

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

- 1. Evaluate the adequacy of the methods used to provide residents and other non-faculty instructors with the objectives of the courses and clerkships in which they will participate and to prepare them for their specific teaching and assessment roles. Is there an effective system to centrally monitor the participation of residents and other non-faculty instructors in such preparation sessions? (9.1)**

Residents, graduate students, postdoctoral fellows, and other non-faculty instructors in the medical education program receive clerkship-specific student learning objectives annually and often more frequently from the Department in which the clinical clerkship is based. These efforts appear to appropriately prepare residents and non-faculty instructors by establishing expectations of their own responsibilities and that of medical students whom they supervise. Medical students were satisfied that non-faculty instructors expectations aligned with their own but did express some dissatisfaction with inconsistencies in assessments.

Prior to 2014, the Emory office of Graduate Medical Education (GME) required all incoming residents to complete three modules on the University of Kansas School Of Medicine's "Strategies in Clinical Teaching" website on Precepting Medical Students - the Five Microskills, Observation and Feedback, and the Ten Minute Talk (<http://wichita.kumc.edu/strategies/>). Print-outs of online post-tests were submitted to program directors who monitored compliance with completion. From 2004-2014, all residents and other non-faculty instructors were provided a teaching handbook, *Residents as Teachers: A Guide to Educational Practice* by Neal Whitman, EdD, and Thomas L. Schwenk, MD, until the book was taken out of print.

With the restructuring of the Emory University School of Medicine Curriculum Committee in 2014, the new Educational Development Sub-committee assumed oversight of educational development for all involved in the undergraduate medical education program, including house staff. In collaboration with the GME Education Committee, "Medical Educator Workshops" are offered to departments/divisions within the School of Medicine on a request basis. The GME office tracks the participation in and comments about medical education workshops and surveys programs for feedback.

Sessions to improve teaching and evaluation skills are held for residents, graduate students (Emory's Teaching Assistant Training and Teaching Opportunity (TATTO) http://gs.emory.edu/professional_development/tatto.html program is a degree requirement for all PhD students, postdoctoral fellows, and other non-faculty instructors in all departments responsible for required clerkships. These sessions are conducted through the dissemination of written materials, web-based programs, and didactic/small group sessions. The Emory University Registrar notes TATTO credit on student transcripts.

Participation of residents and other non-faculty instructors in clinical clerkships is monitored by individual departments. Monitoring of non-faculty instructors in non-clinical courses occurs by the home school of these instructors, primarily the Graduate School of Arts and Sciences.

- 2. Is there an effective system in place to ensure that medical student learning experiences in clinical clerkships are provided by faculty members and that there is appropriate supervision when medical students are engaged in patient care activities? (9.2, 9.3)**

Policies:

All inpatient and outpatient facilities in which medical students are present, including the Atlanta Veterans Administration Medical Center, Children's Healthcare of Atlanta, Grady Health System, and Emory Healthcare have written policies that mandate faculty supervision of students during all clerkship experiences. Medical students are assigned to teams led by one or more attending physicians who are School of Medicine faculty members.

Processes:

During all required clinical clerkships, students are directly observed by faculty. Assessments of students are based on

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direct observation and supervision of students during clinical activities.

The outpatient clinical experience (OPEX) director and inpatient clerkship directors review patient care expectations of medical students with advanced practice providers, residents, fellows, and supervising faculty. Medical student expectations for responsibility in patient care activities are based on the recommendations of the Educational Development Sub-committee. These expectations along with the level of responsibility delegated to medical students are monitored by clerkship directors and supervising faculty.

The School of Medicine administration reviews data from student completed clerkship evaluations and the Learning Environment Survey (LES) at the completion of each clerkship experience to monitor student supervision in the clinical environment. These surveys enable students to express satisfaction and concerns about levels of adequacy and availability of direct faculty observation and supervision. The mean score on a 5-point scale (range 1=strongly disagree and 5=strongly agree) from the LES, in response to the question, “*I have good clinical supervision at all times*” was 4.37 in 2011-12; 4.47 in 2012-13; 4.50 in 2013-14; 4.43 in 2014-15. The lowest score for supervision in any clinical clerkship was a 4.0 and the highest was a 4.7 in the 2014-15 LES.

Medical students may express satisfaction with and concerns regarding supervision through discussions with program directors, departmental chairs, society advisors, and exit interviews with School of Medicine Deans. The Independent Student Analysis (ISA) compiled by medical students (January 2015) reported that students found faculty members to be accessible and responsive to their concerns during clinical education (97% satisfaction rate). Ninety-one percent of students noted they were satisfied with the overall accessibility of faculty members. Clerkship directors were praised for their accessibility and receptiveness to feedback (91% satisfaction rate).

Students are required to complete an online Occupational Safety and Health Administration based course annually. Students are made aware of bloodborne pathogen exposure protocols at each clinical site and have access to a continuously staffed hotline that provides assistance regarding body fluid and bloodborne pathogen exposures through facility-specific protocols. These procedures are outlined in the “*Doctor of Medicine Student Handbook*”, <https://med.emory.edu/handbook/#64>. Ninety-eight percent of students identified being very satisfied with the adequacy of education about prevention and exposure to infectious and environmental hazards.

3. Evaluate the adequacy of the methods used to assess student attainment of the knowledge, cognitive and clinical skills, attitudes, and behaviors specified in the educational program objectives. Is there evidence that students’ core clinical skills are being observed? Are there any limitations in the school’s ability to ensure that the clinical skills of all students are being appropriately assessed? (9.4 plus Overview section)

Examinations during the Foundations phase consist primarily of multiple-choice questions with short essays/narrative responses. In several modules (Genetics, Pulmonology, and Gastroenterology) students also complete an oral examination during the module. Anatomy is taught throughout these modules and is assessed through the use of practical examinations. Students also participate in a regular outpatient clinical experience and are evaluated by their faculty preceptor.

In the longitudinal “Becoming a Doctor” curriculum, students are evaluated through standardized patient encounters, essays and narratives, and direct faculty observation. Many of the “Becoming a Doctor” course activities are carried out in the Society small group setting, including standardized patient encounters, training on delivering bad news and having difficult conversations, and medical ethics case discussions. Students are assessed by their Society advisors on small group participation, communication, and professionalism.

During the Applications and Translations curriculum phases students are evaluated using a standardized clinical evaluation instrument. Eight of the required clinical clerkships/subinternships utilize a NBME subject exam while 6 use internally-developed written examinations. OSCE/standardized patient and simulated patient encounters are used as an assessment tool in 6 of the required clerkships. Oral examinations or presentations are used as an assessment tool

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in 7 of the required clerkships. A variety of other assessment methods including quality improvement projects, reflection papers, problem sets, case logs, and discussion group participation are occur during the clinical clerkships.

During the Discovery phase, students and their progress are periodically assessed by their research mentor(s) and these assessments are reviewed by the faculty director of the Discovery phase. Ten percent of the grade in the Discovery phase is based upon a computer-administered examination at the conclusion of a 20 hour didactic course on research and statistical methods (Short Course on Research and Translational Experiences in Science (SoCRATES)).

At the conclusion of the Foundations and Applications phases students must complete and pass an institutional OSCE (end-of-Foundations and end-of-Applications OSCE). These exams are developed and administered in the clinical skills center. Students who fail this exam must participate in a remediation program and re-test and pass before they can advance in their medical education.

Several mechanisms exist to identify and remediate students who are performing poorly. During required clerkships students have mid-clerkship evaluation meetings with the clerkship director. The evaluation-management system provides immediate notification to clerkship directors of poorly scoring students. There are two independently functioning progress and promotion committees; one for the Foundations phase and one for the remaining 3 phases of the curriculum. These committees initiate various levels of academic warnings/probation and propose remediation plans.

Overall, faculty and preceptors are satisfied with the methods used to assess student attainment of the knowledge, cognitive and clinical skills, attitudes, and behaviors specified in the educational program objectives. Students are mostly satisfied (78%) with the methods used to assess student attainment of the knowledge, cognitive and clinical skills, attitudes, and behaviors specified in the educational program objectives. Students reported high satisfaction with their clinical performance feedback (86%) and professionalism feedback (87%). The amount and quality of formative feedback in the third year satisfied 89% of students. Students also liked the clinical skills assessments, with 92% reporting they were satisfied with them. (ISA pg.63). Students identified weaknesses in the methods used to assess student attainment of the knowledge, cognitive and clinical skills, attitudes, and behaviors specified in the educational program objectives as variation in internal validity (individual variation with interpretation of Likert scale-composed assessments), the number of encounters on which evaluations are based, and in an inadequate opportunity to apply procedural skills in patient care encounters (ISA p.63).

In response to student's concerns regarding the internal validity of different preceptor's assessment, and in a desire to further enhance and refine our assessment of students during clinical clerkships, the School of Medicine has created a task-force charged with creating a new clinical evaluation form and providing best-practice suggestions for the assessment of students during clinical clerkships.

4. How effective are the processes and systems to ensure that students receive comprehensive and timely formative assessment and fair and timely summative in both the preclerkship phase of the curriculum and in the clerkships? Is narrative assessment included as a component of courses and clerkships where teacher-student interaction permits? (9.5, 9.7, 9.8 plus Overview section)

Students receive detailed and useful formative and summative assessments throughout the preclerkship and clerkship phases of the curriculum.

During the Preclerkship portion of the "Becoming a Doctor" curriculum course, 83% of M1 and M2 students were somewhat/very satisfied with the formative feedback that they received. M2 students were less satisfied as they expressed that the majority of their feedback was based on assessment of their physical examination performance. . All students acknowledged that they received feedback immediately from their standardized patient actors; however some students wanted concurrent feedback from faculty whose feedback followed a review of the session at a subsequent

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time. Some students also expressed a desire for more frequent formative feedback following OSCE practice sessions with their Society/Small Group Advisors (SGA).

During the Clerkship phase of the "Becoming a Doctor" curriculum, students were more satisfied with the frequency and delivery of assessments due in part to more standardized, written assessments that were received at the conclusion of each clerkship. Students also found the mid-point, verbal conversation to be beneficial in assessing their performance and identifying areas for improvement. The outpatient experience (OPEX) preceptors provide written comments on a form that students found useful. Some students expressed that the quality of feedback received from their Society/Small Group Advisor (SGA) was advisor-dependent. Students appreciated that narrative assessments were included as a component of preclinical courses and clinical clerkships where teacher-student interaction permits these assessments to occur.

5. Are standards of achievement for courses and clerkships and for the curriculum as a whole set by faculty with appropriate knowledge and expertise? (9.6)

Faculty members with appropriate knowledge and expertise set the standards of achievement in each required learning experience in the medical education program. The composition of the Curriculum Committee and its Subcommittee is designed to capture the diversity of faculty and students with medical student representation on all subcommittees, <https://www.med.emory.edu/education/curriculum-governance/members.html#discovery-&-medical-scholarship>. The Emory School of Medicine Curriculum Committee is responsible for the ongoing monitoring, review, and revision of the four-year medical school program. Comprised of faculty and students, the Curriculum Committee oversees the overall design, management, integration, evaluation, and enhancement of a coherent and coordinated curriculum. The Curriculum Committee is composed of 11 subcommittees. The structure emphasizes the identification and delegation of tasks amongst multiple subcommittees and facilitates communication between the subcommittees. Each Curriculum Committee member is assigned to two subcommittees, ensuring that members sit on both a phase and task subcommittee. Within the Curriculum Committee design, there are three unique subcommittees charged with evaluating the educational program as a whole (Transitions & Integration Subcommittee, Student Subcommittee, and the Executive Committee). Final decision making-capacity rests with the Executive Committee of the Curriculum Committee, composed of 10 voting members (the 8 chairs of the phase and task subcommittees, the chair of the Transitions & Integration Subcommittee, and a student representative).

6. Comment on the adequacy of policies and processes to ensure that a single standard for promotion and graduation is applied across all instructional sites. Evaluate the fairness of due process protection in the case of an adverse academic action against a student. (9.9)

The policies and processes to ensure that a single standard for promotion and graduation is applied across all instructional sites are adequate and are applied universally to all Emory School of Medicine students. The policies and processes are detailed in the Doctor of Medicine Student Handbook <https://med.emory.edu/handbook/>. Progress and promotion of all students is monitored by the Foundations Phase and Clinical Phase Progress and Promotions Committees, who apply the same set of standards, procedures, and consequences to all students. Policies (including due process) are contained in part II, section 6 of the *Doctor of Medicine Student Handbook*. Students are reminded of these policies at M1 and M3 orientations (mandatory attendance) and are required to sign a statement attesting that they are aware of these policies to matriculating at Emory University School of Medicine.

In the case of an adverse academic action against a student, the situation will be reviewed by one of three committees: 1) Academic issues are adjudicated by the Progress and Promotions committees. 2) Honor code violations are dealt with by the Honor Council whose members are elected from the student body. 3) Conduct violations are considered by a Conduct Committee. Part II, section 1 of the *Doctor of Medicine Student Handbook* details a fair and formal process for the three adverse actions that may affect the status of a medical student.