Curriculum Committee Handbook

2006 - 2007
Handbook for Curriculum Committee Members

Introduction
Welcome to the Curriculum Committee of the University of South Carolina School of Medicine (USCSM) and to the important role you have been selected to play at USCSM. Your ideas, insights, and recommendations about curricular content, course and clerkship administration, medical student and curricular assessment, and other related topics are welcome! The deliberations of the Committee are crucial for determining educational policy, curricular structure, and implementation strategies for the four-year USCSM educational program. It is difficult to conceive of a more important or challenging responsibility.

The mission statement adopted by the Curriculum Committee is included as well as a formal description of the Curriculum Committee. As part of the “empowerment” of the Curriculum Committee begun nine years ago, Committee members have been elected from each USCSM department rather than appointed, as previously, from the faculty at large. The Associate Dean for Medical Education and Academic Affairs, the Assistant Deans for Preclinical and Clinical Curricula, the Assistant Dean for Clinical Assessment and the Director of Student Services-Greenville Hospital System will serve the Curriculum Committee as ex officio voting members. Much of the Curriculum Committee’s work will be performed by four standing subcommittees: 1) M-I/M-II, 2) M-III/M-IV, 3) Interdisciplinary/Interdepartmental Integration, and 4) Independent Learning Development and Implementation. There are also two ad-hoc committees, the Extended Curriculum and Curriculum Accommodations. Committee members are asked annually to indicate their subcommittee preferences. The Curriculum Committee Chair uses his/her best judgment in selecting subcommittee members with the proviso that there must be a productive mix of basic science and clinical science faculty on each subcommittee. The tasks facing the full Curriculum Committee include periodic review of outcome data and all courses, clerkships and vertical curricula.

Meetings
Meetings of the Curriculum Committee are held on the second Thursday of each month at 4:00 pm. To accommodate both basic science and clinical science Committee members, the location of the meeting alternates between the Dean's Conference Room in Building 28 on the USCSM/Dorn Veterans Administration Medical Center campus and the Suite 300 Conference Room (301) on the third floor of 15 Richland Medical Park (Clinical Education Building) on the Palmetto Health Richland (PHR) campus on Harden Street. Subcommittee meetings are held as needed and as called by each Subcommittee Chair.

Approximately one week prior to each monthly meeting, members receive an agenda (with location) for the upcoming meeting and a copy of the previous meeting's minutes. The agenda and minutes of each meeting are also available electronically via e-mail and on the Office of Curricular Affairs home page which can be found by following either the faculty or student link from the USCSM home page: http://www.med.sc.edu/. All interested USCSM faculty members and students are invited to attend Curriculum Committee meetings. Meetings generally last one to one-and-a-half hours. Special day-long meetings (retreats) are usually scheduled once a year.

Appointment and Membership
Two representatives from each basic science department and one representative from each clinical department are elected from the departmental faculty. Members serve a three-year-long term on the Curriculum Committee and may be re-elected. To assure a smooth transition, a system of staggered terms of membership has been adopted for Committee members. The medical students are represented by at least two members from both the M-II class and the M-IV class. Multiple consultants who serve ex officio without vote are available to the Curriculum Committee; they include the Assistant Dean for Continuing Medical Education, the Assistant Dean for Minority Affairs, the Director of Enrollment Services/Registrar, the Director of Student Services, the Director of Library Services, the Director of Computer and Communication Resources, the Executive Director of the South Carolina Area Health Education Consortium (SC AHEC), and the Vice President for Medical Education Palmetto Richland Memorial Hospital (PRMH).

Committee Chair
The Chair serves a two-year term and is elected biennially. Chairs are elected alternately from among basic science and clinical science Committee members; Chairs also serve as their department’s Committee representative. A Chair may therefore serve as a Curriculum Committee member for a maximum five-year term if he/she is elected Chair in the third year of his/her Committee membership. The Chair is responsible for developing each month’s agenda and for conducting Committee meetings using *Robert’s Rules of Order*. The Chair also reviews and corrects Committee minutes before they are distributed to Committee members for discussion, corrections, and approval at the beginning of each meeting.

**Staff**

The Associate Dean for Medical Education, the Assistant Deans for Preclinical and Clinical Curricula, and Assistant Dean for Clinical Assessment are charged with the responsibilities of assisting the Chair in the development of the agenda; of providing Committee members with required information resources, of transmitting the decisions of the Committee to course and clerkship directors and to department chairs; and of ensuring that Committee recommendations approved by the Dean are implemented. Administrative support is provided by Mrs. Kathleen Lovelace, Administrative Coordinator in the Office of Curricular Affairs and Faculty Support (733-3367). The Curriculum Committee Chair ensures that Committee deliberations and recommendations are reported regularly to the Dean for his/her approval; these recommendations may be also presented to the Executive Committee for information.

**Functions**

The *Liaison Committee for Medical Education* (LCME), the joint accrediting agency of the *American Medical Association* and the *Association of American Medical Colleges*, has established and promulgated extensive criteria for medical school accreditation. Curriculum Development and oversight is an important component of the medical school’s function.

> The program’s faculty is responsible for the design, implementation, and evaluation of the curriculum. There must be integrated institutional responsibility for the design and management of a coherent and coordinated curriculum. The chief academic officer must have sufficient available resources and authority provided by the institution to fulfill this responsibility. The curriculum of the program leading to the M.D. degree must be designed to provide a general professional education, recognizing that this alone is insufficient to prepare a graduate for independent, unsupervised practice. Medical schools must evaluate educational program effectiveness by documenting the achievement of their students and graduates in verifiable and internally consistent ways that show the extent to which institutional and program purposes are met. (LCME, *Functions and Structure of a Medical School*, 2005)

Among its various responsibilities, the Curriculum Committee reviews curricular content and process at USCSM on both an ongoing and a cyclical basis. A “vertical curriculum” refers to the interdepartmental integration, in basic science courses and clinical rotations over the course of the four-year curriculum, of topical subject matters that transcend the purview of an individual USCSM department. “Vertical integration” of curriculum can be distinguished from “horizontal integration” in that the latter attempts to teach similar preclinical topics simultaneously even if in different required courses [e.g. the Pathology and the Introduction to Clinical Medicine II (ICM-II) courses present issues concerning the heart during the same academic time period].

Clerkship reviews were completed in 2000-2001 and were performed by the *M-III/M-IV Subcommittee* of the Curriculum Committee, which includes representation from both basic science and clinical science faculty members. The reviews of clinical clerkships followed an established format of evaluating 1) the student orientation to each clerkship, 2) educational goals and objectives, 3) educational methods and activities, including the equivalence of Columbia and Greenville experiences, 4) feedback and evaluation of students, and 5) clerkship strengths and needs. Students’ evaluations of the quality of the educational experience, USMLE scores, and Postgraduate Year One (PGY-1) survey data from graduates and residency program directors are reviewed yearly.

Issues of importance discussed by the Curriculum Committee have included Implementation of the *Clinical Skills Attainment Documentation* to ensure that students have demonstrated mastery of the necessary clinical/technical skills.
prior to successful completion of each clerkship, promotion, and graduation; the relationship between USCSM medical and graduate programs; the collection of data regarding patients seen in clinical encounters by USCSM students on Personal Digital Assistants (PDA’s), the establishment of a required acting internship for all M-IV students; and revision and integration of educational goals and objectives for courses, clerkships, and the four-year educational program.

Office of Curricular Affairs and Faculty Support staff members ensure the ongoing assessment by medical students of all M-I and M-II courses (at the conclusion of each semester) and of all M-III and M-IV required clerkships (at the end of each four-week or eight-week clerkship) by means of evaluation instruments designed for those purposes. Personnel in the Office of Curricular Affairs and Faculty Support also conduct surveys on a regular basis of PGY-1 graduates and graduates’ residency director. An Association of American Medical Colleges (AAMC)-sponsored survey is also completed by graduating senior students; comparative data for students graduating from USCSM and other medical schools nationally are published annually. Results of USCSM student performance on Steps 1 and 2 CS and CK of the United States Medical Licensure Examination (USMLE) are also reviewed. Data from these various evaluations, examinations, and surveys are made available to Curriculum Committee/Subcommittee members to assist them in their work.

Of critical importance to the function of the Curriculum Committee will be the development/incorporation of a curriculum tracking mechanism. It is imperative, before substantive changes can be made to the curriculum, that Committee members have an understanding of how, what, and where specific relevant subject matter is taught in the USCSM curriculum. Curriculum tracking software (CurrMIT), developed by the AAMC, is in place at USCSM and data input continues under the direction of the Office of Curricular Affairs and Faculty Support.

Curricular change and innovation are crucial to maintaining the effectiveness and relevance of a medical school curriculum in a changing environment. A change to the basic science M-I/M-II curriculum is categorized as “major” if it results in 1) any significant change in the number of credit hours assigned to a course, 2) the deletion of topical content from a vertical curriculum (substance abuse, geriatrics, ethics, genetics, ultrasound, or nutrition), 3) the deletion or addition of lecture topics, or 4) a deviation from the “block schedule” (e.g. requiring M-I or M-II students to meet prior to 8:00 am or after 5:00 pm on weekdays or on weekends).

A “major” change in the clinical M-III/M-IV curriculum would include 1) the deletion of topical content involving a vertical curriculum area, 2) an increase in the number of evenings/nights students are on call, or 3) any change in the amount of inpatient vs. outpatient experience in a required clerkship.

Additionally, policies previously adopted and published in the Student Handbook and the School of Medicine Bulletin concerning the academic life of USCSM students are reviewed and updated annually to reflect changes in medical practice, pedagogy, educational law, and society. University of South Carolina policies relevant to any University student, including medical students, are published annually by the University Division of Student Affairs in the Carolina Community: Student Handbook and Policy Guide.

The Curriculum Committee's role is crucial to the well-being and continuing development of the educational program at USCSM. The oversight it provides is required for continuing accreditation of USCSM by the LCME and for maintaining the continuing excellence and effectiveness of the USCSM curriculum. Recent national trends in the revision and reform of medical education have included: 1) a reduction in hours of lecture and passive learning; 2) an increase in small-group instruction, problem-based learning, and other active learning exercises; 3) enhanced interdisciplinary and interdepartmental teaching efforts; 4) integration of basic science and clinical science topics; 5) stimulation of independent learning skills; 6) an emphasis on computer literacy; 7) the development and implementation of more objective methods of medical student assessment [e.g., via Objective Standardized Clinical Examinations (OSCEs) and the use of standardized and simulated patients]; 8) the use of patient simulators and 9) more specifically defined and measurable educational goals and objectives for courses and clinical clerkships.

During the 1998-2000 academic years, the introduction of problem-based learning (PBL) techniques into the interdisciplinary Introduction to Clinical Medicine (ICM) courses was accomplished to create a “hybrid” curriculum composed of lectures, laboratories, and small group and true problem-based learning activities in the M-I and M-II years.
PBL is an educational approach in which students, operating in a small-group setting, are presented case scenarios and are responsible, under the guidance of trained faculty preceptors/tutors, to identify all the “issues” relevant to the patient’s complaint. These issues may include the anatomical, physiological, biochemical, pathological, and psychological aspects of the problem. The cases are discussed in detail, and students are rigorously evaluated by means of self-assessment, peer assessment, and tutor assessment as to their mastery of concepts, searches for and sharing of information, and overall participation.

Implementation

Recommendations of the Curriculum Committee are transmitted to the Dean for approval. Upon the Dean’s approval, the recommendations are transmitted to course and clerkship directors and to department chairs for consideration and implementation. The Committee continually seeks input from course directors, clerkship directors, department chairs, faculty consultants, and medical students so that a broad consensus may be reached.

References

The USCSM Student Handbook and the USC Carolina Community are valuable information resources for Committee members. A copy of the School of Medicine Bulletin is available on USCSM’s website.

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SOM – Dean’s Conference Room, Basic Science Campus
15 RMP (CEB) – Clinical Education Building, Board Room
Mission of the Curriculum Committee

**Preamble:** The Curriculum Committee of the University of South Carolina School of Medicine (USCSM) is empowered by the Dean and faculty with the responsibility (1) for the development of and oversight over the content, structure, and pedagogy of the curriculum leading to the M.D. degree and (2) for ensuring that students learn the knowledge, skills, attitudes, and behaviors necessary for the successful practice of medicine.

**Functions of the Curriculum Committee:**

I. To ensure coverage of all content appropriate for a medical education and elimination of unnecessary duplication, as well as temporal (vertical), inter-disciplinary (horizontal), and inter-departmental (across basic sciences, across clinical sciences, and between basic sciences and clinical sciences) integration of curricular material.

The Curriculum Committee strives for excellence in curricular content, relevance, integration, and methodology. The medical curriculum, with its rapidly expanding and changing scientific basis, is continuously updated to reflect changes in the current body of knowledge and to prepare students for the modern practice of medicine. It is essential that information and outcome data be supplied regularly and in response to requests by the Curriculum Committee.

II. To encourage presentation of basic science and clinical science content by multiple techniques in order to stimulate patterns of self-initiated and self-directed life-long learning and effective problem-solving among students, including, but not limited to, computer-assisted instruction, small group discussion, conferences, and laboratories; the use of standardized and simulated patients; case-based instruction; and problem-based learning.

Because students vary widely in the techniques and modalities by which they learn most effectively, innovation is both desirable and necessary. New educational technologies are constantly being developed which can assist basic science and clinical science faculties to accomplish their goals. The fact that current modes of assessment of medical students and physicians (e.g., for medical licensure) are being revised to include interdisciplinary questions, computerized formats, and objective assessment of clinical skills requires medical schools to prepare students accordingly.

III. To ensure coordinated oversight, internal and external assessment, and tracking of the curriculum.

Information about the impact of the curriculum on student and alumni performance is sought regularly. The impact of curricular revisions is assessed in a timely fashion. Curricular tracking of both content and integration of material among the basic sciences, among the clinical sciences, and between the basic and clinical sciences, as well as for the detection and elimination of unnecessary repetition, is central to the mission of the Curriculum Committee and its administrative staff.

IV. To encourage educational innovation and experimentation and to foster a dynamic curriculum.

Course/clerkship directors are encouraged to experiment with innovative curricular changes within an overall coordinated plan that takes into account the best interests of members of the School of Medicine community.

The Curriculum Committee bears the responsibility for, and is the ideal forum for, collegial discussion about the means to achieve curricular and educational excellence. To function optimally and to facilitate this discussion, the Curriculum Committee must be well informed about the faculty’s plans, ideas, goals, needs and experiments.

5/6/97
UNIVERSITY OF SOUTH CAROLINA
SCHOOL OF MEDICINE
CURRICULUM COMMITTEE
M-I/M-II SUBCOMMITTEE

I. RESPONSIBILITY

The purposes of the M-I/M-II Subcommittee of the Curriculum Committee are to:
A. Perform, under the supervision of the Curriculum Committee, periodic reviews and assessments of all required M-I and M-II courses for medical students.
B. Make reports and recommendations, based upon the findings of the periodic reviews and assessments of required M-I and M-II courses, to the Curriculum Committee.

II. AUTHORITY

Advisory to the Curriculum Committee.

III. MEMBERSHIP

Representation from both basic science and clinical science departments is essential; the Subcommittee may also invite as non-voting consultants other faculty members who are not Curriculum Committee members.
A. At least four faculty members appointed by the Curriculum Committee Chair (from a roster of Curriculum Committee members from basic science and clinical science departments who have expressed interest in service on this Subcommittee) to three-year staggered terms.
B. At least one M-II medical student member of the Curriculum Committee.
C. Assistant Dean for Preclinical Curriculum, ex-officio.

IV. FUNCTIONS

A. The Chair will be elected from among voting Subcommittee members by Subcommittee members at the beginning of each academic year.
B. The chair will convene the Subcommittee at his/her discretion or at the direction of the Curriculum Committee Chair.
C. The M-I/M-II Subcommittee will function as a subcommittee of the Curriculum Committee.
D. The Subcommittee will review annually its committee description and charge and make recommendations regarding any proposed revisions to the Curriculum Committee.

V. REVIEW

Recommendations of the M-I/M-II Subcommittee are forwarded by the Chair to the Curriculum Committee for review and approval.

VI. IMPLEMENTATION

A. Recommendations of the M-I/M-II Subcommittee that have been approved by the Curriculum Committee and the Dean will be implemented by personnel in the Office of Medical Education and Academic Affairs and/or School of Medicine departments.
B. Minutes will be kept of all Subcommittee meetings.

Approved: Curriculum Committee October 12, 2000
Revised: August 8, 2005
I. RESPONSIBILITY

The purposes of the M-III/M-IV Subcommittee of the Curriculum Committee are to:

A. Perform, under the supervision of the Curriculum Committee, periodic reviews and assessments of all required M-III and M-IV clerkships for medical students.

B. Make reports and recommendations, based upon the findings of the periodic reviews and assessments of required M-III and M-IV clerkships, to the Curriculum Committee.

II. AUTHORITY

Advisory to the Curriculum Committee.

III. MEMBERSHIP

Representation from both basic science and clinical science departments is essential; the Subcommittee may also invite as non-voting consultants other faculty members who are not Curriculum Committee members.

A. At least four faculty members appointed by the Curriculum Committee Chair (from a roster of Curriculum Committee members from basic science and clinical science departments who have expressed interest in service on this Subcommittee) to three-year staggered terms.

B. At least one M-IV medical student member of the Curriculum Committee.

C. Assistant Dean for Clinical Assessment, ex-officio.

D. Assistant Dean for Clinical Curriculum, ex-officio.

IV. FUNCTIONS

A. The Chair will be elected from among voting Subcommittee members by Subcommittee members at the beginning of each academic year.

B. The chair will convene the Subcommittee at his/her discretion or at the direction of the Curriculum Committee Chair.

C. The M-III/M-IV Subcommittee will function as a subcommittee of the Curriculum Committee.

D. The Subcommittee will review annually its committee description and charge and make recommendations regarding any proposed revisions to the Curriculum Committee.

V. REVIEW

Recommendations of the M-III/M-IV Subcommittee are forwarded by the Chair to the Curriculum Committee for review and approval.

VI. IMPLEMENTATION

A. Recommendations of the M-III/M-IV Subcommittee that have been approved by the Curriculum Committee and the Dean will be implemented by personnel in the Office of Medical Education and Academic Affairs and/or School of Medicine departments.

B. Minutes will be kept of all Subcommittee meetings.

Approved: Curriculum Committee October 12, 2000

Revised: August 8, 2005
I. RESPONSIBILITY

The purposes of the Interdepartmental/Interdisciplinary Integration Subcommittee of the Curriculum Committee are to:

A. Conduct periodic reviews and updates of vertical curricula.
B. Ensure the integration of interdepartmental and interdisciplinary educational efforts.
C. Oversee initiation and maintenance of a curricular tracking system.

II. AUTHORITY

Advisory to the Curriculum Committee.

III. MEMBERSHIP

Representation from both basic science and clinical science departments is essential; the Subcommittee may also invite as non-voting consultants other faculty members who are not Curriculum Committee members.

A. Four faculty members appointed by the Curriculum Committee Chair (from a roster of Curriculum Committee members from basic science and clinical science departments who have expressed interest in service on this Subcommittee) to three-year staggered terms.
B. Vertical Curriculum Directors, ex-officio, non-voting.

IV. FUNCTIONS

A. The Chair will be elected by Subcommittee members at the beginning of each academic year.
B. The chair will convene the Subcommittee at his/her discretion or at the direction of the Curriculum Committee Chair.
C. The Interdepartmental/Interdisciplinary Integration Subcommittee will function as a subcommittee of the Curriculum Committee.
D. The Subcommittee will review annually its committee description and charge and make recommendations regarding any proposed revisions to the Curriculum Committee.

V. REVIEW

Recommendations of the Interdepartmental/Interdisciplinary Integration Subcommittee are forwarded by the Chair to the Curriculum Committee for review and approval.

VI. IMPLEMENTATION

A. Recommendations of the Interdepartmental/Interdisciplinary Integration Subcommittee that have been approved by the Curriculum Committee and the Dean will be implemented by personnel in the Office of Medical Education and Academic Affairs and/or School of Medicine departments.
B. Minutes will be kept of all Subcommittee meetings.

Approved: Curriculum Committee October 12, 2000
Revised: August 8, 2005
I. RESPONSIBILITY

The purposes of the Independent Learning Development and Implementation Subcommittee of the Curriculum Committee are to:
A. Develop and implement recommendations in the area of independent learning.
B. Select the medical student recipient of the annual Student Independent Learning Award.

II. AUTHORITY

Advisory to the Curriculum Committee.

III. MEMBERSHIP

Representation from both basic science and clinical science departments is essential; the Subcommittee may also invite as non-voting consultants other faculty members who are not Curriculum Committee members.
A. At least one faculty member appointed by the Curriculum Committee Chair (from a roster of Curriculum Committee members from basic science and clinical science departments who have expressed interest in service on this Subcommittee) to a three-year term.

IV. FUNCTIONS

A. The Chair will be elected by Subcommittee members at the beginning of each academic year.
B. The chair will convene the Subcommittee at his/her discretion or at the direction of the Curriculum Committee Chair.
C. The Independent Learning Development and Implementation Subcommittee will function as a subcommittee of the Curriculum Committee.
D. The Subcommittee will review annually its committee description and charge and make recommendations regarding any proposed revisions to the Curriculum Committee.

V. REVIEW

Recommendations of the Independent Learning Development and Implementation Subcommittee are forwarded by the Chair to the Curriculum Committee for review and approval.

VI. IMPLEMENTATION

A. Recommendations of the Independent Learning Development and Implementation Subcommittee that have been approved by the Curriculum Committee and the Dean will be implemented by personnel in the Office of Medical Education and Academic Affairs and/or School of Medicine departments.
B. Minutes will be kept of all Subcommittee meetings.

Approved: Curriculum Committee October 12, 2000
Revised: August 8, 2005
I. RESPONSIBILITY

The purposes of the Curriculum Accommodations Subcommittee of the Curriculum Committee are to:
A. Establish and review periodically policies and procedures for providing reasonable accommodations in didactic coursework.
B. Review applications from medical students for didactic curriculum accommodations.
C. Approve applications from students that meet established criteria for reasonable accommodations.

II. AUTHORITY

Advisory to the Curriculum Committee through the Assistant Dean for Preclinical Curriculum.

III. MEMBERSHIP

A. On faculty member who teaches in the M-I year appointed by the Chair of the Curriculum Committee
B. On faculty member who teaches in the M-II year appointed by the Chair of the Curriculum Committee
C. One faculty member who teaches in the M-III year appointed by the Chair of the Curriculum Committee
D. Assistant Dean for Preclinical Curriculum, ex-officio, Chair

IV. FUNCTIONS

A. The Assistant Dean for Preclinical Curriculum will serve as Subcommittee Chair.
B. The chair will convene the Subcommittee at his/her discretion.
C. The Curriculum Accommodations Subcommittee will function as a subcommittee of the Curriculum Committee.
D. The Subcommittee will review annually its committee description and charge and make recommendations regarding any proposed revisions to the Curriculum Committee.

V. REVIEW

Recommendations of the Curriculum Accommodations Subcommittee will be implemented by the Assistant Dean for Preclinical Curriculum.

VI. IMPLEMENTATION

A. Recommendations of the Curriculum Accommodations Subcommittee will be implemented by the Assistant Dean for Preclinical Curriculum.
B. Minutes will be kept of all Subcommittee meetings

Revised: January 19, 1999
December 1, 2003
The Curriculum Committee supports the Technical Standards for Admission and Graduation previously approved by the Executive Committee. The Committee acknowledges the recommendations of the GPEP Report of 1984, the LCME Functions and Structure of a Medical School 2005, the LCME Accreditation Database, and LCME Annual Questionnaire. These recommendations propose that all students should be assessed during or at the end of the educational process to ensure that the basic knowledge and skills needed by a generalist physician, and established as criteria for graduation by the faculty of the medical school, have been mastered. The methodology of this assessment is left to the individual schools. Therefore, the Committee acknowledges the need to document achievement of student technical proficiency at USCSOM. To that end the Technical Standards Attainment Document (TSAD) was created. In 2006, this document was renamed the “Clinical Skills Attainment Document” (CSAD). In the creation of the CSAD, course and clerkship directors, in communication with department chairs, agreed to a group of academic accomplishments, observational experiences, and technical skills which all graduates of this school should master.

Departmental Skills

To document accomplishment of certain technical skills, the CSAD cards were created. The cards are blue in color, and there are separate Departmental Skills cards for each one of the nine clerkships. The technical skills that are required to be completed during the clerkship are listed on the front of the card. Skills which may be strongly recommended are indicated by two asterisks (**). Students must complete the required skills during the clerkship or they will receive an “Incomplete” grade for the clerkship. To document completion of the required skills, students should receive a copy of the blue card on the first day of the clerkship during orientation. When a student has the opportunity to accomplish one of the required skills, a faculty member or senior resident (not a PGY-1/first year resident/intern) must observe him/her performing the skill, then date and initial the card showing that the student was successful in performing the particular skill. At the end of the clerkship, the cards are to be collected by the Clerkship Director and submitted to the Registrar’s Office along with the students’ academic grades. The Registrar’s Office enters the accomplishment of these skills into a database which keeps track of which students have accomplished which skills. Forgery of a CSAD card is a violation of Personal and Professional Conduct Standards.

Non-Departmental Skills

Some of the skills required for graduation from the School of Medicine are not specific to any one Department, nor are they required for completion of any specific clerkship. These are called Non-Departmental skills. They are listed with the same asterisk code on the back of the departmental blue cards students receive at the orientation for each clerkship. During their clerkships, students should obtain an initialing as described above for as many of these non-departmental skills as possible. These skills will also be recorded by the Registrar’s Office into the database in the same manner as the Departmental Skills above. However, students must keep up with which ones they are lacking. Students should not wait until the final month of their senior year to discover they cannot graduate because they are lacking one or more of the required Non-Departmental Skills.
Required Non Departmental Skills
M-III Bioethics & Professionalism Essay/Discussion
Senior Mentor Assignment – Patient/Physician Relationship

M-I Introduction to Clinical Medicine Skills
Required Curricular Activity
Complete Tasks for Senior Mentor Program:
  Senior Mentor Assignment - Physiology of Aging
  Senior Mentor Assignment - Medical History & Physical Exam
  Senior Mentor Assignment - Intimacy, Friendship and Aging
  Senior Mentor Assignment – Patient/Physician Relationship (may be performed anytime during M-I/M-IV years)
Obtain and Record Medical History (SP Session)
Perform and Record Mental Status Exam (SP Session)
Obtain and Record Sexual History (SP Session)

M-II Introduction to Clinical Medicine Skills
Required Curricular Activity
Perform Clinical Breast Exam
Demonstrates Basic Cardiac Life Support (BCLS) Skills
Complete Columbia Free Medical Clinic Experience
Demonstrates Complete History and Physical Examination
Complete M-III Shadowing Experience
Perform Computer Literature Search
Complete Tasks for Senior Mentor Program
  Senior Mentor Assignment – Behavior Change
  Senior Mentor Assignment – Behavior Change One Month Follow-up
  Senior Mentor Assignment – Behavior Change Five Month Follow-up and Home Assessment
  Senior Mentor Assignment – Medications/Pharmacology
  Senior Mentor Assignment – Physical Examination
  Senior Mentor Assignment – Patient/Physician Relationship (may be performed anytime during M-I/M-IV years)

M-III Family Medicine Skills
Required Curricular Activity
Attending Review of Two Inpatient H&P’s
Complete On-line Nutrition Assessment Case Study
Complete Senior Mentor Assignment – “Advanced Directives”
Inpatient Topic Presentation
Observation of Lower Gastrointestinal Endoscopy
Observation of Upper Gastrointestinal Endoscopy
Participate in Assessment of Nursing Home Patient
Participates in a Well-Child Visit and Discuss Pediatric Development Milestones
Perform Comprehensive Inpatient History and Physical Examination
Perform Gyn Screening Exam (Pap & Breast Exam)
Perform Outpatient Observed History and Physical Examination
Video Review

Strongly Recommended
Observe Colposcopy/Endometrial Biopsy
Observe Exercise Stress Testing
Observe Flexible Sigmoidoscopy
Observe Individual or Family Psychotherapy Session
Observe/Perform Outpatient Dermatologic Procedures
Observe Nasopharyngoscopy
Participate in Family-Centered Prenatal Visit
Participate in Nutritional Assessment of Patient with Nutritionist

**M-III Internal Medicine Skills**

**Required Curricular Activity**
- Complete On-line Nutrition Assessment Case Study
- Complete Senior Mentor Assignment “Fall Risk Assessment”
- Draw Venous Blood Specimen
- History and Physical Examination (8 total)
- Interpretation of Basic Chest Radiographic Findings
- Interpretation of Basic Electrocardiographic Findings
- Observation of Bronchoscopy
- Participate in Cardiac Resuscitation (Code) Utilizing Basic Cardiac Life Support (BLS) Skills
- Perform an Observed History and Physical Examination
- Presentation of Selected Topic
- Writing of Adequate Progress Notes

**Strongly Recommended**
- Lumbar Puncture
- Microscopic Examination of Peripheral Blood Smear
- Microscopic Examination of Sputum Gram Stain
- Observation of Cardiac Catheterization

**M-III Obstetrics and Gynecology Skills**

**Required Curricular Activity**
- Complete On-line Nutrition Assessment Case Study
- Evaluate Vaginitis including Performance of Wet Preparation with KOH Staining
- # of Deliveries in which Student Participates – vaginal and c-section
- Observe and Discuss Colposcopy
- Observe and Discuss Hysterectomy
- Observe and Discuss Laparoscopy
- Observe Genetic Counseling Session
- Observe GYN Ultrasound
- Observe OB Anatomical Ultrasound
- Obtain Sexual History
- Perform or Assist with Vaginal Delivery
- Perform Breast Examination (Observed by Faculty or Senior Level Resident)
- Perform Contraception Counseling
- Perform Pap Smear (Observed by Faculty or Senior Level Resident)
- Perform Pelvic Examination (Observed by Faculty or Senior Level Resident)
- Teach Breast Self-Examination

**M-III Pediatrics Skills**

**Required Curricular Activity**
- Attend Mid-Rotation Feedback Session
- Calculate Parenteral Fluid Administration
- Complete On-line Nutrition Assessment Case Study
- Demonstrate Working Understanding of Child Abuse
Evidence Based Medicine Research
Interpret History on Newborn Infant
Obtain Pediatric History on an Inpatient
Obtain Pediatric History on an Outpatient
Perform an Observed Physical Examination on a Newborn Infant
Perform Physical Examination on an Inpatient Pediatric Patient
Perform Physical Examination on an Outpatient Pediatric Patient
Perform Urinalysis with Microscopic Examination
Perform Written Pediatric History and Physical Examination
Plot Growth Curves
Write a Prescription Accurately

Strongly Recommended
Demonstrate Understanding of Immunization Schedules
Interpret Typanogram
Lumbar puncture
Obtain Pediatric Blood Pressure
Participate in Adolescent Counseling
Visit Home of a “Special Needs” Child

M-III Psychiatry Skills

Required Curricular Activity
Complete Alcoholics Anonymous Experience
Complete Hospice Volunteer Training
Complete On-line Nutrition Assessment Case Study
Complete Senior Mentor Assignment – “Life Review”
Conduct an Observed Mental Status Exam and Present the Results #1
Conduct an Observed Mental Status Exam and Present the Results #2
Conduct an Observed Mental Status Exam and Present the Results #3
Conduct and Review with Faculty a Videotaped History and Mental Status Exam

M-III Surgery Skills

Required Curricular Activity
Complete On-line Nutrition Assessment Case Study
Draw Arterial Blood Specimen
Evaluate Groin Hernia
Foley Catheter Placement (Female)
Foley Catheter Placement (Male)
Intravenous Line Placement
Nasogastric Tube Placement
Observation or Placement of Central Venous Catheter (e.g. Swan-Ganz)
Perform History and Physical Examination (at least two per week)
Perform Observed Evaluation of Acute Surgical Abdomen
Perform Observed H&P During 2nd 4 weeks of Clerkship
Perform Preoperative Evaluation and Write Orders
Perform Postoperative Evaluation
Perform Wound Management Techniques (dressing changes)
Performance of Thoracentesis, Paracentesis or Chest Tube Placement
M-IV Neurology Skills

**Required Curricular Activity**
- Demonstrate Knowledge of Nerve Conduction Velocity Testing
- Demonstrate Knowledge of Use of Electromyographic Testing
- Demonstrate Knowledge of Use of Electrocencephalographic Testing
- Identify Normal Anatomy on Brain Computerized Tomogram
- Identify Normal Anatomy on Brain Magnetic Resonance Image
- Perform History and Neurological Examination

**Strongly Recommended**
- Demonstrate Knowledge of Carotid Ultrasound
- Demonstrate Knowledge of Transcranial Doppler Study
- Identify Normal Anatomy on Brain SPECT
- Lumbar Puncture

Revised 5/06
The curriculum of the University of South Carolina School of Medicine has been designed to provide a general professional education leading to the M.D. degree and to prepare undifferentiated students to enter graduate medical training in a wide variety of medical specialties and subspecialties. All candidates for admission to, and all candidates for the M.D. degree at, the School of Medicine should possess sufficient intellectual capacity, physical ability, emotional stability, interpersonal and technical competencies, professional attitudes, and clinical abilities required to pursue any pathway of graduate medical education and to enter the independent practice of medicine. 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.

While the School of Medicine fully endorses the spirit and intent of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1992, it also acknowledges that certain minimum technical standards must be present in candidates for admission and graduation. Therefore, the School of Medicine has established the following technical standards for admission to, and graduation from the M.D. program:

All candidates for admission must fulfill the minimum requirements for admission and all candidates for the M.D. degree must complete all required courses and clerkships as indicated in the School of Medicine Bulletin.

All candidates for admission and all candidates for the M.D. degree should possess sufficient physical, intellectual, interpersonal, social, emotional, and communication abilities to:

Establish appropriate relationships with a wide range of faculty members, professional colleagues, and patients. Candidates should possess the personal qualities of integrity, empathy, concern for the welfare of others, interest and motivation. They should possess the emotional 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. Candidates should be able to tolerate physically taxing workloads and to function effectively under stress. 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. Candidates should be able to speak, to hear, to read, to write, and to observe patients in order to elicit information, to describe changes in mood, activity, posture, and behavior, and to perceive nonverbal communications. Candidates should be able to communicate effectively and efficiently in the English language in oral and written form with all members of the health care team. Candidates must be mobile and able to move within the clinical environment.

Obtain a medical history and perform physical and mental examinations with a wide variety of patients. Observation requires the functional use of the sense of vision and other sensory modalities and is enhanced by the functional use of the sense of smell. Candidates should have sufficient exteroceptive sense (touch, pain, and temperature), proprioceptive sense (position, pressure, movement, stereognosis, and vibratory), and motor function to carry out the requirements of the physical examination. Candidates should have sufficient motor function to elicit information from patients by palpation, auscultation, percussion, and other diagnostic operations. They should be able to use effectively and in a coordinated manner those standard instruments necessary for a physical examination (e.g., stethoscope, otoscope, sphygmomanometer, ophthalmoscope, and reflex hammer). Candidates should be able to execute motor movements required to provide general and emergency
treatment to patients, including cardiopulmonary resuscitation\textsuperscript{11,12}, the administration of intravenous medication\textsuperscript{2,4,5,6}, the application of pressure to stop bleeding\textsuperscript{2,5,8}, the opening of obstructed airways\textsuperscript{2,12}, the suturing of simple wounds\textsuperscript{2,5,8}, and the performance of simple obstetrical maneuvers\textsuperscript{8}, such actions require coordination of both fine and gross muscular movements, equilibrium, and functional use of the senses of touch and vision.

Conduct tests\textsuperscript{11-17} and perform laboratory work\textsuperscript{1}. Candidates must be able to observe demonstrations\textsuperscript{1}, collect data\textsuperscript{3,10,11,13,14}, and participate in experiments\textsuperscript{13} and dissections\textsuperscript{13,14} in the basic sciences, including but not limited to, demonstrations in animals\textsuperscript{13}, microbiologic cultures\textsuperscript{17}, and microscopic studies of microorganisms\textsuperscript{5,6,17}, and tissues in normal\textsuperscript{15} and pathologic states\textsuperscript{16}. They should be able to understand basic laboratory studies and interpret their results\textsuperscript{3,11}, draw arterial and venous blood, and carry out diagnostic procedures (e.g. proctoscopy\textsuperscript{2,5}, paracentesis\textsuperscript{5}).

Ultimately make logical diagnostic and therapeutic judgments\textsuperscript{11}. Candidates should be able to make measurements\textsuperscript{11,15}, calculate\textsuperscript{3,11}, and reason\textsuperscript{1,16}, to analyze\textsuperscript{1,11,18}, integrate\textsuperscript{1,11,18}, and synthesize data\textsuperscript{1,11,18} and to problem-solve\textsuperscript{1}. Candidates should be able to comprehend three-dimensional relationships\textsuperscript{2,3,8,9,14} and to understand the spatial relationships of structures\textsuperscript{2,3,8,9,14}. Candidates should be able to integrate rapidly, consistently, and accurately all data received by whatever sense(s) employed\textsuperscript{1}.

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 patient be maintained. While compensation, modification, and accommodation can be made for some disabilities on the part of candidates, candidates must be able to perform the duties of a student\textsuperscript{1,11} and of a physician in a reasonably independent manner\textsuperscript{11}. 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 or graduation is not permitted.

The School of Medicine will consider for admission any candidate who has the ability to 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\textsuperscript{1} not only on the basis of their academic abilities, but also on the basis of their non-academic (physical, interpersonal, communications, and emotional) abilities\textsuperscript{11} to meet the requirements of the curriculum and to graduate as skilled and effective medical practitioners.

Reference to Attainment Documentation

1. All course and clerkships
2. M-III Surgery clerkship
3. M-II ICM-II
4. M-III Pediatrics clerkship
5. M-III Family Medicine clerkship
6. M-III Internal Medicine clerkship
7. M-III Psychiatry clerkship
8. M-III OB/GYN clerkship
9. M-IV Neurology clerkship
10. M-I ICM-I
11. All clerkships
12. M-II ICM-II/BCLS
13. M-I Physiology course
14. M-I Embryology/Gross Anatomy course
15. M-I Microscopic Anatomy course
16. M-II Pathology course
17. M-II Microbiology course
18. USMLE exams
LCME
Educational Objectives

ED-1 The medical school faculty must define the objectives of its educational program.

Educational objectives are statements of the items of knowledge, skills, behaviors, and attitudes that students are expected to exhibit as evidence of their achievement. They are not statements of mission or broad institutional purpose, such as education, research, health care, or community service. Educational objectives state what students are expected to learn, not what is to be taught.

Student achievement of these objectives must be documented by specific and measurable outcomes (e.g., measures of basic science grounding in the clinical years, USMLE results, performance of graduates in residency training, performance on licensing examinations, etc.). National norms should be used for comparison whenever available.

It is expected that the objectives of the educational program will be used by faculty members in designing their courses and clerkships and in developing plans for the evaluation of students. The curriculum committee, working in conjunction with the chief academic officer, should review the stated objectives of individual courses and clerkships, as well as methods of pedagogy and student evaluation, to assure congruence with institutional educational objectives.

ED-1-A The objectives and their associated outcomes must address the extent to which students have progressed in developing the competencies that the profession and the public expect of a physician.

There are several widely recognized definitions of the characteristics appropriate for a competent physician, including the physician attributes described in the AAMC’s Medical School Objectives Project, the general competencies of physicians resulting from the collaborative efforts of the ACGME and AMBS, and the physician roles summarized in the CanMEDS 2000 report of the Royal College of Physicians and Surgeons of Canada. To comply with this standard, a school should be able to demonstrate how its institutional learning objectives facilitate the development of such general attributes of physicians. A school may establish other objectives appropriate to its particular missions and context.

ED-2 The objectives for clinical education must include quantified criteria for the types of patients (real or simulated), the level of student responsibility, and the appropriate clinical settings needed for the objectives to be met.

Each course or clerkship that requires interaction with real or simulated patients should specify the numbers and kinds of patients that students must see in order to achieve the objectives of the learning experience. It is not sufficient simply to supply the number of patients students will work up in the inpatient and outpatient setting. The school should specify, for those courses and clerkships the major disease states/conditions that students are all expected to encounter. They should also specify the extent of student interaction with patients and the venue(s) in which the interactions will occur. A corollary requirement of this standard is that courses and clerkships will monitor and verify, by appropriate means, the number and variety of patient encounters in which students participate, so that adjustments can be made to ensure that all students have the desired clinical experiences.

ED-3 The objectives of the educational program must be made known to all medical students and to the faculty, residents, and others with direct responsibilities for medical student education.

Among those who should exhibit familiarity with the overall objectives for the education of medical students are the dean and the academic leadership of clinical affiliates where the educational program takes place.

ED-4 The program of medical education leading to the M.D. degree must include at least 130 weeks of instruction.
ED-5 The medical faculty must design a curriculum that provides a general professional education, and fosters in students the ability to learn through self-directed, independent study throughout their professional lives.

ED-6 The curriculum must incorporate the fundamental principles of medicine and its underlying scientific concepts; allow students to acquire skills of critical judgment based on evidence and experience; and develop students' ability to use principles and skills wisely in solving problems of health and disease.

ED-7 It must include current concepts in the basic and clinical sciences, including therapy and technology, changes in the understanding of disease, and the effect of social needs and demands on care.

ED-8 There must be comparable educational experiences and equivalent methods of evaluation across all alternative instructional sites within a given discipline.

Compliance with this standard requires that educational experiences given at alternatives sites be designed to achieve the same educational objectives. Course duration or clerkship length must be identical, unless a compelling reason exists for varying the length of the experience. The instruments and criteria used for student evaluation, as well as policies for the determination of grades, should be the same at all alternative sites. The faculty who teach at various sites should be sufficiently knowledgeable in the subject matter to provide effective instruction, with a clear understanding of the objectives of the educational experience and the evaluation methods used to determine achievement of those objectives. Opportunities to enhance teaching and evaluation skills should be available for faculty at all instructional sites.

While the types and frequency of problems or clinical conditions seen at alternate sites may vary, each course or clerkship must identify any core experiences needed to achieve its objectives, and assure that students received sufficient exposure to such experiences. Likewise, the proportion of time spent in inpatient and ambulatory settings may vary according to local circumstance, but in such cases the course or clerkship director must assure that limitations in learning environments do not impede the accomplishment of objectives.

To facilitate comparability of educational experiences and equivalency of evaluation methods, the course or clerkship director should orient all participants, both teachers and learners, about the educational objectives and grading system used. This can be accomplished through regularly scheduled meetings between the director of the course or clerkship and the directors of the various sites that are used.

The course/clerkship leadership should review student evaluations of their experiences at alternative sites to identify any persistent variations in educational experiences or evaluation methods.

ED-9 The LCME must be notified of plans for major modification of the curriculum.

Notification should include the explicitly-defined goals of the change, the plans for implementation, and the methods that will be used to evaluate the results. Planning for curriculum change should consider the incremental resources that will be required, including physical facilities and space, faculty/resident effort, demands on library facilities and operations, information management needs, and computer hardware.

In view of the increasing pace of discovery of new knowledge and technology in medicine, the LCME encourages experimentation that will increase the efficiency and effectiveness of medical education.

ED-10 The curriculum must include behavioral and socioeconomic subjects, in addition to basic science and clinical disciplines.

Lists of subjects widely recognized as important components of the general professional education of a physician are included in the medical education database completed in preparation for full accreditation surveys, and in the LCME Part II Annual Medical School Questionnaire. Depth of coverage of the individual
topics will depend on the school’s educational goals and objectives.

ED-11 It must include the contemporary content of those disciplines that have been traditionally titled anatomy, biochemistry, genetics, physiology, microbiology and immunology, pathology, pharmacology and therapeutics, and preventive medicine.

ED-12 Instruction within the basic sciences should include laboratory or other practical opportunities for the direct application of the scientific method, accurate observations of biomedical phenomena and critical analyses of data.

ED-13 Clinical instruction must cover all organ systems, and include the important aspects of preventive, acute, chronic, continuing, rehabilitative, and end-of-life care.

ED-14 Clinical experience in primary care must be included as part of the curriculum.

ED-15 The curriculum should include clinical experiences in family medicine, internal medicine, obstetrics and gynecology, pediatrics, psychiatry, and surgery.

Schools that do not require clinical experience in one or another of these disciplines must ensure that their students possess the knowledge and clinical abilities to enter any field of graduate medical education.

ED-16 Students’ clinical experiences must utilize both outpatient and inpatient settings.

ED-17 Educational opportunities must be available in multidisciplinary content areas, such as emergency medicine and geriatrics, and in the disciplines that support general medical practice, such as diagnostic imaging and clinical pathology.

ED-18 The curriculum must include elective courses to supplement required courses.

While electives permit students to gain exposure to and deepen their understanding of medical specialties reflecting their career interests, they should also provide opportunities for students to pursue individual academic interests.

ED-19 There must be specific instruction in communication skills as they relate to physician responsibilities, including communication with patients, families, colleagues, and other health professionals.

ED-20 The curriculum must prepare students for their role in addressing the medical consequences of common societal problems, for example, providing instruction in the diagnosis, prevention, appropriate reporting and treatment of violence and abuse.

ED-21 The faculty and students must demonstrate an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases, and treatments.

All instruction should stress the need for students to be concerned with the total medical needs of their patients and the effects that social and cultural circumstances have on their health. To demonstrate compliance with this standard, schools should be able to document objectives relating to the development of skills in cultural competence, indicate where in the curriculum students are exposed to such material, and demonstrate the extent to which the objectives are being achieved.

ED-22 Medical students must learn to recognize and appropriately address gender and culture biases in themselves and other, and in the process of health care delivery.

The objectives for clinical instruction should include student understanding of demographic influences on health care quality and effectiveness, such as racial and ethnic disparities in the diagnosis and treatment of
The objectives should also address the need for self-awareness among students regarding any personal biases in their approach to health care delivery.

A medical school must teach medical ethics and human values, and require its students to exhibit scrupulous ethical principles in caring for patients, and in relating to patients’ families and to others involved in patient care.

Each school should assure that students receive instruction in appropriate medical ethics, human values, and communication skills before engaging in patient care activities. As students take on increasingly more active roles in patient care during their progression through the curriculum, adherence to ethical principles should be observed and evaluated, and reinforced through formal instructional effects.

In student-patient interactions, there should be a means for identifying possible breaches of ethics in patient care, either through faculty/resident observation of the encounter, patient reporting, or some other appropriate method.

“Scrupulous ethical principles” imply characteristics like honesty, integrity, maintenance of confidentiality, and respect for patients, patients’ families, other students, and other health professionals. The school’s educational objectives may identify additional dimensions of ethical behavior to be exhibited in patient care settings.

Residents who supervise or teach medical students, as well as graduate students and postdoctoral fellows in the biomedical sciences who serve as teachers or teaching assistants, must be familiar with the educational objectives of the course or clerkship and be prepared for their roles in teaching and evaluation.

Supervision of student learning experiences must be provided throughout required clerkships by members of the medical school’s faculty.

The medical school faculty must establish a system for the evaluation of student achievement throughout medical school that employs a variety of measures of knowledge, skills, behaviors, and attitudes.

Evaluation of student performance should measure not only retention of factual knowledge, but also development of the skills, behaviors, and attitudes needed in subsequent medical training and practice, and the ability to use data appropriately for solving problems commonly encountered in medical practice.

The LCME urges schools to develop a system of evaluation that fosters self-initiated learning by students and disapproved of the use of frequent test which condition students to memorize details for short-term retention only.

There must be ongoing assessment that assures students have acquired and can demonstrate on direct observation the core clinical skills, behaviors, and attitudes that have been specified in the school’s educational objectives.

There must be evaluation of problem solving, clinical reasoning, and communication skills.

The faculty of each discipline should set the standards of achievement in that discipline.

The directors of all courses and clerkships must design and implement a system of formative and summative evaluation of student achievement in each course and clerkship.

Those directly responsible for the evaluation of student performance should understand the uses and limitations of various test formats, the purposes and benefits of criterion-referenced vs. norm-referenced grading, reliability and validity issues, formative vs. summative assessment, etc. In addition, the chief academic officer, curriculum leaders, and faculty should understand, or have access to individuals who are
knowledgeable about, methods for measuring student performance. The school should provide opportunities for faculty members to develop their skills in such methods.

An important element of the system of evaluation should be to ensure the timeliness with which students are informed about their final performance in the course/clerkship. In general, final grades should be available within four to six weeks of the end of a course/clerkship.

ED-31 Each student should be evaluated early enough during a unit of study to allow time for remediation.

It is expected that courses and clerkships provide students with formal feedback during the experience so that they may understand and remediate their deficiencies. Courses or clerkships that are short in duration (less than 4 weeks) may not have sufficient time to provide structured formative evaluation, but should provide alternate means (such as self-testing or teacher consultation) that will allow students to measure their progress in learning.

ED-32 Narrative descriptions of student performance and of non-cognitive achievement should be included as part of evaluations in all required courses and clerkships where teacher-student interaction permits this form of assessment.

ED-33 There must be integrated institutional responsibility for the overall design, management, and evaluation of a coherent and coordinated curriculum.

The phrase “integrated institutional responsibility” implies that an institutional body (commonly a curriculum committee) will oversee the educational program as a whole. An effective central curriculum authority will exhibit:

- Faculty, student, and administrative participation
- Expertise in curricular design, pedagogy, and evaluation methods
- Empowerment, through bylaws or decanal mandate, to work in the best interests of the institution without regard for parochial or political influences, or departmental pressures.

Curriculum management signifies leading, directing, coordinating, controlling, planning, evaluating, and reporting. Evidence of effective curriculum management includes:

- Evaluation of program effectiveness by outcomes analysis, using national norms of accomplishment as a frame of reference.
- Monitoring of content and workload in each discipline, including the identification of omission and unwanted redundancies.
- Review of the stated objectives of individual courses and clerkships, as well as methods of pedagogy and student evaluation, to assure congruence with institutional educational objectives.

Minutes of the curriculum committee meeting and reports to the faculty governance and deans should document that such activities take place and should show the committee’s findings and recommendations.

ED-34 The program’s faculty must be responsible for the detailed design and implementation of the components of the curriculum.

Such responsibilities include, at a minimum, the development of specific course or clerkship objectives, selection of pedagogical and evaluation methods appropriate for the achievement of those objectives, ongoing review and updating of content, and assessment of course and teacher quality.

ED-35 The objectives, content, and pedagogy of each segment of the curriculum, as well as for the curriculum as a whole, must be subject to periodic review and revision by the faculty.

ED-36 The chief academic officer must have sufficient resources and authority to fulfill the responsibility for the management and evaluation of the curriculum.
The dean often serves as the chief academic officer, with ultimate individual responsibility for the design and management of the educational program as a whole. He or she may, however, delegate operational responsibility for curriculum oversight to a vice dean or associate dean.

The kinds of resources needed by the chief academic officer to assure effective delivery of the educational program include:

- Adequate numbers of teachers who have the time and training necessary to achieve the program’s objectives.
- Appropriate teaching space for the methods of pedagogy employed in the educational program.
- Appropriate educational infrastructure (computers, audiovisual aids, laboratories etc.)
- Educational support services, such as examination grading, classroom scheduling, and faculty training in methods of teaching and evaluation.
- Support and services for the efforts of the curriculum management body and for any interdisciplinary teaching efforts that are not supported at the departmental level.

The chief academic officer must have explicit authority to ensure the implementation and management of the educational program, and to facilitate change when modifications to the curriculum are determined to be necessary.

**ED-37** The faculty committee responsible for the curriculum must monitor the content provided in each discipline so that the school’s educational objectives will be achieved.

The committee, working in conjunction with the chief academic officer, should assure that each academic period of the curriculum maintains common standards for content. Such standards should address the depth and breadth of knowledge required for a general professional education, currency and relevance of content, and the extent of redundancy needed to reinforce learning of complex topics. The final year should complement and supplement the curriculum so that each student will acquire appropriate competence in general medical care regardless of subsequent career specialty.

**ED-38** The committee responsible for the curriculum, along with medical school administration and educational program leadership, must develop and implement policies regarding the amount of time students spend in required activities, including the total required hours spent in clinical and educational activities during clinical clerkships. [Technical revision approved June 2005, effectively immediately.]

Attention should be paid to the time commitment required of medical students, especially during the clinical years. Students’ hours should be set taking into account the effects of fatigue and sleep deprivation on learning, clinical activities, and student health and safety. [Annotation revised June 2005]

**ED-39** The medical school’s chief academic officer must be responsible for the conduct and quality of the educational program and for assuring the adequacy of faculty at all educational sites.

**ED-40** The principal academic officer of each geographically remote site must be administratively responsible to the chief academic officer of the medical school conducting the educational program.

**ED-41** The faculty in each discipline at all sites must be functionally integrated by appropriate administrative mechanisms.

Schools should be able to demonstrate the means by which faculty at dispersed sites participate in and are held accountable for medical student education that is consistent with the objectives and performance expectations established by course or clerkship leadership. Mechanisms to achieve functional integration may include regular meetings or electronic communication, periodic visits to all sites by course or clerkship leadership, and sharing of course or clerkship evaluation data and other types of feedback regarding faculty performance of their educational responsibilities.
ED-42 There must be a single standard for promotion and graduation of students across geographically separate campuses.

ED-43. The parent school must assume ultimate responsibility for the selection and assignment of all medical students to component campuses or tracks. There must be a process that permits a student with an appropriate rationale to request an alternative assignment when circumstances allow for it. [Technical revision approved June 2006, effective immediately.]

Schools which offer educational programs at multiple instructional sites or via distinct educational tracks are responsible for determining which site or track each student will attend. That responsibility should not preclude students from obtaining alternative assignments if appropriate reasons are given (for example, demonstrable economic or personal hardship) and if the educational activities and resources involved allow for such reassignment. It is understood, however, that movement among campuses may not be possible (e.g. because the sites may offer different curriculum tracks). [New annotation approved June 2006.]

ED-44 Students assigned to all campuses should receive the same rights and support services.

ED-45 A medical school must collect and use a variety of outcome data, including national norms of accomplishment, to demonstrate the extent to which its educational program objectives are being met. [Technical revision approved June 2006, effective immediately.]

Schools should collect outcome data on student performance during and after medical school appropriate to document the achievement of the school’s educational program objectives. The kinds of outcome data that could serve this purpose include performance on national licensure examinations, performance in courses/clerkships and other internal measures related to educational program objectives, academic progress and program completion rates, acceptance into residency programs, assessments of program directors and graduates on graduates; preparation in areas related to educational program objectives, including the professional behavior of their graduates. [New annotation approved June 2006.]

ED-47 In assessing program quality, schools must consider student evaluations of their courses and teachers, an appropriate variety of outcome measures. [Technical revision approved June 2006, effective immediately.]

It is expected that schools will have a formal process to collect and use information from students on the quality of courses and clerkships, which could include such measures as questionnaires (written or online), focus groups, or other structured data collection tools. Other measures could include peer review and external evaluation. [New annotation approved June 2006.]

The Office of Curricular Affairs and Faculty Support published the 2006-2007 Curriculum Committee Handbook for use by members of USCOSM Curriculum Committee members.

The Office of Curricular Affairs reserves the right to revise the 2006-2007 Curriculum Committee Handbook as directed by the University of South Carolina School of Medicine Office of the Dean.

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