.

#### Procedures

For faculty/staff that would like to file a complaint: The University of South Carolina has designated as the ADA Title II, Section 504, and Title IX coordinator the Executive Assistant to the President for Equal Opportunity Programs. Anyone who has been a victim of unlawful discrimination or harassment related to education programs, services, or activities provided by the university may file complaints with the EOP office. UofSC employees who witness or have evidence of unlawful discrimination or harassment of any UofSC student or employee is required to report the incident to the EOP office. The Office of the Executive Assistant to the President for Equal Opportunity Programs is located at 1600 Hampton Street, Suite 805, Columbia, SC; telephone 803-777-3854.

For students that would like to file a complaint:

 Ombudsperson – Contact the ombudsperson for the UofSC School of Medicine Columbia by phone to leave a secure and confidential message for a follow-up appointment;

#### M-I and M-II Students

Jay Potts, Ph.D. Department of Cell Biology and Anatomy School of Medicine Email: Jay.Potts@uscmed.sc.edu Phone: 803-216-3820

**M-III and M-IV Students** Robin B. Welsh, M.D. Department of Pediatrics

MARY FOERTSCH, PHD

14 Medical Park, Suite 400 Email: Robin.Welsh@palmettohealth.org Phone: 803-479-1999

#### **Florence Regional Campus Students**

Brittany Rainwater, Psy.D. McLeod Family Medicine Center Email: Brittany.Rainwater@mcleodhealth.org Phone: 843-777-2826

Email is not recommended. The ombudsman is empowered to receive and investigate reports of mistreatment in a confidential manner and to mediate if requested between the parties involved. In the event mediation is not successful, the ombudsperson will make recommendations, with the student's consent, directly to the Associate Dean for Student Affairs and Admissions regarding appropriate resolution of any complaints.

- Online Mistreatment Report Form An online mistreatment report form. Although forms may be submitted anonymously, the
  reporter is encouraged to self-identify in order to facilitate appropriate follow-up. This form is received and reviewed by the
  associate dean for student affairs and admission, manager of student affairs and admissions and lead student affairs coordinator.
  The matter is then referred to the appropriate School administrative office or personnel for additional investigation. If the
  submitter has identified themselves, they will receive notice of the outcome of the evaluation of their report. If the form was filed
  anonymously, no notification of the outcome is possible;
- Health System Compliance Hotline Students may confidentially or anonymously report concerns regarding the clinical training environment at the partner health system. A caller may remain anonymous but should self-identify as a UofSC School of Medicine Columbia student to ensure that the reported incident is forwarded to Office for Student Affairs. The Compliance Hotline is operated by an independent outside firm to further protect anonymity. To reach the Compliance Hotline, call 1-888- 243-3611 (English) or 1-800-297-8592 (Spanish). Callers should keep the case number and PIN number provided by the operator.
- A formal report to the UofSC School of Medicine Columbia administration Meeting with a member of the School's administration, including assistant or associate deans in the Offices for Academic Affairs or Student Affairs and Admissions, or the Director of Multicultural Affairs. Upon meeting with a member of administration, a mistreatment report form is completed for tracking purposes;
- Faculty and resident evaluations distributed to students at the end of each module and clerkship. These evaluations are confidential, but not anonymous.

o Clerkship faculty and resident evaluations are reviewed by the clerkship director, program director, director for clerkship and post clerkship curriculum, vice chair of academics and chair for each department, and the associate dean for curriculum

o Pre-clerkship faculty evaluations are reviewed by the director for pre-clerkship curriculum, chair of biomedical science, and the associate dean for curriculum

o IPM faculty evaluations are reviewed by the director of IPM, department chair, and the associate dean for curriculum.

#### Non-reprisal

52

No person will be subjected to restraint, interference, coercion, or reprisal for filing a complaint, serving as a witness, or seeking information regarding the equal opportunity/affirmative action program of the University of South Carolina or for seeking information about remedies available to the requestor from external agencies.

#### Sanctions

Persons found to be in violation of the university's anti-discrimination or harassment policies will be subject to disciplinary action, which may include, but is not limited to, oral or written warnings, reprimands, suspension, transfer, demotion or separation from the institution, (to include revocation of tenure procedures if applicable).

#### **Additional Contacts**

Office for Student Affairs and Admissions Ombudsman Director of Multicultural Affairs, UofSC School of Medicine Columbia Office of Academic Affairs Student Handbook (in process)

Related Information can be found at:

https://sc.edu/about/offices and divisions/diversity equity and inclusion/report an incident/index.php

Implications: Policies are available to students, faculty, and staff in a variety of locations.

**Closing the Loop:** This standard is in compliance with LCME standards

# LCME ELEMENT 5.8: LIBRARY RESOURCES/STAFF

A medical school provides ready access to well-maintained library resources sufficient in breadth of holdings and technology to support its educational and other missions. Library services are supervised by a professional staff that is familiar with regional and national information resources and data systems and is responsive to the needs of the medical students, faculty members, and others associated with the institution.

### When/How Often Implemented: Ongoing

*Data Source(s)*: The data sources include AAMC GQ; school administered student and faculty surveys, library documentation.

<u>Methodology:</u> Qualitative analyses of sources.

<u>*Results*</u>: The USCSM Library has a collection of over 10,000 biomedical electronic journals, over 1,300 biomedical electronic books, and over 80 biomedical databases. Additionally, due to resource sharing with the University Libraries, PA students and faculty have access to more than 56,000 e-journals. All electronic information resources are easily accessible to students and faculty from any location which provides Internet access. With 8 professional librarians and 6 paraprofessional staff, the USCSM Library faculty and staff members are viewed as being highly responsive to the needs

of medical students and faculty. The USCSM Library does not serve any other schools or colleges. The Library's electronic collections provide strong support for SOM educational programs, research, and patient care. Ongoing efforts in engaging in consortia purchase of electronic information resources with University Libraries and other academic libraries in South Carolina have expanded the Library's electronic collections. Library users are able to access electronic resources onsite or remotely if they are affiliated with the School of Medicine. The Medline database can be accessed via PubMed or Ovid. Other databases available via the Library website include: AccessMedicine, ClinicalKey, CINAHL, Cochrane Evidence-Based Medicine, Essential Evidence Plus, Micromedex, PsychiatryOnline, and Web of Science Core Collection. As a result of resource sharing and collaboration with the University Libraries, more than 750,000 e-journals are available via FullText Finder, the e-journal management system.

•Study Space: The entire Library is accessible to students and faculty 24 hours per day, year round, via the Carolina Card system at the main entrance. Four group study rooms are located on the 2nd floor. Study tables and Individual carrels are placed throughout the Library. These study areas are available to students on a first-come, first-served basis.

•Information Commons: The Library first floor includes an Information Commons which includes ten public workstations, two multi-function copier/scanner/printers, a scanning station, four 40" flat screen televisions which display high definition television channels with closed captioning, comfortable seating, and current medical journals, newspapers, and popular magazines. Students use their laptops to access the library's resources from anywhere in the Library via the wireless network.

•Reference Services: Reference librarians are available during normal operating hours to offer assistance to faculty, staff, students, and local health care practitioners. Reference requests are accepted in-person, by telephone, or online via an "Ask-A-Librarian" form. Librarians also provide literature searching services upon request, via the online "Literature Search Request Form." Additional Reference and Information Services include:

- Answers to factual questions where no interpretation of information is required.
- Assistance in locating materials through the use of the online catalog, the list of print periodicals held by Columbia area health science libraries, and the E-journals web page.
- Assistance in identifying authoritative web sites with quality content.
- Instruction in the use of local databases.
- Computerized bibliographic search services.
- Assistance in verification of citations for bibliographies and for interlibrary loan requests.
- Help in determining availability of translations of foreign language materials.
- Brief manual bibliographic searches.

•InterLibrary Loan Services: InterLibrary Loan Service is available to library users. Users can request items via ILL Express! by registering for an ILL Express! account. LL Express! is the Interlibrary Loan ordering system for the USC School of Medicine Library.

•Educational/Instructional Services: The Library offers a series of on-demand classes for faculty, staff, and students on PubMed, Ovid, evidence-based medicine resources, Photoshop, Current Awareness Tools, etc. A Computer Classroom with ten workstations and an instructor's workstation is available for instructional purposes. Librarians also offer courseintegrated instruction. These sessions are designed to meet the specific needs of the students in order to optimize their research and information literacy skills. Numerous online tutorials are available to provide an overview of an e-resource and can help users improve their searching skills. The Library Liaison Service actively supports the faculty and staff of the School of Medicine, and fosters communication between the Library and School of Medicine departments. Liaison Librarians offer instruction on the use of various library resources and advise on library services and policies. Library liaisons also create Subject Guides for School of Medicine departments and programs. Subject Guides are customized portals to the Library's electronic resources. The Assistant Director for Education & Outreach, serves as the library liaison for the Physician Assistant program and created the Subject Guide for the Physician Assistant program. The PA program Subject Guide includes links to evidence-based practice resources, core databases, e-textbooks for courses.

Table 5.8a shows student satisfaction with library services in 2021 slightly below the national average.

School and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were <i>satisfied/very satisfied</i> (aggregated) with the library.				
	School	National		
2021	85.2%	87.2%		
2020	87.7%	87.2%		
2019	93.8%	86.4%		
2018	84.4%	86.3%		
2017	86.2%	86.3%		
2016	92.9%	85.9%		

#### Table 5.8a: Student Satisfaction with the Library

*Implications*: Policies are in place and are being followed. This standard was not cited by LCME.

<u>Closing the Loop</u>: No further action is necessary. The school is in compliance with this LCME standard. This standard will be monitored again before the next LCME site visit.

# LCME ELEMENT 5.12: REQUIRED NOTIFICATIONS TO LCME

A medical school notifies the LCME of any substantial change in the number of enrolled medical students; of any decrease in the resources available to the institution for its medical education program, including faculty, physical facilities, or finances; of its plans for any major modification of its medical curriculum; and/or of anticipated changes in the affiliation status of the program's clinical facilities. The program also provides prior notification to the LCME if it plans to increase entering medical student enrollment on the main campus and/or in one or more existing regional campuses above the threshold of 10 percent, or 15 medical students in one year or by a total of 20 percent in three years; or to start a new or to expand an existing regional campus; or to initiate a new parallel curriculum (track).

When/How Often Implemented: Continuously

When/How Often Implemented: Annually

<u>*Data Source(s)*</u>: Office of Medical Education documents; Curriculum Committee Minutes, subcommittee Minutes, Committee and subcommittee bylaws; LCME documents

Methodology: Qualitative analysis of documents.

<u>Results</u>: Results of the LCME review of the new curriculum are reported below.

Barbara Barzansky, PhD, MHPE Co-Secretary Liaison Committee on Medical Education American Medical Association 330 North Wabash Avenue Suite 39300 Chicago, IL 60611-5885 Phone: 312-464-4933 E-mail: barbara.barzansky@ama-assn.org



LIAISON COMMITTEE ON MEDICAL EDUCATION

www.lcme.org

Veronica M. Catanese, MD, MBA Co-Secretary Liaison Committee on Medical Education Association of American Medical Colleges 655 K Street, NW, Suite 100 Washington, DC 20001-2339 Phone: 202-828-0596 E-mail: vcatanese@aamc.org

June 23, 2021

Leslie W. Hall, MD Chief Executive Officer, Palmetto Health-USC Medical Group Executive Dean, School of Medicine University of South Carolina School of Medicine, Columbia Office of the Dean 15 Medical Park, Room 318 Columbia, SC 29208

RE: Major Curricular Modification Notification Form dated April 1, 2021

Dear Dr. Hall:

At its June 15-17, 2021 meeting, the Liaison Committee on Medical Education (LCME) reviewed the Major Curricular Modification Notification Form dated April 1, 2021, which was submitted on behalf of the medical education program leading to the MD degree at the University of South Carolina School of Medicine, Columbia.

The change is a revision of the second curriculum year to do the following: 1) create an organ systems based curriculum that integrates the previously discipline-based foundational subjects of microbiology/immunology, pathology, and pharmacology; 2) align content from the Introduction o Clinical Medicine sequence to the organ system modules; and 3) create a new case-based course, Application of Clinical Evidence, to better prepare students to identify and use best evidence in patient care. The overall goal of the change is to develop a more clinically-integrated curriculum.

The LCME does not decide whether a medical school should go forward with a major curricular modification. Instead, based on the information provided in the change notification, the LCME determines whether there appear to be adequate resources currently available to support the proposed changes. The LCME may request additional information about the plans for the change to determine if the program's performance in the relevant accreditation elements and/or standards is warranted. Changes in accreditation elements and/or standards could result in changes to the program's accreditation status or term and may result in additional follow-up. It is the medical school's responsibility to decide whether and when to proceed.

Leslie W. Hall, MD Page 2

Based on the information provided, the LCME voted as follows:

LCME Determination	Resources appear adequate to support the proposed changes.
Required Follow-Up for the School	No further information on this item is requested at this time. A previously requested status report on Element 2.4 (sufficiency of administrative staff), Element 3.2 (community of scholars/research opportunities), Element 3.3 (diversity/pipeline programs and partnerships), Element 11.2 (career advising), and Element 11.3 (oversight of extramural electives) is due by December 1, 2021.
Required Follow-Up for the Next Survey Team	The LCME directed that the survey team conducting the next full survey carefully review content integration in the pre-clerkship phase of the curriculum and in the curriculum as a whole (Element 8.3), adequacy of funding from the dean's office to maintain the curriculum change (Element 5.2), and sufficiency of faculty for the new Applications of Clinical Evidence course (Element 4.1).
Next Full Survey Visit	2024-25 academic year

### IMPORTANT INFORMATION FOR THE MEDICAL EDUCATION PROGRAM

#### ACHIEVE SATISFACTORY PERFORMANCE IN ELEMENTS AND COMPLIANCE WITH STANDARDS

If the LCME determines a program to be in noncompliance with a standard at the same time that the program's performance in an associated element is found to be unsatisfactory, the total time for correction of the deficiencies in compliance and performance will be two years. If the LCME determines a program to be in compliance or compliance with a need for monitoring with a standard but if the performance in an element within that standard is unsatisfactory, the program must achieve a status of satisfactory or satisfactory with a need for monitoring in that element within a maximum of two years; if that does not occur, the LCME will find the program to be in noncompliance with all LCME accreditation standards within two years of the LCME meeting at which the noncompliance determination was made. For more details, refer to the most recent version of the LCME *Rules of Procedure*, available on the LCME website, <u>lcme.org/publications</u>.

### ALIGNING FOLLOW-UP WITH THE APPROPRIATE ACCREDITATION ELEMENTS

Programs that have status reports or other follow-up items due to the LCME are responsible for aligning the follow-up with the *Functions and Structure of a Medical School* document whose effective academic year corresponds with the academic year in which each follow-up item is due. To review the current list of LCME accreditation standards and elements, refer to the most recent version of the *Functions and Structure of a Medical School* document, available on the LCME website, <u>lcme.org/publications</u>.

*Implications*: The plan for the new M-I and M-II curriculum is in place and approved by the LCME.

<u>Closing the Loop</u>: This element is satisfactory but it will continue to be monitored as the curriculum is implemented.

# LCME ELEMENT 8.3: CURRICULAR DESIGN, REVIEW, REVISION/CONTENT MONITORING

The faculty of a medical school are responsible for the detailed development, design, and implementation of all components of the medical education program, including the medical education program objectives, the learning objectives for each required curricular segment, instructional and assessment methods appropriate for the achievement of those objectives, content and content sequencing, ongoing review and updating of content, and evaluation of course, clerkship, and teacher quality. These medical education program objectives, learning objectives, content, and instructional and assessment methods are subject to ongoing monitoring, review, and revision by the faculty to ensure that the curriculum functions effectively as a whole to achieve medical education program objectives.

### When/How Often Implemented: Annually

<u>Data Source(s)</u>: Office of Medical Education, Course/Clerkship Syllabi, Curriculum Inventory, Curriculum Committee Minutes, Core Student Assessment Subcommittee Minutes, Course/Clerkship Evaluations, NBME/USMLE examinations, the Graduation Questionnaire and PGY-I surveys

<u>Methodology</u>: Outcomes are compared to other courses and clerkships, while subject exam grades are compared to national numbers. This data is reviewed annually by the Curriculum Committee as well as the Office of Medical Education and Academic Affairs.

<u>Results:</u> Results are reported by topic area below.

The LCME asked the SOM to describe the current status of implementing a review of the curriculum as a whole, including curriculum content (whether sufficient content is included and appropriately placed in the curriculum related to each of the medical education programs are being met). They also asked for a description of the resources available for the review.

In response, the SOM reported that the curriculum is evaluated annually through end-of-course and end-of-clerkship evaluations. These evaluations are summarized and recommendations for change are reviewed and approved by the M-I/M-II and M-III/M-IV subcommittees and then presented to the full Curriculum Committee.

In addition, the SOM conducted a complete curriculum evaluation that led to a recommendation for curriculum changes as approved in September 2018 by the Curriculum Committee. As part of this process, all phases of the curriculum were examined and changes were recommended based on multiple years of course evaluations, USMLE Board exam outcomes, and a review of the AAMC Annual Graduation Questionnaire.

Since the new curriculum was approved, faculty have examined the distribution of the curriculum as recommended in the USMLE Content Outline and developed a plan to redistribute the content based on the move to a systems-based approach. As the final curriculum is developed, Course Directors and Block Directors will continue to use the USMLE Content Outline to ensure all appropriate content is covered. While modifications were made to the M-I, M-II, and M-IV years, most of these changes are taking place in the M-II year and are on track to be implemented in fall 2021.

Course faculty are presented the detailed outcome data from the annual administration of the Comprehensive Basic Science Exam (CBSE) and discuss areas for improvement. This takes place each summer following the annual administration of the CBSE following the second year of course completion. This review includes the item analysis by specific categories to help faculty pinpoint areas that did not have high performance.

Clinical clerkship directors annually receive data from the NBME Subject Examination Academic Year-End reports. This data includes information from SOM students relative to the comparison group in each content area. This allows clerkship directors to assess for the relative strengths of our students in each content area. Additionally, our clerkship directors can review the NBME subject exam for their discipline on an annual basis.

A summary of performance on the Step 1 exam is presented to the M-I/M-II Subcommittee and the Curriculum Committee each year. Similarly, performance results of the Step 2 CK and CS exams are presented to the M-III/M-IV subcommittee and Curriculum Committee. Faculty are able to review the categorical histogram to evaluate specific areas that need adjustment or improvement.

Additional information includes the following:

<u>Developing the objectives for individual courses and clerkships</u>: Course and clerkship directors primarily develop the objectives for respective courses, but welcome input from instructors, department heads, and administrative personnel.

- <u>Identifying the appropriate teaching and assessment methods</u>: Course and clerkship directors take the lead in identifying appropriate teaching and assessment methods. Student comments, new information from conferences, professional organizations, medical education literature, advice from the Office of Medical Education also contributes to the overall course and clerkship development. A new Curriculum Committee subcommittee on Core Student Assessment has also been formed to review assessment policies and procedures and recommend improvements to the Curriculum Committee.
- 2. <u>Identifying course and clerkship content and assessment methods that are appropriate for the course/clerkship</u> <u>learning objectives</u>: The medical education program objectives drive content as do the physician competencies. Assessment methods have generally been the choice of the course or clerkship directors in consultation with the teaching faculty and department chairs and reviewed annually by the appropriate Curriculum Committee subcommittee.
- 3. Evaluating the quality of individual faculty member teaching (e.g., through peer assessment of teaching or review <u>of course content</u>): The quality of teaching faculty members is evaluated through peer reviews, course/ clerkship director reviews, and student evaluations. Course/clerkship directors also review teaching section content to ensure a broad and balanced curriculum. Peer and student evaluations are reviewed with each faculty member annually by their chair during their evaluation.
- 4. <u>Monitoring the quality of individual faculty member teaching (e.g., through the review of student evaluations of courses and clerkships)</u>: Student evaluations are completed for every faculty member who is teaching or participates as a small group facilitator. These evaluations are initiated after every teaching encounter. Student evaluations are sent to the faculty member, course/clerkship director, and the chair at the end of each semester once course/clerkship grades have been received. Student evaluations of faculty are also available for review by the assistant deans in the Curricular Affairs as well as by the associate dean for medical education and academic affairs.
- 5. <u>Evaluating the overall quality and outcomes of the course/clerkship</u>: Course and clerkship quality is evaluated as part of a multi-level process using student evaluations, content matching to medical program objectives, content from the NBME/USMLE examinations, the Graduation Questionnaire and PGY-I surveys. Outcomes are compared to other courses and clerkships, while subject exam grades are compared to national numbers. This data is reviewed annually by the Curriculum Committee as well as the Office of Medical Education and Academic Affairs.

The process of formal review for each of the following curriculum elements is detailed below. Included in the description is the frequency with which such reviews are conducted, how they are conducted, the administrative support available for the reviews (e.g., through an office of medical education), and the individuals and groups (e.g., the curriculum committee) receiving the results of the evaluation.

Curriculum content is monitored on a continual basis by the Curriculum Committee and the M-I/M-II and M-III/M-IV subcommittees. The annual reviews serve as the monitoring process. In the first-year curriculum, genetics was identified as being redundant because it was being taught within two courses with a gap in the learning objectives. Consequently, genetics was consolidated into the new Molecular Medicine course.

A gap has been identified recently in social determinants of health and disease. A project leader has been identified and steps are under way to enhance this important curricular content as a vertical curriculum, to include experiential and service-learning components.

The OASIS database houses the curriculum inventory. It is accessible and searchable by students and faculty. Content is written as course/clerkship descriptions and the learning objectives, MESH terms, and the appropriate medical education program objectives are all found easily by those who are assigned to monitor the curriculum.

View rights are available to anyone interested in the database with the most access being for the catalog information. Course and clerkship directors, administrative coordinators can also access the database. Monitoring falls to the director of educational program assessment, the assistant dean for preclinical curriculum, the assistant dean for clinical curriculum and assessment, the associate dean for medical education, and the evaluation coordinator. Reviews of curriculum content are shared with the course and clerkship directors by the various administrative staff under the umbrellas of the medical education or the curriculum committee.

The process of formal review for each of the following curriculum elements is detailed below. Included in the description is the frequency with which such reviews are conducted, how they are conducted, the administrative support available for the reviews (e.g., through an office of medical education), and the individuals and groups (e.g., the curriculum committee) receiving the results of the evaluation.

<u>Individual years or phases of the curriculum</u>: The individual years are reviewed periodically with changes recommended by the appropriate subcommittee. Most recently the third-year curriculum was modified to incorporate Neurology into an expanded Internal Medicine clerkship which also allowed for internal medicine subspecialty exposure. Additionally, a one-week intersession was added to meet student requests for ACLS earlier in their training. In the fourth year a required emergency medicine/critical care rotation was added in order to better meet objectives of preparing students for their internship year.

<u>Required courses in the pre-clerkship phase of the curriculum</u>: Courses are reviewed yearly through the USCSM Curriculum Committee M-I/M-II sub-committee. The course director presents the self-assessment which is augmented by student evaluations. Other reviews are conducted as needed by a curriculum committee member outside the course using a list of standardized questions. The M-I/M-II subcommittee is staffed by the assistant dean for pre-clinical curriculum who is able to provide assistance for the reviews. All results are reviewed by the subcommittee and the full Curriculum Committee.

<u>Development of the objectives for individual courses and clerkships</u>: Course and clerkship directors primarily develop the objectives for respective courses, but welcome input from instructors, department heads, and administrative personnel.

<u>Identifying the appropriate teaching and assessment methods</u>: Course and clerkship directors take the lead in identifying appropriate teaching and assessment methods. Student comments, new information from conferences, professional organizations, medical education literature, and advice from the Office of Medical Education also contribute to the overall course and clerkship development. A new Curriculum Committee subcommittee on Core

Student Assessment has also been formed to review assessment policies and procedures and recommend improvements to the Curriculum Committee.

<u>Identification of course and clerkship content and assessment methods that are appropriate for the course/clerkship</u> <u>learning objectives</u>: The medical education program objectives drive content as do the physician competencies. Assessment methods have generally been the choice of the course or clerkship directors in consultation with the teaching faculty and department chairs and reviewed annually by the appropriate Curriculum Committee subcommittee.

<u>Evaluation of the overall quality and outcomes of the course/clerkship</u>: Course and clerkship quality is evaluated as part of a multi-level process using student evaluations, content matching to medical program objectives, content from the NBME/USMLE examinations, the Graduation Questionnaire and PGY-I surveys. Outcomes are compared to other courses and clerkships, while subject exam grades are compared to national numbers. This data is reviewed annually by the Curriculum Committee as well as the Office of Medical Education and Academic Affairs.

<u>Required clerkships</u>: Clerkships are reviewed yearly through the M-III/M-IV subcommittee of the USCSM Curriculum Committee. The clerkship directors provide a report to the subcommittee using a SWOT analysis to evaluate their clerkship which is augmented by student evaluations. The M-III/M-IV subcommittee is staffed by the assistant dean for clinical curriculum and assessment who can provide assistance for reviews. All results are reviewed by the subcommittee and the full Curriculum Committee.

Renewed emphasis has been placed on horizontal and vertical integration of the curriculum as well as instructional methods. Health Systems Sciences and ACE have been added as vertical curricula.

In 2016 Dean Hall formed a Strategic Planning Committee. One of the four focus areas was education and using the mission, vision, and goals developed by the Strategic Planning group along with the 2014 report of the Learning and Innovation Task Force, the strategic planning education subcommittee mapped out the educational goals for the five-year strategic plan. A key goal was the development of an educational task force independent of the Curriculum Committee to review and make recommendations on the entire MD curriculum.

Based on the strategic planning findings, in the summer of 2017 the SOM formed a Curriculum and Innovation Task Force (CITF); the CITF was also to address the issues noted in the LCME report. The co-chairs appointed by Dean Hall were two senior faculty members and the make-up of the committee included representation from all basic science and clinical departments to foster integration and encourage recommendations for both phases of medical education, and a student from each medical class was added in spring of 2018. In addition, half the task force members were strategically chosen from the Curriculum Committee to allow for a strong link between the deliberations and recommendations of the task force and the Curriculum Committee, which would need to approve and implement any CITF recommendations. The committee objectives included: 1) conducting a comprehensive review of the entire medicine curriculum for the MD degree, 2) identifying areas for improvement and immediate implementation as early as fall of 2018, and 3) long-term curricular innovations targeting a 2020 implementation date. The committee was to address changes that would have a significant impact on student learning as measured by higher GPAs and USMLE Step exam scores, increased student satisfaction ratings on end of course evaluations and after graduation, match success, and better prepare students for clinical practice in the evolving health care environment.

The CITF first reviewed the data compiled in the previous 2014 ad hoc report and an updated pre- clinical curricular mapping, with a focus on the number of lecture hours in our curriculum. Additional data reviewed by the committee included student exam performance, our LCME self-study, and the new implemented CQI process. To identify alternative curricular models, integration of foundational and clinical information, and alternatives to lecture-based educational approaches, the CITF reviewed over 25 curricula from other institutions, discussed sentinel curricular innovation and experiential learning articles, collected input from students, and examined course and clerkship evaluations. Task force representatives provided regular updates to each department at faculty meetings and to the members of the curriculum committee.

Current and future work is being guided by the "ideal "graduate of the USC SOM defined during the first phase of strategic planning. CITF discussions have addressed and reinforced this vision. We are shaping our new curricular efforts and program assessment plans with these ideals in mind.

In the fall of 2017, recommendations were distributed in written form to all faculty and students. Results of the confidential surveys (Likert scale with open comments) were used as a springboard to the open forum discussions held first with students and then faculty. The goals, at that juncture, were to maximize input and to help develop a climate receptive to change. All findings were discussed by the task force, and recommendations were sent to the Curriculum Committee for consideration and approval for possible implementation in fall 2018. The Curriculum Committee started reviewing the recommendations at the December 2017 meeting. Two were approved, one with modifications. Discussion continued at the January 2018 meeting, where three additional recommendations met approval. One recommendation was sent to the I3 Subcommittee for further consideration, planning and implementation details before returning to the Curriculum Committee for further discussion.

The CITF focused on long-term curriculum changes and innovations for implementation in 2021. The task force developed overarching "frameworks" for the MD curriculum that reflect the SOM's Missions, Values, and Goals. Each change to the curriculum will be evaluated for its impact on teaching and learning. At each step input was sought from faculty and students via committee meetings, department meetings, surveys, and forums. The Curriculum Committee approved a curriculum framework in the spring of 2019. Since that time, the first new course *Foundational Medical Anatomy (MCBA D 603)* has been taught once to M-I students and *General Principles (DMED D683)* will be taught to M-II students in the fall. In addition the Dean appointed an ad-hoc committee to make a recommendation of moving to pass/fail grading in the first two years. A report for this committee is expected early in the 21-22 academic year.

*Implications:* A great deal of work has been accomplished on a tight schedule. Periodic quizzes and an NBME test have been added to each course/block. End-of-block evaluations have also been added.

<u>Closing the Loop:</u> This standard requires further monitoring as changes are implemented.

# LCME ELEMENT 8.4 EVALUATION OF EDUCATIONAL PROGRAM OUTCOMES

A medical school collects and uses a variety of outcome data, including national norms of accomplishment, to demonstrate the extent to which medical students are achieving medical education program objectives and to enhance medical education program quality. These data are collected during program enrollment and after program completion.

When/How Often Implemented: Updated annually.

*Data Source(s)*: NBME Subject Exam Data Reports, CBSE NBME data reports, Step 1 and 2 data reports, End-of-Course Survey Data (See Table 8.4b)

Methodology: School Exam Score means are compared with national means

<u>*Results:*</u> Table 8.4a summarizes the USMLE requirements for advancement and graduation. Table 8.4b contains the individuals and/or groups responsible for monitoring the indicators used to evaluate program quality and outcomes.

# Table 8.4.ª USMLE Requirements for Advancement/Graduation

	umns to indicate if the school's medical student for advancement and/or graduation.	s are required to take and/or pass USMLE
	Take	Pass
Step 1	X	х
Step 2 CK	X	х

Source: School-reported

# Source: School-reported

Provide the individuals and/or groups in the medical school	ol that are responsible for monitoring each of the
indicators that are used to evaluate medical education prog	
Outcome Indicator	Individuals and Groups Receiving the Data
	Course and Clerkship Directors
	Curriculum Committee
Results of USMLE or other national examinations	Office of Medical Education and Academic Affairs
	Office of the Dean
	USC Institutional Planning and Research Office
Student scores on internally developed examinations	Course and Clerkship Directors
Performance-based assessment of clinical skills (e.g.,	Course and Clerkship Directors
OSCEs)	Curriculum Committee
	Course and Clerkship Directors
	Curriculum Committee
Student responses on the AAMC GQ	Executive Committee
	Office of Medical Education and Academic Affairs
	Office of the Dean
	Curriculum Committee
Student advancement and graduation rates	Student Promotions Committee
Student advancement and graduation rates	Office of Medical Education and Academic Affairs
	Office of the Dean
	Curriculum Committee
NRMP match results	Executive Committee
NRIVIE IIIaicii results	Office of Medical Education and Academic Affairs
	Office of the Dean
	Admissions Committee
Specialty choices of graduates	Executive Committee
Specially choices of graduates	Office of Medical Education and Academic Affairs
	Office of the Dean
Assessment of residency performance	Curriculum Committee
of graduates	Office of Medical Education and Academic Affairs
Licensure rates of graduates	Curriculum Committee
Licensure rates of graduates	Office of Medical Education and Academic Affairs
	Curriculum Committee
Practice types of graduates	Office of Medical Education and Academic Affairs
Flactice types of graduates	Executive Committee
	Office of the Dean
	Curriculum Committee
Practice location of graduates	Office of Medical Education and Academic Affairs
	Executive Committee
	Office of the Dean

# Table 8.4-2: Monitoring of Medical Education Program Outcomes Provide the individuals and/or groups in the medical school that are res

### NBME Comprehensive Basic Science Exam (CBSE): M-II Students

The exam is taken by students during the spring of Year 2. Beginning in 2015, students were required to take the exam; in 2016 students were required to pass the CBSE before taking the STEP I exam. Students who fail the CBSE must retake it and pass before taking the STEP 1 exam.

The exam consists of multiple-choice questions. Items were clustered into content areas according to the CBSE item analyses for 2015-2017. The content area item labels do not provide an exact match to discipline labels. However, the content labels allow for a more in-depth look at total average performance on the exam that allow for inferences to be made about performance within a discipline. The exam is administered at the USC SOM. NBME completes the scoring and reporting processes. Results are returned to the USC SOM by NBME and distributed to Course Directors, Faculty, students, Curriculum Committee, Assistant and Associate Academic Deans, and Director of Program Assessment.

Table 7.1b shows the number of students who passed on their first, second, or third test administrations for the classes of 2018, 2019, 2020, 2021, 2022, and 2023. Tables 7.1c through g and their accompanying charts show school and predicted national average performances by item categories for the classes of 2018-2021. Please note: The exam administered in 2016 contained 18 fewer questions than the 2017-2019 exams. The school passing score of 70 is equivalent to a score of 200 on the Step 1 exam. A passing score on the Step 1 Exam is 194. However, low passing scores on the Step 1 Exam make it difficult for students to obtain residency appointments.

Class	Number of Students Tested	Number of Students Passing/Failing on First Attempt	Number of Students Passing/Failing on Second Attempt	Number of Students Passing/Failing on Third Attempt
2018	91	66/25	8/17	3/5
2019	94	51/43	21/22	9/13
2020	94	53/41	23/18	18/10
2021	101	76/25	9/8	7/5
2022	94	72/37	15/22	14/8
2023	100	78/22	7/11*	6/5*

Table 8.4c Number of students	nassing/failing CBS	E Classes of 2018	2019 2020	2021 2022 and	2023
Table 0.4C Number of students	passing/ranning CD.	DL Classes 01 2010	, 2017, 2020	, 2021, 2022, anu	2023

\*Four students opted to delay retaking the exam a second time.

The number of students in the class of 2023 passing on the first try increased. Seventy-eight out of the 100 students who took the exam for the first time passed, 7 out of 11 passed on their second try, and 6 out of 5 passed on their third attempt. The number of students in the class of 2023 passing on their first attempt increased slightly from the class of 2022.

To determine system/fields students seemed to be having the most difficulty with, exam results were broken down by class, physician task, system, and discipline. Table 8.4d and the charts that follow show a comparison of class performance on the CBSE by Class physician task, system, and disciplines. Table cells blocked in red show declines of more than 3 percent. Compared with the Class of 2022, the Class of 2023 showed declines in every area except Behavioral Sciences

While the number of students who passed the CBSE on the first try increased from last year, the weighted averages in each of the reporting areas indicate issues with the curriculum. It is likely that the continued recovery from COVID and

65

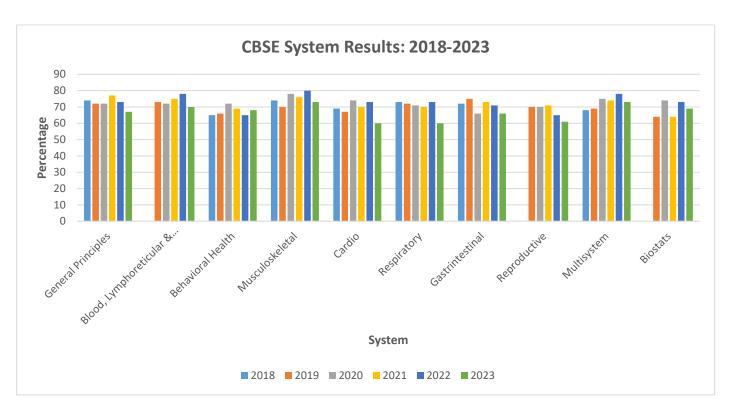
the restrictions imposed due to the pandemic affected student performance. A new curriculum was put in place in the fall of 2020 for M-I students. A significant reorganization of curricular and academic affairs in also in process. Step 1 scores will likely shed more light on the issue.

Nnn

Table 8.4d: CBSE Class	<b>Comparison: Schoo</b>	ol P-Values by System/Field	& Disciplines

System/Field	2018	2019	2020	2021	2022	2023		
Physician Task		-	-					
Applying Foundational Science Concepts	N/A	0.69	0.71	0.71	0.70	0.66		
Diagnosis	N/A	0.71	0.74	0.73	0.72	0.71		
System								
General Principles*	0.74	0.72	0.72	0.77	0.73	0.67		
Blood & Lymphoreticular and Immune Systems	N/A	0.73	0.72	0.75	0.78	0.70		
Behavioral Health and Nervous Systems/Special Senses	0.65	0.66	0.72	0.69	0.65	0.68		
Musculoskeletal, Skin, & Subcutaneous Tissue	0.74	0.70	0.78	0.76	0.80	0.73		
Cardiovascular System	0.69	0.67	0.74	0.70	0.67	0.67		
Respiratory and Renal/Urinary Systems**	0.73	0.72	0.71	0.70	0.73	0.60		
Gastrointestinal System	0.72	0.75	0.66	0.73	0.71	0.66		
Reproductive & Endocrine Systems	N/A	0.70	0.70	0.71	0.65	0.61		
Multisystem Processes & Disorders	0.68	0.69	0.75	0.74	0.78	0.73		
Biostatistics & Epidemiology/Population Health	N/A	0.64	0.74	0.64	0.73	0.69		
Disciplines	T	T	T	T	1			
Pathology	0.70	0.71	0.73	0.73	0.71	0.69		
Physiology	0.68	0.68	0.71	0.71	0.68	0.66		
Pharmacology	0.72	0.76	0.74	0.77	0.73	0.72		
Biochemistry and Nutrition	0.65	0.68	0.73	0.74	0.68	0.65		
Gross Anatomy & Embryology	0.67	0.62	0.69	0.62	0.61	0.62		
Microbiology and Immunology	0.79	0.73	0.75	0.77	0.76	0.73		
Behavioral Sciences	0.77	0.81	0.73	0.78	0.80	0.76		
Histology and Cell Biology	0.73	0.70	0.73	0.71	0.75	0.61		
**Note: The 2018 version of the CBSE exam (older) has fewer questions (182) as well as different categorization of the test items. Some categories were not used in this version of the exam and are noted as "N/A." Additionally, Respiratory system items are in a separate category from Renal/Urinary System (this is different than subsequent years).								

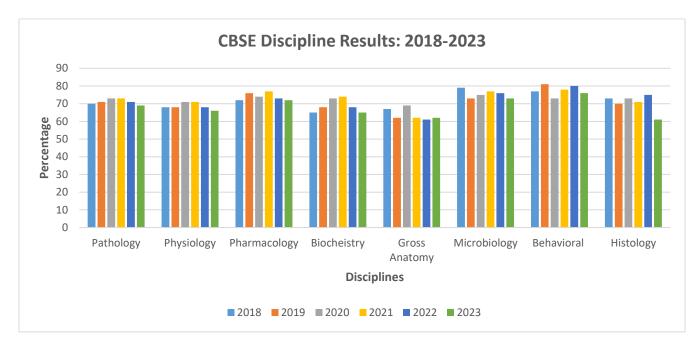
The chart below shows the CBSE System exam results for first-time test takers, classes of 2018-2023. Student scores fell in all system areas reported by NBME, except for Behavioral Health.



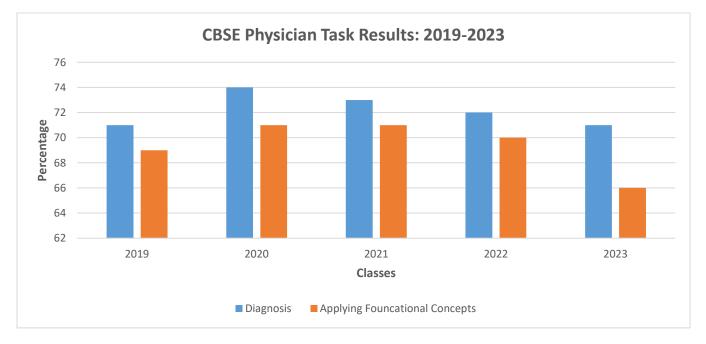
#### Note: General Principles Topic List

Acute inflammation and mediatory systems Adaptive cell responses and cellular homeostasis Adulthood-lifestyle Apoptosis Bacterial structure Cell/tissue structure, regulation, function Childhood-lifestyle Chronic inflammatory responses Concentration- and dose-effect relationships Energy metabolism Fungal structure Gene expression-transcription Gene expression-translation Genetic mechanisms Inheritance patterns Invasion and metastasis Mechanisms of adverse effects/over dosage/toxicology

Mechanisms of drug action, structure-activity relationships Mechanisms of drug interactions Mechanisms of injury and necrosis Microbicide mechanisms and tissue injury Occurrence and recurrence risk determination Parasite processes, replication, and genetics Pharmacokinetics Population genetics Principles of gene therapy Prions Regenerative processes Structure and function of proteins and enzymes Structure/replication/exchange/epigenetics Tissue response to disease-clinical manifestation Vascular response to injury Viral processes, replication, and genetics Wound healing, repair



CBSE Discipline results for the class of 2023 remained relatively stable except for Behavioral Sciences and Histology/Cell Biology which showed a 4 and 10 percent drop respectively, from the previous year.



CBSE Physician Task Results were lower for the class of 2023 in Applying Foundational Concepts than in any of the other classes for which data was reported. Student results in the area of Diagnosis for the class of 2023 returned to the class of 2019 level. A number of factors may have come in to play with the class of 2023 results, including the departure of the ICM 1 and 2 course director in the summer of 2019. The ICM courses cover a good deal of the information tested on the CBSE Diagnosis and Applying Foundational Concepts areas. Now that a full-time course director has been identified for the ICM courses, we are likely to see an increase in scores in these areas on the CBSE next year.

# NBME End-of-Clerkship Exam Results

An NBME End-of-Clerkship Exam is administered to M-III students as they complete a clerkship. Results for the past six years by clerkship are shown in Table 7.1c.

Students performed the same in Family Medicine and slightly better in all other clerkships than in recent years. Student performance in Ob-Gyn continues to be the lowest performing clerkship. This finding will be forwarded to the Associate Dean of Clinical Curriculum and Assessment, the Clerkship Director, and the M-III/M-IV subcommittee of the Curriculum Committee for further investigation and the development of an action plan.

Table 7.1d shows the NBME end-of-clerkship exam score means. In all clerkships, the mean scores have risen, in fact, they are the highest they have been in the past four years.

Clerkship	2016	2017	2018	2019	2020	2021
Family Medicine	71.9	73.1	73.4	74.9	75.8	74.4
Internal Medicine	71.5	72.4	71.2	73.9	73.8	72.7
OB/GYN	75.4	75.7	74.4	77.3	75.7	77.5
Pediatrics	76.1	77	76.3	78.9	79.0	78.5
Psychiatry	76.8	78.9	79.5	82.0	82.9	83.5
Surgery	70.1	71.2	70.5	71.7	73.0	72.8

Table 7.1c: NBME End-of-clerkship Exam Score Means by Academic Year

Source: Academic Year-End Report of NBME Clerkship Exam Results

The scores reported in the table above are equated percent correct scores that represent mastery of the content domain assessed by the examination. They are calculated as the percentage of items in the content domain that would be answered correctly based on an examinee's proficiency level.

Scores remained fairly stable in 2021 compared to 2020. Additional comparisons can be found in the snapshots below.

FAMILY MEDICINE MODULAR CORE + CHRONIC EXAMINATION

## 2020-2021 Academic Year-End Report

#### 041020 - U South Carolina School of Medicine

## Performance of Medical Students Testing 8/1/2020 - 7/31/2021

		Score Me	ent Correct an (SD)
Academic Year Clerkship Rotation	Number of Examinees	Core + Chronic Care	Core Only
All Clerkship Rotations	98	74.6 (6.3)	74.8 (6.7)
All Clerkship Rotations	94	74.4 (6.3)	74.7 (6.8)
All Clerkship Rotations	2,411	76.2 (7.1)	76.3 (7.3)
4 Week Rotations	778	76.1 (7.4)	76.2 (7.4)
6 Week Rotations	1,212	76.2 (7.1)	76.3 (7.3)
Traditional Rotations	2,034	76.0 (7.2)	76.1 (7.4)
	Clerkship Rotation All Clerkship Rotations All Clerkship Rotations All Clerkship Rotations 4 Week Rotations 6 Week Rotations	Clerkship RotationExamineesAll Clerkship Rotations98All Clerkship Rotations94All Clerkship Rotations2,4114 Week Rotations7786 Week Rotations1,212	Academic Year Clerkship RotationNumber of ExamineesCore + Chronic CareAll Clerkship Rotations9874.6 (6.3)All Clerkship Rotations9474.4 (6.3)All Clerkship Rotations2,41176.2 (7.1)4 Week Rotations77876.1 (7.4)6 Week Rotations1,21276.2 (7.1)

This report compares the equated percent correct score performance of all takers and first-time takers from your school with comparison group examinees from schools taking the examination during this academic year. Performance on the Core module is reported for all modular examinations. All takers from your school may include examinees with multiple administrations during this academic year. First-time takers from your school may include examinees who took the examination with extended testing time or for purposes other than as a final examination. Any examinees who fail to enter a valid ID may not be identified as first-time takers. The comparison group includes first-time takers from LCME-accredited medical schools who took a form of this examination as an end-of-course or end-of-clerkship examination administered under standard testing time.

This report also provides information regarding the performance of comparison group examinees as a function of the most common clerkship rotation lengths and types (at least 500 examinees across 5 schools) listed in the table above. Clerkship rotation type is reported in two categories: non-traditional (i.e., longitudinal, integrated, systems/problem-based) and traditional. The clerkship rotation length and type categories only include comparison group examinees that have clerkship rotation length and/or type information available.

The scores reported above are equated percent correct scores that represent mastery of the content domain assessed by the examination. They are calculated as the percentage of items in the content domain that would be answered correctly based on an examinee's proficiency level.



MEDICINE EXAMINATION

#### 2020-2021 Academic Year-End Report

#### 041020 - U South Carolina School of Medicine

#### Performance of Medical Students Testing 8/1/2020 - 7/31/2021

	Academic Year		Total Test Equated Percent Correct Score
Candidate Group	Clerkship Rotation	Examinees	Mean (SD)
All Takers From Your School	All Clerkship Rotations	102	72.3 (7.6)
First-Time Takers From Your School	All Clerkship Rotations	96	72.7 (7.6)
Comparison Group	All Clerkship Rotations	20,940	74.9 (9.3)
Comparison Group	4 Week Rotations	1,070	76.0 (8.4)
Comparison Group	6 Week Rotations	2,639	74.4 (10.0)
Comparison Group	8 Week Rotations	10,179	75.0 (9.1)
Comparison Group	10 Week Rotations	1,583	73.5 (9.3)
Comparison Group	12 Week Rotations	3,277	74.9 (9.4)
Comparison Group	Non-Traditional Rotations	2,294	75.7 (8.7)
Comparison Group	Traditional Rotations	17,685	74.8 (9.3)

This report compares the equated percent correct score performance of all takers and first-time takers from your school with comparison group examinees from schools taking the examination during this academic year. All takers from your school may include examinees with multiple administrations during this academic year. First-time takers from your school may include examinees who took the examination with extended testing time or for purposes other than as a final examination. Any examinees who fail to enter a valid ID may not be identified as first-time takers. The comparison group includes first-time takers from LCME-accredited medical schools who took a form of this examination as an end-of-course or end-of-clerkship examination administered under standard testing time.

This report also provides information regarding the performance of comparison group examinees as a function of the most common clerkship rotation lengths and types (at least 500 examinees across 5 schools) listed in the table above. Clerkship rotation type is reported in two categories: non-traditional (i.e., longitudinal, integrated, systems/problem-based) and traditional. The clerkship rotation length and type categories only include comparison group examinees that have clerkship rotation length and/or type information available.

The scores reported above are equated percent correct scores that represent mastery of the content domain assessed by the examination. They are calculated as the percentage of items in the content domain that would be answered correctly based on an examinee's proficiency level.

NB

73

OBSTETRICS AND GYNECOLOGY EXAMINATION

#### 2020-2021 Academic Year-End Report

#### 041020 - U South Carolina School of Medicine

#### Performance of Medical Students Testing 8/1/2020 - 7/31/2021

Candidate Group	Academic Year Clerkship Rotation	Number of Examinees	Total Test Equated Percent Correct Score Mean (SD)
All Takers From Your School	All Clerkship Rotations	98	77.3 (6.5)
First-Time Takers From Your School	All Clerkship Rotations	94	77.5 (6.5)
Comparison Group	All Clerkship Rotations	21,372	78.2 (7.8)
Comparison Group	4 Week Rotations	1,835	78.0 (7.2)
Comparison Group	5 Week Rotations	1,506	77.4 (7.5)
Comparison Group	6 Week Rotations	13,427	78.2 (7.9)
Comparison Group	8 Week Rotations	3,456	78.4 (8.0)
Comparison Group	Non-Traditional Rotations	2,166	78.6 (7.6)
Comparison Group	Traditional Rotations	18,179	78.1 (7.9)

This report compares the equated percent correct score performance of all takers and first-time takers from your school with comparison group examinees from schools taking the examination during this academic year. All takers from your school may include examinees with multiple administrations during this academic year. First-time takers from your school may include examinees who took the examination with extended testing time or for purposes other than as a final examination. Any examinees who fail to enter a valid ID may not be identified as first-time takers. The comparison group includes first-time takers from LCME-accredited medical schools who took a form of this examination as an end-of-course or end-of-clerkship examination administered under standard testing time.

This report also provides information regarding the performance of comparison group examinees as a function of the most common clerkship rotation lengths and types (at least 500 examinees across 5 schools) listed in the table above. Clerkship rotation type is reported in two categories: non-traditional (i.e., longitudinal, integrated, systems/problem-based) and traditional. The clerkship rotation length and type categories only include comparison group examinees that have clerkship rotation length and/or type information available.

The scores reported above are equated percent correct scores that represent mastery of the content domain assessed by the examination. They are calculated as the percentage of items in the content domain that would be answered correctly based on an examinee's proficiency level.

NB

## PEDIATRICS EXAMINATION

2020-2021 Academic Year-End Report

#### 041020 - U South Carolina School of Medicine

#### Performance of Medical Students Testing 8/1/2020 - 7/31/2021

Candidate Group	Academic Year Clerkship Rotation	Number of Examinees	Total Test Equated Percent Correct Score Mean (SD)
All Takers From Your School	All Clerkship Rotations	96	78.4 (7.1)
First-Time Takers From Your School	All Clerkship Rotations	95	78.5 (7.1)
Comparison Group	All Clerkship Rotations	19,008	78.5 (8.3)
Comparison Group	4 Week Rotations	1,077	77.7 (8.2)
Comparison Group	5 Week Rotations	1,669	77.5 (8.4)
Comparison Group	6 Week Rotations	8,852	78.8 (8.2)
Comparison Group	8 Week Rotations	5,824	78.5 (8.4)
Comparison Group	Non-Traditional Rotations	1,790	78.4 (8.1)
Comparison Group	Traditional Rotations	16,258	78.5 (8.4)

This report compares the equated percent correct score performance of all takers and first-time takers from your school with comparison group examinees from schools taking the examination during this academic year. All takers from your school may include examinees with multiple administrations during this academic year. First-time takers from your school may include examinees who took the examination with extended testing time or for purposes other than as a final examination. Any examinees who fail to enter a valid ID may not be identified as first-time takers. The comparison group includes first-time takers from LCME-accredited medical schools who took a form of this examination as an end-of-course or end-of-clerkship examination administered under standard testing time.

This report also provides information regarding the performance of comparison group examinees as a function of the most common clerkship rotation lengths and types (at least 500 examinees across 5 schools) listed in the table above. Clerkship rotation type is reported in two categories: non-traditional (i.e., longitudinal, integrated, systems/problem-based) and traditional. The clerkship rotation length and type categories only include comparison group examinees that have clerkship rotation length and/or type information available.

The scores reported above are equated percent correct scores that represent mastery of the content domain assessed by the examination. They are calculated as the percentage of items in the content domain that would be answered correctly based on an examinee's proficiency level.

NB

**PSYCHIATRY EXAMINATION** 

#### 2020-2021 Academic Year-End Report

#### 041020 - U South Carolina School of Medicine

#### Performance of Medical Students Testing 8/1/2020 - 7/31/2021

Candidate Group	Academic Year Clerkship Rotation	Number of Examinees	Total Test Equated Percent Correct Score Mean (SD)
All Takers From Your School	All Clerkship Rotations	95	83.4 (5.7)
First-Time Takers From Your School	All Clerkship Rotations	93	83.5 (5.7)
Comparison Group	All Clerkship Rotations	21,176	84.5 (6.3)
Comparison Group	4 Week Rotations	7,669	84.3 (6.2)
Comparison Group	5 Week Rotations	1,450	84.4 (5.8)
Comparison Group	6 Week Rotations	9,054	84.6 (6.5)
Comparison Group	8 Week Rotations	1,471	84.6 (6.0)
Comparison Group	Non-Traditional Rotations	2,372	84.3 ( <mark>6</mark> .1)
Comparison Group	Traditional Rotations	17,878	84.5 (6.3)

This report compares the equated percent correct score performance of all takers and first-time takers from your school with comparison group examinees from schools taking the examination during this academic year. All takers from your school may include examinees with multiple administrations during this academic year. First-time takers from your school may include examinees who took the examination with extended testing time or for purposes other than as a final examination. Any examinees who fail to enter a valid ID may not be identified as first-time takers. The comparison group includes first-time takers from LCME-accredited medical schools who took a form of this examination as an end-of-course or end-of-clerkship examination administered under standard testing time.

This report also provides information regarding the performance of comparison group examinees as a function of the most common clerkship rotation lengths and types (at least 500 examinees across 5 schools) listed in the table above. Clerkship rotation type is reported in two categories: non-traditional (i.e., longitudinal, integrated, systems/problem-based) and traditional. The clerkship rotation length and type categories only include comparison group examinees that have clerkship rotation length and/or type information available.

The scores reported above are equated percent correct scores that represent mastery of the content domain assessed by the examination. They are calculated as the percentage of items in the content domain that would be answered correctly based on an examinee's proficiency level.

NB

#### SURGERY EXAMINATION

2020-2021 Academic Year-End Report

#### 041020 - U South Carolina School of Medicine

#### Performance of Medical Students Testing 8/1/2020 - 7/31/2021

Candidate Group	Academic Year Clerkship Rotation	Number of Examinees	Total Test Equated Percent Correct Score Mean (SD)
All Takers From Your School	All Clerkship Rotations	98	72.4 (7.3)
First-Time Takers From Your School	All Clerkship Rotations	94	72.8 (6.9)
Comparison Group	All Clerkship Rotations	21,135	74.4 (8.6)
Comparison Group	6 Week Rotations	2,742	74.7 (8.7)
Comparison Group	8 Week Rotations	12,266	74.5 (8.7)
Comparison Group	10 Week Rotations	918	73.7 (8.1)
Comparison Group	12 Week Rotations	1,819	75.1 (8.4)
Comparison Group	Non-Traditional Rotations	1,755	74.8 (8.8)
Comparison Group	Traditional Rotations	17,976	74.4 (8.6)

This report compares the equated percent correct score performance of all takers and first-time takers from your school with comparison group examinees from schools taking the examination during this academic year. All takers from your school may include examinees with multiple administrations during this academic year. First-time takers from your school may include examinees who took the examination with extended testing time or for purposes other than as a final examination. Any examinees who fail to enter a valid ID may not be identified as first-time takers. The comparison group includes first-time takers from LCME-accredited medical schools who took a form of this examination as an end-of-course or end-of-clerkship examination administered under standard testing time.

This report also provides information regarding the performance of comparison group examinees as a function of the most common clerkship rotation lengths and types (at least 500 examinees across 5 schools) listed in the table above. Clerkship rotation type is reported in two categories: non-traditional (i.e., longitudinal, integrated, systems/problem-based) and traditional. The clerkship rotation length and type categories only include comparison group examinees that have clerkship rotation length and/or type information available.

The scores reported above are equated percent correct scores that represent mastery of the content domain assessed by the examination. They are calculated as the percentage of items in the content domain that would be answered correctly based on an examinee's proficiency level.

NR

77

#### **USMLE Step Exams**

The USMLE Step 1 exam is taken by students during the spring/summer of the M-II year at professional testing centers, and it is the first component of the USMLE and is taken by medical students and graduates seeking to practice medicine in the United States. The overall purpose of the Step 1 exam is to assess an individual's basic science knowledge. While some of the exam questions may involve testing an examinee's range of knowledge, most exam items place a strong emphasis on the application of basic science principles in the practice of clinical medicine. The Step 1 exam has approximately 308 multiple-choice test items. This is divided into seven 60-minute blocks and administered in one 8-hour testing session.

Table 7.1I shows that first time test takers in 2018 scored at the national mean for the first time in many years. This is a positive outcome that may be attributed to the numerous changes that include the requirement to pass the CBSE before taking the Step 1 exam, and the raising of the CBSE passing score.

Year Taken	# Examined	Percent Passing	Mean Total Score and SD		National Total Scor	
			Score	SD	Score	SD
2021*	92	92	234	15	230	19
2020	94	99	229	16	233	18
2019	87	99	224	15	229	20
2018	90	96	230	19	230	19
2017	86	99	224	17	229	20
2016	91	96	223	19	229	20
2015	90	90	220	20	229	20
2014	91	87	221	24	229	20

## Table 7.1d: STEP 1 USMLE Results of First-time Takers

\*Scores through September 2021 Source: NBME STEP 1 School Report

The Step 2 CK exam is taken at the end of students' third year of medical school. Table 7.1M provides *Step 2 CK USMLE* results of <u>first-time test takers</u> during the six most recently completed academic years.

Table 7.1e shows the results of first-time test takers on the CK exam. The results show that students mean scores have been stable in 2018, 2017, 2016, 2015, and 2014. The passing rate increased in 2017-2018, however, students performed below the national mean in the past five years.

## Table 8.4e: STEP 2 CK USMLE Results of First-time Takers

		Percent	School Mean		Nat	ional Mean
Academic Year	# Examined	Passing	Score	SD	Score	SD
2020-2021	101	97	243	15	245	15
2019-2020	88	100	242	16	245	16
2018-2019	88	99	237	14	243	16
2017-2018	89	98	238	16	243	17
2016-2017	79	91	236	16	242	17
2015-2016	84	95	238	16	241	17
2014-2015	85	96	240	14	240	18
2013-2014	84	100	237	16	237	18

Source: NBME STEP 2 CK School Reports

The Step 3 exam takes place at the end of Year 4. Reporting of scores is voluntary. Table 8.4g shows that the percentage of first-time takers has remain stable. The 2016 and 2018 graduates scored below the national percentage of first-time takers, however, 2017 scored slightly above.

Table 8.4g: STEP 3 USMLE Results of First-time Takers

Graduates/Exam Years	# Examined from School	School Percent Passing	National Percent Passing
2018/May 2018 to December 2020	82	95	98
2017/May 2017 to December 2020	82	99	98
2016/May 2016 to December 2020	86	97	98

Source: NBME School Reports 06/04/2021

## End-of-Course Evaluation Results

At the conclusion of each course, students are asked to evaluate the course, course director, and faculty on a number of factors. Tables 8.4h shows the results for the

## Table 8.4h: Composite Course Evaluation Scores Fall 2020

M-I Course Composite Evaluation Scores	FMA	ICM-I	AVG
1. Clarity of course learning outcomes	4.7	3.93	4.32
2. Explanation of my final grade determination	4.76	4.40	4.58
3. Explanation of attendance requirements	4.73	3.94	4.34
4. Quality of course management	4.70	3.52	4.11
5. Exams/papers graded in timely manner	4.92	3.16	4.04
6. Instructors met regularly & at scheduled times.	4.93	4.24	4.90
7. Instructors' use of voice/language, English	4.93	4.87	4.77
8. Instructors treated all people with respect.	4.85	4.69	4.54
9. Instructor Availability	4.87	4.25	4.56
10. After course, understanding of subject	4.65	4.43	4.36
11. Value websites/Blackboard/Internet resources	4.49	4.22	4.25
12. Overall quality of the course rating	4.57	3.93	4.42
Averages	4.75	4.12	4.44
Number of responses	98	98	
Response Rate (Percentage)	96%	96%	

M-II Course Composite Evaluation Scores	ICM II	Path II	Microbiology	AVG
1. Clarity of course learning outcomes	3.17	4.27	4.48	4.32
2. Explanation of my final grade determination	4.11	4.77	4.72	4.53
3. Explanation of attendance requirements	3.68	4.68	4.74	4.34
4. Quality of course management	2.33	4.37	4.72	3.81
5. Exams/papers graded in timely manner	3.33	4.63	4.81	4.04
6. Instructors met regularly & at scheduled times.	3.92	4.83	4.85	4.61
7. Instructors use of voice/language, English	4.63	4.56	4.63	4.22
8. Instructors treated all people with respect.	3.54	4.31	4.82	4.03
9. Instructor Availability	3.72	3.72	4.82	3.88
10. After course, understanding of subject	3.1	4.48	4.5	4.36
11. Value websites/Blackboard/Internet resources	3.6	4.42	4.58	3.92
12. Overall quality of the course rating	2.76	4.39	4.61	4.42
Averages	3.47	4.52	4.68	4.24
Number of responses	97	97	97	
Response Rate (Percentage)	97%	97%	97%	

Table 8.4h: Composite Course Evaluation Scores Fall 2020 continued

Scores range from 1-5 with 5 being the highest: 5 = Excellent; 4 = Good; 3 = Average; 2 = Marginal; 1 = Poor Basic Science **Teaching Faculty Average** (Average of each course, 3 courses): 3.96

Teaching Faculty Average, all courses, including ICM: 3.97

The fall semester was the first semester that the new course, Foundations of Medical Anatomy was taught. The M-I survey respondents rated the course high with a 4.75 average on a scale of 1-5. The course will incorporate slight modifications based on feedback from students and faculty. Overall, this change in curriculum appears to be successful. A full evaluation study of the new curriculum will be implemented once the subject area courses are replaced by blocks focused on organ systems. The preliminary plan for the evaluation of the curriculum innovations will be detailed in a separate section.

M-I Course Composite Evaluation Scores	Biochem	ICM-I	Physiology	AVG
1. Clarity of course learning outcomes	4.56	2.59	4.75	3.97
2. Explanation of my final grade determination	4.72	3.67	4.80	4.40
3. Explanation of attendance requirements	4.58	3.62	4.64	4.28
4. Quality of course management	4.37	2.24	4.74	3.78
5. Exams/papers graded in timely manner	4.35	3.12	4.89	4.12
6. Instructors met regularly & at scheduled times.	4.76	2.94	4.86	4.19
7. Instructors' use of voice/language, English	4.85	4.68	4.97	4.83
8. Instructors treated all people with respect.	4.86	4.54	4.83	4.74
9. Instructor Availability	4.66	3.67	4.77	4.37
10. After course, understanding of subject	4.48	3.40	4.54	4.14
11. Value websites/Blackboard/Internet resources	4.35	3.71	4.54	2.82
12. Overall quality of the course rating	4.46	2.68	4.69	3.94
Averages	4.58	3.41	4.75	4.25
Number of responses	79	82	80	
Response Rate (Percentage)	78%	81%	79%	

## Table 8.4i: Composite Course Evaluation Scores for Spring 2021

M-II Course Composite Evaluation Scores	ICM II	Path II	Pharmacology	AVG
1. Clarity of course learning outcomes	3.22	4.18	4.56	3.99
2. Explanation of my final grade determination	3.06	4.59	4.75	4.13
3. Explanation of attendance requirements	3.52	4.58	4.65	4.25
4. Quality of course management	2.70	4.31	4.52	3.84
5. Exams/papers graded in timely manner	3.98	4.75	4.74	4.49
6. Instructors met regularly & at scheduled times.	4.01	4.76	4.46	4.41
7. Instructors use of voice/language, English	4.65	4.69	4.86	4.73
8. Instructors treated all people with respect.	4.21	4.51	4.71	4.48
9. Instructor Availability	3.90	4.64	4.72	4.42
10. After course, understanding of subject	3.44	4.34	4.32	4.03
11. Value websites/Blackboard/Internet resources	3.66	4.17	4.34	4.06
12. Overall quality of the course rating	3.07	4.31	4.52	4.97
Averages	3.47	4.49	4.60	4.19
Number of responses	88	91	91	
Response Rate (Percentage)	88%	91%	91%	

Table 8.4i: Composite Course Evaluation Scores for Spring 2021 continued

Scores range from 1-5 with 5 being the highest: 5 = Excellent; 4 = Good; 3 = Average; 2 = Marginal; 1 = Poor

Basic Science Teaching Faculty Average (Average of each course, 3 courses): 3.84

Teaching Faculty Average, all courses, including ICM: 3.82

Overall, response rates dropped in the spring of 2021 compared with fall 2020 rates. Course averages were slightly lower in 2021 than in 2020, with ICM 1 and ICM 2 courses receiving the lowest ratings. These low ratings may be attributed to the fact that the course director left in the summer of 2020 and a temporary course director taught in the fall of 2020 until a new course director was hired in 2021. The changes in course directors likely contributed to a feeling of instability in the course which resulted in lower ratings.

For the past several years, students have been requesting greater transparency in terms of how their feedback was being utilized in the continuous quality improvement process. To increase transparency in how course directors use comments made by students on the end-of-course evaluations, the Director of Program Assessment and CQI in conjunction with members of the CSAS committee and the Curriculum Committee agreed to pilot a process to capture the most often mentioned student concerns and the most frequently mentioned positive comments at the end of the 2021 spring semester. The Director of Program Assessment classified comments using the form that appears below and tallied the number of times the same/similar comments were made in each area. The 3 top areas of issues and positive comments were sent to course directors for their responses to the comments.

# Course Evaluation Comments Analysis: Spring 2021

The analysis is intended for Course Directors to provide students with feedback on their comments on course evaluations. Often multiple comments are related to the same category; for example, 10 students may all make comments about the assignments being unclear. This is not really 10 different comments but rather one comment 10 times. The multiple mentions give it weight, but it is only one area that needs to be addressed for improvement.

#### Analysis:

 The Comments Analysis Worksheet helps organize student comments and make sense of the written data. The worksheet has been organized in sections according to most frequently commented categories and include the following:

- Top 3 areas of concern.
- Top 3 positive comments.

 The frequency of comments surrounding each theme have been recorded to help identify the areas where students felt most strongly.

Comments are tracked according to the <u>category(ies</u>) they relate to and whether they are positive or express concerns. Note that one comment may contain multiple points related to different comment categories. Any comments that are of a personal nature, unprofessional or not constructive will be ignored.

# Please read all of the comments contained in the course evaluation. The comments in the table are those that appeared most often and require your response. You do not need to respond to positive comments.

	Comments	#	Comments	#	Course Director's Response
Overall					
Clarity/ Content/ Objectives					
Organization & Structure					
Teaching Strategies					
Assignments and Exams					
Communication					3

Some course/block directors chose to share their comments directly with the class, others met with teams of students who summarized the results of their discussions with course/block directors and delivered the summaries to the class. Common themes included redundancy of class material, more focus on what is being tested and board preparation, technical issues with class recordings, and overall communication.

<u>Implications</u>: Student performance continues to be high on the NBME Clerkship, Subject, and Step exams but slightly below the national average. The pilot to share course/block directors' responses to end-of-course evaluation comments was also successful with spring 2021 course/block directors participating. Moving forward, CAPs will be completed for M2 blocks by the block director(s).

<u>Closing the Loop</u>: The SOM is satisfactory on this element. The CAP process will continue to be monitored.

## LCME ELEMENT 9.4: ASSESSMENT SYSTEM

A medical school ensures that, throughout its medical education program, there is a centralized system in place that employs a variety of measures (including direct observation) for the assessment of student achievement, including students' acquisition of the knowledge, core clinical skills (e.g., medical history-taking, physical examination), behaviors, and attitudes specified in medical education program objectives, and that ensures that all medical students achieve the same medical education program objectives.

<u>When/How Often Implemented</u>: Objectives are reviewed annually as part of the Curriculum Inventory; objectives are published in the school bulletin and are available by course on Black Board.

*Data Source(s)*: Course/Clerkship syllabi; Black Board; course materials; course and clerkship directors; Curriculum Inventory

<u>Methodology</u>: Verification of objectives in sources listed and report of awareness of objectives by students; Review of Curriculum Inventory; Curriculum Committee Minutes referencing approval of objectives

<u>*Results:*</u> Table 9.4a lists each course or clerkship where residents, graduate students, postdoctoral fellows, and/or other non-faculty instructors teach medical students. Describe how the relevant department or the central medical school administration ensures that the objectives and orientation to the methods of assessment have been provided and that this information has been received and reviewed.

The LCME asked the SOM to describe how residents at all sites, including regional campuses, who supervise/assess medical students in required clinical clerkships receive the relevant clerkship learning objectives and the list of required clinical encounters.

The SOM responded that all residents have access to the annually updated SOM Student Handbook through their residency program learning management system (New Innovations). The handbook includes the learning objectives for the overall programs as well as specific objectives and performance expectations for each core M-III rotation and M-IV required experiences, such as the Acting Internship (AI). All residents who have teaching roles sign an acknowledgement of review of the overall program objectives and the rotation specific learning objectives for the relevant rotations with co-learning experiences of residents and students. This plan applies to and has been implemented at the residency programs for both clinical partners: Prisma Health Midlands in Columbia and McLeod Regional Medical Center in Florence South Carolina. Partnering with the Behavioral Medicine Specialist at McLeod Family Medicine Residency program, resident training in teaching was implemented in 2017 and thereafter similar sessions have been included in new resident onboarding. At the Prisma Health programs in Columbia and Sumter, all new residents participate in a centralized extended on-boarding workshop series called "PEARLS" which includes a session specifically addressing residents as teachers and supervisors. The series is overseen by the Director, GME Education Development & Josey Medical Library at Prisma Health.

Course or Clerkship	Types of Trainees Who Provide Teaching/Supervision	How Objectives Are Provided and Teachers Oriented	
Introduction to Clinical Medicine I	Non-faculty physicians and other health professionals	Course director meets individually with each one	
Introduction to Clinical Medicine II	Non-faculty physicians and residents	Course director or component direct meets individually with each one	
Medical Embryology and Gross Anatomy	Graduate Students	Mandatory University Orientation and by Course Director	
Family Medicine	Residents	Electronic and/or paper distribution of objectives with orientation by clerkship director or clerkship site director	
Internal Medicine/Neurology	Residents	Electronic and/or paper distribution of objectives with orientation by clerkship directors	
Obstetrics and Gynecology	Residents	Electronic and/or paper distribution of objectives with orientation by clerkship directors	
Pediatrics	Residents	Electronic and/or paper distribution of objectives with orientation by clerkship directors	
Psychiatry	Residents	Electronic and/or paper distribution of objectives with orientation by clerkship director	
Surgery	Residents	Electronic and/or paper distribution of objectives with orientation by clerkship director	

Source: School-reported

Table 9.4b shows resident preparation program(s) available to residents to prepare for their roles teaching and assessing medical students in required clinical clerkships. For each program, whether the program is sponsored by the department or the institution, whether the program is required or optional (R/O), and whether resident participation is centrally monitored (Y/N), and if so, by whom.

### **Table 9.4b: Resident Preparation to Teach**

Preparation program(s) available to residents to prepare for their roles teaching and assessing medical students in required clinical clerkships. For each program, whether the program is sponsored by the department or the institution, whether the program is required or optional (R/O), and whether resident participation is centrally monitored (Y/N), and if so, by whom.									
	Program Name/Brief Summary	Sponsorship (D/I)	Required/ Optional (R/O)	Centrally Monitored? (Y/N)	By Whom?				
Family medicine	Prisma (Teaching Seminar)	D	R	Y	Clerkship Director				
Family medicine	McLeod Regional Medical Center	D	R	Y	Clerkship Site Director				
Internal medicine	Prisma (Residents as Teachers Workshop)	D	R	Y	Clerkship Director				
Ob/GYN	Prisma (Residents as Teachers Workshop)	D	R	Y	Clerkship Director				
Pediatrics	Prisma (Teaching Seminar)	D	R	Y	Clerkship Director				
Psychiatry	Prisma	D	R	Y	Clerkship Director				
Surgery	Prisma (Teaching Seminar)	D	R	Y	Clerkship Director				
Other (list):Neurology	Prisma (On-line modules)	Ι	О	Y	Clerkship Director				

At Prisma, the director of education development in the GME Office and the director of faculty development in the Office of Continuous Professional Development and Strategic Affairs are contacted when needed, usually by residency program directors, for support in teaching as it relates to the development of fellows, residents, and faculty in their clinical work and with medical students. These individuals design program-specific opportunities based on the need as outlined by the program director or chair. Specific examples of these initiatives include a facilitated group discussion of supervision and teaching responsibilities with all residents in the Neurology program, after viewing a webinar on the topic, a unique session for OB/GYN residents on presenting and speaking for small and large groups, and individual coaching sessions with residents and faculty in General Surgery. Continuing since 2009, the Residents' Ethics Conference, which has two cohorts, is hosted by 9 different residency programs and is open to all medical students. Resident and student leaders of the series are provided with written feedback after presentations so as to improve speaking, teaching, and facilitation in a group. The participating programs to have attendance policies with requirements for their specific programs. In addition, the director of education development regularly collaborates with the director of faculty development during the teaching seminar for M-IVs each year during Capstone. A similar course entitled FRATS – Fellows and Residents as Teachers is available to all programs upon request.

Since 2013, the development of centralized curricular offerings for GME has been advanced through the work of the director of education development supported by the GME Subcommittee on Common Program Requirements which is charged with defining and offering core curricular opportunities. Residents at Prisma are required to attend a common orientation in late June, to be ready for residency start on July 1<sup>st</sup>. The onboarding process has been enhanced to align with Prisma practices, with emphasis on the policies related to PH Standards of Behavior and the culture of the institution. These Standards apply to all residents as employees of Prisma and to all students who rotate at PH sites. In addition, central offerings for residents included:

1. GRIT – Geriatric - Resident Immersion Training – to give basics of geriatric care needed for all physicians who treat seniors (taught by faculty from the PH Geriatrics Division)

2. Resident Leadership Series – initially offered to Chief Residents and now expanded to include other resident leaders, and eventually broadened to include any residents with interest and commitment to attend a majority of sessions in a one –year period (Led by Dr. Renee Connolly in GME and with various leaders in the health system and medical school presenting).

3. Lean – "White Belt" – an introduction to Lean techniques taught through the PH Department of Performance Analytics.

In Florence, only the McLeod Regional Medical Center and outpatient clinic settings have residents who rotate from the McLeod Family Medicine Residency Program and therefor in teaching and supervision of students. As we enter our 2<sup>nd</sup> year of having medical students at these locations, the director of faculty development has contacted the program director to offer support in education for teaching skills of both faculty and residents. This is an extension of our work with the series already offered for all Florence Faculty – ITEACH! Medical Students and the ongoing quarterly professional development CME series offered in Florence. The assistant dean for medical student education at the Florence Regional Campus is a faculty member and former residency program director of the Family Medicine residency. Through that connection, we will continue negotiations for not only resident education, but the possibility of partnering through the PACER initiative – supporting the clinical learning environment at the Family Medicine Center in providing patient centered care.

Medical students must complete end of rotation evaluations which include their assessments of the quality of teaching provided on all clerkship rotations. Generally, data obtained is grouped to assure the confidentiality of the feedback before being provided back to clerkship directors and individual faculty and residents, whether located in Florence or our Columbia training sites. In the event of comments with urgency, or that raise any concerns about the clinical learning environment or a particular individual's capacity as a teacher and supervisor, such issues would be addressed immediately through the clerkship and clerkship site directors if needed. Clerkship directors and the curriculum committee monitor course ratings and trends with annual reviews.

At Prisma, all GME programs administer annual resident and faculty surveys as part of accreditation requirements. While these surveys include items related to all aspects of program quality, there are at least one or two items related to teaching and facilitation. Programs review data from these on an annual basis as part of their annual program evaluations. In the 2015-2016 AY many residency programs at Prisma have chosen to focus on improving the teaching, feedback, and participation in teaching and education events for residents and faculty, which should have a significant positive impact on medical students.

In addition, the GME Office administers an annual survey to all residents and includes items related to faculty teaching effectiveness and the overall educational experience. The Office also took the initiative to implement a graduate survey in spring 2015 for residents who have completed their training program three years prior to gain any insight on teaching and educational experience once residents have moved beyond their years at Prisma. Data from the past two years of this survey looks at items such as working with faculty who were dedicated to effective teaching and who focus on an environment of inquiry and scholarship.

Graduate students are used as laboratory teaching assistants in our Medical Embryology and Gross Anatomy course. Prior to serving as a teaching assistant graduate students must complete mandatory training sponsored by the university as well as an orientation conducted by the course director.

Central oversight will be monitored through the Office of Curricular Affairs through the submission of an attendance sheet and objectives will also be added to their New Innovations software so that the residents will be able to access the objectives at any time and document they have been received/reviewed. Training will be done annually with incoming residents conducted by faculty from the SOM. Students also provide evaluations of their residents as part of their clerkship evaluations which are monitored by the respective clinical department, the Office of Curricular Affairs, and the Curriculum Committee. Feedback will be provided to residents through their program director.

<u>Evaluation Study of New Curriculum</u>. A formal evaluation study of the new curriculum has been designed by the Director of Program Assessment and CQI. The plan is as follows:

## SUMMARY OF EVALUATION STUDY OF NEW CURRICULUM

## Introduction

The University of South Carolina School of Medicine (UofSC SOM), conducted a complete curriculum evaluation that led to a recommendation for curriculum changes as approved in September 2018 by the Curriculum Committee. As part of this process, all phases of the curriculum were examined and changes were recommended based on multiple years of course evaluations, USMLE Board exam outcomes, and a review of the AAMC Annual Graduation Questionnaire.

Since the new curriculum was approved, faculty have examined the distribution of the curriculum as recommended in the USMLE Content Outline and developed a plan to redistribute the content using systems-based approach. Course Directors and Block Directors use the USMLE Content Outline to ensure all appropriate content is covered. While modifications were made to the M-I, M-II, and M-IV years, many of these changes took place in the M-II year and were implemented in fall 2021. The change in the curriculum will be studied to determine the impact on student performance after the introduction of the integrated system system-based curriculum compared to that of the traditional curriculum. Since the school will be moving to a pass/fail grading system beginning with the class of 2026, the study will use the shadow data collected for purposes of ranking.

The purpose of this study is to analyze whether students who learn with the integrated system block curriculum perform better than students who learn with the traditional medical school curriculum on the preclinical NBME subject examinations, performance on the Comprehensive Basic Science Examination (CBSE), the NBME USMLE Step 1 and 2 examinations, and the clinical NBME clerkship exams.

From the 200 students studied in the control group (classes of 2019 and 2020) and the 200 students in the intervention group (classes of 2025, 2026), we will look for improved performance on the NBME USMLE Steps 1 and 2 examinations for first-time test takers following the introduction of the integrated system–based curriculum.

The purpose of this study was to examine the impact of changing the pre-clinical curriculum on student academic performance on the NBME USMLE Steps 1 and 2 board examinations, as well as the comparative relationship of medical student performance on internal and external measures used for promotion and graduation. The study includes comparisons of:

- preadmission variables, such as the overall Medical College Admissions Test (MCAT) scores and the biological sciences score or the Biological and Biochemical Foundations of Living Systems sub-score on the MCAT; cumulative undergraduate academic performance grade point average (GPA)
- preclinical subject NBME final exam scores of the first 2 years, NBME clerkship exam scores, as well as the NBME USMLE Steps 1 and 2.

Passing scores on the CBSE, NBME USMLE Steps 1 and 2 examinations are required for promotion and graduation and are appropriate for determining the effect of this curricular change. The study group of 400 total students consists of 50% female students and 50% male students, with 5% minority students included. Students who have successfully completed all course work or who have failed and/or repeated a course(s), the academic year, or a clerkship and who were subsequently successful will be included in this study as well. Additionally, only "first-time taker" scores will be included. Thus, the number of students successfully negotiating these examinations (CBSE, NBME USMLE certification examinations Steps 1 and 2) on first take as well as the level of performance would demonstrate the likely impact and help determine whether the new curriculum had any significant impact on "first-time taker" passage on the NBME USMLE Steps 1 and 2 board examinations as well as the level of performance during progression through medical school.

## Methodology

The study approach consists of 400 students from the graduating classes of 2019, and 2020 vs the graduating classes of 2025 and 2026 representing before-and-after curriculum design modification. We will include such variables as the preadmission MCAT overall scores, biological sciences MCAT scores, undergraduate graduation GPAs, subject board (NBME shelf examinations) scores in all preclinical and clerkships, NBME USMLE steps 1 and 2 knowledge and clinical skills-based performance scores. Analysis of the comparison groups will be conducted using descriptive and inferential statistics.

Descriptive statistics will be used to compare the demographic profiles of the control and intervention groups using the following 6 variables: (1) race/ethnicity, (2) MCAT overall score, (3) MCAT science score, (4) overall GPAs when entering medical school, (5) science GPA when entering medical school, and (6) gender ratio.

The average of each variable will be calculated for each class year. Then the average of the 2 years for the control group and 2 years for the intervention group will be calculated. Next, the percent difference of the control and intervention group will be calculated for each variable. If the percent difference was less than 5%, the 2 groups will be deemed comparable for that variable. If the percent difference is greater than 5%, the 2 groups will be deemed incomparable for that variable. A one-way analysis of variance (ANOVA) will also be used to assess the mean difference between the control and intervention groups for the entering students' GPA. Although the control and intervention groups were enrolled at 2 different times, the demographic composition and quality of applicants based on the MCAT scores, race/ethnicity, and GPAs are most likely compatible and will not deviate over time due to the SOM's admissions process. The 2 groups, therefore, are likely to be deemed comparable. Descriptive statistics also will be used to compare the control and intervention group performance on the NBME USMLE Steps 1 and 2.

A one-way ANOVA will be used to test for a mean difference in the subject board examination scores for the control and intervention groups. Ninety-five percent confidence intervals will be used as the threshold for study significance. The *t* test results will be verified in a separate analysis using a *t* distribution value table, degrees of freedom, and *t* critical value.

In addition, end-of-block evaluations and Corrective Action Plans will be included in the findings.

An ad hoc committee was formed at the end of the academic year to look at pass/fail grading in the first two years. Recommendations of the committee are expected early in the 21-22 academic year. Results will be reported in the 2023 CQI report.

*Implications:* There is evidence that the medical school provides resources to enhance residents' and non-faculty teaching and assessment skills and provides central monitoring of their participation in those opportunities.

<u>Closing the Loop</u>: The medical school will be sure to include the Florence campus in these activities.

## LCME ELEMENT 10.1: PREMEDICAL EDUCATION/REQUIRED COURSEWORK

Through its requirements for admission, a medical school encourages potential applicants to the medical education program to acquire a broad undergraduate education that includes the study of the humanities, natural sciences, and social sciences, and confines its specific premedical course requirements to those deemed essential preparation for successful completion of its medical curriculum.

## When/How Often Implemented: Annually

<u>Data Source(s)</u>: The premedical and required coursework are listed on the USCSM's website and a link on the application.

<u>Methodology:</u> Review of premedical education and required coursework admissions documents; https://sc.edu/study/colleges\_schools/medicine/education/md\_program/admission/required\_courses/index.php

<u>*Results:*</u> It is <u>strongly recommended</u>, but not required that candidates for the MD program meet the following requirements:

- English composition and literature. Two semesters or three quarters.
- Biology with laboratory. Coursework in general biology, general zoology, or botany is acceptable. No more than four semester hours may be botany. Two semesters or three quarters.
- General inorganic chemistry with laboratory. Coursework in qualitative analysis, quantitative analysis, or physical chemistry is acceptable. Two semesters or three quarters.
- General organic chemistry with laboratory. Coursework should include studies of aliphatic and aromatic compounds. Two semesters or three quarters.
- a. The medical school <u>recommends</u>, but does not require, as prerequisites for admission Physics, Histology and Biochemistry.
- b. Premedical course requirements are reviewed at least annually by the Admissions Committee. Recommendations about changing course requirements can be made by any member of the Admissions Committee or faculty member, but the decision to change the requirements must be approved by a majority vote of the Admissions Committee. Several years ago, due to a review of data that seemed to indicate that our students entering medical school without

any Biochemistry seemed to struggle more in the first semester curriculum, it was recommended by the Admissions Committee that while not requiring a semester of Biochemistry, it was strongly encouraged.

Implications: Documents are available on the SOM website. In addition, a student handbook is being updated.

<u>Closing the Loop</u>: This LCME element will continue to be monitored.

## LCME ELEMENT 10.3: POLICIES REGARDING STUDENT SELECTION

The faculty of a medical school establish criteria for student selection and develop and implement effective policies and procedures regarding, and make decisions about, medical student application, selection, admission, assessment, promotion, graduation, and any disciplinary action. The medical school makes available to all interested parties its criteria, standards, policies, and procedures regarding these matters.

## When/How Often Implemented: Updated annually.

<u>*Data Source(s)*</u>: Policies and procedures for the selection, assessment, advancement, graduation, and dismissal of medical students, and the policies and procedures for disciplinary action; the charge to or the terms of reference of the medical student promotions committee(s).

Methodology: Review of documents

<u>Results:</u> A summary of the results appears below.

## A. Development, approval, and dissemination of policies, procedures, and criteria for medical student selection

Policies, procedures, and criteria for medical student selection were developed and approved by the admissions committee. Information regarding the selection process is listed on the USCSM website. Additional polices such as the USCSM diversity statement which helps to guide the medical student selection process received wide vetting among faculty, staff, and students before being approved by the Executive Committee. In addition to the USCSM website applicants and advisors routinely visit the USCSM and/or Admissions Office representatives visit colleges and universities in the state to meet with applicants and advisor to discuss the process.

- B. The admissions process
  - Preliminary screening of applications is done by staff in the Office of Admissions based on established criteria (state residency, close ties to the state) to receive the secondary/supplementary application.
  - Selection of candidates to interview is done by the admissions chair with input from both the assistant and associate deans for diversity and inclusion based on established criteria including residency status, GPA, MCAT, clinical/research experiences, letters of recommendation, and historical averages for previous classes.
  - Interviews are randomly assigned by office staff. Applicants are given an individual score by each member of the Admissions Committee and the average score is used to determine if a candidate is "acceptable" for admission.
  - Offers of admission are made by the Admissions Committee chair based on the score of the candidate from highest score to lowest.

93

• Committee members are informed on a weekly basis on admissions offers.

# C. Joint baccalaureate-MD program(s) or dual degree program(s) (e.g., MD-PhD), procedures for the selection and admission of students to the MD-granting portion of the program

There is a joint baccalaureate-MD program offered to a maximum of eight members of the University of South Carolina Honors College. The process is the same as outlined above in (B) with the exception that in the selection for interview and acceptance the SAT and/or ACT is used instead of the MCAT. Students are given a provisional acceptance as long as they maintain certain academic criteria for their three years of undergraduate education.

There is a joint MD/PhD program as well but the requirements for entry do not differ from other medical students. Students apply to the appropriate program though the USC Graduate School once they have accepted an offer of admission from the USCSM.

D. Composition of the medical student promotions committee.

The Student Promotions Committee makes recommendations to the executive dean regarding each student's continued enrollment and/or academic/professional progress in the USCSM, including continuation to the next academic semester, promotion to the next academic year, suspension, dismissal, or any variation in the opinion of the committee is appropriate. Voting members of the committee include those faculty members who are the chairs of USCSM departments, and three faculty members elected by the Faculty Representation Committee. The associate dean for medical education and academic affairs serves as an *ex officio* non-voting member of the committee.

E. How the policies for the assessment, advancement, and graduation of medical students, and the policies for disciplinary action are made available to medical students and to faculty.

Policies for the assessment, advancement, and graduation of medical students and the policies for disciplinary action are made available to medical students and faculty in the Academic Bulletin and in the Student Handbook that are both posted on the USCSM website.

- A. How and by which individual(s) or group(s) the following decisions are made:
  - 1. The advancement of a medical student to the next academic period

To be promoted to the next academic year or to be permitted to continue to the next academic semester, a student must be recommended for promotion or continuation to the Dean by the Student Promotions Committee.

2. A medical student's graduation

Upon notification of the completion of all graduation requirements by the Office of Curricular Affairs and Media Resources, the faculty of the USCSM vote by majority on each student in a general faculty meeting.

Implications: Documents are available on the SOM website. In addition, a student handbook is being updated.

<u>Closing the Loop</u>: The SOM is in compliance with this LCME element.

## LCME ELEMENT 10.5: TECHNICAL STANDARDS

A medical school develops and publishes technical standards for the admission, retention, and graduation of applicants or medical students with disabilities, in accordance with legal requirements.

<u>When/How Often Implemented</u>: The technical standards were developed and approved by the Curriculum Committee with input from representatives of the Office of Medical Education and Academic Affairs, the Admissions Committee, the USC Office of Disability Services, and other members of the USCSM faculty and staff. The technical standards are reviewed on an annual basis by the Curriculum Committee and the Admissions Committee.

<u>Data Source(s)</u>: The technical standards are listed on the USCSM's website and a link on the supplemental application requests that applicants attest they have reviewed the standards before submitting the application.

<u>Methodology</u>: Review of the Technical Standards dated 04/19/2021; https://sc.edu/study/colleges\_schools/medicine/education/md\_program/admission/technical\_standards/index.php

<u>*Results:*</u> All candidates for admission to and all current students at the School of Medicine, herein after designated as candidates for the M.D. degree, should possess sufficient intellectual capacity, physical ability, emotional and psychological stability, interpersonal sensitivity, and communication skills to acquire the scientific knowledge, interpersonal and technical competencies, professional attitudes, and clinical abilities required to pursue graduate medical education and to meet all requirements for medical licensure, which are not necessarily as flexible as the School of Medicine's requirements.

All candidates should be aware that the academic and clinical responsibilities of medical students may, at times, require their presence during day and evening hours, seven days per week. Candidates should be able to tolerate physically taxing workloads and to function effectively under stress. Individuals whose performance is impaired by abuse of alcohol or other substances are not suitable candidates for admission, promotion, or graduation.

While the School of Medicine fully endorses the spirit and intent of Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1992, and the ADA Amendments Act of 2008; it also acknowledges that certain minimum technical standards must be present in candidates for admission, retention and graduation. Patient safety and well-being are considered as major factors in the determination of requirements regarding the physical, cognitive, and emotional abilities of all candidates. Those individuals who would constitute a direct threat to the health or safety of themselves, patients, or others are not considered suitable candidates for admission or retention in medical school.

The delineation of technical standards is required by the Liaison Committee on Medical Education to confirm that accreditation standards are being met. Although these standards serve to delineate the necessary physical and mental abilities of all candidates, they are not intended to deter any qualified candidate for whom reasonable accommodation will

allow fulfillment of the complete curriculum. A "qualified person with a disability" is an individual with a disability who meets the academic and technical standards requisite to admission or participation in the School of Medicine's educational programs, with or without reasonable accommodations. Each applicant to the School of Medicine, as part of the school's supplemental application, is required to acknowledge in writing the reading, understanding, and meeting of all technical standards. Candidates for admission who have a disability and use accommodations should begin discussions with the University of South Carolina Student Disability Resource Center (http://www.sa.sc.edu/sds) either prior to or as soon as the offer of admission is received and accepted. All candidates (admission candidates and current students) with disabilities bear the responsibility of providing that office with current information documenting the general nature and extent of the disability, and the proposed accommodations. Evaluating and facilitating accommodation requests is a collaborative effort among the candidate, the School of Medicine, and the UofSC Student Disability Resource Center. The School of Medicine reserves the right to request new or additional information through the Student Disability Resource Center should a candidate/student have or develop a condition that would place patients, the candidate/student, or others at risk or that may affect his/her need for accommodation.

The School of Medicine has established the following technical standards for admission to, retention in, and graduation from, the M.D. program:

#### (a) Observation

Candidates/students must be able to observe demonstrations, collect data, and participate in experiments and dissections in the basic sciences, including, but not limited to, demonstrations in animals, microbiologic cultures, and microscopic studies of microorganisms and tissues in normal and pathologic states. Candidates/students must be able to accurately observe patients and integrate these observations with the findings obtained during the elicitation of a medical history and performance of a physical examination in order to develop an appropriate diagnosis and establish a therapeutic plan.

#### (b) Communication

Candidates/students must be able to communicate effectively and efficiently in the English language in oral and written form with patients, their families, and all members of the health care team. They must be able to obtain a medical history and perform a mental status examination, interpret non-verbal aspects of communication, and establish therapeutic relationships with patients. Candidates/students must be able to record information accurately and clearly.

## (c) Motor Function

Candidates/students must possess the capacity to perform complete physical examinations and diagnostic maneuvers. Candidates/students should be able to respond to emergency situations in a timely manner and to execute motor movements required to provide general and emergency treatment to patients. They must adhere to universal precaution measures and meet safety standards applicable to inpatient and outpatient settings and other clinical activities. Candidates/students must be mobile and able to function independently within the clinical environment.

## (d) Intellectual-Conceptual, Integrative and Quantitative Abilities

Candidates/students must be able to ultimately make logical diagnostic and therapeutic judgments. Candidates/students should be able to make measurements, calculate, and reason; to analyze, integrate, and synthesize data; and to problem-solve. Candidates/students should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. Candidates/students should be able to integrate rapidly, consistently, and accurately all data received by whatever sense(s) employed.

#### (e) Behavioral and Social Attributes

Candidates/students must be able to establish appropriate relationships with a wide range of faculty members, professional colleagues, and patients. Candidates/students should possess the personal qualities of integrity, empathy, concern for the welfare of others, interest, and motivation. They should possess the emotional and psychological health required for the full use of their intellectual abilities; the exercise of good judgment; the prompt completion of all responsibilities associated with the diagnosis and care of patients; and the development of mature, sensitive, and effective relationships with patients, patients' families, and professional colleagues. They must be able to adapt to changing environments, to be flexible, and to function in the face of ambiguities inherent in the clinical situation.

## **Consideration for Admission**

In evaluating candidates for admission and candidates for the M.D. degree, it is essential that the integrity of the curriculum be maintained, that those elements deemed necessary for the education of a physician be preserved, and that the health and safety of patients be maintained. While compensation, modification, and accommodation can be made for some disabilities on the part of candidates/students, candidates must be able to perform the duties of a student and of a physician in a reasonably independent manner. An accommodation is not reasonable if it poses a direct threat to the health or safety of self and or others, if it requires a substantial modification in an element of the curriculum that is considered essential, if it lowers academic standards, or if it poses an undue administrative or financial burden. The use of a trained intermediary would result in mediation of a candidate's judgment by another person's powers of selection and observation. Therefore, the use of trained intermediaries to assist students in meeting the technical standards for admission, retention, or graduation would constitute an unacceptable substantial modification, except in rare circumstances, and is not permitted.

The School of Medicine will consider for admission any candidate who can perform or to learn to perform the skills and abilities specified in these technical standards. Candidates for the M.D. degree will be assessed at regular intervals not only based on their academic abilities, but also based on their non-academic (physical, interpersonal, communication, psychological, and emotional) abilities to meet the requirements of the curriculum and to graduate as skilled and effective medical practitioners. The faculty and administration bear significant responsibility in ensuring that the technical standards are maintained by all candidates.

*Implications:* The medical school has made the technical standards available to the public and has updated those standards as required.

*Closing the Loop*: The medical school is performing satisfactorily on this LCME element.

## LCME ELEMENT 11.1: ACADEMIC ADVISING

A medical school has an effective system of academic advising in place for medical students that integrates the efforts of faculty members, course and clerkship directors, and student affairs staff with its counseling and tutorial services and ensures that medical students can obtain academic counseling from individuals who have no role in making assessment or promotion decisions about them.

## When/How Often Implemented: Annually

*Data Source(s)*: AAMC GQ – Student Affairs/Student Support; Office of Student Affairs and Career Services records; School surveys

Methodology: Analysis of survey results and secondary source documents; Interviews with program personnel.

<u>Results:</u> Table 11.1a provides school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with academic advising/counseling. Table 11.1b provides data from the independent student analysis, by curriculum year, on the percentage of respondents who were *satisfied/very satisfied* (aggregated) with academic advising/counseling and tutoring services, as requested by LCME.

2018		18	20	019	20	020	2021		
Activities	School	Naťl	School	Naťl	School Nat'l		School	Naťl	
Academic Counseling	58.4	72.4	64.7	73.2	36.0	73.0	64.1	74.4	
Tutoring	42.5	70.5	47.0	69.3	41.5	72.7	73.3	74.0	
Personal Counseling	47.2	71.3	50.0	71.7	25.4	72.1	57.2	71.9	
Faculty Mentoring	69.3	79.7	68.4	80.7	57.1	80.4	64.0	81.1	
Wellness	44.1	70.8	59.7	68.8	38.4	67.8	48.0	66.2	

Table 11.1a: Percentage of students responding satisfied/very satisfied to academic support activities

Source: AAMC GQ

As shown in Table 11.1a, the percentage of respondents who were satisfied/very satisfied with the academic advising/counseling and tutoring increased substantially from the previous year. The results of this survey reflect the change in faculty that has taken place in the office of Curricular Affairs. An independent school administered survey also showed higher levels of satisfaction in 2021 than in 2020.

Students experiencing academic difficulties are identified by monitoring performance on quizzes, tests, and practical examinations beginning early in the M-I year. The record collection is done by the assistant dean for preclinical curriculum and access is restricted to "need to know." Course directors, as content experts, are initially responsible for contacting underperforming students and offering additional assistance and advice. When a student's grade average falls below 70 or a "C", the assistant dean or the learning skills specialist requests the student come in for an assessment of their academic issues. The new Student Success Center matches student with resources, depending on their needs. For example, students who failed the CBSE on multiple attempts were given intensive online remediation at no cost to them.

**Student Success Center**. Students in academic difficulty currently have a variety of resources available to them. During M-I orientation, the students are told encouraged to get help quickly so they do not fall behind in their studies or become discouraged if they find themselves making less than "C" level on examinations. If the student does not voluntarily come forth, he/she will be contacted by one of the assistant deans, course directors, or the learning skills specialist to triage the cause of the difficulty. Many course directors and faculty in almost all courses provide review sessions prior to exams. Students found to have concerns outside the scope of academics are referred to the USC main campus counseling center. All course directors and most faculty members have open door policies and are very willing to provide extra instruction to struggling students. In the past, M-IV students have volunteered to hold either small group or individual tutoring sessions for students. A series of workshops are provide early each academic year on time management and study skills (via 12-Step Seminar Series or Wellness Wednesday Workshops). Additionally, the medical library has a variety of online resources for use by all students. These resources include an online question bank, electronic flash cards, and various "Lib Guides" with a directory of additional resources. Every M-I student is also assigned an M-II mentor, who provides help, resources, a listening ear and feedback regarding academic success. This mentoring process continues throughout all four years of medical education.

In the M-III and M-IV years, the assistant dean for clinical curriculum in addition to the clerkship directors meet with students who are struggling with academic issues. Occasionally, because of past relationships they will also seek out the assistant dean for preclinical curriculum, and the assistant dean for student services. On the Florence Regional Campus, help is available thru the assistant dean's office plus the Columbia resources.

Implications: Documents reviewed indicate improvement in student satisfaction with support services.

<u>Closing the Loop</u>: This LCME element will continue to be monitored.

## LCME ELEMENT 11.2: CAREER ADVISING

<u>When/How Often Implemented</u>: The data source is the AAMC GQ which is administered annually by the AAMC.

<u>Methodology</u>: Review of data collected by the Office of Student and Career Services as well as The Medical School Graduation Questionnaire (GQ), a national questionnaire administered by the AAMC. The GQ was first administered in 1978 and is an important tool for medical schools to use in program evaluation and to improve the medical student experience. The GQ includes questions related to:

- Pre-clinical, clinical, and elective experiences
- General medical education and readiness for residency
- Student services
- Experiences of negative behaviors
- Financial-aid and indebtedness
- Career intentions
- Strengths of the medical school and areas that need improvement

<u>*Results:*</u> Tables 11.2a and b show data related to career advising services. As shown in Table 11.2a, the percentage of survey respondents who were satisfied/very satisfied with career planning services and information about specialties was low except for the M-IV respondents.

Satisfacti	Satisfaction with Career Counseling (Columbia Campus)									
Provide data by curriculum year and campus on the number and percentage of students who responded n/a, dissatisfied/very dissatisfied (combined), and satisfied/very satisfied (combined) with the availability of information on how to become involved in research.										
Medical School	Number of Total Responses to this	and % es	Number and Dissatisfied Dissatisfied	and Very	Number and % of combined Satisfied and Very Satisfied					
Class	item/Response rate	N	%	N	%	Ν	%			
MI	73/73%	19	26.03	21	28.77	33	45.21			
MII	73/73%	15	20.55	17	23.29	41	56.17			
MIII	52/52%	1	1.92	20	38.47	31	59.62			
MIV	67/69%	2	2.99	17	25.38	48	71.64			

Satisfacti	Satisfaction with Career Counseling (Florence Campus)										
Provide data by curriculum year and campus on the number and percentage of students who responded n/a, dissatisfied/very dissatisfied (combined), and satisfied/very satisfied (combined) with the availability of information on how to become involved in research.											
Medical School	Number of Total Responses to this	Responses Dissatisfied					of combined ery Satisfied				
Class	item/Response rate	N	%	N	%	N	%				
MI											
MII											
MIII	5/56%	0	0	1	20.00	4	80.00				
MIV	6/46%	0	0	0	0	6	100.00				

## Table 11.2b: Satisfaction with Career Counseling Spring 2021 (Florence Campus)

#### Table 11.2c: Career Planning Services

Provide school and national benchmark data from the AAMC Graduation Questionnaire (GQ) on the percentage of respondents who were *satisfied/very satisfied (aggregated)* in the following areas.

	GQ 2016		GQ 2017		GQ 2018		GQ 2019		GQ 2020		GQ 2021	
	Schl %	Nat %	Schl %	Nat %	Sch %	Nat %	Schl %	Nat %	Sch1%	Nat%	Sch1%	Nat%
Overall satisfaction with career planning services	50.9	42.0	42.0	63.9	38.0	63.3	55.5	64.6	30.2	63	49.0	67.0
Information about specialties	56.4	71.5	30.5	71.3	41.7	71.6	60.4	72.6	41.8	63	63	74

As shown in Table 11.2c, student satisfaction with overall career planning services and information about specialties has increased from 2020 levels but has not returned yet to 2019 (pre-COVID) levels.

## Table 11.2d: Optional and Required Career Advising Activities

Describe each career information session and advising activity available to medical students in each year of the curriculum during the most recently completed academic year. Note whether each was (R) or optional (O). *Schools with regional campus(es) should provide the information by campus*.

Advising Activity/Info Session	M-I	M-II	M-III	M-IV
AAMC Careers in Medicine	Optional	Optional	Optional	Optional
Career Planning Seminars	Optional	Optional	Optional	Optional
Specialty Interest Groups	Optional	Optional	Optional	Optional
Summer Clerkships	Optional			
Volunteer Experiences	Optional	Optional	Optional	Optional
Primary Care Week	Optional	Optional	Optional	Optional
General Advisor Group Meeting	Optional	Optional	Optional	Optional
General Advisor Individual Meeting	Required	Required	Required	Required
Residency Interview Prep Panel			Required	Required
Residency Fair	Optional	Optional	Optional	Optional
CV Review	Optional	Optional	Required	Optional
3 <sup>rd</sup> year Electives			Required	
M-III Intersession Week			Required	
MSPE Meeting			Required	Required
Individual Meetings with Faculty Advisors	Required	Required	Required	Required
Residency Interview Prep Panel			Required	Required
Mock Interviews				Required
Meetings with Assistant Dean for Student Affairs	Optional	Optional	Optional	Optional
ERAS Personal Statement			Required	
ERAS 101 Workshop				Required
M-IV Capstone				Required
M-IV Interview Workshop				Required
NRMP Rank List Workshop				Required
Specialty Advisor Meeting	Optional	Optional	Required	Optional
Mid-residency Application Advising				Optional
Florence Regional campus specialty advisor meeting*			Optional	Optional

AII M-III and M-IV activities are offered at both the Columbia and Florence Regional Campuses.

The career advising system begins as a self-directed process in the first year, where career advisory workshops introduce the Careers in Medicine (CiM) website; a values workshop; and CV preparation for summer clerkships. A menu of opportunities for students is provided, including workshops, on-line resources, faculty/staff advisors, specialty interest groups, and class meetings. Students are assigned 2-3 faculty advisors who meet with them periodically and discuss potential career interests as well as other topics. A few sessions are mandatory, such as M-III Intersession Week, which includes a half day of CV prep; personal statement tips; M-IV student advice; program director advice and ERAS preparation. M-III and M-IV students are also required to meet individually with the associate dean or one of the assistant deans to discuss their MSPE and career plans and are required to meet with a faculty advisor with whom they discuss their M-IV rotation schedule. An ERAS and Match survey is sent to M-IV students in October and November of each year and students are encouraged to meet with the assistant dean for student affairs and/or their faculty advisor to discuss concerns about number of interviews or potential to match. Earlier in the process, we discuss strategies to increase their chance of matching.

The Office of Student and Career Services provides students with access to all AAMC Careers in Medicine documents. Select resources are printed and provided to students during events throughout the year. These documents include an overview of the Careers in Medicine program brochure, various assessments for career decision making, and guides for creating and maintaining a CV throughout medical school. As students advance to clinical years, they are provided with information to assist in the exploration of different fields, self-assessment tools for reflecting on clerkships, and resources for starting to prepare for the match process. At the end of third year, students are again provided with CV and Personal Statement resources, tools for requesting letters of recommendation, as well as timelines and resources for the match process. All materials are either original documents or slightly modified adaptations from existing AAMC or ERAS documents. We encourage students to utilize these tools while meeting with advisors in their specialty of choice, though it is not mandatory. All documents are provided during mandatory class meetings and are sent electronically as well.

<u>LCME Finding</u>: The school has a career advising system in place and has made changes in response to AAMC GQ and ISA data regarding student perception of career counseling. During the survey visit, students expressed satisfaction with the career counseling programs; however, the program should be monitored to ensure its effectiveness.

<u>USC SOM Response</u>: Prior to his retirement, the former assistant dean for student affairs developed a series of objectives and activities for students to complete over the course of their medical education focusing on career counseling and includes participation in the AAMC's Careers in Medicine website.

In the fall of 2017, 36 faculty volunteered to be student advisors and were assigned in groups of three to a student cohort spanning all four years. An advisor faculty training workshop was held in Columbia in August 2017. In addition, two faculty training workshops were held in Florence along with a follow-up session with faculty advisors and students.

All faculty advisors received an email reminding them of the expectations of meeting at least once per semester as a group and, meeting at least once per year, with each student. They were given as a resource a copy of the AAMC CiM advisor checklist for M-1/M-2/M-3/M-4, advising at-risk students and advising students who haven't matched. All advisors (in Columbia & Florence) have received an email from the AAMC and have access to the AAMC CiM website. Students also received an email early in the year with the expectation that they be proactive and contact their faculty advisor to set up a one-on-one meeting. The assistant dean for clinical curriculum and assessment meets individually with each M-III to discuss their M-IV schedule in ensure that both academic

requirements are met as well as individual career needs and discusses with each student their choice for a faculty advisor in their desired specialty.

With the change in leadership to a new assistant dean for student affairs in February 2018, the new assistant dean has been tasked with a re-evaluation of the student career advising system to ensure that students are getting the career counseling they need at the appropriate times in their training. The assistant dean for career advising will report to the dean.

<u>Implications</u>: At the end of the year, we will distribute an electronic survey through the school's Survey Monkey asking the questions below regarding the adequacy of career counseling and access to career advisors, as well as satisfaction with their advisors and usefulness/effectiveness of the group and individual meetings. Dr. Donna Ray will oversee this area and will conduct a re-evaluation of the current system.

<u>Closing the Loop</u>: This standard is not being met and requires further monitoring.

## LCME ELEMENT 11.3: OVERSIGHT OF EXTRAMURAL ACTIVITIES

If A medical student at a medical school is permitted to take an elective under the auspices of another medical school, institution, or organization, a centralized system exists in the dean's office at the home school to review the proposed extramural elective prior to approval and to ensure the return of a performance assessment of the student and an evaluation of the elective by the student. Information about such issues as the following are available, as appropriate to the student and the medical school in order to inform the student's and the school's review of the experience prior to its approval.

- Potential risks to the health and safety of patients, students, and the community
- The availability of emergency care
- The possibility of natural disasters, political instability, and exposure to disease
- The need for additional preparation prior to, support during, and follow-up after the elective
- The level and quality of supervision
- Any potential challenges to the code of medical ethics adopted by the home school.

<u>When/How Often Implemented</u>: The data source is the listing of those students taking an extramural elective as posted in OASIS and the subsequent completed elective evaluations.

<u>Methodology</u>: Review of data by the Office of the Registrar and the Assistant Dean for Clinical Curriculum and Assessment.

<u>*Results*</u>: The LCME finding and the school's response follows:

<u>LCME Finding</u>: The school does not ensure the return of an evaluation by the student of student completed extramural electives.

<u>USC SOM Response</u>: An on-line evaluation process has been created and implemented for students participating in elective away rotations. Students who are enrolled in elective away rotations receive a link to complete an assessment of their experience. As of the fall of 2017, elective evaluations are being sent for all rotations.

### In June of 2019, the LCME requested the following information:

# 1. Provide summary data on the percent of students who submitted evaluations of extramural electives during the 2019-20 academic year?

Extramural evaluations have been collected at the SOM over the years. Our most recent data comes from 2017/18 and 2018/19. In the 17/18 year, we collected approximately 50% of the evaluations of extramural electives. During the 18/19 year, we collected approximately 50% of the evaluations of extramural electives.

At this point, we do not believe that this data was collected during the 2019/20 academic year. This stems largely from the fact that there were transitions in several of the key positions that typically oversee collection of this data (particularly, new hires in the roles of Assistant Dean for Clinical Curriculum and Assessment as well as Evaluation Program Coordinator). Recognizing this now, this data will be collected on extramural electives going forward. Due to the COVID-19 pandemic and the significant limiting of extramural electives during the 2020/21 academic year, we expect that the data we will collect this year will be less than usual with only 8 extramural rotations (all military) being allowed.

2. Describe the status of the plans to create a portal so that students can review summary evaluation data of extramural electives. Note if the portal is "live" and include any available data on utilization by students and/or advisors.

While recent evaluations remain available in the Office of the Registrar for student to review, current plans are to take these elective evaluations and place them on our school's Blackboard page. This is software that is accessible by our students and can house these evaluations. We will collect them and sort them into an "online catalogue" that can be accessed by students at any time. This this information was accessible to students this spring.

*Implications*: Steps have been taken to ensure the availability of elective evaluations and the construction of an online portal.

<u>Closing the Loop</u>: This element requires follow-up on the creation of a portal and consistent collection of data.

## SUMMARY OF CURRENT ASSESSMENT ACTIVITIES AND STATUS

Note: Elements receiving a rating of U or SM by LCME will be included in the 2023 Program Assessment Report. Elements that have not been cited by LCME but are in compliance with LCME standards or were rated satisfactory by LCME will not be reviewed in the next report.

**Element 2.4: Sufficiency of Administrative Staff.** This element received a rating of U by LCME. The results of LCME requested school administered student satisfaction surveys with administrative staff in the Office of Student and Career Services, and the Office of Curricular Affairs accessibility and responsiveness to student concerns indicated low level of satisfaction on the Columbia campus and higher levels on the Florence campus. The results of the 2021 AAMC GQ showed improved levels of satisfaction with Career Services and Office of Curricular Affairs as did the school administered survey. This element will be a part of the 2023 Program Assessment Report and will include the results of a second administration of the LCME requested student survey in October 2021. Data reviewed indicates that this element is currently not being met satisfactorily.

**Element 3.2: Community of Scholars/Research Opportunities.** This element received an LCME rating of SM. Improvements are in process concerning the availability of funding for summer research opportunities, availability of information on how to become involved in research, and availability of research opportunities. However, data from the survey of current students requested by the LCME indicate that students at the Columbia and Florence campuses expressed low levels of satisfaction in all research areas surveyed. Data indicate that this element is still requires work.

**Element 3.3: Diversity/Pipeline Programs.** This element was rate "SM" by the LCME. While it is reasonable to argue that problems as complex as program diversity cannot be solved in a short amount of time, the LCME expects to see movement towards a solution in the form of plans and activities to increase diversity. A commitment to funding for new diversity initiatives and other economic incentives are in processes, along with strategic planning initiatives. This element is currently being met satisfactorily but requires monitoring. Substantial progress has been made on this element.

Element 3.4: Anti-discrimination Policy. This LCME element was not cited. This element is being met satisfactorily.

**Element 5.8: Library Resources/Staff.** This LCME element was not cited. This is the first review of this element since a formal Program Assessment and CQI process was put in place in 2016. A review of data sources indicate that this element is being met satisfactorily.

**Element 5.12: Required Notifications to LCME.** This LCME element was not cited. This is the first review of this element since a formal Program Assessment and CQI process was put in place in 2016. A review of data sources indicate that this element is being met satisfactorily.

**Element 8.3: Curricular Design, Review, Revision/Content Monitoring.** This LCME element's status is satisfactory with a need for monitoring. Changes implemented in the 2020-2021 academic year included the following:

\*Regular academic support sessions are being offered through the Student Success and Wellness Center.

\*The M2 organ system blocks have been created and are being implemented.

\*Correct Action Plans (CAPs) are being completed in response to student end-of-course/block comments.

\*Application of Clinical Evidence I and II (DMED D680 and 681) are being implemented during the M-I and M-II fall and spring semesters.

\*An ah-hoc committee has been formed by the Dean to make a recommendation about changing to a pass/fail grading system in the first two years.

Data indicate that this element is being met satisfactorily.

**Element 8.4: Program Evaluation**. This element was not cited by the LCME. This is the first review of this element since a formal Program Assessment and CQI process was put in place in 2016. Data available at the time of this report indicate that this element is being met satisfactorily. The COVID-19 pandemic interrupted Step 1 and 2 CK testing, and suspended Step 2 CS testing indefinitely.

Element 9.4: Assessment System. This element was not cited by the LCME. This element is being met satisfactorily.

**Element 10.1: Premedical Education/coursework**. This element was not cited by the LCME. This is the first review of this element since a formal Program Assessment and CQI process was put in place in 2016. This element is being met satisfactorily.

**Element 10.3**: **Policies Regarding Student Selection**. This element was not cited by the LCME. This is the first review of this element since a formal Program Assessment and CQI process was put in place in 2016. Data indicate that this element is being met satisfactorily.

**Element 10.5**: **Technical Standards**. This element was not cited by the LCME. This is the first review of this element since a formal Program Assessment and CQI process was put in place in 2016. Data indicate that this element is being met satisfactorily.

**Element 11.1**: Academic Advising. This element was not cited by the LCME. This is the first review of this element since a formal Program Assessment and CQI process was put in place in 2016. Data indicate that this element is being met satisfactorily.

**Element 11.2: Career Advising**. This element was rated SM by the LCME. Data indicate that this element requires continued monitoring.

**Element 11.3**: **Oversight of extramural activities**. This element was rated SM by the LCME. There were issues with the collection of data on extramural activities that appear to have been corrected. This element should continue to be monitored.

# ATTACHMENT A

### Table 94.D: Direct/Indirect assessments M-I and M-II

Competency	Objective	Direct Measures	Indirect Measures
Knowledge	Knowledge of the normal structure and function of the	Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam	Course Activities-P PBL Group Work-P
Knowledge	body and its major organ systems	NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation Clinical Evaluations CSAD	Course/Faculty Evaluation Practice Tests
	Knowledge of the molecular, biochemical, and cellular mechanisms important to maintaining body homeostasis	Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation Clinical Evaluations CSAD	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests
	Knowledge of the various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic degenerative, psychosocial, and traumatic) of maladies and of the pathogenesis of maladies	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation Clinical Evaluations CSAD	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests
	Knowledge of altered structure and function (pathology and pathophysiology) of the body and its major organ systems seen in various diseases and conditions,	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation Clinical Evaluations	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests
	Knowledge of frequent clinical, laboratory, and pathologic manifestations of common maladies	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation Clinical Evaluations	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests
	Knowledge of the important, non-biological determinants of health and of the economic,	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests

psychological, social, and	USMLE Step Exam	
cultural factors that	Papers (with rubric)	
contribute to the	PBL Evaluation	
development and/or	Clinical Evaluations	
continuation of maladies.	CSAD	

## Table 9.4D: Direct/Indirect assessments M-I and M-II continued

Competency	Objective	Direct Measures	Indirect Measures
Competency Knowledge	ObjectiveKnowledge of theepidemiology of commonmaladies within a definedpopulation and systematicapproaches to reduce theincidence and prevalence ofthose maladies.Knowledge of variousapproaches to, andimplications of, theorganization, financing, anddelivery of health care.	Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation Clinical Evaluations Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation	Indirect MeasuresCourse Activities-PPBL Group Work-PCourse/Faculty EvaluationPractice TestsIHI ModulesCourse Activities – PPBL Group Work – PPractice TestsIHI Modules
	Knowledge of the theories and principles that govern ethical decision-making and of the major ethical dilemmas encountered in medical practice, particularly at the beginning and end of life and resulting from the rapid expansion of knowledge in genetics.	Clinical Evaluations Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation Clinical Evaluations CSAD	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests
	Knowledge about relieving pain and ameliorating the suffering of patients.	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation Clinical Evaluations CSAD	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests
	Knowledge of the quality improvement methods and the factors associated with increased patient safety	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests IHI Modules

	Clinical Evaluations CSAD	
Knowledge of the threats to medical professionalism posed by the conflicts of interest inherent in various financial and organizational arrangements for medical practice	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation Clinical Evaluations CSAD	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests IHI Modules

	Objective	Direct Measures	Indirect Measures
con	e ability to obtain an accurate and aplete medical history, with special ntion to issues related to age, gender,	Faculty Developed Exams Comprehensive Basic Science Exam	Course Activities – P PBL Group Work – P Course/Faculty Evaluation
sexu	ual orientation, and socio-economic us and fully documents that ormation as part of a medical record.	NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation CSAD	Practice Tests
orga doc	e ability to perform a complete and an-specific examination and fully ument that information as part of a lical record.	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam PBL Evaluation CSAD	Course Activities – P PBL Group Work – P
	e ability to perform routine technical cedures	Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam PBL Evaluation CSAD	Course Activities-P PBL Group Work-P Course/Faculty Evaluation Practice Tests
	e ability to interpret results of nmonly used diagnostic procedures.	Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam PBL Evaluation CSAD	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests
info mak indi	e ability to retrieve, manage, and utilize ormation for solving problems and king decisions relevant to the care of aviduals and populations.	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation CSAD	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests
indi sele pati the	e ability to identify factors placing ividuals at risk for disease or injury, ect appropriate tests for detecting ents at risk for specific diseases or in early stage of diseases, and determine ropriate response strategies.	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric)	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests

Papers (with rubric)

**Direct Measures** 

#### Table 9.4D continued: Direct/Indirect assessments M-I- and M-II

Objective

Competency

Skills

**Indirect Measures** 

	The ability to construct appropriate management strategies, both diagnostic and therapeutic, for patients with common acute and chronic medical psychiatric conditions, surgical conditions, and conditions requiring short and long term rehabilitation therapy.	PBL Evaluation CSAD Faculty Developed Exams Comprehensive Basic Science Exam OSCEs USMLE Step Exams CSAD	PGY-1 Survey PGY-1 Survey - Supervisors
	The ability to recognize and outline an initial course of management for patients with serious conditions requiring critical care.	Faculty Developed Exams Comprehensive Basic Science Exam OSCEs USMLE Step Exams	Course Activities – P PBL Group Work – P
Skills	The ability to reason deductively in solving clinical problems	Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation CSAD	Course Activities-P PBL Group Work-P Course/Faculty Evaluations Practice Tests
Skills	The ability to access and critically evaluate medical literature.	Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation CSAD	Course Activities – P PBL Group Work – P Course/Faculty Evaluations Practice Tests

Competency	Objective	Direct Measures	Indirect Measures
Attitudes and Behaviors	Compassionate treatment of patients and respect for their privacy and dignity.	Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation	Course Activities-P PBL Group Work-P Course/Faculty Evaluation Practice Tests Conduct Evaluation
	Commitment to advocate at all times for the interests of his/her patients' interests over his/her personal interests.	Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests Conduct Evaluation
	Commitment to provide care to patients unable to pay for medical services and to advocate for access to health care for members of traditionally underserved populations.	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation	Course Activities – P PBL Group Work – P Course/Faculty Evaluation Practice Tests IHI Modules Conduct Evaluation
	Commitment to engage in life-long learning in order to stay abreast of relevant scientific advances.	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation	Course Activities – P PBL Group Work – P Course/Faculty Surveys Practice Tests Conduct Evaluation
	The capacity to recognize and accept limitations in one's knowledge and clinical skills and a commitment to improve that knowledge and ability through self- assessment.	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation	Course Activities – P PBL Group Work – P Course/Faculty Surveys Practice Tests Conduct Evaluation
	The ability to understand the power of the scientific method in establishing the causation of disease and efficacy of traditional and non-traditional therapies	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs USMLE Step Exam Papers (with rubric) PBL Evaluation	Course Activities – P PBL Group Work – P Conduct Evaluation

## Table 9.4D continued: Direct/Indirect assessments M-I and M-II

113

#### Table 9.4E: Direct/Indirect assessments M-III and M-IV

Competency	Objective	Direct Measures	Indirect Measures
	Knowledge of the normal	Departmental Exams	Clerkship Evaluations
Knowledge	structure and function of the	NBME Subject Exams	L
8	body and its major organ	OSCEs & Gate Exam	
	systems	Clinical Evaluations	
	5	USMLE Step Exam	
		CSAD	
		Clinical Evaluations	
	Knowledge of the	Departmental Exams	Clerkship Evaluation
	molecular, biochemical, and	NBME Subject Exams	F =
	cellular mechanisms	OSCEs & Gate Exam	
	important to maintaining	Clerkship Evaluations of Students	
	body homeostasis	USMLE Step Exam	
	loug nomeostable	CSAD	
		Clinical Evaluations	
	Knowledge of the various	Departmental Exams	Clerkship Evaluations
	causes (genetic,	NBME Subject Exams	AAMC GQ
	developmental, metabolic,	OSCEs & Gate Exam	in the op
	toxic, microbiologic,	Clerkship Evaluations of Students	
	autoimmune, neoplastic	USMLE Step Exam	
	degenerative, psychosocial,	CSAD	
	and traumatic) of maladies	Clinical Evaluations	
	and of the pathogenesis of	Chinear Evaluations	
	maladies		
	Knowledge of altered	Faculty Developed Exams	Clerkship Evaluations
	structure and function	NBME Subject Exams	AAMC GQ
	(pathology and	OSCEs & Gate Exam	1
	pathophysiology) of the	USMLE Step Exam	
	body and its major organ	CSAD	
	systems seen in various	Clinical Evaluations	
	diseases and conditions,		
	Knowledge of frequent	Faculty Developed Exams	Clerkship Evaluations
	clinical, laboratory,	NBME Subject Exams	AAMC GQ
	roentgenologic, and	OSCEs & Gate Exam	1
	pathologic manifestations of	USMLE Step Exam	
	common maladies	CSAD	
		Clinical Evaluations	
	Knowledge of the	Faculty Developed Exams	Clerkship Evaluations
	important, non-biological	NBME Subject Exams	AAMC GQ
	determinants of health and	OSCEs & Gate Exam	
	of the economic,	USMLE Step Exam	
	psychological, social, and	CSAD	
	cultural factors that	Clinical Evaluations	
	contribute to the		
	development and/or		
l	continuation of maladies.		
	continuation of mataules.	l	

Table 9.4E: Direct/Indirect assessments M-III and M-IV continued

MARY FOERTSCH, PHD

Competency	Objective	Direct Measures	Indirect Measures
Knowledge	Knowledge of the epidemiology of common maladies within a defined population and systematic approaches to reduce the incidence and prevalence of those maladies.	Faculty Developed Exams/Quizzes NBME Subject Exams OSCEs & Gate Exam USMLE Step Exam CSAD Clinical Evaluations	Clerkship Evaluation IHI Modules
	Knowledge of the theories and principles that govern ethical decision-making and of the major ethical dilemmas encountered in medical practice, particularly at the beginning and end of life and resulting from the rapid expansion of knowledge in genetics.	Faculty Developed Exams/Quizzes NBME Subject Exams OSCEs & Gate Exam USMLE Step Exam Papers (with rubric) CSAD Clinical Evaluations	Clerkship Evaluations
	Knowledge about relieving pain and ameliorating the suffering of patients.	Faculty Developed Exams NBME Subject Exams OSCEs & Gate Exam USMLE Subject Exam Papers (with rubric) CSAD Clinical Evaluations	Clerkship Evaluations AAMC GQ
	Knowledge of the quality improvement methods and the factors associated with patient safety.	Faculty Developed Exams NBME Subject Exams OSCEs & Gate Exam USMLE Step Exam Papers (with rubric) CSAD Clinical Evaluations	Clerkship Evaluations IHI Modules
	Knowledge of various approaches to, and implications of, the organization, financing, and delivery of health care	Clinical Evaluations	IHI Module
	Knowledge of the threats to medical professionalism posed by the conflicts of interest inherent in various financial and organizational arrangements for medical practice	Faculty Developed Exams NBME Subject Exams OSCEs & Gate Exam USMLE Step Exam Papers (with rubric) CSAD Clinical Evaluations	Clerkship Evaluations

Competency	Objective	Direct Measures	Indirect Measures
Skills	The ability to obtain an accurate and complete medical history, with	Faculty Developed Exams NBME Subject Exams	Clerkship Evaluations Small Group Work – P
SKIIIS	special attention to issues related to	OSCEs & Gate Exam	Sinan Group work – F
	age, gender, sexual orientation, and	USMLE Step Exam	
	socio-economic status and fully	Papers (with rubric)	
	document that information as part	CSAD	
	of a medical record.	Oral Case Presentations	
	of a modelar record.	Clinical Evaluations	
	The ability to perform a complete	Clinical Evaluations	Clerkship Evaluations
	and organ-specific examination		Small Group Work - P
	and fully document that		
	information as part of a medical		
	record.		
	The ability to perform routine	Faculty Developed	Clerkship Evaluation
	technical procedures	Exams/Quizzes	Small Group Work - P
	-	NBME Subject Exams	-
		OSCEs & Gate Exam	
		USMLE Step Exam	
		Papers (with rubric)	
		CSAD	
		Clinical Evaluations	
	The ability to interpret results of	Faculty Developed	Clerkship Evaluations
	commonly used diagnostic	Exams/Quizzes	Small Group Work - P
	procedures.	NBME Subject Exams	
		OSCEs & Gate Exam	
		USMLE Step Exam	
		Papers (with rubric) CSAD	
	The ability to retrieve, manage,	Faculty Developed Exams	Clerkship Evaluations
	and utilize information for solving	NBME Subject Exams	IHI Modules
	problems and making decisions	OSCEs & Gate Exam	Small Group Work - P
	relevant to the care of individuals	USMLE Subject Exam	Sinui Group Work T
	and populations.	Papers (with rubric)	
		Clinical Evaluations	
	The ability to identify factors	Faculty Developed Exams	Clerkship Evaluations
	placing individuals at risk for	NBME Subject Exams	Small Group Work - P
	disease or injury, select appropriate	OSCEs & Gate Exam	L.
	tests for detecting patients at risk	USMLE Step Exam	
	for specific diseases or in the early	Papers (with rubric)	
	stage of diseases, and determine	CSAD	
	appropriate response strategies.	Clinical Evaluations	
	The ability to construct appropriate	Faculty Developed Exams	Clerkship Evaluations
	management strategies, both	OSCEs & Gate Exam	Small Group Work - P
	diagnostic and therapeutic, for	USMLE Step Exams	
	patients with common acute and	CSAD	
	chronic medical psychiatric	Clinical Evaluations	
	conditions, surgical conditions, and		
	conditions requiring short and long		
	term rehabilitation therapy.	En analtas Danaela su 1 E. ana	
	The ability to recognize and outline an initial course of	Faculty Developed Exams	Clerkship Evaluations
	outline an initial course of	OSCEs & Gate Exam	Small Group Work - P

management for p serious conditions	USMLE Step Exams CSAD	
care.	 Clinical Evaluations	

#### Table 9.4 continued: Direct/Indirect assessments M-III and M-IV

Competency	Objective	Direct Measures	Indirect Measures
Skills	The ability to reason	Faculty Developed Exams/Quizzes	Clerkship Evaluations
	deductively in solving clinical	NBME Subject Exams	IHI Modules
	problems	OSCEs & Gate Exam	Small Group Work - P
		USMLE Step Exam	-
		Papers (with rubric)	
		CSAD	
		Clinical Evaluations	
	The ability to function as part	Clinical Evaluations	IHI Modules
	of an inter-professional health	CSAD	Clerkship Evaluations
	care team and/or serve in a		Small Group Work – P
	leadership role		AAMC GQ
	The ability to access and	Faculty Developed Exams/Quizzes	Clerkship Evaluations
	critically evaluate medical	NBME Subject Exams	Small Group Work - P
	literature.	OSCEs & Gate Exam	-
		USMLE Step Exam	
		Papers (with rubric)	
		CSAD	
		Clinical Evaluations	

Competency	Objective	Direct Measures	Indirect Measures
Attitudes and Behaviors	Compassionate treatment of patients and respect for their privacy and dignity.	Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs & Gate Exam USMLE Step Exam Papers (with rubric) PBL Evaluation Form	Clerkship Evaluation Conduct Evaluation
	Commitment to advocate at all times for the interests of his/her patients' interests over his/her personal interests.	Faculty Developed Exams/Quizzes Comprehensive Basic Science Exam NBME Subject Exams OSCEs & Gate Exam USMLE Step Exam Papers (with rubric) PBL Evaluation Form	Clerkship Evaluation IHI Modules Conduct Evaluation
	Commitment to provide care to patients unable to pay for medical services and to advocate for access to health care for members of traditionally underserved populations.	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs & Gate Exam USMLE Step Exam Papers (with rubric) PBL Evaluation Form	Clerkship Evaluation IHI Modules Conduct Evaluation
	Commitment to engage in life- long learning in order to stay abreast of relevant scientific advances.	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs & Gate Exam USMLE Step Exam Papers (with rubric) PBL Evaluation Form	Clerkship Evaluations IHI Modules Conduct Evaluation
	The capacity to recognize and accept limitations in one's knowledge and clinical skills and a commitment to improve that knowledge and ability through self-assessment.	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs & Gate Exam USMLE Step Exam Papers (with rubric) PBL Evaluation Form	Clerkship Evaluations Conduct Evaluation
	Understanding of and respect for the roles of other health care professionals and of the need for collaboration with them in caring for patients and promoting the health of defined populations.		IHI Module Conduct Evaluation
	The ability to understand the power of the scientific method in establishing the causation of disease and efficacy of traditional and non-traditional therapies	Faculty Developed Exams Comprehensive Basic Science Exam NBME Subject Exams OSCEs & Gate Exam USMLE Step Exam Papers (with rubric)	Conduct Evaluation

Table 9.4E continued: Direct/Indirect assessments M-III and M-IV

PBL Evaluation Form	
---------------------	--

119