STANDARDS FOR THE ACCREDITATION OF MEDICAL SCHOOLS

IN THE CARIBBEAN COMMUNITY (CARICOM)

Caribbean Accreditation Authority for Education in Medicine and other Health Professions

CAAM- 2007

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Acknowledgement. The Liaison Committee on Medical Education of the United States and Canada has given permission to the Caribbean Accreditation Authority to use the format for adaptation of their document entitled '*Functions and structure of a Medical School; LCME 2002*'.

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STANDARDS FOR ACCREDITATION OF MEDICAL SCHOOLS

Introduction

Accreditation is a peer review process designed to attest to the educational quality of new and established educational programmes. The Caribbean Accreditation Authority for Education in Medicine (CAAM) is established to accredit medical education programmes leading to the MB.BS/M.D. degrees in CARICOM member states. By judging the compliance of medical education programmes with national and internationally accepted standards of educational quality, this accrediting agency serves the interests of the general public in the CARICOM community and the interest of the students enrolled in the programmes of the schools. The Accreditation reports are intended to attest to member governments, registration bodies (local, regional and international) as well as education institutions the quality of the programmes offered by the participating institutions.

To achieve and maintain accreditation, medical education programmes must meet the standards portrayed in this document. The standards are provided in both a narrative format (Part 1) that illustrates how standards relate to each other, and in a list format (Part 2) that allows the inclusion of explanatory annotations to clarify the operational meaning of standards when necessary. The standards deal with the following areas:

1. The Institutional Setting
2. The Students
3. Education Programmes
4. The Faculty
5. Educational Resources, and
6. Internships

These standards have been compiled using the standards complied within the region in relation to the standards of the General Medical Council of Great Britain (GMC), as well as those of the Liaison Committee on Medical Education (LCME) of the United States and Canada. The LCME has given permission to the accreditation authority to use the format for adaptation of their document entitled *'Functions and Structure of a Medical School'* 2002.

Part 1: Accreditation Standards

I. INSTITUTIONAL SETTING

The goal of each programme of medical education leading an MB.BS./M.D. degree must be the meeting of standards for accreditation by the Caribbean Accreditation Authority for Education in Medicine (CAAM).

A. Governance and Administration

Medical schools are part of a university or chartered as an institution by the government of the jurisdiction in which it operates.

The manner in which the medical school is organised, including the responsibilities and privileges of administrative officers, faculty, students and committees must be promulgated in medical school or university bylaws. The governing body responsible for oversight of the medical school should be composed of persons who have the educational needs of the institution as their first priority and no clear conflict of interest in the operation of the school, its associated hospitals, or other related teaching or service facilities. Any such conflict of interest by board members should be declared to the CAAM. The terms of governing body members should be sufficiently long to permit them to gain an understanding of the programmes of the medical school. Administrative officers and members of a medical school faculty must be appointed by, or on the authority of, the governing body of the medical school or its parent university.

The dean or chief official of the medical school must have ready access to the administrative head of the university or other university official charged with final responsibility for the school, and to other university officials as are necessary to fulfill the responsibilities of the dean's office. There must be a clear understanding of the authority and responsibility for medical school matters among the administrative officials of the university, the dean of the school, the faculty, and the administrative officials of other components of the medical teaching complex and of the university.

The dean must be qualified by education and experience to provide leadership in medical education, scholarly activity, and he/she or his/her deputy in the care of patients. The medical school administration should include such associate or assistant deans, department chairs/heads, leaders of other organisational units, and staff as are necessary to accomplish the missions of the medical school.

B. Academic Environment

A medical school should be a component of a university offering other graduate and professional degree programmes that contribute to the academic environment of the medical school. The programme of medical education must be conducted in an environment that fosters the intellectual challenge and spirit of inquiry appropriate to a community of scholars. Students should have the opportunity to participate in research and other scholarly activities

of the faculty. Medical school faculty members should work together in teaching, research, and appropriate health care delivery programmes.

II. MEDICAL STUDENTS

A. Admissions

1. *Requirements*

Students studying medicine should acquire a broad education, including the sciences, humanities and social sciences. Premedical course requirements should be restricted to those deemed essential preparation for completing the medical school curriculum.

2. *Selection*

The faculty of each school must develop criteria and procedures for the selection of students that are readily available to potential applicants and to their collegiate advisors. The final responsibility for selecting students to be admitted for medical study must reside with a duly constituted faculty committee.

Each medical school must have a pool of applicants sufficiently large and possessing qualifications to fill its entering class. Medical schools must select students who possess the intelligence, integrity, personal and emotional characteristics necessary for them to become effective physicians. The selection of individual students must not be influenced by political or financial factors. Each medical school should have policies and practices ensuring the gender, racial, cultural, and economic diversity of its students. Each school must develop and publish technical standards for admission of handicapped applicants.

The institution's catalogue or equivalent information materials must describe the requirements for the MB.BS/M.D degree and all associated joint degree programmes, provide the most recent academic calendar for each curricular option, and describe all required courses and clerkships offered by the school. The catalogue or informational materials must also enumerate the school's criteria for selecting students, and describe the admissions process.

3. *Visiting and Transfer Students*

Institutional resources to accommodate the requirements of any visiting and transfer students must not significantly diminish the resources available to existing enrolled students. Transfer students must demonstrate achievements in premedical and medical school education comparable to those of students in the class that they join. Prior course work taken by students who are accepted for transfer or admission to advanced standing must be compatible with the programme to be entered. Transfer students should not be accepted into the final year of the programme except under rare circumstances.

The accepting school should verify the credentials of visiting students, formally register and maintain a complete roster of such students, approve their assignments, and provide evaluations to their parent schools. Students visiting from other schools for clinical clerkships and electives should possess qualifications equivalent to students they will join in these experiences.

B. Student Services

1. *Academic and Career Counselling*

The system of academic advising for students must integrate the efforts of faculty members, course directors, and student affairs officers with the school's counselling and tutorial services. There must be a system to assist students in career choice and application to internship, residency and postgraduate programmes, and to guide students in choosing elective courses. If students are permitted to take electives at other institutions, there should be a system in the dean's office to review the students' proposed extramural programmes prior to approval and to ensure the return of a performance appraisal by the host programme.

The process of applying for internship or residency programmes should not disrupt the general medical education of the students.

2. *Financial Aid Counselling and Resources*

A medical school must provide students with effective financial aid and debt management counselling. Schools should develop financial aid resources that minimise total student indebtedness.

3. *Health Services and Personal Counselling*

Each school must have an effective system of personal counselling for its students that includes programmes to promote the well-being of students and facilitate their adjustment to the physical and emotional demands of medical school. Students must have access to confidential counselling and health services. No confidential reports may be used in the academic evaluation or promotion of students receiving those services. Health services and/or insurance must be available to all students, and all students must have access to disability insurance and to preventive and therapeutic health services.

Medical schools should follow national guidelines in determining appropriate immunizations for medical students. Schools must have policies addressing student exposure to infectious and environmental hazards.

C. The Learning Environment

In the admissions process and throughout medical school, there should be no discrimination on the basis of gender, sexual orientation, age, race or religion. Each medical school must

define and publicise the standards of conduct for the teacher-learner relationship, and develop written policies for addressing violations of those standards.

The medical school must publicise to all faculty and students its standards and procedures for the evaluation, advancement, and graduation of its students and for disciplinary action. There must be a fair and formal process for taking any action that adversely affects the status of a student. Student records must be confidential and available only to members of the faculty and administration with a need to know, unless released by the student or as otherwise governed by laws concerning confidentiality. Students must be allowed to review and challenge their records.

Schools should assure that students have adequate study space, lounge areas, and personal lockers or other secure storage facilities.

III. EDUCATIONAL PROGRAMME

The CAAM sees the doctors trained for functioning in the Caribbean as being able to function in the community as an isolated practitioner, as well as in the modern hospital or clinic setting. The doctor for the Caribbean should be a promoter of health for the individual as well as the community, and be able to diagnose and treat illness in resource constrained circumstances. They must be aware of modern techniques of care and how they may be accessed when not available in the setting in which they practise. The doctor practising in the Caribbean must be *au fait* with International codes of conduct for health professionals and practise within the law and ethical code of conduct of the country in which they practise. They should be an advocate for the patient, particularly those disadvantaged by age or economic status and do so irrespective of ethnic, racial, religious, political or other considerations.

A. Educational Objectives

The medical school faculty must define the objectives of its educational programme. The objectives for clinical education must include quantified criteria for the types of patients, the level of student responsibility, and the appropriate clinical settings needed for the objectives to be met. The objectives of the educational programme must be made known to all medical students and to the faculty, residents/junior staff, and others with direct responsibilities for medical student education.

B. Structure

1. *General Design*

The degree programme of medical education must include at least 130 weeks of instruction delivered over at least 4 calendar years. 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. 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. 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. Students must learn how to function as part of a team, through an understanding of the roles and responsibilities of team members and the dynamics of team interaction; and must appreciate the patient or the community as a whole and not as separate organ systems, or as individuals outside of family and the community. There must be comparable educational experiences and equivalent methods of evaluation across all instructional sites within a given discipline. Accredited programmes must notify CAAM of plans for any major modification of the curriculum.

2. *Content*

The curriculum must include behavioural and socioeconomic subjects, in addition to basic science and clinical disciplines. 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, community and preventive medicine, and the promotion of health in individuals and community. Instruction within the basic sciences should include laboratory or other practical exercises that entail accurate observations of biomedical phenomena. Critical analyses of data must be a component of all segments of the curriculum.

Clinical instruction must cover all organ systems, and include the important aspects of preventive, acute, chronic, continuing, rehabilitative, and end-of-life care. Clinical experience in primary care must be included as part of the curriculum. The curriculum should include practical experiences in community medicine, family medicine, internal medicine, obstetrics and gynaecology, child health/paediatrics, psychiatry, and surgery. Students' clinical experiences must utilize outpatient, inpatient and emergency settings. Educational opportunities must be available in multi disciplinary content areas, such as emergency medicine and geriatrics, and in the disciplines that support general medical practice, such as diagnostic imaging and clinical pathology. Ethical conduct and the impact of organisation of health services in society on medical practice should be an essential part of the course. The curriculum must include elective courses to supplement required courses.

There must be specific instruction in communication skills as they relate to physician responsibilities, including communication with patients, families, colleagues, other health professionals, groups and communities. 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. 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. Medical students must learn to recognise and appropriately address gender and cultural biases in themselves and others, and in the process of health care delivery. A medical school must teach medical ethics with respect for the religious and other human values and their relationship to law and governance of medical

practise. Students must be required to exhibit scrupulous ethical principles in caring for patients, and in relating to patients' families, others involved in patient care and to the community.

C. Teaching and Evaluation

Residents/junior staff 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, behaviours, and attitudes. There must be ongoing assessment that assures students have acquired and can demonstrate on direct observation the core clinical skills, behaviours, and attitudes that have been specified in the school's educational objectives. There must be evaluation of problem solving, clinical reasoning, interdisciplinary linking 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. Each student should be evaluated early enough during a unit of study to allow time for remedial work. Narrative descriptions of student performance including personal qualities and interactions should be included as part of evaluations in all required courses and clerkships where teacher-student interaction permits this form of assessment.

D. Curriculum Management

1. *Roles and Responsibilities*

There must be integrated institutional responsibility for the overall design, management, and evaluation of a coherent and coordinated curriculum. The programme's faculty must be responsible for the detailed design and implementation of the components of the curriculum. 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.

The academic faculty must have sufficient resources and authority to fulfill the responsibility for the management and evaluation of the curriculum. 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 should give careful attention to the impact on students of the amount of work required, including the frequency of examinations and their scheduling.

2. *Geographically Separated Programmes*

The medical school's academic officers must be responsible for the conduct and quality of the educational programme and for assuring the adequacy of faculty at all educational sites. 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 programme. The faculty in each discipline at all sites must be functionally integrated by appropriate administrative mechanisms.

There must be a single standard for promotion and graduation of students across geographically separate campuses. The parent school must assume ultimate responsibility for the selection and assignment of all medical students when geographically separated campuses are operated. Students assigned to all campuses should receive the same rights and support services. Students should have the opportunity to move among the component programmes of the school.

E. Evaluation of Programme Effectiveness

To guide programme improvement, medical schools must evaluate the effectiveness of the educational programme by documenting the extent to which its objectives have been met. In assessing programme quality, schools must consider student evaluations of their courses and teachers, and an appropriate variety of outcome measures. Medical schools must evaluate the performance of their students and graduates in the framework of national and international norms of accomplishment, including assessments of individuals by the community.

IV. FACULTY

A. Number, Qualifications, and Functions

The recruitment and development of a medical school's faculty should take into account its mission, the diversity of its student body, and the population that it serves. There must be a sufficient number of faculty members in the subjects basic to medicine and in the clinical disciplines to meet the needs of the educational programme and the other missions of the school.

Persons appointed to a faculty position must have demonstrated achievements commensurate with their academic rank. Members of the faculty must have the capability and continued commitment to be effective teachers. Faculty members should have a commitment to continuing scholarly productivity characteristic of an institution of higher learning. The medical school faculty must make decisions regarding student admissions, promotion, and graduation, and must provide academic and career counselling for students.

Faculty should be chosen in keeping with the objectives of the programme, including patient and community centeredness.

B. Personnel Policies

There must be clear policies for faculty appointment, renewal of appointment, promotion, granting of tenure, and dismissal that involve the faculty, the appropriate department heads, and the dean. A medical school should have policies that deal with circumstances in which the private interests of faculty members or staff may be in conflict with their official responsibilities.

Faculty members should receive written information about their terms of appointment, responsibilities, lines of communication, privileges and benefits, and, if relevant, the policy on practice earnings. They should receive regularly scheduled feedback on their academic performance and their progress toward promotion. Opportunities for professional development must be provided to enhance faculty members' skills and leadership abilities in education and research.

C. Governance

The dean and a committee of the faculty should determine medical school policies. Schools should assure that there are mechanisms for direct faculty involvement in decisions related to the educational programme. The full faculty should meet often enough for all faculty members to have the opportunity to participate in the discussion and establishment of medical school policies and practices.

V. EDUCATIONAL RESOURCES

The CAAM must be notified of any substantial change in the number of students enrolled or in the resources of the institution, including the faculty, physical facilities, or the budget.

A. Finances

The present and anticipated financial resources of a medical school must be adequate to sustain a sound programme of medical education and to accomplish other institutional goals. Pressure for institutional self-financing must not compromise the educational mission of the medical school nor cause it to enroll more students than its total resources can accommodate.

B. General Facilities

A medical school must have, or be assured use of, buildings and equipment appropriate to achieve its educational and other goals. Appropriate security systems should be in place at all educational sites.

C. Clinical Teaching Facilities

The medical school must have, or be assured use of, appropriate resources for the clinical instruction of its medical students. A hospital or other clinical facility that serves as a major

site for medical student education must have appropriate instructional facilities and information resources. Required clerkships should be conducted in health care settings where staff in accredited programmes of graduate medical education, under faculty guidance, participates in teaching the students.

There must be written and signed affiliation agreements between the medical school and its clinical affiliates that define, at a minimum, the responsibilities of each party related to the educational programme for medical students. In the relationship between the medical school and its clinical affiliates, the educational programme for medical students must remain under the control of the school's faculty.

D. Information Resources and Library Services

The medical school must have access to well-maintained library and information facilities, sufficient in size, breadth of holdings, and information technology to support its education and other missions. The library and information services staff must be responsive to the needs of the facu1ty, junior staff/residents, and students of the medical school.

VI. INTERNSHIP

A. Structure of Internship

Graduates of the medical school must enter a period of supervised practise as an intern prior to full registration to practise in member countries of the CAAM. The period of an internship must be no less than one calendar year and should consist of supervised practise and training in approved posts in hospital and community facilities. The internship should include training in the disciplines of medicine, surgery, obstetrics and primary care and must include the care of adults, children and emergency cases.

B. Approved Internship Posts

The medical school in consultation with governments will identify and approve posts and institutions in member countries for the purposes of internship. Approval of internship posts must be done on the basis of written guidelines on the amount of work to be undertaken, including the periods of on-call duty. Approved internship posts must have written contracts with stated periods of leave, a portion of which must be taken at least every 6 months.

Hospitals approved for internship purposes must have the basic facilities for the care of patients such as pathology and imaging services. Departments/disciplines which are approved to supervise interns must have a programme of education activities which should include case reviews. Basic texts and other education material relevant to the discipline must be readily available for the intern.

C. Supervision of Interns

Supervising staff must be identified and have the appropriate qualifications to act as supervisors. Interns should have written assessments, signed by the approved supervisor, of each segment of the internship; such assessments should be made available for discussion with the intern. In the case of an unfavourable assessment, the intern should receive a warning in writing in sufficient time that remedial action could be taken by the intern.

In the case of an adverse report, i.e. the segment of the internship has not been approved as satisfactorily completed, the intern must be entitled to appeal to the medical school. The dean/chief academic officer of the medical school, in consultation with the employing authority, should consider the appeal.

Part 2: Explanatory Annotations

I. INSTITUTIONAL SETTING

IS-1 The goal of each programme of medical education leading an MB.BS./M.D. degree must be the meeting of standards for accreditation by the Caribbean Accreditation Authority for Education in Medicine (CAAM).

The accreditation process requires educational programmes to provide assurances that their graduates exhibit general professional competencies that are appropriate for entry to the next stage of their training, and that serve as the foundation for life-long learning and proficient medical care.

While recognizing the existence and appropriateness of diverse institutional missions and educational objectives, the CAAM subscribes to the proposition that local circumstances do not justify accreditation of a substandard programme of medical education.

A. Governance and Administration

IS-2 Medical schools are part of a university or chartered as an institution by the government of the jurisdiction in which it operates.

Accreditation will be conferred only on those programmes that are legally authorized under applicable law to provide a programme of education beyond secondary education.

IS-3 The manner in which the medical school is organised, including the responsibilities and privileges of administrative officers, faculty, students and committees must be promulgated in medical school or university bylaws.

IS-4 The governing body responsible for oversight of the medical school must be composed of persons who have the educational needs of the institution as their first priority and no clear conflict of interest in the operation of the school, its associated hospitals, or any related enterprises.

IS-5 The terms of the governing body members should be sufficiently long to permit them to gain an understanding of the programmes of the medical school.

1S-6 Administrative officers and members of a medical school faculty must be appointed by, or on the authority of, the governing body of the medical school or its parent university.

1S-7 The dean or chief official of the medical school, must have ready access to the administrative head of the university or other university official charged with final

responsibility for the school, and to other university officials as are necessary to fulfill the responsibilities of the dean's office.

1S-8 There must be clear understanding of the authority and responsibility for medical school matters among the administrative officials of the university, the dean of the school, the faculty, and the administrative officials of other components of the medical teaching complex and of the university.

IS-9 The dean must be qualified by education and experience to provide leadership in medical education, scholarly activity, and he/she or his/her deputy in the care of patients.

IS-10 The medical school administration should include such associate or assistant deans, department chairs, leaders of other organisational units, and staff as are necessary to accomplish the missions of the medical school.

There should not be excessive turnover or long-standing vacancies in medical school leadership. Medical school leaders include the dean, vice/associate deans, department chairs, and others where a vacancy could negatively impact institutional stability, especially planning for or implementing the educational programme. Areas that commonly require administrative support include admissions, student affairs, academic affairs, faculty affairs, postgraduate education, continuing education, hospital relationships, research, business and planning, and fund raising.

B. Academic Environment

1S-11 A medical school should be a component of a university offering other graduate and professional degree programmes that contribute to the academic environment of the medical school.

There should be regular and formal review of all graduate and professional programmes in which medical school faculty participate, to foster adherence to high standards of quality in education, research, and scholarship, and to facilitate the progress and achievement of the trainees

IS-I2 The programme of medical education must be conducted in an environment that fosters the intellectual challenge and spirit of inquiry appropriate to a community of scholars.

1S-13 Students should have the opportunity to participate in research and other scholarly activities of the faculty.

IS-14 Medical school faculty members from different disciplines should work together in teaching, research, and appropriate health care delivery programmes.

Because the education of both medical students and graduate physicians requires an academic environment that provides close interaction among faculty members, those skilled in teaching and research in the basic sciences must maintain awareness of the relevance of their disciplines to clinical problems. Conversely, clinicians must maintain awareness of the contributions that basic sciences, and non science areas such as culture and religion, bring to the understanding of clinical problems. These reciprocal obligations emphasize the importance of collegiality among medical school faculty across disciplinary boundaries and throughout the continuum of medical education.

II. MEDICAL STUDENTS

A. Admissions

1. *Entry Requirements*

MS-l Students studying medicine should acquire a broad education, including the humanities and social sciences.

An undergraduate degree or an adequate level in the sciences is necessary for entrance into medical school. A general education that includes the social sciences, history, arts, and languages is increasingly important for the development of physician competencies outside of the scientific knowledge domain.

MS-2 Premedical course requirements should be restricted to those deemed essential preparation for completing the medical school curriculum.

2. *Selection*

MS-3 The faculty of each school must develop criteria and procedures for the selection of students that are readily available to potential applicants and to their collegiate advisors.

MS-4 The final responsibility for selecting students to be admitted for medical study must reside with a duly constituted faculty committee.

Persons or groups external to the medical school may assist in the evaluation of applicants but should not have decision-making authority.

MS-5 Each medical school must have a pool of applicants sufficiently large and possessing the published qualifications to fill its entering class.

The size of the entering class and of the medical student body as a whole should be determined not only by the number of qualified applicants, but also the adequacy of critical resources:

- Finances.
- Size of the faculty and the variety of academic fields they represent.
- Library and information systems resources.
- Number and size of classrooms, student laboratories, and clinical training sites.
- Patient numbers and variety.
- Student services.
- Instructional equipment.
- Space for the faculty.

Class size considerations should also include:

- The need to share resources to educate graduate students or other students within the university.
- The size and variety of programmes of graduate medical education.
- Responsibilities of continuing education, patient care, research, the size of the community and the sensibility of the individual patient.

MS-6 Medical schools must select students who possess the intelligence, integrity, and personal and emotional characteristics necessary for them to become effective physicians in the social as well as the scientific sense.

MS-7 The selection of individual students should not be influenced by political or financial factors.

MS-8 Each medical school should have policies and practices ensuring the gender, racial, cultural, and economic diversity of its students.

The standard requires that the school's student body exhibit diversity in the dimensions noted. The extent of diversity needed will depend on the school's missions, goals, and educational objectives, expectations of the community in which it operates, and its implied or explicit social contract at the national level.

MS-9 Each school must develop and publish technical standards for admission of handicapped applicants

MS-l0 The institution's catalog or equivalent informational materials must describe the requirements for the MB.BS/M.D degree and all associated joint degree programmes; provide the most recent academic calendar for each curricular option, and describe all required courses and clerkships offered by the school.

A medical school's publications, advertising, and student recruitment should present a balanced and accurate representation of the mission and objectives of the programme.

MS-11 The catalogue or informational materials must also enumerate the school's criteria for selecting students, and describe the admissions process.

3. *Visiting and Transfer Students*

MS-12 Institutional resources to accommodate the requirements of any visiting and transfer students must not significantly diminish the resources available to existing enrolled students.

MS-13 Transfer students must demonstrate achievements in premedical education and medical school comparable to those of students in the class that they join.

MS-14 Prior course work taken by students who are accepted for transfer or admission to advanced standing must be compatible with the programme to be entered.

MS-15 Transfer students should not be accepted into the final year of the programme except under rare circumstances.

MS-16 The accepting school should verify the credentials of visiting students, formally register and maintain a complete roster of such students, approve their assignments, and provide evaluation to their parent schools.

Registration of visiting students allows the school accepting them to establish protocols or requirements for health records, immunizations, exposure to infectious agents or environmental hazards, insurance, and liability protection comparable to those of their own enrolled students.

MS-17 Students visiting from other schools for clinical clerkships and electives must possess qualifications equivalent to students they will join in these experiences.

B. Student Services

1. *Academic and Career Counselling*

MS-18 The system of academic advising for students must integrate the efforts of faculty members, course directors, and student affairs' officers with the school's counselling and tutorial services.

MS-19 There must be a system to assist students in career choice and application to internship, residency and postgraduate programmes, and to guide students in choosing elective courses.

MS-20 If students are permitted to take electives at other institutions, there should be a system centralized in the dean's office to review students' proposed extramural programmes prior to approval and to ensure the return of a performance appraisal by the host programme.

MS-21 The process of applying for internship or residency programmes should not disrupt the general medical education of the students.

2. ***Financial Aid Counselling and Resources***

MS-22 A medical school must provide students with effective financial aid and debt management counselling.

In providing financial aid services and debt management counselling, schools should pay close attention and alert students to the impact of non-educational debt on their cumulative indebtedness.

MS-23 Schools should develop financial aid resources that minimise total student indebtedness.

3. ***Health Services and Personal Counselling***

MS-24 Each school must have an effective system of personal counselling for its students that includes programmes to promote the well-being of students and facilitate their adjustment to the physical and emotional demands of medical school.

MS-25 Students must have access to confidential counselling and health services. No confidential report may be used in the academic evaluation or promotion of students receiving those services.

MS-26 Health services/insurance must be available to all students and their dependents, and all students must have access to disability insurance and to preventive and therapeutic health services.

MS-27 Medical schools should follow national guidelines in determining appropriate immunizations for medical students.

Medical schools should follow guidelines issued by the country’s ministry of health in the location of their training or elective programme.

MS-28 Schools must have policies addressing student exposure to infectious and environmental hazards.

The policies should include:

- education of students about methods of prevention;
- the procedures for care and treatment after exposure, including definition of

financial responsibility; and

- the effects of infectious and environmental disease or disability on student learning activities.

All registered students (including visiting students) need to be informed of these policies before undertaking any educational activities that would place them at risk.

C. The Learning Environment

MS-29 In the admissions process and throughout medical school, there should be no discrimination on the basis of gender, sexual orientation, age, race, religion, or creed.

MS-30 Each medical school must define and publicise the standards of conduct for the teacher-learner relationship, and develop written policies for addressing violations of those standards.

The standards of conduct need not be unique to the school but may originate from other sources such as the parent university. Mechanisms for reporting violations of these standards, such as incidents of harassment or abuse, should assure that they can be registered and investigated without fear of retaliation.

The policies also should specify mechanisms for the prompt handling of such complaints and support educational activities aimed at preventing inappropriate behaviour.

MS-31 The medical school must publicise to all faculty and students its standards and procedures for the evaluation, advancement, and graduation of its students and for disciplinary action.

MS-32 There must be a fair and formal process for taking any action that adversely affects the status of a student.

The process should include timely notice of the impending action, disclosure of the evidence on which the action would be based, an opportunity for the student to respond, and an opportunity to appeal any adverse decision related to promotion, graduation, or dismissal.

MS-33 Student records must be confidential and available only to members of the faculty and administration with a need to know, unless released by the student or as otherwise governed by laws concerning confidentiality.

MS-34 Students must be allowed to review and challenge their records.

MS-35 Schools should assure that students have adequate study space, lounge areas, and personal lockers or other secure storage facilities.

III. EDUCATIONAL PROGRAMME

A. Educational Objectives

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

Educational objectives are statements of the items of knowledge, skills, behaviours, 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, examination results, performance of graduates in residency training, performance in licensing examinations, etc.).

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

Each course or clerkship that requires physical or simulated patient interactions should specify the numbers and kinds of patients that students must see in order to achieve the objectives of the learning experience. They should also specify the extent of student interaction with patients and the venue(s) in which the interactions will occur, irrespective of the student's religious beliefs and with full respect for the autonomy of the patient. 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 in the criteria can be made if necessary without sacrificing educational quality.

ED-3 The objectives of the educational programme must be made known to all medical students and to the faculty, residents/junior staff, 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 any clinical affiliates where the educational programmes take place.

B. Structure

1. *General Design*

ED-4 The degree programme of medical education must include at least 130 weeks of instruction delivered over at least 4 calendar years.

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 alternative sites be designed to achieve the same educational objectives. Course duration or clerkship length should 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 Accredited programmes must notify CAAM of plans for any 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 CAAM encourages experimentation that aims at increasing the efficiency and effectiveness of medical education.

2. *Content*

ED-I0 The curriculum must include behavioural and socioeconomic subjects, in addition to basic science and clinical disciplines.

Subjects widely recognised as important components of the general professional education of a physician should be included in the medical education curriculum. 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, community and preventive medicine, as well as ethics and law and international codes of conduct.

ED-12 Instruction within the basic sciences should include laboratory or other practical exercises that entail accurate observations of biomedical phenomena.

ED-13 Critical analyses of data must be a component of all segments of the curriculum.

ED-14 Clinical instruction must cover all organ systems, and include the important aspects of preventive, emergency, acute, chronic, continuing, rehabilitative, and end-of-life care.

ED-15 Clinical experience in primary care must be included as part of the curriculum.

ED-I6 The curriculum should include clinical experiences in family medicine, internal medicine, obstetrics and gynaecology, child health/paediatrics, psychiatry, and surgery.

ED-17 Students' clinical experiences must utilize outpatient, inpatient and emergency settings.

ED-I8 Educational opportunities must be available in multi disciplinary 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-I9 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-20 There must be specific instruction in communication skills as they relate to physician responsibilities, including communication with patients, families, colleagues, other health professionals and conflict resolution.

ED-21 The curriculum must prepare students for their role in addressing the medical consequences of common problems, for example, providing instruction in the diagnosis, prevention, appropriate reporting, and treatment of violence and abuse, as well as the recognition and handling of personal stress.

ED-22 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, international human rights, and indicate where in the curriculum students are exposed to such material, and demonstrate the extent to which the objectives are being achieved.

ED-23 Medical students must learn to recognise and appropriately address gender and cultural and religious biases in themselves and others, 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 diseases. The objectives

should a1so address the need for self-awareness among students regarding any personal biases in their approach to health care delivery.

ED-24 A medical school must teach medical ethics with respect for religious and other human values, and their relationship to law and governance of medical practice. Students must be required to exhibit scrupulous ethical principles in caring for patients, and in relating to patients' families and others involved in patient care strive to encompass community concerns.

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 efforts.

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.

C. Teaching and Evaluation

ED-25 Residents/junior staff 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.

ED-26 Supervision of student learning experiences must be provided throughout required clerkships by members of the medical school's faculty.

ED-27 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, behaviours, and attitudes.

Evaluation of student performance should measure not only retention of factual knowledge, but also development of the skills, behaviours, 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 CAAM does not consider the use of frequent tests which condition students to memorize details for short-term retention only, a good system of evaluation to foster self- initiated learning by students.

ED-28 There must be ongoing assessment that assures students have acquired and can demonstrate on direct observation the core clinical skills, behaviours, and attitudes that have been specified in the school's educational objectives.

ED-29 There must be evaluation of problem solving, clinical reasoning, and communication skills, in relation to both individuals and communities.

ED-30 The faculty of each discipline should set the standards of achievement in that discipline, including knowledge attitudes and practice in the discipline.

ED-31 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, criterion-referenced vs. norm-referenced grading, reliability and validity issues, formative vs. summative assessment, and objective vs. subjective formats. Courses or clerkships that are short in duration may not have sufficient time to provide structured activities for formative evaluation, but should provide some alternate means (such as self-testing or teacher consultation) that will allow students to measure their progress in learning.

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.

ED-32 Each student should be evaluated early enough during a unit of study to allow time for remedial work.

ED-33 Narrative descriptions of student performance including personal qualities and interactions should be included as part of evaluations in all required courses and clerkships where teacher-student interaction permits this form of assessment.

D. Curriculum Management

1. *Roles and Responsibilities*

ED-34 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 programme as a whole. An effective central curriculum authority will exhibit:

- Faculty, student, and administrative participation.
- Expertise in curricular design, pedagogy, and evaluation methods.

- Empowerment to work in the best interests of the institution’s programmes without regard for parochial or departmental pressures.

The phrase "coherent and coordinated curriculum" implies that the programme as a whole will be designed to achieve the school's overall educational objectives. Evidence of coherence and coordination includes:

- Logical sequencing of the various segments of the curriculum.
- Content that is coordinated and integrated within and across the academic periods of study (horizontal and vertical integration).
- Methods of pedagogy and student evaluation that are appropriate for the achievement of the school’s educational objectives.

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

- Evaluation of programme effectiveness by outcomes analysis.
- Monitoring of content and workload in each discipline, including the identification of omissions 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 meetings 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-35 The programme'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-36 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-37 The academic faculty 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 programme as a whole. However, he or she may 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 programme include:

- Adequate numbers of teachers who have the time and training necessary to achieve the programme's objectives.
- Appropriate teaching space for the methods of pedagogy employed in the educational programme.
- 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 a departmental level.

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

ED-38 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 his/her subsequent career specialty.

ED-39 The committee should give careful attention to the impact on students of the amount of work required, including the frequency of examinations and their scheduling.

2. *Geographically Separated Programmes*

ED-40 The medical school's academic officers must be responsible for the conduct and quality of the educational programme and for assuring the adequacy of faculty at all educational sites.

ED-41 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 programme.

ED-42 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, electronic communication, or 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-43 There must be a single standard for promotion and graduation of students across geographically separate campuses.

ED-44 The parent school must assume ultimate responsibility for the selection and assignment of all medical students when geographically separated campuses are operated.

ED-45 Students assigned to all campuses should receive the same rights and support services.

ED-46 Students should have the opportunity to move among the component programmes of the school.

E. Evaluation of Programme Effectiveness

ED-47 To guide programme improvement, medical schools must evaluate the effectiveness of the educational programme by documenting the extent to which its objectives have been met.

ED-48 In assessing programme quality, schools must consider student evaluations of their courses and teachers, and an appropriate variety or outcome measures.

Among the kinds of outcome measures that serve this purpose are data on student performance, academic progress and programme completion rates, acceptance into residency/postgraduate programmes, postgraduate performance, and practice characteristics of graduates.

ED-49 Medical schools must evaluate the performance of their students and graduates in the framework of national and international norms of accomplishment and performance within the health care system.

IV. FACULTY

A. Number, Qualifications, and Functions

FA-l The recruitment and development of a medical school's faculty should take into account its mission, the diversity of its student body, and the population that it serves.

FA-2 There must be a sufficient number of faculty members in the subjects basic to medicine and in the clinical disciplines to meet the needs of the educational programme and the other missions of the medical school.

In determining the number of faculty needed for the educational programme, medical schools should consider that faculty may have educational and other responsibilities in academic programmes besides medicine. In the clinical sciences, the number and kind of faculty appointed should also relate to the amount of patient care, health promotion and prevention activities required to conduct meaningful clinical teaching across the continuum of medical education.

FA-3 Persons appointed to a faculty position must have demonstrated achievements commensurate with their academic rank.

FA-4 Members of the faculty must have the capability and continued commitment to be effective teachers.

Effective teaching requires knowledge of the discipline and an understanding of curriculum design and development, curriculum evaluation, and methods of instruction. Faculty members involved in teaching, course planning and curricular evaluation should possess or have ready access to expertise in teaching methods, curriculum development, programme evaluation, and student evaluation. Such expertise may be supplied by an office of medical education or by faculty/staff members with backgrounds in educational science.

Faculty involved in the development and implementation of a course, clerkship, or larger curricular unit should be able to design the learning activities and corresponding evaluation methods (student and programme) in a manner consistent with the school's stated educational objectives and sound educational principles.

Community physicians appointed to the faculty, on a part-time basis or as volunteers, should be effective teachers, serve as role models for students, and provide insight into contemporary methods of providing patient care, prevention of illness and promotion of health.

Among the lines of evidence indicating compliance with this standard are the following:

- Documented participation of the faculty in professional development activities related specifically to teaching and evaluation.
- Attendance at regional or national meetings on educational affairs.
- Evidence that faculty members' knowledge of their discipline is current.

FA-5 Faculty members should have a commitment to continuing scholarly productivity characteristic of an institution of higher learning.

FA-6 The medical school faculty must make decisions regarding student admissions, promotion, and graduation, and must provide academic and career counselling for students.

B. Personnel Policies

FA-7 There must be clear policies for faculty appointment, renewal of appointment, promotion, granting of tenure, and dismissal that involve the faculty, the appropriate department heads, and the dean.

FA-8 A medical school should have policies that deal with circumstances in which the private interests of faculty members or staff may be in conflict with their official responsibilities.

FA-9 Faculty members should receive written information about their terms of appointment, responsibilities, lines of communication, privileges and benefits, and, if relevant, the policy on practice earnings.

FA-10 They should receive regularly scheduled feedback on their academic performance and their progress toward promotion.

> Feedback should be provided by departmental leadership or, if relevant, other institutional leadership.

FA-11 Opportunities for professional development must be provided to enhance faculty members' skills and leadership abilities in education and research.

C. Governance

FA-12 The dean and a committee of the faculty should determine medical school policies.

> This committee, which typically consists of the heads of major departments, may be organised in any manner that brings reasonable and appropriate faculty influence into the governance and policymaking processes of the medical school.

FA-13 Schools should assure that there are mechanisms for direct faculty involvement in decisions related to the educational programme.

> Important areas where direct faculty involvement is expected include admissions, curriculum development and evaluation, and student promotions. Faculty members also should be involved in decisions about any other mission-critical areas specific to the school. Strategies for assuring direct faculty participation may include peer selection or other mechanisms that bring a broad faculty perspective to the decision-making process, independent of departmental or central administration points of view. The quality of an

educational programme may be enhanced by the participation of volunteer faculty in faculty governance, especially in defining educational goals and objectives.

FA-14 The full faculty should meet often enough for all faculty members to have the opportunity to participate in the discussion and establishment of medical school policies and practices.

V. EDUCATIONAL RESOURCES

ER-l The CAAM must be notified of any substantial change in the number of students enrolled or in the resources of the institution, including the faculty, physical facilities or the budget.

A. Finances

ER-2 The present and anticipated financial resources of a medical school must be adequate to sustain a sound programme of medical education and to accomplish other institutional goals.

The costs of conducting an accredited programme leading to the MB.BS/M.D degree should be supported from diverse sources, including tuition, endowments, support from the parent university, covenants, grants from organisations and individuals, and appropriations by government. Evidence for compliance with this standard will include documentation of adequate financial reserves to maintain the educational programme in the event of unexpected revenue losses, and demonstration of effective fiscal management of the medical school budget.

ER-3 Pressure for institutional self-financing must not compromise the educational mission of the medical school nor cause it to enroll more students than its total resources can accommodate.

Reliance on student tuition should not be so great that the quality of the programme is compromised by the need to enroll or retain inappropriate numbers of students or students whose qualifications are substandard.

B. General Facilities

ER-4 A medical school must have, or be assured use of, buildings and equipment appropriate to achieve its educational and other goals.

The medical school facilities should include offices for faculty, administrators, and support staff; laboratories and other space appropriate for the conduct of research; student classrooms and laboratories; lecture hall(s) sufficiently large

to accommodate a full year's class and any other students taking the same courses; space for student use, including student study space; space for library and information access; and space for the humane care of animals when animals are used in teaching or research.

ER-5 Appropriate security systems should be in place at all educational sites.

C. Clinical Teaching Facilities

ER-6 The medical school must have, or be assured use of, appropriate resources for the clinical instruction of its medical students.

Clinical resources should be sufficient to ensure breadth and quality of ambulatory and bedside teaching. They include adequate numbers and types of patients (acuity, case mix, age, gender, etc) as well as physical resources for the treatment of illness the prevention of disease and the promotion of health.

ER-7 A hospital or other clinical facility that serves as a major site for medical student education must have appropriate instructional facilities and information resources.

Appropriate instructional facilities include areas for individual student study, for conferences, and for large group presentations (lectures). Sufficient information resources, including library holdings and access to other library systems, must either be present in the facility or readily available in the immediate vicinity. A sufficient number of computers are needed that allow access to the Internet and to other educational software. Call rooms and lockers, or other secure space to store personal belongings, should be available for student use.

ER-8 Required clerkships should be conducted in health care settings where staff in accredited programmes of graduate medical education, under faculty guidance, participates in teaching the students.

It is understood that there may not be junior staff at some community clinics. In that case, medical students must be adequately supervised by attending staff.

ER-9 There must be written and signed affiliation agreements between the medical school and its clinical affiliates that define, at a minimum, the responsibilities of each party related to the educational programme for medical students.

Written agreements are necessary with hospitals that are used regularly as inpatient sites for core clinical clerkships. Additionally affiliation agreements may be warranted with other clinical sites that have a significant role in the clinical education programme.

Affiliation agreements should address, at a minimum, the following topics:

- The assurance of student and faculty access to appropriate resources for medical student education.
- The primacy of the medical school over academic affairs and the education/evaluation of students.
- The role of the medical school in appointment/assignment of faculty members with responsibility for medical student teaching.
- Specification of the responsibility for treatment and follow-up when students are exposed to infectious or environmental hazards or other occupational injuries.

If department heads of the school are not the clinical service chiefs, the affiliation agreement must confirm the authority of the department head to assure faculty and student access to appropriate resources for medical student education. The CAAM should be advised of anticipated changes in affiliation status of a programme's clinical facilities.

ER-I0 In the relationship between the medical school and its clinical affiliates, the educational programme for medical students must remain under the control of the school's faculty.

Regardless of the location where clinical instruction occurs, department heads and faculty must have authority consistent with their responsibility for the instruction and evaluation of medical students.

The responsibility of the clinical facility for patient care should not diminish or preclude opportunities for medical students to undertake patient care duties under the appropriate supervision of medical school faculty and junior staff/residents.

D. Information Resources and Library Services

ER-11 The medical school must have access to well-maintained library and information facilities, sufficient in size, breadth of holdings, and information technology to support its education and other missions.

There should be physical or electronic access to leading biomedical, clinical, and other relevant periodicals, the current numbers of which should be readily available. The library and other learning resource centres must be equipped to allow students to access information electronically, as well as to use self-instructional materials.

ER-12 The library and information services staff must be responsive to the needs of the faculty, junior staff/residents and students of the medical school.

A professional staff should supervise the library and information services, and provide instruction in their use. The library and information services staff should be familiar with current regional and national information resources and data systems, and with contemporary information technology.

Both school officials and library/information services staff should facilitate access of faculty, residents, and medical students to information resources, addressing their needs for information during extended hours and at dispersed sites.

IV. INTERNSHIP

A. Structure of Internship

IT-1 Graduates of the medical school must enter a period of supervised practise as an intern prior to full registration to practise in member countries of the CAAM.

The CAAM recommends that graduates of fully accredited schools who satisfactorily complete an approved internship should be registered without further examination in member countries.

IT-2 The period of internship must be no less than one calendar year and should consist of supervised practise and training in approved posts in hospital and community facilities.

Posts and institutions may be approved in or outside of member countries provided they satisfy the same criteria as those approved in member countries.

IT-3 The internship should include training in the disciplines of medicine, surgery, obstetrics and primary care and must include the care of adults, children and emergency cases.

The period of training in a particular discipline under a supervisor must be no less than six weeks, exclusive of any leave period.

Requirements may be combined, for example, paediatric surgery may count as experience in the care of children and surgery. Primary care requirements may be met in community practice or in an emergency department.

B. Approved Internship posts

IT-4 The medical school in consultation with governments will identify and approve posts and institutions in member countries for the purposes of internship.

Approved posts must satisfy the requirements of the CAAM for education and supervision standards.

Approved posts should be reviewed every five years or on the receipt of information which may affect the approval of such posts.

IT-5 Approval of internship posts must be done on the basis of written guidelines on the amount of work to be undertaken, including the periods of on-call duty.

The work load of an intern is determined by the number of hospital beds they are responsible for, the turnover of patients, the number of clinics attended and the number of patients seen in those clinics. The number of patients must be such that the intern has the time and the opportunity to ask questions of their supervisors and to read about the patient care problems faced.

An intern is normally expected to be able to satisfactorily complete the tasks assigned in four and a half normal working days or any other contractual arrangement.

Continuity of care is encouraged, however, an intern must have clear periods of uninterrupted sleep in every 36 hours period. Therefore, on call periods and other work commitments must be arranged in such a manner that this objective is satisfied.

IT-6 Approved internship posts must have written contracts with stated periods of leave, a portion of which must be taken at least every 6 months.

Contracts for interns must include accommodation arrangements that allow ready access to carry out their emergency duties and to be able to rest and sleep in between patient care duties.

Interns must have a minimum of four weeks paid leave a year, at least one week of which must be taken within a six-month period. Any periods of approved leave for illness must not be deducted from vacation leave but should be taken into account when assessing the period of internship in a particular discipline.

IT-7 Hospitals approved for internship purposes must have the basic facilities for the care of patients such as pathology and imaging services.

IT-8 Departments/disciplines which are approved to supervise interns must have a programme of education activities which should include case reviews of management including ethical issues.

Interns must have access to organised education activities at least twice a month.

IT-9 Basic texts and other education material relevant to the discipline must be readily available for the intern.

C. Supervision of Interns

IT-10 Supervising staff must be identified and have the appropriate qualifications to act as supervisors.

Supervisors must have the appropriate training, postgraduate qualifications and/or experience in the discipline and must have the final responsibility for the care of the patients in the discipline.

Supervisors may be supported in their supervision duties by junior staff/residents. On any particular service the number of interns must not exceed the number of support junior staff.

IT-11 Interns should have written assessments, signed by the approved supervisor, of each segment of the internship; such assessments should be made available for discussion with the intern.

The assessments of interns must be made available to the institution in which the internship is done and the dean of the medical school.

A signed summary assessment of the disciplines completed during the internship should be available to the dean of the medical school and registration authorities.

IT-12 In the case of an unfavourable assessment, the intern should receive a warning in writing in sufficient time that remedial action could be taken by the intern.

IT-13 In the case of an adverse report, i.e. the segment of the internship has not been approved as satisfactorily completed, the intern must be entitled to appeal to the medical school. The dean/chief academic officer of the medical school, in consultation with the employing authority, should consider the appeal.

The dean and the employing authority must make arrangement for the satisfactory completion of the internship.