

IRAQI  
NATIONAL  
STANDARD FOR  
ACCREDITATION  
OF MEDICAL  
COLLEGES

National Council for Accreditation of Medical  
Colleges

*2016*



## **Iraqi National Standards for Accreditation of Medical Colleges**

REVISED BY

Ministry of Health, Deans of Colleges of Medicine,

National Council for Accreditation of Medical Colleges,  
and Advisory Board

Endorsed by

National Council for Accreditation of Medical Colleges, Ministry of  
Higher Education and Scientific Research, World Health Organization,  
World Federation for Medical Education.

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*National Council of Accreditation of Medical  
Colleges*

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## **Background:**

The purpose of accreditation and quality improvement in medical education is to reflect the changing conditions in the health care delivery system and prepare physicians for the needs and expectations of Iraqi society. Accreditation is both a statement of affirmation and empowerment for higher education institutions (Colleges), used to obtain a distinguished character and identity, and gives a seal of approval that actions taken to improve quality are being successful. It is the gate way towards total quality assurance and it is also considered to be a motivation for colleges to promote a comprehensive educational process and quality systems to raise the level of confidence in the medical college and its graduates. Accreditation is a mandatory peer – review process designed to attest the educational quality of new and established educational programs to pre-defined standards. The Deans of Colleges of Medicine in Iraq have approved the need to develop basic minimum standards for the accreditation of medical Colleges to ensure they meet both the national and international quality standards, and also the interests of the public and students. It is imperative to have an established body at national level responsible for accreditation. The recommendations and guidelines in this document have been modified from Arabian Gulf Cooperation Council ‘Recommendations & Guidelines on Minimum Standards for Establishing and Accrediting Medical Schools in The Arabian Gulf Countries’ and also based on the joint World Health Organization and the World Federation for Medical Education (WFME) recent recommendations on Standards for Basic Medical Education.

The overall aim of the accreditation process is to evaluate the medical program in any particular college against its own goals and objectives in order for graduates to be competent professionals, provided these are concurrent with the general principles described

below. It is the medical colleges' responsibility to develop and implement a curriculum that achieves these objectives. An appropriate internal appraisal mechanism must be in place to monitor the implementation of the curriculum and make appropriate changes in relation to varying requirements. This sets of standards for use in the regular accreditation of medical schools in Iraq. However, the value of accreditation is not just in the quality assurance of individual medical schools; it is in the creation of a general culture of quality improvement in medical education, to the ultimate benefit of the health of the population.

## 1. Mission

- 1.1. The Medical College will have a documented mission statement, aims and educational objectives to produce competent graduates who are suitably prepared to meet the needs and demands of human rights and Iraqi values as physicians. The mission statements and objectives are being set in context of participation from key stakeholders, namely the college Dean, medical college faculty, medical students, health and education authorities, health professional associations and health societies, community and civil society.
- 1.2. The curriculum objectives should be governed by the quality and volume of material which should be learned by students in order to qualify them to deal with the common and prominent medical problems in the community with high level of competence and to aspire be lifelong learners.

## 2. CURRICULUM

*Annotation: Curriculum; in this document refers to the educational program and includes a statement of the intended educational outcomes, the content/syllabus, experiences and processes of the program, including a description of the structure of the planned instructional and learning methods and assessment methods. The curriculum should set out what knowledge, skills, and attitudes the student will achieve.*

### 2.1. Goals

*Annotation; Goal is a general principle that guides decision making.*

- 2.1.1. The overall goal of undergraduate medical education program is to produce multidisciplinary educated medical graduates who are competent to practice both safely and effectively.
- 2.1.2. Graduates must have an appropriate foundation, not only to function upon graduation as a physician, but be prepared to pursue lifelong learning and readiness for further training.

**Annotation;** *Lifelong learning: the curriculum need to provide opportunities for students to learn by practice, the abilities for self assessment ,discover gaps and seek and learn further knowledge, skills, attitudes from different sources to bridge gaps. This can be achieved in active learning in small group learning which is structured around meaningful theme ( e.g. case, problem) with formative assessment and reporting.*

- 2.1.3. Emphasis must be placed on the professional behavior and values in the practice of medical science, rather than on the acquisition of a detailed compendium of current knowledge or a comprehensive list of clinical skills.
- 2.1.4. The program must be responsive to the health and developmental needs of the community, with continued community engagement
- 2.2. Objectives of Undergraduate Medical Education: The outcome objectives must result in medical graduates who are competent and equipped to respond to the health needs of individuals and families based on a service that is compassionate, caring and taking into consideration human rights and gender equity. The competencies, which should be exhibited by the student at the point of graduation, must be defined. These must include the skills of continuing professional development.

**Annotation;** *Objectives are specific, measurable steps that can be taken to meet the goal.*

- 2.3. Program duration: The duration of the program in Iraq is not less than 200 weeks, this is based on the educational and experience required for addressing common health needs and problems.
- 2.4. Curriculum Design and Organization
- 2.4.1. The curriculum must disseminate essential factual knowledge, impart requisite professional skills in communication and patient management, develop critical thinking, analytical ability and enhance the development of desirable professional behaviors and values founded in medical ethics relevant to Iraqi culture.
- 2.4.2. The units into which the curriculum is divided must demonstrate adequacy of a core content to ensure that the required competencies of knowledge, skills and professional behavior for entry into medical practice are met.
- 2.4.3. The curriculum should provide opportunities for self-directed learning, for taking optional/elective units, and for gaining exposure to a wide range of institutional and community experiences.
- 2.4.4. Students must spend at least three academic years of their training in direct contact with individuals, families and the community with increasing clinical responsibility under supervision. And the students should be exposed to patients and community as early as possible.
- 2.4.5. The curriculum must enable students to acquire appropriate knowledge, skills and professional behavior relating to disease prevention, health promotion and community health.
- 2.4.6. Medical ethics must be an integral part of the curriculum.

- 2.4.7. Basic science teaching must be relevant to the overall objectives of the medical college, and such relevance must be apparent to the faculty and students. Thus, basic science must illustrate the importance of principles being taught to the understanding of health and disease, both at the individual and community level.
- 2.4.8. Clinical medicine must be taught in such a way that reinforces underlying scientific principles and humanitarian values.
- 2.4.9. Staff from basic science departments should be involved in the teaching of clinical disciplines, as is the involvement of clinicians in the teaching of basic sciences.
- 2.4.10. An appropriate level of horizontal (concurrent) and vertical (sequential) integration (end point spiral integration) should be in place in order to achieve the educational objectives.

***Annotation:** Examples of horizontal (concurrent) integration would be integrating basic sciences such as anatomy, biochemistry and physiology or integrating disciplines of medicine and surgery such as medical and surgical gastroenterology or nephrology and urology.*

*Examples of vertical (sequential) integration would be integrating metabolic disorders and biochemistry or cardiology and cardiovascular physiology.*

- 2.4.11. Explicit statements about the level of knowledge and understanding, skills, and professional behavior expected of the students at each phase of the curriculum will enhance its organization.

- 2.5. Curriculum Implementation: Schools must demonstrate that they have processes in place that allow the overall content and balance of the curriculum and its assessment to be defined in relation to the stated objectives of the medical school. A Curriculum Committee must exist and be given the authority for planning and overseeing the comprehensive curriculum and must have the ability to exhibit sufficient control over the curriculum to secure its objectives and development.
- 2.6. Teaching and Learning Methods and Educational Settings: These must be consistent with the schools educational objectives.
  - 2.6.1. Teaching methods in different settings (lectures, tutorials, site visits, practical's) must use strategies which promote student-centered rather than teacher-centered learning, encourage active student interaction, stimulate analytical thinking and organization of knowledge, and foster life-long learning skills.
  - 2.6.2. The school must ensure that students are made aware of the importance of information technology and medical informatics and opportunities are provided for the learning and practice of these skills.
  - 2.6.3. Professional clinical skills must be introduced early in the curriculum and integrated with basic medical sciences. Skills laboratories must be developed and used in the preparation of students for their first day in practice.
  - 2.6.4. Throughout the program, students must be exposed to a range of settings in which health care is delivered and health promotion is practiced. In addition to teaching hospitals and primary health care centers, students must also have the opportunity to work in the community,

with families, in community health centers, in rural hospitals, in general practice, and in centers for those with chronic mental, physical disability and workplace to address occupational health.

- 2.6.5. Students must be exposed to common medical problems that are not seen in the hospital setting, and experience the effect of the family and community environment on symptom expression and therapeutic responses.
- 2.6.6. Mechanisms must be in place to ensure that all clinical placements are well organized and adequately supervised. The objectives and the assessment of all clinical placements, in hospitals and in the community must be clearly defined and made known to both the students and teachers.
- 2.6.7. It is desirable that students are given the opportunity to undertake a supervised elective study in areas such as social or environmental and community service with identified objectives, which are assessed by the Faculty.
- 2.6.8. The student should have at least one research project through the study period. Students must be exposed to issues and concerns that will violate medical research ethics and be guided in the development of research ethical professional behavior.

### **3. STUDENTS ASSESSMENT**

#### **3.1. Student assessment;**

- 3.1.1. Must match the objectives of the medical course. Methods of summative and formative assessment must be explicit and communicated to the students at the outset of the curriculum.

- 3.1.2. College should use “blueprints” in all student assessments to ensure systematic and objective assessment based on relevant learning objectives.
- 3.2. Continuous assessments must play an integral role in the education of medical students.
- 3.3. Methods of formative and summative assessment may comprise a variety of approaches, e.g. written assessments, oral assessments, projects, documentation of the performance of practical procedures (log book), checklists, clinical assessments and case examinations with real or simulated patients.
- 3.4. Clinical examinations must form a significant component of the overall process of assessment in the clinical disciplines.
- 3.5. Students must also be assessed on communication skills and professional behavior towards patients and other members of the health care team.

#### **4. PROGRAM EVALUATION**

- 4.1. Mechanisms for Monitoring and Evaluating the Curriculum: Each medical school must develop mechanisms for monitoring and evaluating the curriculum that are disseminated to faculty and students. Representative student as well as faculty opinions must be obtained regularly for each component of the curriculum and evaluated by the appropriate committee, in order to identify problematic areas and initiate corrective measures. Other pathways for student feedback on the curriculum must also exist, as High pass or failure rates need to be thoroughly investigated by the medical school.

**Annotation:** *Program monitoring would imply the routine collection of data about key aspects of the curriculum to ensure that the educational process is on track and to identify any areas in need of intervention.*

*Program evaluation: It would imply the use of reliable and valid methods of data collection and analysis for the purpose of demonstrating the qualities of the educational program or core aspects of the program in relation to the mission and the curriculum, including the intended based medicine and lifelong learning.*

- 4.2. Quality of Graduates; Medical colleges must
  - 4.2.1. Have mechanisms for obtaining feedback about the performance of their graduates from the graduates themselves, from the involved faculty, from civil society and from the health institutions where their students work as interns and residents after graduation.
  - 4.2.2. Respond to community and employer feedback about the performance of their graduates.

## 5. STUDENTS

- 5.1. Selection of Students: Students selected for a medical school must have successfully completed their formal secondary education and admission interview. The Medical College may choose to apply a student admission policy or placement test.

**Annotation;** *Admission policy would imply adherence to possible national regulation as well as adjustments to local circumstances.*

- 5.2. Size of Student Intake: The recommended intake must be subjected to the available resources and fulfillment of requirements such as student: faculty ratios. Student ration is determined for theory; laboratory and clinical settings.
- 5.3. Student Support Services; Support services must include access to counseling services with trained staff, a student health service and student academic advisers. Students must be advised on the risks to themselves and to patients when dealing with infectious diseases. The medical school must have a policy on the immunization of students against infectious diseases, and a mechanism for monitoring its implementation.
- 5.4. Personal Development of Students: The curriculum must provide opportunities for students' extracurricular activities in pursuit of their personal and professional development.

## **6. STAFF**

- 6.1. Faculty to Student Ratio: the academic staff cadre must be such that, overall, the medical school will have a 1:10 ratio of staff for clinical learning, with ratio for laboratory 1:6, 1:5 for group work and 1:60 in lectures. It is imperative that at least 70 % of the faculties are full time. Each department must have at least one full-time Professor or Assistant Professor. Departments must also have adequate numbers of nonacademic support staff (secretaries, technicians).
- 6.2. Qualifications for Recruitment and Promotion of Academic staff:
  - 6.2.1. Faculty recruitment and promotion must be guided by the University regulations. In the case of a private medical college, the University regulations in Iraq must guide the process of recruitment and promotion.

- 6.2.2. Non-medically qualified basic science teachers must be encouraged to teach their subjects in such a way that relevance to medicine is apparent to students.
- 6.2.3. Making joint appointments between basic science and clinical departments.
- 6.2.4. Making part-time appointments.
- 6.2.5. Making joint appointments between universities and hospitals.
- 6.2.6. Conferring academic designation for hospital or community practitioners involved in teaching and research.
- 6.2.7. Allowing promotion of part-time clinical faculty according to the University regulations.
- 6.2.8. Ensuring that faculty is publishing research according to set criteria.
  
- 6.3. Academic Staff Development and Career Review
  - 6.3.1. Medical education unit needs to be available with clear policy for the unit.
  - 6.3.2. Medical schools must have in place a policy for staff development and career review. The process must be formative, and provide opportunities for the mentoring of staff by their immediate superiors and feedback from students.
  - 6.3.3. Staff must have access to staff development program appropriate to their developmental needs.
- 6.4. Teaching support and advice on Evidence-Based Medicine teaching and learning are available.
- 6.5. An established plan for human resources development.

***Annotation:*** *Training support and development would involve all teachers and staff, (not only new teachers), and also include teachers employed by hospitals and PHC.*

## **7. EDUCATIONAL RESOURCES**

7.1. Physical Facilities: The medical school must have adequate resource facilities for diverse learning settings such as lectures, tutorials and practical classes, including auditoriums, laboratories (multi-disciplinary, basic medical sciences and professional skills laboratories), dissection rooms and anatomy/pathology museums, tutorial rooms, audio-visual equipment, laboratory equipment and computers for satisfactory delivery of the curriculum. The physical resources must respond to the curriculum structure, organization and implementation.

### **7.2. Learning Resource Facilities**

7.2.1. Library Resources including virtual library: The school must have a collection of reference materials meeting the standards that are adequate to meet the curriculum and research needs of the students and faculty; support staff must be available to help the students. It is advisable that students have access to computer-based reference systems. A core of essential journals must be available in paper and /or electronic form, it should also be ensured that the most recent periodicals, and a number of referenced books are available.

7.2.2. Learning Resource Unit: this must be capable of providing support to learning and teaching including established skill laboratories plus the production of audiovisual aids and electronic networking facilities.

7.3.1. Clinical Learning environment / Teaching Primary Health Care and Hospitals: Sites for teaching and clinical environments, including primary health care centers and teaching hospitals, should meet the health institutions accreditation. In case there is a need to expand the clinical teaching of students or the

unavailability of a University hospital, an official agreement must be reached between the medical school and affiliated teaching hospitals, indicating clearly the terms of cooperation and commitment. This agreement must be subject to regular review and there must be clear evidence that the relationship is functioning effectively.

- 7.3.2. Specialties and Teaching Beds; Affiliated health care institutions must be suitable for medical education and have teaching beds and outpatient clinics in the main specialties (surgery, medicine, pediatrics, obstetrics and gynecology, accident and emergency. ENT, Dermatology and other specialties) based on the health problems.
- 7.3.3. Student to Hospital Bed Ratio: With regard to the specialties of medicine, surgery, obstetrics and gynecology, and pediatrics, a medical college must have access to at least three occupied hospital beds per student in a clinical clerkship rotation at a given time. A medical college with an intake of 100 students per year must be affiliated to a teaching hospital(s) providing approximately 300-500 beds with high occupancy rate.
- 7.3.4. Ambulatory Care Services: Access to outpatient clinics and primary health care centers must be available. Learning and teaching in ambulatory care services are essential for the training of medical students.
- 7.3.5. Educational: library and on-call facilities must be available for students in the health care facilities.
- 7.4. Student Welfare Facilities must be provided for student study, sport and recreation.

## **8. GOVERNANCE AND ADMINISTRATION OF THE MEDICAL COLLEGE.**

8.1. Administration and Structure within the University: The College must have sufficient autonomy to be able to direct resources in an appropriate manner to achieve the overall objectives, in addition the college must have control over the curriculum, and a clear direct line of responsibility for the curriculum and its resources.

***Annotation:** Management means the act and/or the structure concerned primarily with the implementation of the institutional and program policies including the economic and organizational implications i.e. the actual allocation and use of resources within the medical school. Implementation of the institutional and program policies would involve carrying into effect the policies and plans regarding mission, the curriculum, admission, staff recruitment and external relations.*

### 8.2. Relationship with Affiliated Institutions and the Community

- 8.2.1. University academic staff working within teaching hospitals and other health care institutions must be integrated into the service and administrative activities of the affiliated institution.
- 8.2.2. Institutions associated or affiliated with university medical schools must share the educational and research objectives of the medical school and should work towards being accredited.
- 8.2.3. There must be effective methods for the medical school to communicate with, and receive the opinions of, medical practitioners, allied health professionals, community health workers and recipients of health care in the community.

### 8.3. Funding

- 8.3.1. Schools must ensure that their financial resources are sufficient to allow the school's objectives to be achieved and to maintain high standards of medical education.
- 8.3.2. Sources of financial support must be transparent and fully disclosed.

### 8.4. Governance

- 8.4.1. Providing an up-to-date and accurate organizational chart including the relation with the university.
- 8.4.2. All staff must be informed about their role and responsibility with effective coordination and leadership across the college.
- 8.4.3. A central registration of all policies and regulations is available to staff and students.

**Annotation:** *Governance is primarily concerned with policy making, the processes of establishing general institutional and program policies and also with control of the implementation of the policies.*

## 9. RESEARCH

- 9. An active research environment within a medical college is necessary. Departments must strive to achieve an overall balance in which individuals may make differently weighted contributions in the areas of teaching, research and clinical service. Opportunities for students to be involved in research activities at any stage of their medical education must be provided. The College must have a time plan to develop and implement research.

**Annotation:** *The balance of capacity between teaching, research and service functions would include provision of protected time for*

*each function, taking into account the needs of the medical school and professional qualifications of the teachers.*

## **10. CONTINUOUS PROFESSIONAL DEVELOPMENT**

- 10.1. Medical colleges must recognize the need for continuing medical and health professional education.
- 10.2. The College has a written plan on CME and CPD that is known to faculty and staff.
- 10.3. The College ensures that faculty is participating actively in CPD. Regular symposiums, workshops and conferences should be organized to fulfill these needs.

***Annotation:*** *CPD includes all activities that doctors undertake, formally and informally, to maintain, update, develop and enhance their knowledge, skills and attitudes in response to the needs of their patients. CPD is a broader concept than CME, which describes continuing education in the knowledge and skills of medical practice.*



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