



EVIDENCE GENERATION BOOKLET

**MANUAL OF EVIDENCE FOR SELF-
ASSESSMENT STUDY**

National Council for Accreditation of Medical
Colleges (NCAMC)
Republic of Iraq

November 2025

Second Edition



Evidence Generation Booklet: Manual of Evidence for Self-Assessment Study

National Council for Accreditation of Medical Colleges (NCAMC)
Republic of Iraq

Edited by:

Prof. Nazar Haddad
Prof. Sinan Bahjat Alrifai
Dr. Haneen Al Ibrahim

Authored by:

Members of the NCAMC

November 2025

Second Edition

| Contents | Contributors | Page |
|--|---|-------------|
| foreword | | 4 |
| How to use? | | 5 |
| Area -1- Mission and outcome | Asst.Prof . Dr. Hilal Bahjat Al-Saffar Asst.Prof . Dr. Zeki Ali Mohamed | 6 |
| Area -2- Educational program | Prof. Yusra AR. Mahmood Prof. Husam M. AlZweny | 39 |
| Area -3- Students' assessment | Prof. ADIL HASAN ALI AKBAR Prof: Prof. Mohammed Saeed Abdulzahra Ass. Prof. Yasser Mohammad Hussein Al-Hakeem | 80 |
| Area -4- Program monitoring and evaluation | Prof. Alaa Jamel Hasin Ass Prof. Omaima Abdulrazzaq Ibrahim Zubair | 93 |
| Area -5- Students | Prof. Firas Tariq Ismaeel Prof. Raid Mohammed Suhael Al-Ani | 109 |
| Area -6- Staff | Prof. Sinan Bahjat Alrifai Prof. Ali Mansoor Prof. Safaa Abd Illah Faraj Assist. Prof. Omaima Zubair | 121 |
| Area -7- Educational resources | Asst. Prof. AbdulAdheem Yaseen Al-Barrak Prof. Dr. Talib Jawad Kadhem | 131 |
| Area -8- Governance | Prof. Ihsan Ajeena Prof. Ali Mansoor Prof. Alaa Jamel | 172 |
| Area -9- Continuous renewal | Prof. Nazar Haddad Prof. Suzan Essa Assist. Prof. Zeki Ali Mohamed | 183 |

Foreword:

In August 2018, the accreditation process for Iraqi medical colleges was officially launched following the revision of national accreditation standards to align with the World Federation for Medical Education (WFME) criteria.

Since then, a series of workshops have been conducted at different levels. The basic level targeted the Self-Assessment Committees (SASC) within the colleges, while the advanced level focused on members of the National Assessors Team (NAT).

After achieving the distinguished milestone of WFME recognition in 2024, the National Council for Accreditation of Medical Colleges (NCAMC) designated 2025 as a year dedicated to quality improvement. As part of this initiative, this updated edition aims to address ambiguities within the standards. It builds upon the previous version, offering additional clarification and examples based on feedback from various sources, including the NAT, SASC, stakeholders, and observations made by NCAMC members during their reviews of Self-Assessment Reports (SARs) and Site Visit Reports (SVRs).

This book, "*The Manual of Self-Assessment Study and Evidence Generation*," is part of a series developed by the NCAMC to support medical colleges throughout the accreditation process. It is intended for medical college staff in general, and particularly for members of Self-Assessment Committees, Quality Assurance Units, and the National Assessors Team.

On this occasion, the NCAMC President extends sincere thanks and appreciation to all NCAMC members and contributors whose insights and suggestions have enriched the content of this book, making it more accessible and comprehensible.

In conclusion, this manual represents a collective effort to strengthen the culture of quality and continuous improvement within Iraqi medical education. By fostering collaboration, transparency, and accountability, it aims to ensure that every medical college contributes to producing competent graduates who meet international standards. The NCAMC remains committed to guiding and supporting institutions in their journey toward sustained excellence and global recognition.

Yusra AR Mahmood
President of NCAMC
Oct. 2025

How to Use This Book

This book has been developed in a standardized format that reflects the authors' collective perspectives. Each section has been written and reviewed by one or more members of the National Council. The national standards comprise **nine main areas**, each of which includes one or more **subareas**, and each subarea contains one or more **standards**. Accordingly, each chapter in this book represents one area. Every chapter begins by presenting the area as stated in the *National Standards for Accreditation of Medical Colleges (2018)*. Each standard is then presented separately, followed by annotations, notes, or explanations of unclear terms and phrases, as well as illustrative examples and guiding questions. This is followed by a section on **Evidence Generation**.

Evidence generation is a key process that helps both the colleges and the assessors understand each standard and identify what is required to achieve it. To verify that a standard has been fully achieved, it must pass through **three levels of implementation**:

- **Level I:** Present
- **Level II:** Present and applied
- **Level III:** Present, applied, and effective

However, it should be noted that not all standards are required to meet all three levels to be considered fully achieved.

The examples of evidence provided in this book are **not mandatory**. Colleges may modify, add, or disregard them based on their specific context and judgment. The examples are intended only to clarify concepts and assist in the preparation of suitable evidence.

Each standard has its own specific indicators for defining the three levels. For instance:

- To confirm that a standard is **present**, colleges may provide official documents, policies, or administrative orders, or demonstrate implementation on-site.
- To confirm that a standard is **applied**, colleges may present meeting minutes from departmental or college councils, showing decisions and actions taken.
- To confirm that a standard is **effective**, colleges may gather stakeholder feedback through structured questionnaires, focus group discussions (FGDs), or key informant interviews (KIIs) involving faculty members, students, administrative staff, graduates, and healthcare partners.

In conclusion, this book serves as a practical guide to help medical colleges interpret, implement, and document the national accreditation standards with clarity and confidence. By following the structured approach outlined here, institutions can enhance the quality of their self-assessment process, ensure consistency in evidence generation, and promote a shared understanding of quality assurance principles. Ultimately, this manual aims to foster a culture of continuous improvement that strengthens the credibility and effectiveness of medical education in Iraq.

Yusra AR Mahmood

President of NCAMC

Oct. 2025

Area -1-

Mission and Outcome

Prepared by:

Assist. Prof. Hilal Bahjet Shawkai Al Saffar
Assist. Prof. Mousa Mohsin Ali

Revised by:

Assist. Prof: Hilal Bahjet Shawki Al Saffar
Assist. Prof: Zeki Ali Mohamed

Area 1: Mission and Educational Outcomes

The Mission Statement

Introduction

We will attempt to elaborate on this subject by addressing the following questions:

1. What is the mission statement?
2. Why does it matter?
3. What should it contain?
4. Who should participate in its development?
5. How should we develop the mission statement, and when ought it to be revised?
6. What are the intended educational objectives, outcomes, or competencies?
7. What evidence should the medical college produce to demonstrate compliance with the standards?

Area “one “of the national standards consists of four main sub-areas:

1. The mission statement.
2. Autonomy and freedom in mission statement development.
3. Intended educational objectives/outcomes or competencies.
4. The process of the mission statement development and the stakeholders involved.

Mission Statement: should include a very brief mention of the following:

- Vision
- Aims
- Educational strategy
- Type of curriculum

- Instructional methods
- Assessment methods
- Curriculum management.
- Feedback
- Monitoring and evaluation.
- Medical research
- Global health

Intended educational objectives/outcomes/ competencies:

Educational outcomes or learning outcomes/competencies refer to statements of knowledge, skills and attitudes that students demonstrate at the end of a period of learning. Outcomes within medicine and medical practice - to be specified by the medical College would include documented knowledge and understanding of:

(a) The basic biomedical sciences, (b) The behavioral and social sciences, including public health and population medicine, (c) Medical ethics, human rights and medical jurisprudence relevant to the practice of medicine, (d) The clinical sciences, including clinical skills with respect to diagnostic procedures, practical procedures, and communication skills, treatment and prevention of disease, health promotion, rehabilitation, clinical reasoning and problem-solving, (e) The ability to undertake lifelong learning and demonstrate professionalism in connection with the different roles of the doctor, also in relation to the medical profession.

The characteristics and achievements that the students display upon graduation can be categorized in terms of the doctor as (a) scholar and scientist, (b) practitioner, (c) communicator, (d) teacher, (e) manager and (f) a professional and appropriate student conduct would presuppose a written code of conduct.

What evidence should the medical college generate to comply with the national standard?

We have to remember that the evidence generated by the academic institution has three levels:

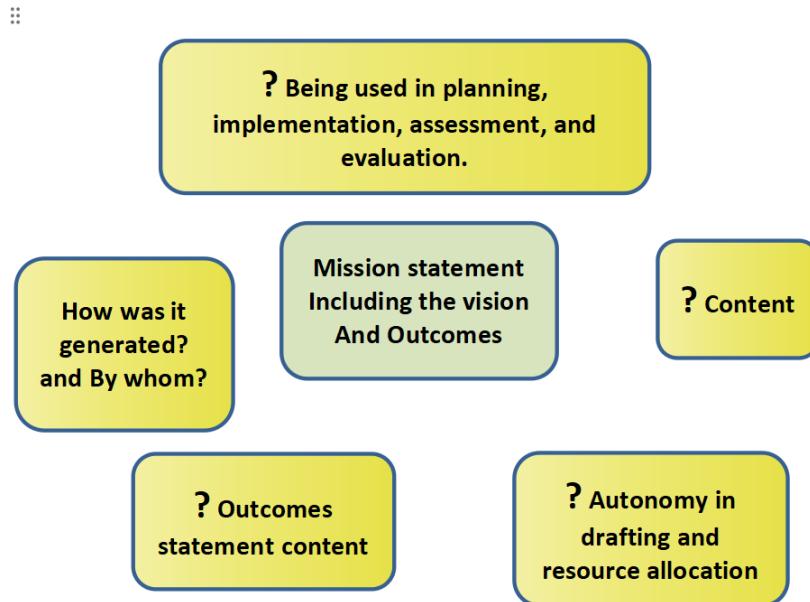
a. Present, b. Applied and c. Effective

Any evidence will be more impressive if it includes the three levels, but it is not necessary for all evidence to fulfil the levels.

- **Documents** (including official administrative orders issued by the college council, dean, or vice-deans, departments, units, etc. and minutes of meetings).

- **Questionnaire and survey** (faculty, students, administrative staff, graduates, health sector workers)
- **Direct interview** (faculty, students, administrative staff, graduates, health sector workers).
- **Direct sightseeing** by the NAT members.

Theme of Area One



1.1.1 The medical college must state its mission.

Note:

Examples of Evidence:

- Mission statement approved by the relevant authorities (the College Council and the University).

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | The medical college has a documented mission statement, but it lacks formal approval from the relevant authorities (College Council, the University). |
| Applied | A written mission statement exists and has been formally approved by the college council and the university. |
| Effective | The mission aligns with national healthcare needs and global standards (e.g., NCAMC, WFME). |

1.1.2 The medical college must make its mission known to its community and the health sector.

Annotations:

The community would include the leadership, staff, students, as well as other stakeholders.

The health sector would include the healthcare delivery system, whether public or private, and medical research institutions) The evidence that the Mission and Outcomes were known to its community and the health sector it serves (by representatives of **other stakeholders** from the health sector, medical societies, and NGOs, among others, should be involved in the Mission and Outcomes committee. Furthermore, the Mission and Outcomes document ought to be available on the website of the academic institution as well as at the teaching hospitals and health centers that serve as training sites for the medical students.

Notes:

Examples of Evidence:

- Questionnaires/focus group discussion of principle and other stake holder indicate reasonable awareness about the mission/outcome statements.
- Meeting minutes with health sector representatives.
- Screenshots of mission statements on the college website, teaching hospitals, and PHCs.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Mission is shared in some but not all key locations (e.g., only on the website). |
| Applied | The mission is announced on the college website, teaching hospitals, and primary health centers (PHCs). |
| Effective | Surveys/focus groups show more than two-thirds of participants (faculty, students, health workers) are aware of the mission. Some stakeholders contributed to developing the mission. |

1.1.3.1. The medical college must, in its mission, outline the aims and the educational strategy that results in a medical doctor who is competent at a basic level.**Annotations:**

- *In most countries, the basic levels of medical education are identical to undergraduate medical education, starting from completed secondary school education.*
- *The mission statement is a key guiding document that should state the institution's purpose and offer direction for curriculum design, student support, faculty development, assessment strategies, and stakeholder engagement.*
- *The mission statement must reflect local, national, and global healthcare needs and align with recognized medical education standards (such as NCAMC as a national accreditation body and WFME as an international body).*

Notes:

The aims refer to the ultimate goals of the educational program, including:

- *Producing safe, ethical, and competent physicians and ensuring graduates possess the necessary knowledge, skills, and attitudes for basic medical practice.*
- *Promoting values such as lifelong learning, professionalism, patient-centered care, teamwork, and evidence-based practice.*
- *Serving the healthcare needs of society, particularly underserved or priority populations.*

*The educational strategy encompasses the **methods, principles, and structure** employed to achieve the designated aims:*

- *Including the **educational philosophy** (e.g., student-centered learning, integration of basic and clinical sciences, competency-based education).*
- *The **teaching methodologies** include problem-based learning (PBL), simulation, early clinical exposure, and interprofessional education.*
- *The educational strategy promotes progressive learning and skills development, alongside **appropriate assessment and feedback mechanisms**.*

The goal is to produce a graduate who can safely and effectively practice medicine under supervision.

Competence at a basic level typically includes mastery of core medical knowledge, the ability to conduct clinical assessments and make initial diagnostic and treatment decisions, and an understanding of professionalism, ethics, and communication.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Either the aims or the educational strategy are missing in the mission statement or are not described explicitly. |
| Applied | Both the aims and the educational strategy were mentioned clearly in the mission statement. |
| Effective | By survey or focus group interview , more than 2/3 of the participants are aware of the main aims and the educational strategy of the medical college. |

1.1.3.2. The medical college must in its mission, outline the aims and the educational strategy resulting in a medical doctor with an appropriate foundation for a future career in any branch of medicine.

Annotation:

Any branch of medicine refers to all types of medical practice, administrative medicine, and medical research.

Notes:

- *A medical college's mission should be forward-thinking, inclusive, and adaptable, equipping students not only to practice medicine upon graduation but also to flourish and evolve in any specialty or role within healthcare.*
- *The graduate should possess a strong foundation in biomedical and clinical sciences, ethical principles, and professional behavior.*
- *The graduate must have transferable skills, such as analytical thinking, communication, collaboration, and adaptability.*

Examples of Evidence:

- *The mission/ outcomes statement documents mentioning the list of competencies/outcomes should be acquired after graduation.*
- *Curriculum maps linking the competencies/outcomes to the curriculum design, implementation and assessment.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|---|
| Present | There is a clear mention of the acquisition of sound competencies in biomedical and clinical sciences, ethical and professional skills, including communication and analytical thinking. There is no clear mapping of the acquired competencies and skills to curriculum planning and implementation. |
| Applied and Effective | The curriculum outlines the acquisition of sound competencies in biomedical and clinical sciences, ethical and professional skills |

including communication and analytical thinking, **and maps them to curriculum planning and implementation**

1.1.3.3 The medical college must in its mission, outline the aims and the educational strategy resulting in a medical doctor capable of undertaking the roles of doctors as defined by the health sector.

Annotation:

Health sector includes public and private health care delivery systems, as well as medical research institutions.

Note:

The ultimate product of the educational process—a practice-ready graduate who can effectively:

- *Diagnose and manage illness.*
- *Communicate with patients, families, and healthcare teams.*
- *Uphold ethical and legal responsibilities.*
- *Promote health and prevent disease.*
- *Use evidence in decision-making.*
- *Understand and contribute to healthcare systems.*

Importantly, this includes not only the clinical role but also the doctor's role as a health advocate, leader and manager, scholar and teacher, team collaborator, and public health contributor.

This should focus on many points, including:

- **National healthcare priorities** (e.g., primary care, non-communicable diseases, mental health)
- **Health workforce planning** (e.g., rural deployment, community-based care, emergency preparedness)
- **Professional standards** (e.g., medical councils, ministries of health, accreditation bodies)

*This requires active **collaboration with healthcare stakeholders** (health ministry, hospitals, and licensing bodies, Iraqi Medical Association) to ensure alignment between **education and service delivery**.*

*The medical college must ensure its mission and strategy are **directly responsive to the roles doctors are expected to perform** in the healthcare system.*

Examples of Evidence:

- *Alignment Map – Table showing how mission aims match national/regional doctor role definitions and graduate outcomes.*
- *Stakeholder Input –Meeting minutes with the health sector, faculty, students, and the community in developing the mission.*
- *Curriculum Examples – Specific modules and assessments that prepare students for each defined role of the doctor.*
- *Review Mechanism – Evidence of regular review to ensure ongoing alignment with health sector needs.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | The needs of the health sector (hospitals, PHCs, emergency departments), professional bodies (Ministry of Health, IMA) and accreditation bodies (NCAMC, WFME) were outlined in the MO statement. |
| Applied | meeting minutes with the related health sector, IMA, and NCAMC defined aims that match real needs. |
| Effective | Adopting strategies that prepare students for the complexities of modern practice. |

1.1.3.4. The medical college must, in its mission, outline its aims and educational strategy that result in a medical doctor who is prepared and ready for postgraduate medical education.

Annotations:

Postgraduate medical education would include preregistration education (leading to the right to independent practice), vocational/professional education, specialist/subspecialist education, and other formalized educational programs for defined expert functions

Notes:

- *This statement underscores the continuity between undergraduate and postgraduate medical education. It emphasizes that the mission of a medical college must clearly reflect its responsibility to prepare students not just for graduation, but for successful entry into postgraduate training.*

Examples of Evidence:

- *Mission Statement – An approved mission clearly stating the aim of producing graduates ready for postgraduate training.*
- *Alignment Map – Table linking mission aims and strategies to graduate outcomes and competencies required for entry into postgraduate programs.*
- *Stakeholder Engagement – Minutes or reports showing input from postgraduate training bodies, health sector representatives, faculty, and students in shaping the mission.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The mission statement document focuses on graduating safe, competent, and capable individuals who can take responsibility for patients under supervision, adapt to new environments, and assume a professional identity. |
| Applied | Limited feedback was received from either the graduates or the teaching staff. |
| Effective | Surveys and focus group interviews of the medical college graduates, supervising faculty, and specialists at the teaching hospital and other training venues were conducted regarding the ability of graduated medical students to transition smoothly into a postgraduate training program. |

1.1.3.5. The medical college must, in its mission, outline the aims and the educational strategy resulting in a medical doctor committed to lifelong learning.

Annotations:

Life-long learning is the professional responsibility to keep up to date in knowledge and skills through appraisal, audit, reflection, or recognized continuing professional development (CPD)/continuing medical education (CME) activities. CPD encompasses all formal and informal activities that doctors undertake 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.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|---|
| Present | The mission statement document should state that it aims to produce reflective, self-directed, and lifelong learners equipped to evolve with the medical profession. |
| Applied and Effective | Curriculum map showing where lifelong learning competencies are taught and assessed, course/module objectives including self-directed learning, reflective practice, or CPD concepts, and documentation of vertical themes (e.g., professionalism, EBM, reflective practice) Teaching and Learning Methods: Use of student-centered methods, such as PBL, CBL, TBL, SDL, eLearning, documentation of journal clubs, EBM courses, or appraisal skills workshops, and the use of learning portfolios. Assessment of Lifelong Learning Skills , tools assessing reflection, self-assessment, or professional development planning, sample student portfolios or reflective essays, and the use of progress testing or longitudinal assessments. |

1.1.4. The medical college must consider that the mission encompasses the health needs of the community, the needs of the health care delivery system, and other aspects of social accountability.

Annotations:

Encompassing the health needs of the community would imply interaction with the local community, especially the health and health-related sectors, and adjustment of the curriculum to demonstrate attention to and knowledge about the health problems of the community.

Social accountability would include the willingness and ability to respond to the needs of society, of patients, and the health and health related sectors, and to contribute to the national and international development of medicine by fostering competencies in health care, medical education, and medical research. This would be based on the college's own principles and in respect of the autonomy of universities. Social accountability is sometimes used synonymously with social responsibility and social responsiveness.

In matters outside its control, the medical college would still demonstrate social accountability through advocacy and by explaining relationships and drawing attention to the consequences of the policy.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | The mission statement document should explicitly reference the health needs of the local and national communities, the commitment to social accountability, and responsiveness to health system priorities. |
| Applied | <ul style="list-style-type: none">• The college should document meeting minutes or reports from strategic planning sessions that incorporate stakeholder feedback from public health representatives, local communities, and healthcare providers.• The college should provide documentation of community health needs assessments it has carried out or obtained from the local healthcare authority.• The college should have partnership agreements or memoranda of understanding (MOUs) with the Ministry of Health, local hospitals, primary care centers, NGOs, or community-based organizations.• The college should provide survey results or focus group reports gathered from community members or health service leaders. |

| | |
|------------------|--|
| Effective | <ul style="list-style-type: none"> • The college should ensure that the needs of the local community and society are integrated into the curriculum design, teaching sessions, assessments, and evaluations. • A curriculum map displaying courses or modules in public health, health disparities, and social determinants of health, as well as community-based education and service learning. • Evidence of student visits or placements in underserved or rural communities. • OSCEs, WPBAs, or reflective assignments assessing students on social accountability or patient advocacy. |
|------------------|--|

1.1.5. The medical college should ensure that the mission encompasses medical research attainment.

Notes:

- *A medical school must provide clear, structured, and verifiable evidence that medical research is not only recognized in its mission but is also integrated into its strategic planning, curriculum, operations, and culture.*
- *Medical research encompasses scientific research in basic biomedical, clinical, behavioral, and socialsciences.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <p>Mission Statement explicitly mentioning a commitment to medical research and knowledge generation, research goals and priorities, and its alignment with national/institutional health research strategies. The institution should maintain records showing regular reviews of the mission, with emphasis on research-related goals.</p> |
| Applied | <ul style="list-style-type: none"> • Research infrastructure and resources: organizational chart showing a Research Office or Research Directorate, list and photos of research laboratories or simulation centers, research information systems, |

| | |
|------------------|--|
| | <p>databases, and electronic libraries, annual budget or grant allocations to research (internal and external).</p> <ul style="list-style-type: none"> • Database or summary of faculty publications in peer-reviewed journals. • The CVs of faculty members with research involvement, supervision, or editorial roles are provided. |
| Effective | <p>There is evidence of undergraduate research opportunities, including student-selected research components or electives, summer research programs, student publications, conference presentations, or posters, as well as guidelines for student research supervision and mentoring.</p> |

1.1.6. The medical college should ensure that the mission encompasses aspects of global health.

Annotations:

Aspects of global health encompass an understanding of significant international health issues as well as the health impacts of inequality and injustice.

A medical school should demonstrate, through clear and organized evidence, that global health is not only integrated into its mission statement but also woven throughout the curriculum, partnerships, student opportunities, and institutional activities.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|--|
| Present | <p>The mission statement explicitly references global health priorities, international collaboration, global health equity, and outlines internationalization strategies (e.g. partnerships, mobility, research), records of mission reviews or stakeholder input emphasizing global health issues (e.g., pandemic response, international health challenges).</p> |
| Applied and Effective | <ul style="list-style-type: none"> • The curriculum should integrate global health topics, such as health systems in different countries, the global disease burden, emerging health threats, social determinants of health on a global scale, health equity, migration health, climate change, and health, as demonstrated by a curriculum map. |

- The college should have **course syllabi or modules dedicated to global health** or comparative healthcare systems.
- The college should use **case studies or simulations involving international health contexts**.
- The college should provide student opportunities and engagement, such as a **list of student exchange programs, electives, or rotations abroad, participation in global health conferences, summer schools, or workshops**, support for student research projects on global health issues, and evidence of involvement in **international NGOs or global health initiatives**.
- Faculty engage in international research or global health consortia, teach global health courses, deliver guest lectures abroad, and participate in faculty development programs on global health competencies; visiting international faculty and scholars also contribute to global health teaching and research.
- **International Partnerships and Collaborations:** MOUs or agreements with international medical schools, global health organizations (e.g., WHO), joint research or training initiatives addressing **transnational health challenges, and participation in international networks**, such as AMEE, FAIMER.
- **Research on Global Health Issues:** a list of faculty and student **research projects focused on global health**, such as infectious disease outbreaks, maternal and child health in LMICs, global surgery, or rural health delivery, publications in global health journals, and collaboration with international **research teams or institutions**.

1.2 INSTITUTIONAL AUTONOMY AND ACADEMIC FREEDOM

1.2.1. The medical college must have institutional autonomy to formulate and implement policies for which its faculty / academic staff and administration are responsible, especially regarding:

1.2.1.1. The medical college must have institutional autonomy to formulate and implement policies for which its faculty/academic staff and administration are responsible, especially regarding the design of the curriculum.

Notes:

- *A policy is a formal, written document that outlines principles, rules, or guidelines designed to govern decisions, actions, and procedures within an educational institution or program.*
- *Policies help ensure consistency, transparency, accountability, and alignment with accreditation standards, institutional missions, and legal regulations.*
- *Policy development is typically a collaborative responsibility, with final approval usually granted by the Academic Council, the governing Board, or the Dean's Office, depending on the institution's structure.*
- *Institutional autonomy includes appropriate independence from government and other stakeholders (regional and local authorities, religious communities, private partners, professional bodies, unions, and other interest groups) to make decisions about key areas such as curriculum design, assessments, student admissions, staff recruitment and selection, employment conditions, research, and resource allocation, taking into account local governance authority and regulations.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------------------|---|
| Present | <ul style="list-style-type: none">• Governance and Policy Documents: Official policy/manual on curriculum governance, stating faculty authority in curriculum design, and an organizational chart showing curriculum committee(s) under academic governance.• Curriculum Committee Terms of Reference (ToR) showing composition (faculty-led), roles, decision-making authority, and autonomy. |
| Applied and Effective | <ul style="list-style-type: none">• Meeting minutes showing independent decision-making about curriculum development or revision. |

| | |
|--|---|
| | <ul style="list-style-type: none"> • Faculty involvement evidence: records of faculty-led curriculum retreats, workshops, or review panels, and evidence of faculty proposals or reports initiating curriculum changes. • Examples of Independent Curriculum Decisions, such as case studies showing major curriculum redesign or course/module introduction initiated and approved internally, and a timeline or process map of curriculum development showing autonomous steps. • Accreditation self-study or external reports, including prior external accreditation or evaluation reports acknowledging academic autonomy. |
|--|---|

1.2.1.2. The medical college must have institutional autonomy to formulate and implement policies for which its faculty/academic staff, and administration are responsible, especially regarding the use of the allocated resources necessary for the implementation of the curriculum.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------------------|---|
| Present | <p>Budget Authority Documents: Policies showing that the dean, vice dean, academic departments, or curriculum committees have the authority to allocate resources (e.g., for teaching materials, simulations, faculty development).</p> |
| Applied and Effective | <ul style="list-style-type: none"> • Resource Allocation Examples: documentation of faculty-led decisions to allocate funds for new teaching methods, technology, or learning spaces. Records of purchase or procurement requests initiated by academic units (e.g., simulators, anatomy lab resources). • Committee/Department Budget Meeting Minutes showing internal decisions about the distribution of resources related to curriculum implementation. • Autonomy in Scheduling and Human Resources: evidence of department heads or academic leaders scheduling staff, allocating teaching duties, or hiring adjuncts based on curriculum needs. • Strategic Planning Documents: annual or strategic academic plans linking curriculum needs with resource allocation priorities. |

1.2.2. The medical college should ensure academic freedom for its staff and students in addressing the actual curriculum.

Annotations:

Academic freedom would include appropriate freedom of expression, freedom of inquiry, and publication for staff and students.

Addressing the actual curriculum would allow staff and students to draw upon different perspectives in the description and analysis of medical issues, both basic and clinical.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|--|
| Present | <ul style="list-style-type: none">• The college should have an Academic Freedom Policy that defines and protects academic freedom for faculty and students.• The institution should have a Code of Conduct or Ethics Guidelines that affirms the rights to freedom of teaching, learning, and discussion. The faculty or student handbook should include sections that explicitly address freedom in academic content delivery and participation. |
| Applied and Effective | <ul style="list-style-type: none">• Teaching Practice and Records: Course syllabi or module descriptors that demonstrate staff flexibility in teaching approaches (e.g., using case-based learning, clinical variations).• Examples of lecture material where staff interpret or adapt curriculum content using personal academic judgment.• The institution should have evidence of student-led discussions or seminars on controversial or open-ended topics in medicine.• The faculty and student feedback, including survey results or focus group reports, should indicate staff and student perceptions of the freedom to discuss, critique, or approach curriculum content creatively.• Minutes from curriculum committee or staff meetings showing open debate or modification of content based on academic expertise. |

1.2.3. The medical college should ensure academic freedom for its staff and students in exploring the use of new research results to illustrate specific subjects without expanding the curriculum.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|---|
| Present | Faculty Autonomy in Teaching: Policies or guidelines enabling academic staff to supplement core content with up-to-date information without requiring approval from the curriculum committee. |
| Applied and Effective | <ul style="list-style-type: none">• Teaching Materials and Examples: lecture slides or session materials incorporating recent research articles or findings (e.g., using a recent NEJM or JAMA study as part of a teaching case). Recorded lectures or tutorials should discuss new research within existing topic areas.• Departmental memos encourage the integration of emerging scientific and medical research into teaching.• Assessment Practices: examples of assessments (e.g., MCQs, SAQs, case vignettes) that include updated or cutting-edge research scenarios without straying from the core curriculum.• Reports from external reviewers or accrediting bodies praise academic innovation and responsiveness to new research.• Examples of interdisciplinary modules or enrichment sessions where recent scientific advances are introduced. |

1.3 EDUCATIONAL OUTCOMES

Annotations:

Educational outcomes or learning outcomes/competencies refer to statements of knowledge, skills, and attitudes that students demonstrate at the end of a period of learning.

Outcomes might be either intended or acquired. Educational/learning objectives are often described in terms of intended outcomes. Outcomes within medicine and medical practice - to be specified by the medical college would include documented knowledge and understanding of (a) the basic biomedical sciences, (b) the behavioral and social sciences, including public health and population medicine, (c) medical ethics, human rights, and

medical jurisprudence relevant to the practice of medicine, (d) the clinical sciences, including clinical skills with respect to diagnostic procedures, practical procedures, communication skills, treatment and prevention of disease, health promotion, rehabilitation, clinical reasoning, and problem solving; and (e) the ability to undertake lifelong learning and demonstrate professionalism in connection with the different roles of the doctor, also in relation to the medical profession.

The characteristics and achievements the students display upon graduation can, e.g., be categorized in terms of the doctor as (a) scholar and scientist, (b) practitioner, (c) communicator, (d) teacher, (e) manager, and (f) professional.]

1.3.1.1. The medical college must define the intended educational outcomes that students should exhibit upon graduation in relation to their achievements at a basic level regarding knowledge, skills, and attitudes.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|---|
| Present | Documented Intended Educational Outcomes (IEOs): an official list of graduate outcomes or competencies (aligned with national or international frameworks like NCAMC, WFME) with clear classification into knowledge, skills, and attitudes/domains . |
| Applied | <ul style="list-style-type: none">• Curriculum Mapping and Alignment: a curriculum map linking each intended outcome to courses/modules, teaching methods, and assessment tools.• Evidence of integration across preclinical and clinical phases.• Examples of how attitudes and professionalism are taught and assessed (e.g., reflective portfolios, professionalism modules, mentoring logs).• Curriculum handbook or program specification that communicates the IEOs to students and faculty.• Orientation sessions or guides explaining the expected competencies at graduation. |
| Effective | <ul style="list-style-type: none">• Surveys or focus group discussions of medical students, faculty, and administrative staff show that more than 2/3 are aware of the ILOs of the medical college. |

- Also showing their ideas about whether the teaching strategies, teaching methods, and assessment methods are **aligned with the ILOs**.

1.3.1.2. The medical college must define the intended educational outcomes that students should exhibit upon graduation in relation to an appropriate foundation for a future career in any branch of medicine.

Notes:

The medical school must demonstrate that its program prepares graduates broadly and competently for entry into any postgraduate medical training, regardless of specialty. This involves a clear set of outcomes and supporting structures.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The documented intended educational outcomes (IEOs) emphasize broad-based biomedical knowledge, core clinical and communication skills, professionalism and ethical behavior , lifelong learning abilities, critical thinking, and problem-solving. |
| Applied | <ul style="list-style-type: none"> A curriculum map showing how courses and learning experiences build a foundation applicable to all specialties. The program includes exposure to major clinical disciplines (medicine, surgery, pediatrics, OBGYN, psychiatry, family medicine, etc.) Interdisciplinary skills (research literacy, leadership, teamwork). |
| Effective | Surveys and focus group discussions with graduated students and teaching faculty at the health care delivery system facilities showed that they were ready to be recruited in any branch of medicine after graduation. |

1.3.1.3. The medical college must define the intended educational outcomes that students should exhibit upon graduation in relation to their future roles in the health sector.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Published list of Intended Learning Outcomes (ILOs) that describe the knowledge, skills, attitudes, and behaviors expected of graduates, aligned with their roles in the health sector (e.g., clinician, communicator, advocate, researcher, and leader). |
| Applied | <ul style="list-style-type: none">• The medical college should demonstrate alignment between the ILOs and courses/modules, teaching strategies, and assessment methods through curriculum mapping.• Local Ministry of Health workforce expectations.• Meeting minutes, reports, or feedback forms from health sector employers and healthcare providers. |
| Effective | Surveys and focus group discussions with graduated students and teaching faculty at the health care delivery system facilities showed that they were ready to play their roles in the health sector after graduation. |

1.3.1.4. The medical college must define the intended educational outcomes that students should exhibit upon graduation in relation to their subsequent postgraduate training.

Notes:

The medical school should provide structured and well-documented evidence that demonstrates how its undergraduate medical program prepares graduates for postgraduate education.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <ul style="list-style-type: none">• The medical school should have a documented graduate outcome framework that includes knowledge, clinical skills, professional attitudes, and behaviors essential for entry into postgraduate training. |

| | |
|------------------|---|
| | <ul style="list-style-type: none"> Outcomes should include self-directed learning, clinical reasoning, time management, professionalism, and foundational clinical competence. |
| Applied | <ul style="list-style-type: none"> Curriculum map demonstrating how learning activities and assessments develop the outcomes necessary for postgraduate training. Evidence of both vertical and horizontal integration illustrates the progressive development of relevant skills (e.g., patient care, interprofessional collaboration, and lifelong learning). Assessment strategies and tools that evaluate clinical competence (e.g., OSCEs, mini-CEX, DOPS), communication skills (e.g., patient simulations, SP encounters), professionalism, and teamwork (e.g., 360° feedback, portfolios). Support for the transition to postgraduate training: preparation programs or transition courses, such as internship readiness modules and simulation boot camps. Career guidance and mentorship programs to assist students in preparing for postgraduate exams and interviews. Stakeholder engagement: evidence of consultations with postgraduate training institutions, residency program directors, health ministries, or national boards. Employer and alumni feedback on graduate preparedness for residency. Graduate tracking data: percentage of graduates entering postgraduate training, their performance in national postgraduate entrance exams, and feedback from postgraduate training supervisors. Alumni and employer surveys assessing readiness for clinical responsibilities during postgraduate training. |
| Effective | Surveys and focus group discussions with graduated students and teaching faculty at the health care delivery system facilities showed that they were ready to be involved in PG training programs (residency, specialties). |

1.3.1.5. The medical college must define the intended educational outcomes that students should exhibit upon graduation in relation to their commitment to and skills in lifelong learning.

Notes:

The medical school must provide documented, structured, and outcome-based evidence that demonstrates how it prepares students to become self-directed, reflective, and continuously learning professionals.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|--|
| Present | <ul style="list-style-type: none">• Documented learning outcomes specifically referencing lifelong learning attitudes and behaviors (e.g., curiosity, intellectual humility, adaptability).• Skills for lifelong learning (e.g., information literacy, critical appraisal, self-assessment, reflective practice). |
| Applied and Effective | <ul style="list-style-type: none">• Curriculum map showing where and how lifelong learning is taught, practiced, and assessed across all years.• Embedded courses/modules/workshops on evidence-based medicine (EBM), research skills, critical appraisal, self-directed learning, study planning, reflective practice, and portfolio use.• The curriculum provides opportunities for independent or student-led learning, including elective projects, literature reviews, and case-based learning.• Methods of teaching and learning that encourage lifelong education, such as problem-based learning (PBL) and case-based learning (CBL), flipped classrooms, blended learning, journal clubs, and critical appraisal sessions, portfolios to encourage reflection and documentation of learning progress.• Assessment tools and evidence, such as student learning portfolios with reflective components.• Faculty development programs that train teachers to model and promote lifelong learning.• Access to learning resources, including libraries, databases, online modules, and EBM tools. |

| | |
|--|--|
| | <ul style="list-style-type: none"> • Workshops or support services on time management and learning skills, using clinical evidence and guidelines, and preparing personal development plans (PDPs). |
|--|--|

- Workshops or support services on time management and learning skills, using clinical evidence and guidelines, and preparing personal development plans (PDPs).

1.3.1.6. The medical college must define the intended educational outcomes that students should exhibit upon graduation in relation to the health needs of the community, the needs of the health care delivery system, and other aspects of social accountability.

Notes:

The medical school should prepare clear, documented, and triangulated evidence showing how its curriculum, educational processes, and governance are aligned with community health priorities, health care system needs, and broader social responsibilities.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|--|
| Present | A clearly stated set of graduate outcomes (learning outcomes or competencies) that explicitly references community and population health needs, health disparities and social determinants of health, health system functioning and challenges, and commitment to social accountability and advocacy. |
| Applied and Effective | <ul style="list-style-type: none"> • The medical school should provide a curriculum map showing where and how these outcomes are taught and assessed, including courses on public health, epidemiology, health systems, health policy, and medical ethics, community-based education (CBE), rural/underserved rotations, and interprofessional learning involving health system collaboration, as well as the integration of case studies or projects focusing on real community issues. • The medical school should provide reports or documentation of community needs assessments used in curriculum planning. • The medical school should provide evidence of formal partnerships with local health authorities, NGOs, or community organizations. |

| | |
|--|--|
| | <ul style="list-style-type: none"> • Examples of how feedback from the community or healthcare system stakeholders are used to revise educational goals. • Student portfolios, logbooks, or reflection assignments show engagement with community health needs. • Participation in health promotion, outreach, or community service programs. • Evidence of student exposure to vulnerable populations or underserved areas. • Faculty development programs focusing on teaching social accountability and community-based learning, supervising students in community or system-based placements. |
|--|--|

1.3.2. The medical college must ensure appropriate student conduct with respect to fellow students, faculty members, other healthcare personnel, patients, and their relatives.

Notes:

A medical school must demonstrate a structured, well-documented, and actively implemented approach to teaching, monitoring, and enforcing professional behavior.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|--|
| Present | <ul style="list-style-type: none"> • The official Code of Conduct and Student Professionalism Policy documents outline expected behaviors toward peers, faculty, staff, healthcare professionals, patients, and their families. • Inclusion of professionalism and ethical behavior in student handbooks, orientation guides, and institutional policies. |
| Applied and Effective | <ul style="list-style-type: none"> • Integration of professionalism, medical ethics, communication skills, and interprofessional behavior in: formal curriculum (e.g., courses, modules, lectures), hidden curriculum (role modeling, informal learning), clear learning outcomes related to professional behavior, and use of case-based discussions (e.g., ethical dilemmas, interprofessional conflicts) |

| | |
|--|--|
| | <ul style="list-style-type: none"> • Structured professionalism workshops, seminars, or lectures. • Faculty role-modeling expectations are described in the faculty development program. • Assessment tools and procedures that evaluate professional behavior, including 360-degree evaluations, Mini-CEX, DOPS, or logbooks with professionalism components, reflective writing assignments, and professionalism essays, and OSCE stations assessing communication and respect with colleagues and patients. |
|--|--|

1.3.3. The medical college must make the intended educational outcomes publicly known.

Notes:

The medical school must show clear, accessible, and verifiable documentation that the graduate attributes or competencies are published and communicated transparently to internal and external stakeholders.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------------------|---|
| Present | Official publication of the intended educational outcomes on the medical school's website, student handbook, brochures , or public documents used in admissions or stakeholder communication. |
| Applied and Effective | <ul style="list-style-type: none"> • Evidence that educational outcomes have been shared with stakeholders, including faculty and teaching staff (e.g., during orientation presentations), students (e.g., during induction or curriculum briefings), external stakeholders such as accrediting bodies, clinical training sites, and employers. • Reports from external examiners confirm that outcomes are clearly defined and appropriately disseminated. |

- **Survey results or feedback** forms indicate that students and faculty are aware of and understand the intended educational outcomes.

1.3.4. The medical college should specify and coordinate the linkage of acquired outcomes by graduation with acquired outcomes in postgraduate training.

Notes:

The medical school must provide evidence that its undergraduate outcomes align with and support a smooth transition to postgraduate education, both in structure and intention.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|---------|--|
| Present | Clearly articulated graduate outcomes that include knowledge, skills, and attitudes expected at graduation , and competencies aligned with entry-level expectations of postgraduate training programs (e.g., foundation or residency level) |
| Applied | <ul style="list-style-type: none"> Minutes or reports showing joint meetings or curriculum coordination with postgraduate deans or training bodies, residency or internship program directors. Memoranda of understanding (MoUs) or formal communication protocols between the undergraduate medical school and postgraduate training institutions. Evidence that the curriculum intentionally develops students' readiness for postgraduate roles, including clinical decision-making, independent practice under supervision, professionalism, and team-based care. Internship preparation modules are designed as a bridge to postgraduate expectations. Data and reports on graduate success in postgraduate entry. Feedback from postgraduate educators or program directors regarding the readiness of new graduates and gaps observed at the transition point. |

1.3.5. The medical college should specify intended outcomes of student engagement in medical research.

Notes:

The medical school must demonstrate that it has clearly defined educational goals related to student research involvement and that these goals are embedded in the curriculum, supported institutionally, and evaluated effectively.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|---|
| Present | A formal list of research-related learning outcomes , such as: understanding of scientific principles and research methodology, ability to critically appraise scientific literature, skills in research ethics and responsible conduct, ability to formulate a research question and design a study, skills in data analysis and scientific writing, and capacity to present and disseminate research findings. |
| Applied and Effective | <ul style="list-style-type: none">• A formal list of research-related learning outcomes, such as: understanding of scientific principles and research methodology, ability to critically appraise scientific literature.• Documentation showing where research-related outcomes are taught, practiced, and assessed across the curriculum, compulsory research methods modules or scientific foundation courses, research projects (mandatory or elective), journal clubs, critical appraisal sessions, or literature review assignments.• Evidence of structured student engagement in research, including supervised research projects, either individual or group-based.• Guidelines and timelines for student research involvement.• Curriculum content or workshops addressing research ethics, informed consent, plagiarism, and academic integrity.• Records showing student research output. |

1.3.6. The medical college should draw attention to global health-related intended outcomes.

Notes:

A medical college should prepare documented evidence that demonstrates the inclusion, emphasis, and assessment of global health in its curriculum, policies, and institutional strategies.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|--|
| Present | <ul style="list-style-type: none">• Inclusion of global health-related competencies in the graduate profile or outcome framework.• Course syllabi with explicit references to global health concepts (e.g., social determinants of health, global burden of disease, health equity, climate change and health, international health systems, migration and health). |
| Applied and Effective | <ul style="list-style-type: none">• Mapping of global health topics to intended learning outcomes (ILOs)• Description of modules, sessions, or electives specifically dedicated to global health.• Case-based or problem-based learning (PBL) scenarios involving global or cross-border health issues.• Sample exam questions (MCQs, SAQs) covering global health topics, OSCE, or workplace-based assessments with global health-related components, reflective portfolios, or assignments that demonstrate student understanding of global health challenges.• Participation in global health-related projects, exchanges, or international electives.• Student research or capstone projects focused on global health themes.• Faculty development programs related to teaching global health. |

1.4 PARTICIPATION IN FORMULATION OF MISSION AND OUTCOMES

1.4.1. The medical college must ensure that its principal stakeholders participate in formulating the mission and intended educational outcomes.

Annotations:

Principal stakeholders would include the dean, the faculty council, the curriculum committee, representatives of staff and students, the university leadership and administration, relevant governmental authorities, and regulatory bodies.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|--|
| Present | Written policies and procedures describing how stakeholders are engaged in strategic planning or mission formulation. Institutional bylaws or governance documents specifying stakeholder participation. Names and roles of stakeholders involved in the mission/outcome formulation committees. |
| Applied and Effective | Minutes of meetings and workshops involving principal stakeholders discussing the mission and outcomes. Agendas and attendance records of curriculum committee meetings, strategic planning groups, or task forces. Surveys or structured interviews are conducted with students, faculty, and external stakeholders during mission/outcome development. Evidence of periodic review and revision of the mission and outcomes based on updated stakeholder input (e.g., every 3–5 years). Action plans resulting from stakeholder feedback (e.g., to align outcomes with health system needs). |

1.4.2. The medical college should ensure that the formulation of its mission and intended educational outcomes is based also on input from other stakeholders.

Annotations:

Other stakeholders would include representatives of other health professions, patients, the community, and the public (e.g. users of the health care delivery systems, including patient organizations). Other stakeholders would also include representatives of academic and administrative staff, education and health care authorities, professional organizations, medical scientific societies, and postgraduate medical educators.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|--|
| Present | A documented plan or policy describing how <i>other stakeholders</i> are identified and involved in mission/outcome development. Criteria for selecting community or external representatives (e.g., experience, role, region) |
| Applied and Effective | <ul style="list-style-type: none">• Agendas, minutes, and attendance logs from other stakeholder meetings.• Curriculum advisory board or steering committee meetings, including external members.• Surveys, questionnaires, or structured interviews targeting alumni, employers, and community leaders.• Draft and final versions of the mission/outcomes showing tracked changes resulting from stakeholder suggestions.• Committee reports explaining which external feedback was incorporated and why. |

Area -2- EDUCATIONAL PROGRAM

Prepared by:

Prof. Yusra AR. Mahmood

Revised by:

Prof. Yusra AR. Mahmood

Prof. Husam M. AlZweny

2.1 FRAMEWORK OF THE PROGRAM

2.1.1. The medical college must define the overall curriculum.

Annotation:

[Overall curriculum in this document refers to the specification of the educational program, including a statement of the intended educational outcomes the content/syllabus, learning experiences and processes of the program. The curriculum should set out what knowledge, skills, and attitudes the student will achieve. Also, the curriculum would include a description of the planned instructional and learning methods and assessment methods. Curriculum description would sometimes include models based on disciplines, organ systems, clinical problems/tasks or disease patterns as well as models based on modular or spiral design. The curriculum would be based on contemporary learning principles.]

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-------------------------------------|--|
| Present | <ul style="list-style-type: none">• There is a written curriculum but may be missing one or more of the determined criteria.• There is a written syllabus, no clear learning objectives, instructional or assessment methods.• There are outcomes but not well defined.• The curriculum map is missing, or if available, it is not clearly defined. |
| Applied (Partially Compliant) | <ul style="list-style-type: none">• There is a written curriculum missing of one or more of the above criteria.• The syllabus was drafted with clear learning objectives, instructional methods, and assessment criteria. It lacked uniformity across all subjects.• The outcomes are not well defined.• The curriculum map is well defined. |
| Effective (Fully Compliant) | <p>1- A well- written curriculum which must fulfill all the following points:</p> <ul style="list-style-type: none">a. A statement of the intended educational outcomes (refer to statements of knowledge, skills and attitude that students demonstrate at the end of a period of learning).b. The content/syllabus (describe the content, extent and sequencing of courses and other curricular elements).c. Learning experiences and processes of the program.d. The curriculum would include a description of the planned instructional and learning methods and assessment methods (define |

| | |
|--|--|
| | <p>and state the principles, methods, and practices used for the assessment of its students).</p> <p>e. Curriculum description would sometimes include models based on disciplines, organ systems, clinical problems/tasks, or disease patterns, as well as models based on modular or spiral design.</p> <p>f. The curriculum would be based on contemporary learning principles. (Contemporary learning prepares students across all curriculum areas and learning stages with skills and capabilities to thrive in a rapidly changing and interconnected world).</p> <p>https://education.nsw.gov.au/about-us/efsg/education-planning/contemporary</p> <p>2- A clear, comprehensive curriculum map is available and used actively.</p> |
|--|--|

2.1.2. The medical college must use a curriculum and instructional/learning methods that stimulate, prepare, and support students to take responsibility for their learning process.

Annotation:

[Instructional/ learning methods would encompass lectures, small-group teaching, problem-based or case-based learning, peer assisted learning, practical, laboratory exercises, bed-side teaching, clinical demonstrations, clinical skills laboratory training, field exercises in the community and web-based instruction.]

Notes:

- *The more the curriculum depends on the students as the center of learning and away from didactic lectures, the more they will take responsibility for their learning process i.e. be active and participate in the learning process.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | Documents showing the types of instructional/ learning methods: interactive lectures which stimulate critical thinking, small group discussion, problem-based or case-based learning, peer-assisted learning, practical, laboratory exercises, bed- |

| | |
|------------------|---|
| | side teaching, clinical demonstrations, clinical skills laboratory training, field exercises in the community and web-based instruction. |
| Applied | Timetables or any documents prove that the mentioned instructional / learning methods are applied to the ground. |
| Effective | <p>The effectiveness of the instructional / learning methods is proved by:</p> <ul style="list-style-type: none"> • questionnaire or interviewing the students. • Estimate the effectiveness of implementation by direct inspection or field inspection by the college's committee or the visiting team (site visit observation of application). • [example of a question: what is the type of your lectures, whether theory or practical/ clinical; interactive or didactic ones? • Is there interaction and discussion during the lecture? • Does the lecture include a discussion of a medical condition or case scenario? • Same as for the practical/ clinical lessons. |

2.1.3. The medical college must ensure that the curriculum is delivered in accordance with principles of equality.

Annotation:

[Principles of equality mean equal treatment of staff and students irrespective of gender, ethnicity, religion, socio-economic status, and taking into account physical capabilities.]

Notes:

- *To achieve such standard; The college must draft a policy declaring that: the admission policy is central and depends on the students' grades, The college takes into account the policy of equality and non-discrimination among students in terms of gender, ethnicity, religion or socioeconomic status, and ensuring all students regardless of their profile, have equal access to the same resources and facilities and ensuring students feel safe, giving students equal chances of success, likewise achieving equality among the staff in regards treatment, privileges, right and duties in delivering the curriculum.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | A written policy (or instructions) about non-discrimination which should be approved by the college's council. The nondiscrimination must include both staff and students. |
| Applied | <ul style="list-style-type: none"> Issuing administrative orders, circulating them to all departments to act accordingly. Minutes of departments' meetings that indicate the application of these instructions |
| Effective | <ul style="list-style-type: none"> Feedback from students, graduates, academic staff, and non-academic staff (namely registration division) by questionnaire or interview. Example of questions (include both students and staff): Do you feel that there is discrimination or differential treatment between you and your peers/colleagues based on gender? |

2.1.4. The medical college should ensure that the curriculum prepares the students for life-long learning. (LLL)

Notes:

- Lifelong learning is achieved; mainly, by student directed type of learning. (You should not ask the student direct question like: is the curriculum enhances LLL? But ask about the types of delivering the curriculum that enhances LLL, as clarified below:)*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <ul style="list-style-type: none"> Verification of types of learning that enhance (LLL); e.g.: <ul style="list-style-type: none"> small group learning, medical student's self-assessment of learning needs, identification, analysis, and synthesis of relevant information. conducting a dissertation, clinical problem-solving, peer-assisted learning, appraisal of articles |

| | |
|------------------|--|
| | <ul style="list-style-type: none"> ○etc. |
| Applied | <ul style="list-style-type: none"> • How does the curriculum prepare students for (LLL), how the syllabus is applied; by didactic methods or other methods of learning. • Documents showing the Learning/instructional methods used to deliver the curriculum. [small group learning, conducting a dissertation, clinical problem solving, peer-assisted learning, appraisal of articlesetc.] • The teaching schedule should indicate the protected time available to the students to achieve LLL. • Check the timetable for sufficiency of time used for self-directed learning. |
| Effective | <ul style="list-style-type: none"> • Documents showing the time recorded by IT about the activities of students online, or any other methods suitable for the college. • Survey or interview must include the graduates especially the postgraduate students to verify this point. |

2.2 SCIENTIFIC METHOD

Annotation:

[To teach the principles of scientific method, medical research methods and evidence-based medicine requires scientific competencies of teachers. This training would be a compulsory part of the curriculum and would include that medical students conduct or participate in minor research projects.]

2.2.1.1. The medical college must, throughout the curriculum, teach the principles of scientific method, including analytical and critical thinking.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <ul style="list-style-type: none"> • The syllabus and timetable of teaching the scientific methods which must be a compulsory part of the curriculum. • The syllabus must demonstrate lectures about the concept of critical and analytical thinking. |

| | |
|------------------|---|
| Applied | <ul style="list-style-type: none"> The college must show how analytic and critical thinking are achieved in the learning process. (note: it is achieved by e.g., practical/clinical problem solving, small group learning, concept map, appraisal of research, ... etc.). |
| Effective | <ul style="list-style-type: none"> Face-to-face Interview, FGD, and/or questionnaire to students, and academic staff. <i>(You should not ask the student direct question like: is the curriculum enhances critical and analytic thinking? But ask about the types of delivering the curriculum that enhances critical and analytic thinking, as clarified in the contents.)</i> |

2.2.1.2. The medical college must, throughout the curriculum, teach medical research methods.

Notes:

- Student research must be an integral part of the curriculum, and must be delivered in theoretical and practical sessions, and a mechanism should be put in place to monitor and test students periodically.*
- Medical researches must be supervised by all medical departments, must be incorporated across various disciplines to ensure comprehensive capacity building among students.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none"> syllabus of teaching researches' methods [theory and practical]. Learning objectives. |
| Applied | <ul style="list-style-type: none"> Samples of the simple researches that are conducted by students. A mechanism for following up and supervising the research. |
| Effective | <ul style="list-style-type: none"> Feedback by interviewing the students face-to-face or focused group discussion (FGD) and/or using a questionnaire, so as interviewing the academic staff. Documents showing methods for evaluating these researches and calculating their scores. |

2.2.1.3. The medical college must, throughout the curriculum, teach evidence-based medicine (EBM).

Annotation:

[Evidence-based medicine means medicine founded on documentation, trials, and accepted scientific results.]

Notes:

- Evidence-Based Medicine (EBM) refers to the conscientious use of current best evidence in making decisions about the care of individual patients.

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|---|
| Present | The syllabus of teaching (EBM) must be included in more than one discipline and delivered using theoretical and practical methods. |
| Applied | How is Evidence-Based Medicine (EBM) incorporated into the curriculum? This is done by reviewing the learning objectives of selected subjects where EBM principles are applied. <ul style="list-style-type: none">- EBM principles are clearly integrated into specific courses or modules.- Application is verified through:<ul style="list-style-type: none">• Case studies• Literature appraisal sessions• Use of EBM tools (e.g., PICO, clinical guidelines)- Implementation is supported by schedules or teaching materials. |
| Effective | Feedback can be obtained through face-to-face interviews with students or focused group discussions (FGDs) and/or questionnaires, as well as interviews with academic staff. This allows them to describe how and where EBM is used in training sessions. <ul style="list-style-type: none">• (Example of questions: what is EBM? in which stage/s do you teach EBM? in which discipline/s do you teach EBM? Open Q. Interview: what is the significance of EBM?)- Site visit observation may confirm classroom or clinical use of EBM principles.- Advanced levels may show examples of student-conducted evidence appraisals. |

2.2.1. The medical college should, in the curriculum, include elements of original or advanced research.

Annotation:

[Elements of original or advanced research would include obligatory or elective analytic and experimental studies, thereby fostering the ability to participate in the scientific development of medicine as professionals and colleagues.]

Note: "Advanced research is incorporated into the curriculum as planned and is typically conducted as team-based work, with students often collaborating with or continuing projects initiated by their seniors."

Notes:

- As part of the curriculum, it should include:
 - Advanced research which are published as original articles.
 - or advanced researches that carry with it experimental work and scientific analysis,
 - or advanced research that enhance the students' ability to contribute to the development of medicine.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">• It is written in the curriculum plan.• The curriculum includes a plan for integrating advanced research activities.• Descriptions may include elective or mandatory projects, group/team-based research, or alignment with ongoing faculty research. |
| Applied | <p>The research protocol documents the student participation, along with the Progress form.</p> <ul style="list-style-type: none">– Research protocols show student involvement, and progress tracking is implemented (e.g., via progress forms, supervision records).– Students may participate in analytic or experimental studies under faculty guidance.– The research activity is active and monitored, not just theoretical. |
| Effective | <p>The research in process or published as an original paper or has an impact on medicine or medical education.</p> <p>i.e. Some research projects are completed, and outputs are visible:</p> <ul style="list-style-type: none">• Published student papers (original articles)• Capstone projects, posters, or conference presentations |

- Evidence of impact on medicine or medical education (e.g., influencing curriculum, clinical practice, or local health policy).
- Effectiveness verified through student interviews, research supervision logs, or formal evaluation systems.

2.3 BASIC BIOMEDICAL SCIENCES [BBS]

2.3.1. The medical college must, in the curriculum, identify and incorporate the contributions of the basic biomedical sciences to create understanding of:

Annotation:

[The basic biomedical sciences would, depending on local needs, interests, and traditions, include anatomy, biochemistry, biophysics, cell biology, genetics, immunology, microbiology (including bacteriology, parasitology, and virology), molecular biology, pathology, pharmacology, and physiology.]

Notes:

- Incorporate means that the college must embed the subject into curriculum content, teaching methods, and assessments, ensuring it is taught systematically, not as an optional topic, and that students are meaningfully evaluated on it.

2.3.1.1. The medical college must, in the curriculum, identify and incorporate the contributions of the basic biomedical sciences to create an understanding of scientific knowledge fundamental to acquiring and applying clinical science.

Notes:

- *In the subject-based curriculum, the (BBS) must be delivered in applied form, i.e. incorporate the clinical into Basic sciences. While in the integrated type of curriculum, it is a foregone conclusion, this standard is achieved through the vertical integration.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none"> • A list of the (BBS) that are delivered in the curriculum and are incorporated with the clinical sciences. • Syllabus of (BBS), theory part; to demonstrate the incorporation with the clinical sciences. |
| Applied | <ul style="list-style-type: none"> • Learning objectives of the (BBS) lectures or any other learning methods, which gives an idea that the (BBS) are presented mostly in an applied mode. • Sample of the lectures. |
| Effective | <ul style="list-style-type: none"> • Feedback by face-to-face interviews or FGD and /or questionnaires to students and academic staff. • Site visit observations may show incorporated teaching on the ground. • Any type of assessment method to verify the incorporation between (BBS) and clinical sciences (For instance, designing Single Choice Questions (SCQ) items using clinical case scenarios and selecting distractors that meet the expected competency standards) |

2.3.1.2. The medical college must, in the curriculum, identify and incorporate the contributions of the basic biomedical sciences to create understanding of concepts and methods fundamental to acquiring and applying clinical science.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <ul style="list-style-type: none"> • Syllabus of the BBS, the practical lessons. • Learning objectives of the practical lessons. |
| Applied | <ul style="list-style-type: none"> • Documents showing how these lessons create understanding of concepts fundamental to acquiring and applying clinical sciences. (i.e., Explain in a few sentences how BBS helps students to understand and apply clinical sciences through your curriculum). • Examples of practical laboratory lessons that demonstrate the incorporation of clinical concepts with basic sciences in the experiments or other practical lessons.) |

| | |
|------------------|--|
| | <ul style="list-style-type: none"> • It should not be limited to one lesson, such as anatomy or physiology, but should encompass all the basic lessons. • Practical sessions across most BBS disciplines demonstrate applied learning through examples like: <ul style="list-style-type: none"> • Clinical case-oriented lab exercises • Use of clinical data in experiments |
| Effective | <ul style="list-style-type: none"> • To verify the incorporation aspect between BBS and clinical sciences is by: • Feedback by face-to-face interviews or FGD and /or questionnaires to students and academic staff. • OSPE (Objective Structured Practical Examination) sheet, applied practical exams, or any other type of assessment methods. • Site visit observations of actual lab or skills sessions confirming real-world clinical alignment. |

2.3.2. The medical college should in the curriculum adjust and modify the contributions of the biomedical sciences to the:

2.3.2.1. The medical college should in the curriculum adjust and modify the contributions of the biomedical sciences to the scientific, technological, and clinical developments.

Notes:

- "An example of scientific development includes the discovery of new diseases and syndromes, exploration of the genetic and immunological aspects of diseases, advancements in molecular biology, and progress in stem cell research, among others."
- "An example of technological development is the role of biomedical sciences in advancing diagnostic tools, treatment technologies, and data analysis methods. This includes modern techniques for disease detection, CRISPR gene editing, the use of artificial intelligence (AI) in diagnostics, and wearable health devices. These developments highlight the importance of integrating modules on bioinformatics, medical technology, AI, and digital health into the curriculum."
- "An example of clinical development is the translation of biomedical research into clinical practice, which enhances patient care and outcomes. Emerging clinical guidelines and newly identified diseases highlight the need to incorporate relevant updates into the biomedical sciences (BBS) curriculum. Examples include targeted cancer therapies and

advancements such as microrobots that can deliver drugs directly to targeted areas minimizing side effects,

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <p>The college has identified relevant developments in science, technology, or clinical practice, as documented through:</p> <ul style="list-style-type: none">– Departmental reviews.– Curriculum committee discussions. <p>But there is no evidence of actual curriculum modification in response.</p> |
| Applied | <ul style="list-style-type: none">• Meeting minutes showing the modification of the curriculum in light of scientific, technological, and clinical development.• Learning objectives of these changes and updated syllabi reflect these adjustments |
| Effective | <ul style="list-style-type: none">• Feedback by face-to-face Interviews or FGD and /or questionnaire to students, academic staff, and stakeholders.• Site visit observations may confirm modernized labs, technologies, or clinical development according to which the BBS are modified. |

2.3.2.2. The medical college should in the curriculum adjust and modify the contributions of the biomedical sciences to the current and anticipated needs of society and the health care system.

Notes:

- e.g. of society needs like responding to pandemics, infectious diseases, and other health crises, managing age-related diseases.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <ul style="list-style-type: none">• First of all, the college, the department, or the curriculum committee should determine the needs of the society and the health sector through meeting with |

| | |
|------------------|--|
| | representatives from both parties, and the curriculum is then modified in light of these needs. |
| Applied | <ul style="list-style-type: none"> Document required is/ are minute/s of the meeting showing that the curriculum has been modified in light of the needs of society and the health system. Learning objectives of the subjects that underwent these changes. Whether it is applied is verified by checking the concerned teaching schedule/s and syllabus |
| Effective | <ul style="list-style-type: none"> Feedback by face-to-face interview or FGD and /or questionnaire to academic staff, health alliance, and other stakeholders. |

2.4 BEHAVIOURAL AND SOCIAL SCIENCES, MEDICAL ETHICS AND JURISPRUDENCE

Annotation:

[Behavioral and social sciences include: biostatistics, community medicine, epidemiology, global health, hygiene, medical anthropology, medical psychology, medical sociology, public health, and social medicine.]

Notes:

- The terms behavioral sciences and social sciences are interconnected.
 - **Behavioral Sciences:** field studies how people **think, feel, and act**. In medicine, they help us understand how things like **emotions, habits, stress, and motivation** affect a person's **health and behavior**, such as taking medication or visiting the doctor.
 - **Social Sciences:** These fields focus on how people live and interact in **society**. They examine how things like **culture, income, education, family, and environment** affect a person's **health**, access to care, and how healthcare systems work.
- Directing medical colleges to promote the incorporation of social and behavioral sciences, medical ethics, and medical jurisprudence into the curricula of all medical departments, rather than restricting their teaching to specific disciplines such as community medicine. These topics should be incorporated across various disciplines to ensure comprehensive capacity building among students.

2.4.1 The medical college must, in the curriculum, identifies and incorporates the contributions of the:

2.4.1.1. The medical college must, in the curriculum, identifies and incorporates the contributions of the behavioral sciences.

Notes:

- *Some applications of behavior sciences: patient adherence and compliance to medicine to instructions, health behavior change (weight loss), chronic disease management, pain management, public health campaign, doctor-patient communication, crisis response.... etc.*

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | <ul style="list-style-type: none">• Syllabus of behavioral sciences with its learning objectives. |
| Applied | <ul style="list-style-type: none">• The behavioral sciences curriculum is clearly incorporated with other disciplines and addresses topics such as behavior change, stress, health communication, or psychosocial aspects of care.• Sample lectures and teaching materials demonstrate application to clinical or real-life scenarios.• Vertical or horizontal incorporation is evident in design. |
| Effective | <ul style="list-style-type: none">• Face-to-face interviews, FGDs, or surveys with students and faculty• Site visit observations of relevant sessions (e.g., small group discussions, communication skills training)• Students can articulate how behavioral sciences support clinical reasoning, empathy, patient care, or communication. |

2.4.1.2. The medical college must, in the curriculum, identifies and incorporates the contributions of the social sciences.

Notes:

- *Medical sociology is concerned with the relationship between social factors and health, and with applying sociological theory and research techniques to questions related to health and the healthcare system. e.g., study the impact of poverty on health outcomes.*

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | <ul style="list-style-type: none">• A syllabus and learning objectives for social science subjects (e.g., medical sociology, anthropology, health systems, etc.)• Teaching schedules or documentation of delivery |
| Applied | <ul style="list-style-type: none">• Teaching content addresses relevant social science themes such as culture and health, health inequities, population behavior, health system structure, or the role of community in care.• Incorporation with the basic, clinical, or public health disciplines is evident (horizontal or vertical).• Sample lectures or activities demonstrate applied learning. |
| Effective | <ul style="list-style-type: none">• Face-to-face interviews, FGDs, or surveys with students and faculty• Site visit observations of sessions or activities (e.g., community visits, case-based learning)• Students can explain how social science concepts inform patient care, public health, or professional responsibility. |

2.4.1.3. The medical college must, in the curriculum, identifies and incorporates the contributions of the medical ethics.

Annotation:

[Medical ethics deals with values, rights, and responsibilities related to physician behavior and decision making]

Notes:

- *Incorporating the medical ethics curriculum with all specialties according to a mechanism developed for this purpose, highlighting the rights of doctors, the rights of patients, and regulating the relationship between doctors, patients, and healthcare institutions.*
- *e.g.: general medical ethics, consent, confidentiality and privacy, end-of-life, medical error, cultural and religious considerations, ethical issues in reproductive medicine...*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <p>The curriculum includes:</p> <ul style="list-style-type: none"> – A syllabus of medical ethics – Teaching schedule with well-defined learning objectives. |
| Applied | <p>Medical ethics topics are incorporated into the curriculum through structured courses and linked sessions within clinical training or professionalism modules.</p> <ul style="list-style-type: none"> – Sample materials show application to real-world scenarios (e.g., confidentiality, informed consent, end-of-life care). – Ethics is embedded in both theoretical and applied teaching activities. |
| Effective | <p>Effectiveness is verified through triangulation, including:</p> <ul style="list-style-type: none"> • Face-to-face interviews, FGDs, or questionnaires involving students (especially at end stages), graduates, academic staff, and external stakeholders (e.g., hospital partners) • Site visit observations of ethics-focused sessions or discussions – Students and graduates are able to articulate ethical reasoning and its application in clinical decisions. |

2.4.1.4. The medical college must, in the curriculum, identifies and incorporates the contributions of the medical jurisprudence.

Annotation:

[Medical jurisprudence deals with the laws and other regulations of the health care delivery system, including the regulations of the production and use of pharmaceuticals and medical technologies (devices, instruments, etc.).]

Note: the forensic medicine curriculum must include medical jurisprudence and medical laws (the law protecting doctors).

"It is recommended to involve forensic medicine specialists and medical law experts in providing consultations and contributing to the development of a curriculum that aligns with the needs of both the healthcare system and society."

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <ul style="list-style-type: none"> – A syllabus for medical jurisprudence – Learning objectives and a teaching schedule |

| | |
|------------------|--|
| Applied | <p>The subject is incorporated meaningfully into the curriculum, either as a stand-alone course or embedded within clinical disciplines.</p> <ul style="list-style-type: none"> – Teaching materials cover key legal aspects such as malpractice, patient rights, documentation, consent, death certification, and reporting obligations. – Examples show that students are taught how legal principles relate to clinical practice. |
| Effective | <ul style="list-style-type: none"> • Face-to-face interviews, FGDs, or questionnaires with students (especially final-year), graduates, academic staff, and legal/clinical stakeholders • Site visit observations or attendance in relevant sessions <p>– Graduates demonstrate awareness of legal responsibilities and ethical/legal decision-making in real-world practice</p> <p>(sample questions: Is this science (<i>behavioral, social, medical ethics, or medical jurisprudence</i>) included in the curriculum? Is it included in one or more stages? As medical students, do you think that it is of significance in your future career ?)</p> |

2.4.2. The medical college should, in the curriculum, adjust and modify the contributions of the behavioral and social sciences as well as medical ethics and medical jurisprudence to:

Annotation:

[The behavioral and social sciences, medical ethics, and medical jurisprudence would provide the knowledge, concepts, methods, skills, and attitudes necessary for understanding socio-economic, demographic, and cultural determinants of causes, distribution and consequences of health problems as well as knowledge about the national health care system and patients' rights. This would enable analysis of the health needs of the community and society, effective communication, clinical decision-making, and ethical practices.]

2.4.2.1. The medical college should, in the curriculum, adjust and modify the contributions of the behavioral and social sciences as well as medical ethics and medical jurisprudence to scientific, technological, and clinical developments.

Notes:

- *E.g., of development in sciences and technology: in vivo fertilizations (IVF), termination of life, termination of pregnancy, therapeutic abortion, organ donation, etc.]*

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | <p>The curriculum committee or departments have recognized and discussed new scientific, technological, or clinical developments (e.g., AI in medicine, digital documentation, evolving ethics in telehealth), as reflected in:</p> <ul style="list-style-type: none"> – Meeting minutes or planning documents |
| Applied | <ul style="list-style-type: none"> – Documented curriculum updates were made to behavioral/social sciences, ethics, or jurisprudence content in light of relevant advancements (e.g., digital professionalism, health misinformation, legal implications of AI or data privacy). – Updated syllabi and learning objectives reflect these modifications. |
| Effective | <ul style="list-style-type: none"> • Face-to-face interviews, FGDs, or questionnaires with students, academic staff, and curriculum committee members • Site visit observations or review of updated teaching/assessment materials <ul style="list-style-type: none"> – Stakeholders (e.g., legal experts, clinicians) confirm the relevance and application of these updates. <p><i>[During the interview; Ask about modifying or adding subjects according to development in sciences and technology.</i></p> |

2.4.2.2 The medical college should, in the curriculum, adjust and modify the contributions of the behavioral and social sciences as well as medical ethics and medical jurisprudence to current and anticipated needs of the society and the health care system.

Notes:

- *E.g. of health or society needs: like addiction, physical or mental disabilities, various health services, geriatric care.... etc.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|---------|--|
| Present | <p>Societal and health system needs (e.g., population aging, digital health access, health inequities, legal challenges in practice) are recognized and discussed by the curriculum committee and/or departments.</p> <ul style="list-style-type: none"> – Documented in meeting minutes, reports, or similar internal documents. |
| Applied | <ul style="list-style-type: none"> – The curriculum for behavioral/social sciences, ethics, or jurisprudence has been modified to reflect identified societal or system needs. |

| | |
|------------------|---|
| | <ul style="list-style-type: none"> – Updated syllabi, learning objectives, and schedules show content responsive to real-world challenges (e.g., health disparities, communication across cultures, consent in vulnerable populations). |
| Effective | <ul style="list-style-type: none"> -Interviews, FGDs, or questionnaires with students, academic staff, the curriculum committee, and external stakeholders (e.g., MOH, health facilities, civil society) -Site visit observations of updated sessions or field-based learning -Students and staff articulate how these updates address current or future societal and system needs. <p><i>[During the interview, ask about modifying or adding subjects according to health and society needs.]</i></p> |

2.4.2.3. The medical college should, in the curriculum, adjust and modify the contributions of the behavioral and social sciences as well as medical ethics and medical jurisprudence to changing demographic and cultural contexts.

Notes:

- *E.g. of demographic changes and cultural context: like displacement, immigration, urbanization, aging population, changes in educational levels.*

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <p>The curriculum committee or departments have identified changing demographic and/or cultural trends (e.g., population growth, displaced populations, shifts in cultural norms, language diversity).</p> <ul style="list-style-type: none"> – These are documented in meeting minutes or internal reports. |
| Applied | <ul style="list-style-type: none"> – Modifications have been made to the syllabi or learning objectives in behavioral and social sciences, ethics, or jurisprudence to address demographic or cultural developments (e.g., cultural competence, end-of-life practices, gender norms, legal awareness in diverse settings). |
| Effective | <p>Face-to-face interviews, FGDs, or questionnaires involving students (especially clinical years), faculty, and key stakeholders (e.g., community representatives, cultural advisors, MOH/NGO partners)</p> <p>Site visit observations of applied sessions (e.g., communication with diverse patients, ethics around cultural sensitivity)</p> <p>Students can articulate how demographic and cultural factors influence medical decisions, ethics, and legal practice.</p> <p><i>[During the interview, ask about modifying or adding subjects according to health and society needs, demographic changes, or cultural context.]</i></p> |

2.5 CLINICAL SCIENCES AND SKILLS

2.5.1 The medical college must, in the curriculum, Identify and incorporate the contributions of the clinical sciences to ensure that students:

2.5.1.1. The medical college must, in the curriculum, Identify and incorporate the contributions of the clinical sciences to ensure that students acquire sufficient knowledge and clinical and professional skills to assume appropriate responsibility after graduation.

Annotations:

[Clinical skills include history taking, physical examination, communication skills, procedures and investigations, emergency practices, and prescription and treatment practices.]

[Professional skills would include patient management skills, teamwork/team leadership skills, and inter-professional training.]

[Appropriate clinical responsibility would include activities related to health promotion, disease prevention, and patient care.]

Notes:

- We suggest preparing a syllabus for teaching professional skills in a theoretical and practical manner, as well as appropriate methods for evaluation.
- Professional skills can be taught through mentorship, role-play, project-based learning (working on a real-world project helps learners develop teamwork, communication, and problem-solving), collaborative learning, reflection, and self-assessment.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|---------|--|
| Present | <ul style="list-style-type: none">• Teaching schedule for various lessons in clinical sciences.• Learning objectives of various theoretical lessons in clinical sciences.• Learning objectives of various practical lessons in clinical sciences, which demonstrate the acquisition of clinical skills and professional skills.• Learning objectives demonstrate activities related to health promotion,• Learning objectives demonstrate activities related to disease prevention and |

| | |
|------------------|--|
| | <ul style="list-style-type: none"> Learning objectives demonstrate activities related to patient care. |
| Applied | <ul style="list-style-type: none"> A Schedule of training in various clinical sciences in the hospital departments/units as well as PHCCs to clarify training in professional behavior, and patient-care competencies, health promotion, and preventive medicine. Training plans include hospital and PHCC rotations covering both curative and preventive services. Use of logbooks to track skill acquisition clinical skills, acquisition of professional skills, health promotion, and disease prevention with follow-up mechanisms (like faculty signatures, departmental tracking). Samples of assessments (e.g., OSCEs, scenario-based tests) assess real-world clinical and professional competencies. |
| Effective | <p>The curriculum is fully implemented as planned, with regular follow-up on training sessions in both hospital and PHCC settings.</p> <ul style="list-style-type: none"> Students demonstrate exposure to health promotion, disease prevention, professional communication, and ethics in clinical care. Triangulated verification via: <ul style="list-style-type: none"> Interviews/FGDs with students and health staff Documented satisfaction and competency reports from graduates (residents) Evidence of clinical/professional competencies in assessments (e.g., OSCE scenarios involving team interaction, patient counseling, critical decision-making) Clear documentation of session duration, feedback from resident doctors, and the application across all clinical disciplines. <p><i>For example, an OSCE or another type of exam, which must demonstrate the achievement of professional skills, such as a scenario or a role-play between a nurse and the student, then observe how they deal with the situation.</i></p> <p><i>Interview the graduates (resident doctors of the college under evaluation) ask them:</i></p> <ul style="list-style-type: none"> ❖ whether they are satisfied with their knowledge and skills in clinical sessions. ❖ How long does each session last for each clinical subject? ❖ Are you satisfied with the professional knowledge and skills? ❖ Ask about the knowledge and sessions related to health promotion, disease prevention, and patient care. |

2.5.1.2. The medical college must, in the curriculum, Identify and incorporate the contributions of the clinical sciences to ensure that students spend a reasonable part of the program in planned contact with patients in relevant clinical settings.

Annotations:

[A reasonable part would mean about one third of the program.]

[Planned contact with patients would imply consideration of purpose and frequency sufficient to put their learning into context.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Documents exist that specify: <ul style="list-style-type: none">– Clinical training hours/units in various departments.– Total contact time with patients is mentioned, which must equal one-third of the program.– Settings (e.g., hospitals, PHCCs) are named in a clear rotation schedule. |
| Applied | The clinical settings must be well-planned and relevant for all departments. The curriculum includes a planned schedule of clinical training across multiple relevant settings (hospitals, PHCCs, outpatient clinics). <ul style="list-style-type: none">– Total clinical contact is quantified and represents approximately one-third of the program duration.– Learning objectives and expected competencies are defined for each clinical session.– Student attendance logs or tracking documents exist to confirm participation in these settings. |
| Effective | It is verified by Student interviews/FGDs/questionnaires confirm relevance, timing, and usefulness of sessions <ul style="list-style-type: none">• Site visit shows actual student presence in settings and alignment with training schedule❖ – Students report that clinical contact is predictable, meaningful, and supported by instructors, and that sessions typically proceed as scheduled and announced.❖ Ask whether the clinical training, i.e., sessions, are relevant.❖ Are the clinical sessions planned in advance and according to pre-announced schedules?) Do the sessions last as scheduled? |

2.5.1.3. The medical college must, in the curriculum, Identify and incorporate the contributions of the clinical sciences to ensure that students experience health promotion and preventive medicine.

Notes:

- *Health promotion (HPm) and health prevention (HPv) are not limited to community medicine; they must be incorporated into other clinical sciences.]*
- *We recommend updating the health promotion curriculum, in addition to preventive medicine, and benefiting from health promotion programs, including them in the curriculum of various disciplines alongside community medicine, in a theoretical and practical manner.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <p>The curriculum or department plans mention HPm and HPv.</p> <ul style="list-style-type: none">– There is schedule of activities or field exposure.– Learning objectives for HPm and HPv are well written. |
| Applied | <ul style="list-style-type: none">– The curriculum includes a defined schedule and learning objectives for HPm and HPv in disciplines like community medicine, family medicine, pediatrics, and internal medicine, etc.– Field-based training in PHCCs or health directorates is clearly planned and documented in logbooks or rotation schedules.– Students are trained on activities like health education, vaccination programs, screening, chronic disease prevention, health promotion programs, etc. |
| Effective | <p>It is verified by Interviews/FGDs/questionnaires with students, confirming participation in and understanding of HPm/HPv activities</p> <ul style="list-style-type: none">• Logbooks reflect attendance and skills gained• Site visits or documentation show multidisciplinary involvement across relevant departments.• Sample of questions:<ul style="list-style-type: none">○ Does the training schedule include HPm?○ Does the training schedule include HPv?○ Which disciplines include HPm and HPv in their curriculum? |

2.5.2. The medical college must specify the amount of time spent in training in major clinical disciplines.

Annotations:

[Time spent in training includes clinical rotations and clerkships, i.e. 4th, 5th , and 6th year grade]

[Major clinical disciplines would include internal medicine (with subspecialties), surgery (with subspecialties), psychiatry, general practice/family medicine, gynecology & obstetrics and pediatrics.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">• Schedule demonstrating the number of hours/units allocated for each major discipline. <i>[Note: training in major clinical disciplines must cover at least one-third of the program.]</i> |
| Applied | <ul style="list-style-type: none">• Verification of applications according to schedules in the specified hours and the settings of training in hospitals, outpatient clinics, emergency rooms, or PHCCs.• Monitoring tools (e.g., attendance sheets, rotation tracking) are in place to verify application. |
| Effective | <ul style="list-style-type: none">• It is verified by<ul style="list-style-type: none">• Student interviews/questionnaires from different academic years confirm that training occurred as scheduled• Site visit observations align with documented plans• There is a mechanism to address gaps (e.g., make-up sessions, remediation policies) <i>[Ask a representative sample of students from each grade about the average duration spent in the clinical sessions.]</i> |

2.5.3. The medical college must organize clinical training with appropriate attention to patient safety.

Annotations:

[Patient safety would require supervision of clinical activities conducted by students.]

Notes:

- *Patient safety aims to prevent and reduce risks, errors, and harm that occur to patients during the provision of health care. It includes a wide range of methods, starting simply with hand hygiene/ wearing gloves, masks, maintaining the confidentiality of information, privacy during examination, drug dispensaries, training under supervision, to more complicated issues.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">• Lectures' notes and /or the syllabus of the clinical sessions must demonstrate objectives for patient' safety.• Patient safety should be included in all clinical branches and not be limited to one branch. |
| Applied | <ul style="list-style-type: none">• Patient safety objectives are embedded across multiple clinical disciplines in both syllabi and learning objectives in theory and sessions.• Interview patients and healthcare staff to verify the application of these maneuvers.<ul style="list-style-type: none">– Logbooks include checklists or entries on supervised safety practices (e.g., hand hygiene, infection control, informed consent, sharps safety).– Students are routinely supervised during clinical exposure.• – Clinical assessments (OSCEs or others) include stations or questions on patient safety. |
| Effective | <p>This is verified by:</p> <ul style="list-style-type: none">• Patient and health staff interviews reflect student compliance with safety standards<ul style="list-style-type: none">• Student interviews or FGDs confirm they were trained, supervised, and assessed on patient safety• Observation during site visits shows students adhering to safety procedures (e.g., PPE, consent, reporting errors).– Examinations (e.g., OSCEs) include scenarios requiring safety-related decision-making or behaviors. |

2.5.4. The medical college should, in the curriculum, adjust and modify the contributions of the clinical sciences to the:

2.5.4.1 The medical college should, in the curriculum, adjust and modify the contributions of the clinical sciences to the scientific, technological, and clinical developments.

Notes:

Examples about:

- **Scientific Developments:**

- Molecular and genetic research e.g., identification of gene mutations linked to breast cancer (*BRCA1/2*), or the use of pharmacogenomics in drug therapy.
- Immunology advancements e.g., understanding autoimmune diseases, development of monoclonal antibodies.
- Microbiome research: implications in diseases such as inflammatory bowel disease and metabolic syndrome.
- Cancer biology: e.g., tumor microenvironment, targeted cancer therapies.
- Regenerative medicine: stem cell applications in neurology and cardiology.

- **Technological Developments:**

- Advanced imaging technologies: e.g., PET-MRI fusion, functional MRI (fMRI).
- Robotic surgery.
- Telemedicine and remote monitoring: for chronic disease follow-up.
- Artificial intelligence (AI) in diagnostics
- Wearable health technologies: e.g., smart ECG monitors, glucose sensors.

- **Clinical Developments:**

- Minimally invasive procedures: e.g. laparoscopic surgeries, interventional radiology techniques.
- Multidisciplinary care models: team-based approaches in managing complex conditions like stroke or cancer.
- Enhanced recovery protocols: e.g., in perioperative care for faster rehabilitation.
- New clinical guidelines and protocols: such as sepsis bundles or updated cardiovascular risk assessments.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <ul style="list-style-type: none">• The latest developments in science, technology, and/or clinical aspects should be specified in the meeting's minutes.• Syllabi or lecture titles may include new topics but lack alignment with intended learning objectives or assessments |

| | |
|------------------|---|
| Applied | Minutes from the Curriculum Committee (CC) and clinical department meetings document actual curriculum revisions aligned with recent scientific, technology and clinical advancements (e.g., minimally invasive procedures, telemedicine, COVID-19 protocols). Updated syllabi reflect integration of current practices. |
| Effective | <ul style="list-style-type: none"> Asking/interviewing members of (CC), clinical departments and hospital staff. |

2.5.4.2. The medical college should, in the curriculum, adjust and modify the contributions of the clinical sciences to the current and anticipated needs of society and the health care system.

Notes:

examples of Current Needs of Society and the Health Care System:

- Non-communicable diseases (NCDs):
 - High burden of diabetes, hypertension, cardiovascular diseases, and cancer.
 - Need for training in chronic disease management, lifestyle counseling, and preventive care.
- Mental health care:
 - Rising prevalence of anxiety, depression, and substance abuse.
 - Importance of integrating psychiatric skills into general clinical training.
- Aging population:
 - Geriatric care. Curriculum should include geriatrics and palliative care.
- Emergency and disaster preparedness:
 - Increase in natural disasters, pandemics, and mass casualty incidents.
 - Need for training in triage, infection control, and crisis response.
- Health inequities and underserved populations:
 - Emphasis on rural medicine, primary care, and mobile health services.
 - Focus on social determinants of health.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <ul style="list-style-type: none"> Community needs are determined through repeated meetings with stakeholders in the Ministry of Health or its directorates, meetings with civil society representatives in provincial councils or parliament. The society and health system's needs should be specified in meeting minutes. |

| | |
|------------------|---|
| Applied | Meeting minutes which indicate modification in the syllabus of clinical sciences in response to: Health and Society needs. |
| Effective | The effectiveness is verified by asking/ interviewing members of the Curriculum Committee and scientific departments, as well as health staff in hosp. and PHCCs. |

2.5.5. The medical college should ensure that every student has early patient contact, gradually including participation in patient care.

Annotations:

*[Early patient contact **would partly** take place in primary care settings and would primarily include history taking, physical examination, and communication.]*

[Participation in patient care would include responsibility under supervision for parts of investigations and/or treatment of patients, which could take place in relevant community settings.]

Notes:

- *Relevant settings mean well-prepared scheduled sessions with announced learning objectives, and it partly takes place in the PHCCs.*
- *Contact with Simulated Patients (SP) in the Skills Lab/Simulation Center can be considered an additional form of early patient contact. This should be supported by photos and schedules that document the clinical training sessions.]*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <ul style="list-style-type: none"> • Curriculum map, i.e. Schedule showing the clinical training which may be started as early as the 1st. grade partly in PHCCs. • Syllabus of early training under supervision, which should demonstrate learning objectives about history taking, physical examination, and communication skills, suggesting investigations and/or treatment. |
| Applied | <ul style="list-style-type: none"> • Well-scheduled, relevant settings in the PHCCs or community settings. • Simulated patient sessions are included, fully documented with a schedule or photos. |

| | |
|------------------|--|
| | <ul style="list-style-type: none"> • The settings supervised by the responsible seniors should be well-known to students as well as to those involved in this issue. • List of students' attendance at the sessions. |
| Effective | <ul style="list-style-type: none"> • Interview students, asking about the benefits as well as about the adherence to the stated schedule and learning objectives. |

2.5.6. The medical college should structure the different components of clinical skills training according to the stage of the study program.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none"> • The college should first determine a list of clinical skills the student must learn during the study period, or a copy of the syllabus demonstrating such skills. • A list or syllabus of clinical skills exists demonstrate the distribution of these skills over the study years in an organized manner that matches the objectives/outcomes of that year. |
| Applied | <ul style="list-style-type: none"> • Logbook: demonstrate the application of such skills. • Attendance in the clinical settings or skill lab. |
| Effective | <ul style="list-style-type: none"> • OSCE or other modes of assessment that used to assess these skills. • Blueprints that demonstrate the alignment of the skills with the outcomes of the specific academic year. • Interview/questionnaire with students. (<i>Ask the students if the identified skills have been learned and aligned with the outcomes of the academic year.</i>) |

2.6 PROGRAMME STRUCTURE, COMPOSITION AND DURATION

2.6.1. The medical college must describe the content, extent and sequencing of courses and other curricular elements to ensure appropriate coordination between basic biomedical, behavioral and social and clinical subjects.

Notes:

- *These 4 subjects (BBS, Behavioral and Social Sciences, as well as clinical subjects), should be incorporated longitudinally throughout the curriculum, with varying proportions*

depending on intermediate outcomes and the decisions made by the curriculum committee.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">Documents as: Curriculum map or Schedule of the curriculum elements/ courses/ modules that demonstrate the coordination between these 4 subjects: BBS, behavioral and social, and clinical subjects, regarding content, sequences and extent of each element/course/module.A document that describes how these 4 subjects are coordinated with one another; their contents and sequences. |
| Applied | <ul style="list-style-type: none">Minutes of the CC meetings explaining how the curriculum is designed in a sequential and constructive manner that ensures consistency between the four subjects [BBS, behavioral and social, and clinical subjects]Learning objectives that manifest such coordination, for both theoretical and practical lessons. |
| Effective | <ul style="list-style-type: none">Samples of OSCE station, written questions.Interviews the CC members, head of the departments, the students, and/ or graduates. |

2.6.2 The medical college should, in the curriculum, ensure horizontal integration of associated sciences, disciplines, and subjects.

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.]

Note: i.e., integrating basic with basic or clinical with clinical at a horizontal level. e.g., the respiratory module includes anatomy, physiology, biochemistry, pharmacology, pathology of the respiratory system; so as for other systems.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none"> Documents as a curriculum map or Schedule, to clarify the horizontal integration within the same academic year. |
| Applied | <p>Learning objectives of the disciplines/module, ...etc. for both theoretical and practical lessons that demonstrate the horizontal integration within the same academic year.</p> <p>Sample of lectures and the practical/clinical lessons that demonstrate the horizontal integration within the same academic year.</p> |
| Effective | Examples of theoretical exam questions, along with practical/clinical assessments, include OSPE for horizontal integration at the basic sciences level and OSCE for integration at the clinical level. |

2.6.3. The medical college should, in the curriculum, ensure vertical integration of the clinical sciences with the basic biomedical and the behavioral and social sciences.

Annotations:

[Examples of vertical (sequential) integration would be integrating metabolic disorders and biochemistry, or cardiology and cardio-vascular physiology.]

Notes:

- Integrating basic with clinical, behavioral, and social sciences in a vertical level.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none"> Documents as a curriculum map or Schedule to clarify the vertical integration between BBS, clinical sciences, behavioral and social sciences; for both theoretical and practical lessons. Documents that describe how these 4 sciences are integrated with each other. |
| Applied | <ul style="list-style-type: none"> Learning objectives of the disciplines/modules.... etc., which clarify the vertical integration between these sciences, for both theoretical and practical lessons. Some evidence exists of attempts to align theoretical and practical content across these fields. |
| Effective | Examples of theoretical exam questions, along with practical/clinical assessments. |

2.6.4. The medical college should, in the curriculum, allow optional (elective) content and define the balance between the core and optional content as part of the educational program.

Annotations:

[Core and optional (elective) content refer to a curriculum model with a combination of compulsory elements and electives or special options.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none">• A document proving the presence of the optional (elective) subjects within the curriculum.• Curriculum map which demonstrates the balance between the core and the optional contents. |
| Applied | <ul style="list-style-type: none">• Syllabus of elective subjects.• The elective subjects should be well defined, well supervised, and organized to ensure a balance between the core and the optional contents.• Learning objectives of the elective subjects. |
| Effective | <ul style="list-style-type: none">• Document approving the assessment of the elective subjects.• Documents proving the attendance of students to the elective subjects. |

2.6.5. The medical college should, in the curriculum, describe the interface with complementary medicine.

Annotations:

[Complementary medicine would include traditional or alternative practices.]

Note: Examples of complementary medicine (CM) include acupuncture, herbal remedies, massage, meditation, and others. Studying CM is important because it is increasingly utilized by patients, and healthcare professionals who are well-versed in these options can offer more informed advice. This knowledge helps ensure that treatments are safe and effective when used alongside conventional care, providing patients with comprehensive care that respects their preferences and cultural practices.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | <ul style="list-style-type: none">• lectures about complementary medicine• documents describe the interface of complementary medicine with other disciplines like (pharmacology, internal medicine, surgery, pediatrics, Gyn.&obs.). |
| Applied | <ul style="list-style-type: none">• Learning objectives concerning complementary medicine.• Most departments should be involved in this type of medicine, so the syllabus of each department is required to verify the application of complementary medicine. |
| Effective | <ul style="list-style-type: none">• Interviews the CC members, head of the departments, and the student. |

2.7 PROGRAMME MANAGEMENT

2.7.1. The medical college must have a curriculum committee, which under the governance of the academic leadership (the dean) has the responsibility and authority for planning and implementing the curriculum to secure its intended educational outcomes.

Annotation:

[The authority of the curriculum committee (CC) would include authority over specific departmental and subject interests and the control of the curriculum within existing rules and regulations as defined by the governance structure of the institution and governmental authorities. The CC would allocate the granted resources for planning and implementing methods of teaching and learning, assessment of students, and course evaluation.]

Note: The CC must have been formed at least two or three years ago, with minutes of periodic meetings accompanied by recommendations, an action plan and procedures.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none"> • An official order to form the curriculum committee (CC). • Documents of job description and authority of the (CC). |
| Applied | <ul style="list-style-type: none"> • Periodic meeting minutes showing the recommendations and plan of actions [POA] concerning curriculum. • Some evidence of POA implementation is available. |
| Effective | <ul style="list-style-type: none"> • Documents showing the impact of meeting minutes (recommendation) i.e. implementation of the (POA). • Documents showing allocation of the granted resources to planning and implementing methods of teaching and learning methods. • The CC addresses to the Dean, in which it requests to take advantage of the resources granted for the development of the educational process or the educational system, for example: assigning teaching staff, developing classrooms or laboratories, or developing the method of examinations. |

2.7.2. The medical college must, in its curriculum committee, ensure the representation of staff and students.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The administrative order to form the CC must include representatives from students and staff |
| Applied | Meeting minutes of the CC confirm that the staff and student representatives regularly attend and participate in the meetings. |
| Effective | Meeting minutes provide evidence of their active engagement and contributions. -Face-to-face interviews/FGDs verify that student and staff members understand and fulfill clear roles (e.g., when asked “What is your role in the CC?”) |

2.7.3. The medical college should, through its curriculum committee, plan and implement innovations in the curriculum.

Notes:

- e.g., *innovations in the curriculum: Incorporation of educational technology – Successful application of computers, smartphones, social media, simulations, virtual environments, and other educational technology tools to enhance learning, faculty peer evaluation.* (Please note the ref.)

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | A document discusses the innovative parts of the curriculum. <ul style="list-style-type: none">• -There is evidence of planning or preparing to apply such innovations. |
| Applied | Documents show workshops or meetings held to discuss and train faculty/students on curriculum innovation. <ul style="list-style-type: none">• -Steps toward implementation of innovations are clearly documented. |
| Effective | Innovation in the curriculum has been implemented and is evident across disciplines. <ul style="list-style-type: none">-Workshops or training sessions were conducted for faculty/students on innovation aspects.-Direct verification during the site visit confirms application.• -Feedback from faculty and students (via interviews or questionnaires) confirms awareness and experience with the implemented innovations. |

2.7.4. The medical college should, in its curriculum committee, include representatives of other stakeholders.

Annotation:

[Other stakeholders include: [other health professions, patients, the community, and the public (e.g. users of the health care delivery systems, including patient organizations). Other stakeholders would also include other representatives of academic and administrative staff, education and health care authorities, professional organizations, medical scientific societies, and postgraduate medical educators.]

Notes:

- *A documented active participation of other stakeholders.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">• The administrative order to form the (CC) which must include representatives from other stakeholders.• Formal invitation to attend the meetings. |
| Applied | <ul style="list-style-type: none">• <i>Meeting minutes that reflect the active engagement of other stakeholders and the provision then the adoption of key proposals.</i> |
| Effective | <ul style="list-style-type: none">• <i>A face-to-face interview with the steering committee to confirm stakeholder participation and contribution.</i>• Formal invitations and follow-up records exist showing continuous engagement. |

2.8 LINKAGE WITH MEDICAL PRACTICE AND THE HEALTH SECTOR

2.8.1 The medical college must ensure operational linkage between the educational program and the subsequent stages of education or practice after graduation.

Annotation:

[The operational linkage implies identifying health problems and defining required educational outcomes. This requires clear definition and description of the elements of the educational programs and their interrelations in the various stages of training and practice, paying attention to the local, national, regional and global context. It would include mutual feedback to and from the health sector and participation of teachers and students in activities of the health team. Operational linkage also implies constructive dialogue with potential employers of the graduates as basis for career guidance.]

[Subsequent stages of education would include postgraduate medical education (preregistration education, vocational / professional education and specialist/subspecialist or expert education, and continuing professional development (CPD) / continuing medical education (CME).]

*[* Note: 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 or health needs.]*

Notes:

- *The relation between the medical college and health institutes (e.g., teaching hospitals, PHCCs, another specialized center, ...etc.) must be solid and sustainable. That is why the health sectors must be represented in the CC, steering committee, or sharing the college in the formulation of its mission and outcomes, curriculum, and so on.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | <ul style="list-style-type: none">• Letter of agreement between the college and the health institutes. It must include details of aspects of cooperation between the two sides, exchange of experiences, participation in scientific activities (including teaching under and post graduates) by both sides.• Constructive dialogue as basis for career guidance for the future graduates. During regular meetings, health problems must be discussed, and the required educational outcomes must be defined. The constructive dialogue must be extended to involve the postgraduate stages. This is verified by the presence of formal invitations to the meetings, mentioning the topics of discussion and the attendees. This constructive dialogue can be achieved through the Directors' Board of the Teaching hospitals.• The health institute must be informed about the elements of training and practice in various stages of the educational program. This is achieved by formal documents, leaflets/schedules distributed in the health institutes. |
| Applied | <ul style="list-style-type: none">• Letter of agreement with official signatures.• Meeting minutes show constructive dialogue with health sector representatives (e.g., Directors' Board of Teaching Hospitals).• The field visit to the hospital is to verify the implementation of the recommendations approved at the meetings.• The health sector is informed about the undergraduate and postgraduate curriculum, and there is mutual scientific participation (e.g., joint conferences, campaigns).• Some evidence of feedback exchange, but no clear documentation, planning, or implementation. |
| Effective | <ul style="list-style-type: none">• Documents showing the mutual feedback to and from the health sector. The feedback must be analyzed; an action must be planned and then implemented. |

| | |
|--|--|
| | <ul style="list-style-type: none"> • Documents showing participation of both sides in the scientific activities of the other. e.g. scientific conferences / meetings, health awareness campaigns, immunization campaigns, CME, CPD* etc. • The documents that demonstrate the effectiveness of this linkage are for example: changing the curriculum with changing health needs or competencies' requirements; at the same time keeping up with health needs at the local, regional and international levels and changing the curriculum based on them. • Other examples about the linkage between the health sector and the academic sector: <ul style="list-style-type: none"> ○ Participation of specialist doctors of the MoH in teaching undergraduate students. ○ Documents like Ministerial order related to nomination to postgraduate studies (from the Ministry of Health) ○ Documents proving that health institutions are informed about the establishment of postgraduate studies in certain specialties ○ Documents proving the participation of college staff in training postgraduate doctors in teaching hospitals. ○ Documents proving participation of the teaching staff in the teaching of postgraduate students (those affiliated to the Ministry of Health MoH) in the basic biomedical sciences. ○ Documents proving that the titles of MSc. and PhD. theses depend on health problems that the Ministry of Health proposes annually. |
|--|--|

2.8.2. The medical college should ensure that the curriculum committee:

2.8.2.1. The medical college should ensure that the curriculum committee seeks input from the environment in which graduates will be expected to work, and modifies the program accordingly.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <ul style="list-style-type: none"> • Meetings' minutes of (CC), which clarify the committee's procedures for feedback. |

| | |
|------------------|--|
| | <ul style="list-style-type: none"> Various documents which demonstrate feedback from the health institution (e.g. of input from environment: patients, health staff (Senior doctors), health personnel (Nurses), Senior house officers (SHOs), ...etc.) |
| Applied | Analysis of the results and then putting an action plan. |
| Effective | <ul style="list-style-type: none"> Feedback is systematically collected, analyzed, and used to modify the curriculum. Modifications are documented and formally approved within CC minutes and reflected in the updated curriculum structure. |

2.8.2.2 The medical college should ensure that the curriculum committee considers program modification in response to opinions in the community and society.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none"> Meetings' minutes of (CC), which clarify the committee's procedures for feedback. Various documents that demonstrate feedback from the community leaders and society. e.g.: <i>Members from NGO, Members of the Higher Education Committee, and the Health Committee in the provincial councils or parliament.</i> |
| Applied | An action plan is developed; However, evidence of actual modification to the curriculum is limited or not formally approved. |
| Effective | <ul style="list-style-type: none"> Modification of the program accordingly, documented in the meeting minutes of the (CC), and approved formally. |

References:

- <https://www.differencebetween.com/difference-between-behavioral-science-and-vs-social-science/>
- https://apps.who.int/iris/bitstream/handle/10665/44091/9789241598316_eng.pdf
- http://www.acsiphils.org/acsiphilippines/wp-content/uploads/2016/11/curriculum-mapping_shirley-padua.pdf
- <https://blogs.commons.georgetown.edu/centile-template/instructional-design-curriculum-development/innovation-in-curriculum-development/>
- <https://online.nwmissouri.edu/articles/education/innovation-matters-in-education.aspx>
- <https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/ace/ace-innovation-booklet.pdf>
- <https://pediaa.com/what-is-the-difference-between-society-and-community/>
 - Howley LD, Hall KK, Fitall E. Patient Safety in Medical, Nursing, and Other Clinical Education. PSNet [internet]. Rockville (MD): Agency for Healthcare Research and Quality, US Department of Health and Human Services. 2020. <https://psnet.ahrq.gov/perspective/patient-safety-medical-nursing-and-other-clinical-education>
 - **<https://psnet.ahrq.gov/primer/root-cause-analysis>**
- <https://piogroup.net/blog/20-innovative-teaching-methods-with-examples-how-to-implement-in-education-process>
 - Kitaboo. <https://kitaboo.com › top-innovations-in-k-12-education>

Area -3-

ASSESSMENT OF STUDENTS

Prepared by:

Assist. Prof. Dhafer Basheer Al-Youzbaki

Revised by:

Prof: ADIL HASAN ALI AKBAR

Prof: Mohammed Saeed Abdulzahra

Ass. Prof: Yasser Mohammad Hussein Al-Hakeem

3.1 ASSESSMENT METHODS:

3.1.1. The medical college must define, state, and publish the principles, methods and practices used for assessment of its students, including the criteria for setting pass marks, grade boundaries, and number of allowed retakes.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|---|
| Present | Define, state and publish (publish at official or formal website of the college, examination committee, Google classroom and in paper format) the assessment policy, system, program, or any other well-identified assessment structure (approved by college council and university council) which should cover the principles, methods, and practices used for assessment of the students; including the criteria for setting pass marks, grade boundaries, and number of allowed retakes. |
| Applied | Documents demonstrating the application of <i>most</i> of the above criteria of the curriculum in a form of timetable for each module or subject that is published at the beginning of each semester; and should include all the types, times, and pass marks for each examination. All these details must be well-known by the students and faculties. |
| Effective | <ul style="list-style-type: none">Documents (regular annual surveys) from a representing sample of medical students, tutors, related stakeholders; confirming a clear orientation of the above criteria.Quality assurance committee for assessment (QACC) must monitor and evaluate the application of the above criteria and test their effectiveness regularly depending on application and surveys. |

3.1.2. The medical college must ensure that assessments cover knowledge, skills and attitudes.

Notes:

- *Attitude assessment examples:*
 - *Self & peer reflection: students rate themselves and their classmates about honesty, teamwork, and responsibility.*
 - *Portfolio & mentor feedback by collecting reflections, case discussions, and feedback from faculty in the students' portfolios.*
 - *Multidirectional (360°) feedback: feedback comes from attending physicians, residents, nurses, and patients; evaluating how the student shows up as a*

professional in real-life.

- *OSCE /clinical exams: during which the examiner judges on student's professional behavior.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none"> ● Check for a policy of assessment that must cover knowledge, skills and attitudes (KSA). ● Use documents including a blueprint or other documents covering the assessment of KSA (<i>even for more theoretical subjects, assessment of skills can be ensured by addressing intellectual skills and attitudes</i>). |
| Applied | Documents representing the application of the above criteria (KSA) in <i>all</i> departments of the college and in <i>all</i> types of assessment (i.e. evidence of already performed examinations that actually measure KSA). |
| Effective | <ul style="list-style-type: none"> ● Quality assurance committee for assessment (QACC) must review the whole blueprints to evaluate to which extent they cover all three domains (KSA) adequately and suggest an action plan for improvement. ● Documents demonstrating the application of the above criteria for <i>all</i> of subjects in <i>all</i> departments of the college. ● Student feedback (e.g. whether they really performed a dedicated skills exam like OSCE/OSPE or are assessed via to an oral exam instead). |

3.1.3. The medical college must use a wide range of assessment methods and formats according to their “assessment utility”.

Annotations:

“Assessment methods” would include consideration of the balance between formative and summative assessments; the number of examinations and other tests; the balance between different Types of examinations (written and oral); the use of normative and criterion-referenced judgments; and the use of personal portfolio, log-books, and special types of examinations e.g. objective structured clinical examinations (OSCE) and mini-clinical evaluation exercise (Mini-CEX). It would also include systems to detect and prevent plagiarism.

“Assessment utility” is a term combining validity, reliability, educational impact, acceptability, and efficiency of the assessment methods and formats.

[Note: The psychometric committee is the one which is responsible for assessment utility].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|--------------|---|
|--------------|---|

| | |
|------------------|---|
| Present | <p>Documents indicating:</p> <ul style="list-style-type: none"> • The use of a wide range of assessment methods (i.e. examples of different methods of examination which cover both formative and summative examinations). • Implementation according to their respective assessment utility (e.g. assessment of skills by OSCE or OSPE, not by a paper form). |
| Applied | <ul style="list-style-type: none"> • Samples from different formats used (including formative and summative examinations). • Approve the application of the announced blueprint (e.g. for OSCE the use of a brief record, or checklist, or a student performance video record...etc.) to prove the application of the above criteria in <i>most</i> subjects of curriculum. • Psychometric committee's regular reports commenting on validity, reliability, and efficiency for each assessment method. |
| Effective | <ul style="list-style-type: none"> • Questionnaires for graduates and undergraduates to verify whether assessment includes a wide range of methods, and if these methods are used according to their respective utility. • Quality assurance committee for assessment must review the above criteria and suggest improvements in a regular manner. |

3.1.4. The medical college must ensure that methods and results of assessments avoid conflicts of interest.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none"> • Conflict of interest policy (should encompass the avoidance of any involvement in examination-related matters that could influence students positively or negatively); or documents for instructions to exclude conflict of interest (e.g. for social, economic, and other reasons). • Methods of examinations that reduce the incidence of conflict of interest (e.g. the use of question bank for theory, and the use of OSCE/OSLER for clinical/practical exams). |
| Applied | Presence of documents to ensure the application of the above criteria in <i>all</i> departments or all equivalent units of the college. |
| Effective | <ul style="list-style-type: none"> • Surveys for both faculty members and students ensuring an effective application of the above criteria (satisfaction questionnaire). • Annual review of COI incidents and recusal forms; combined with survey results. QACC should implement improvements across programs accordingly. |

3.1.5. The medical college must ensure that assessments are open to scrutiny by external expertise.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Documents to confirm that the college has a policy to ensure that their assessment methods and processes are open to inspection by external expertise in a regular manner to review the assessment policy; including principles, methods, and practices; and submits his/her report to the college council as a suggestion for quality improvement of the assessment process as a whole. This external expertise could be from the same university, other universities, the ministry, or from outside the country. |
| Applied | Documents including invitation letters to external expertise, report(s) of external expertise after reviewing the assessment policy and site visit for the college. |
| Effective | Documents indicating a change or action to be taken according to the suggestions report from the external expertise. |

3.1.6. The medical college must use a system of appeal of assessment results.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Documents indicating that there is a system of appeal (specific regulations and instructions whether from the ministry, university, or college). Appeal is conducted via a specific committee (such committee <u>must not</u> be part of the examination committee). |
| Applied | Documents ensuring the application of the above criteria to <i>most</i> types of exams (samples of meeting minutes of appeal committee for <i>most</i> examinations, and for <i>more</i> than the last two academic years). |
| Effective | Surveys for student, graduates, and faculty's satisfaction after the application of the above criteria. |

3.1.7. The medical college should evaluate and document the reliability and validity of assessment methods.

Annotation:

Evaluate and document the reliability and validity of assessment methods would require an appropriate quality assurance process of assessment practices).

Notes:

- *Reliability (coefficient and item analysis) is usually assessed by the psychometric committee (e.g. reliability coefficient of MCQs exams can be evaluated during the electronic correction using optical mark recognition (OMR) software or (Remark) software. Validity is usually assessed by comparing exam questions to the provided blueprints.*
- *After estimating the validity and reliability via the psychometric committee, the results are then transferred to the quality assurance of assessment committee (QAAC) for further management].*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Evaluate and document the reliability and validity of assessment methods which require a psychometric committee (with a well-documented job description in the assessment policy), and a quality assurance of assessment committee (QAAC) which receives input from the psychometric committee. |
| Applied | Documents ensuring that reliability and validity of assessments were performed regularly in most types of examinations by an authorized committee which transfer their reports to QAAC for further evaluation and suggested improvements. |
| Effective | <ul style="list-style-type: none">• Documents (e.g. meeting minutes of the college council, different departments, or committees.... etc.) indicating that the college is taking special decisions (action plan) according to the analysis reports of the psychometric committee and QACC.• Student outcomes and satisfaction surveys reflect an improved perception of assessment fairness and accuracy. |

3.1.8. The medical college should incorporate new assessment methods where appropriate.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">Documents indicating the incorporation of new assessment methods (e.g. annual review of the assessment plan).Documents indicating recently-adopted method(s) of assessment, which are not previously utilized by the medical college. |
| Applied | <ul style="list-style-type: none">Documents ensuring the application of the new assessment method(s) in more than one area of assessment.Evidence includes timetables, examiner's reports, and blueprints confirming the application of the new assessment method. |
| Effective | Documents ensuring the impact of the new assessment method(s) (e.g. results from student/faculty interviews or surveys, or any data showing improvement in student outcomes or behavioral changes in graduates that are clearly linked to the implementation of the new assessment method). |

3.1.9. The medical college should encourage the use of external examiners.

Annotation:

Use of external examiners may increase fairness, quality and transparency of assessments)

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <ul style="list-style-type: none">The college should have a policy which encourages the participation of external examiners (as co-examiners in practical and clinical examinations and to write a feedback report). These external examiners can be from other colleges, other institutes (ministry of health), or from outside the country.The external examiner must be:<ul style="list-style-type: none">Not a participant in the teaching of the same subject (not a part-time faculty).Well-trained for such examination.Officially invited for participation in the exam. |

| | |
|------------------|--|
| Applied | <ul style="list-style-type: none"> Documents ensuring the participation of the external examiner in college examinations; the evidence must be from most of the departments, and from multiple academic years. Documented feedback reports provided by the external examiner. |
| Effective | <ul style="list-style-type: none"> Review of the external examiners' reports by an authorized committee (e.g. QAAC) and suggesting an action plan of improvement accordingly. Document the effectiveness of the external examiner's perception on the fairness, quality, and transparency of the exam. |

3.2. RELATION BETWEEN ASSESSMENT AND LEARNING

3.2.1. The medical college must use assessment principles, methods and practices that:

3.2.1.1 The medical college must use assessment principles, methods and practices that are clearly compatible with the intended educational outcomes and instructional methods.

Annotations:

assessment principles, methods, and practices refer to the assessment of students' achievement and would include assessment in all domains: knowledge, skills and attitude.

Notes:

- The intended educational outcomes as well as the learning objectives for each academic year must be announced and well-known to faculty and students.*
- Clear correlation must exist between the intended educational outcomes and learning objectives at the levels of each subject (or module), semester, and stage (or phase) of the program.*
- What is meant here is the “constructive alignment” between the intended educational outcomes and instructional method(s) on one hand, and the type of assessment on the other hand.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <ul style="list-style-type: none"> The college must have an assessment policy or system that identifies the correlation and compatibility between the intended educational outcomes and instructional methods on one side, and the assessment methods on the other side. <i>As an example, evidence of teaching communication skills is confirmed by using</i> |

| | |
|------------------|--|
| | <p><i>appropriate instructional methods (like role play and role model with reflection and feedback, or other relevant methods). Next, these communication skills should be assessed by an appropriate assessment method like an OSCE station, Mini-CEX, or other methods (these assessment methods must be well-identified in the assessment policy or other formal documents).</i></p> |
| Applied | <ul style="list-style-type: none"> • The college must have documents indicating the use of related blueprints (assessment principles, methods, and practices that are well-matched between educational outcomes and instructional methods on one hand and assessment methods on the other hand; i.e. constructive alignment). These blueprints must clarify the correlation between different types of examinations and the degree of achievement both at the level of each subject/module in each semester, and at the level of the intended educational outcomes. • Documents ensuring the application of the above criteria in <i>all</i> departments of the college. • For example, as evidence of teaching communication skills, there are video or audio recordings of assessment stations showing that students were evaluated on communication skills; as well as documents outlining the full set of stations, including those focused on communication skills. These must be consistently used across <i>all</i> clinical years and over <i>multiple</i> consecutive academic years. Additionally, records of student marks in these stations are available as evidence of assessment implementation. |
| Effective | Documented review and analysis for each blueprint and its correct application by an authorized committee (e.g. QAAC), and including any suggested action plan to optimize the relation between educational outcomes, instructional methods, and assessment methods according to the concept of constructive alignment mentioned above. |

Blueprint sample (constructive alignment)

| | OSCE | OSLER | MCQ | Log-book | Port-folio | Written Exam. | Quiz | Formative |
|------------------------------|------|-------|-----|----------|------------|---------------|------|-----------|
| Educational Outcomes | | | | | | | | |
| Instructional Methods | | | | | | | | |

3.2.1.2. The medical college must use assessment principles, methods and practices that ensure that the intended educational outcomes are met by the students.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Documents showing: <ul style="list-style-type: none">• Monitoring of the ongoing review of student performance.• Feedback surveys from students, graduates, and faculty confirming the coverage of assessment principles, methods, and practices for the three main areas of educational outcomes (KSA); feedback must be valid and representative.• Performance reports: e.g. pass/fail rates, and outcome achievement reports.• Graduation success in national and international exams, and postgraduate progress. |
| Applied | <ul style="list-style-type: none">• Documents representing application of the above criteria in <i>all</i> academic departments of the college.• Documents showing students who failed as a reason of them not passing a specific outcome. |
| Effective | <ul style="list-style-type: none">• Interviewing or surveying students, graduates, and faculty to explore their opinions about how effective this policy is in driving students learning towards being fully prepared for the different skills needed to practice medicine safely.• Plan of action according to the results of the above criteria (students' performance, graduate success, surveys). |

3.2.1.3. The medical college must use assessment principles, methods and practices that promote student learning.

Notes:

- *Promoting student learning is ensured by using analytic type of questions; using clinical scenario questions that promote the integration and application of knowledge; using formative assessments with feedback; encouraging reflection, critical thinking, and responsibility for learning; using direct observation in clinical settings to promote real-time learning through supervision and immediate feedback; or by using any other methods of assessment that promotes an active engagement and enhances students' responsibility for learning].*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | Look for the policy of assessment: does it promote learning by using problem-solving questions; or by using different levels of questions according to Bloom's taxonomy; or by using formative examination with feedback; or by using blueprints to achieve the principles of knowledge, skill, and attitude. |
| Applied | Verify samples of questions, which cover the above criteria in <i>all</i> departments of the college. Actual assessments (written/practical) must show consistent use of applied learning strategies, integration, critical thinking, real-time feedback, and formative examination...etc. |
| Effective | <ul style="list-style-type: none">Review of samples of assessments (written and practical) by an authorized body (e.g. quality assurance assessment committee) to ensure that these assessment methods do promote student learning; and that this committee regularly reports suggestions for improvement and an action plan.Results of timely students' surveys showing that they had reflected on their performance at both written formative and workplace-based assessments; and that their performance at summative exams was convincingly better after addressing their knowledge and practice gaps, that were discovered during formative assessments.Interviewing a sample of graduates to confirm that the methods of assessment at their college had satisfactorily helped them to practice medicine safely and competently. |

3.2.1.4. The medical college must use assessment principles, methods and practices that provide an appropriate balance of formative and summative assessments to guide both learning and decisions about academic progress.

Annotations:

Decisions about academic progress would require rules of progression and their relationship to the assessment process).

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | The college must have both summative and formative assessments; both must be well-described in the assessment policy and in students' timetables (formative exams must cover <i>all</i> types of exams). |
| Applied | <ul style="list-style-type: none"> The college should provide acceptable evidence for applying formative assessments at weekly, monthly, mid-term, or pre-final fashion followed by feedback in <i>most or all</i> subjects or modules or blocks (i.e. not only from one subject). The college must regularly review the balance of both summative and formative assessments, and adjust their balance based on stakeholders' input. |
| Effective | <ul style="list-style-type: none"> Interviews or students' surveys showing that formative assessments had supported their development and had prepared them satisfactorily for their summative assessment. Regular reports from QAAC including suggestions for adjustments of formative and summative examinations to achieve their objectives. |

3.2.2. The medical college should adjust the number and nature of examinations of curricular elements to encourage both acquisition of the knowledge-based and integrated learning.

Annotations:

Adjust the number and nature of examinations: -would include consideration of avoiding their negative effects on learning. This would also imply avoiding the need for students to learn and recall excessive amounts of information and curriculum overload).

(Annotations: of curricular elements to encourage both acquisition of the knowledge-based and integrated learning would include consideration of using integrated assessments, while ensuring reasonable tests of knowledge for individual disciplines or subject areas).

Notes:

- “Encourage both the acquisition of the knowledge-based”: exams should test whether students have learned the essential medical knowledge (facts, concepts, mechanisms).
- “Encourage integrated learning”: assessments should also promote and measure how well students can connect knowledge across disciplines, apply it in clinical or real-world situations, and think critically and holistically.
- There are two types of questions:
 - 1-To test the knowledge of the subject like physiology or anatomy.... etc.

- *To test student's ability to integrate between disciplines.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none"> • Documents of regular review of assessment number and nature according to the standard's criteria. • Documents representing results of surveys from students about the negative or positive impact of assessment (regarding the number and nature of assessments) on their learning process. |
| Applied | Documents representing active decisions to adjust assessments' number and nature. |
| Effective | <ul style="list-style-type: none"> • Feedback survey from students and faculty to look for the impact of adjustment. • Review of any adjustment by QAAC or any similar committee to evaluate its impact on learning. |

3.2.3. The medical college should ensure timely, specific, constructive and fair feedback to students on basis of assessment results.

Notes:

- *Feedback could be one-way (from teacher to the student); however, some examinations (as in OSCE) need mutual feedback (from student to the teacher and vice versa).*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none"> • Assessment policy should encourage timely feedback after each type of assessment. • Documents indicating assurance of timely, specific, constructive (helpful), and fair feedback to students on basis of assessment results for each exam. |
| Applied | Documents ensuring the application of the above criteria in <i>all</i> departments of the college and from <i>all</i> subjects, and in <i>all</i> types of examinations in each department. |
| Effective | <ul style="list-style-type: none"> • Review the effectiveness of the feedback process by QAAC, which should be documented by reports and includes a plan for improvement. • Survey results from faculty and students addressing the impact of this feedback. |

Area -4-

PROGRAM EVALUATION

Prepared by:
Assist. Prof. Amal Swidan

Revised by:
Prof Alaa Jamel Hasin
Ass Prof. Omaima Abdulrazzaq Ibrahim Zubair

4.1.1 The medical college must have a program of routine curriculum monitoring of processes and outcomes.

Annotations:

Monitoring and evaluation of the educational process in medical colleges is a continuous and essential task. It usually begins with an official order from the college administration to assign one or more responsible committeees. These may differ from one college to another and could include the Accreditation Committee, the Program Monitoring and Evaluation Committee, or the Quality Assurance Committee.

The process includes reviewing all parts of the educational system: the program and curriculum, student performance and assessment methods, teaching strategies, graduate outcomes, and even the quality of infrastructure such as classrooms, laboratories, libraries, and other facilities.

It also involves seeking to collect regular, cyclical feedback from students, teachers, graduates, community members, principal stakeholders, and other stakeholders over a specific period of time, such as every 6 months, yearly, or every 2 years. This information is used to identify strengths and weaknesses and to improve the quality of education to meet national standards and support student learning and graduate readiness.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <ul style="list-style-type: none">The college provides official documents that outline its internal policy for monitoring and evaluating its academic program. The policy includes These documents clearly describe:<ul style="list-style-type: none">○ The frequency of evaluation (e.g., annually, every two years)○ The responsible individuals or committeees○ The methods used for evaluation (e.g., Kirkpatrick model or equivalent)○ The timeline and tools used in the evaluation process |
| Applied | <ul style="list-style-type: none">Supporting evidence includes:<ul style="list-style-type: none">○ Documents showing the college's commitment to regular program evaluation (e.g., evaluation schedules, policies) |

| | |
|------------------|---|
| | <ul style="list-style-type: none"> ○ Documents confirming that evaluations happen periodically (annually, every two years, etc.) ○ Meeting minutes from the committees responsible for monitoring and evaluation ○ Documents describing the procedures and assigned responsibilities of relevant committees (e.g., Quality Assurance, Accreditation Committee, Program Evaluation Committee,) ○ Feedback forms and summaries from students, graduates, academic staff, community representatives, and other stakeholders ○ Attendance reports from the registration unit showing student participation in educational activities ○ Reports from the examination committee detailing student deferrals, reasons, pass rates, and subject-based performance statistics ○ Reports and documentation from multiple relevant committees involved in program evaluation. ○ Reports from scientific departments (or modules directors) submitted to those in charge, that document their activities for program monitoring and evaluation. These could be routine meeting minutes or any alternative. ● All these documents are regularly submitted to the Dean or the College Council for review and further action. |
| Effective | <p>Official records confirm that the Dean or the College Council reviews the results of program evaluations and acts upon the findings. These actions aim to improve the academic program based on data analysis and recommendations provided by the Program Evaluation Committee or related bodies. Actions may include curriculum revisions, policy changes, additional training, or resource allocation to support identified needs.</p> |

4.1.2.1 The medical college must establish and apply a mechanism for program evaluation that addresses the curriculum and its main components.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <ul style="list-style-type: none"> ● Official documents that outline the college's formal policy for evaluating the curriculum and its major components. ● The policy clearly specifies: <ul style="list-style-type: none"> ○ When the curriculum evaluations take place (e.g., annually, biennially) |

| | |
|------------------|---|
| | <ul style="list-style-type: none"> ○ Who is responsible for conducting the evaluations (e.g., curriculum committee, quality assurance unit....) ○ How the evaluations are carried out, including the tools and processes used. |
| Applied | <ul style="list-style-type: none"> • Documented evidence includes multiple meeting minutes from committees or staff tasked with curriculum evaluation. • These minutes reflect discussions, findings, and the development of action plans or recommendations for improving the curriculum and its components (e.g., learning objectives, content structure, teaching methods, assessment tools), with proper response to feedback received from various stakeholders such as students, faculty members, graduates, and community representatives. • Supporting documents may also include reports, feedback analysis, and internal reviews linked to curriculum effectiveness and alignment with learning outcomes. |
| Effective | <ul style="list-style-type: none"> • Official records confirm that the Dean or the College Council has reviewed the evaluation results and has taken concrete actions in response to the proposed improvements. • This may include curriculum revisions, updates to teaching strategies, integration of stakeholder feedback, or resource reallocation to support implementation of the recommended changes. • Students' feedback for their satisfaction and suggestions for improvement. |

4.1.2.2 The medical college must establish and apply a mechanism for program evaluation that addresses student progress.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <p>The college provides an official policy for evaluating student progress, which clearly outlines:</p> <ul style="list-style-type: none"> • Who is responsible for evaluating student progress (e.g., academic advisors, examination or registration units, specific committees) • How the evaluation is conducted (e.g., performance tracking, exam results, attendance, continuous assessment) • The periodicity of evaluation (e.g., after each semester, annually, or as per course structure) |

| | |
|------------------|--|
| Applied | <ul style="list-style-type: none"> The college maintains meeting minutes documenting discussions between various committees, the registration unit, and staff members responsible for monitoring student progress. These documents show how student data (e.g., grades, attendance, progression rates) is reviewed, and how issues are identified. The minutes also include action plans or recommendations that result from these meetings, which are then officially submitted to the Dean or College Council for further decision-making. |
| Effective | <ul style="list-style-type: none"> Official evidence confirms that the Dean or College Council has reviewed the submitted reports and acted upon the proposed plans or recommendations. These actions may include academic support measures, curriculum adjustments, policy changes, or targeted interventions to enhance student performance and success. Surveys and/or interview meeting reports students' feedback for the new updates. |

4.1.2.3 The medical college must establish and apply a mechanism for program evaluation that identifies and addresses concerns.*

Notes:

- Clarification on the Nature of Concerns:**
*Concerns may include **any perceived weaknesses, gaps, or challenges** within the academic program, such as course overload, lack of clinical exposure, insufficient feedback, ineffective teaching strategies, outdated content, inadequate learning environments, or unfair assessment practices. Identifying these concerns is vital for maintaining academic quality.*
- A safe and supportive environment** must be ensured so that faculty and students feel encouraged and protected when providing honest feedback. Anonymity, confidentiality are essential to promoting open communication.
- A well-functioning concern identification and response system enables **continuous quality improvement** by linking stakeholder feedback to meaningful action and visible change

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | The college must have an official policy that outlines a systematic approach to identifying, documenting, and addressing concerns related to the academic program. This policy should define the types of concerns covered (e.g., curriculum, assessment, teaching quality, facilities, student support), responsible personnel or committees, and procedures for escalation and response. |
| Applied | <p>Evidence should demonstrate that the college regularly collects and reviews feedback from students, faculty, and other stakeholders regarding any issues or concerns affecting the educational program. This feedback may be obtained through surveys, suggestion boxes, evaluations, course reviews, focus group discussions, or direct communication.</p> <p>These concerns are documented, analyzed by a designated committee or quality assurance unit, and translated into actionable improvement plans, which are then formally submitted to the Dean or College Council.</p> |
| Effective | <p>The Dean or College Council must review the proposed plans and take appropriate corrective or developmental actions. This may include modifying policies, adjusting curriculum content, providing faculty development, improving infrastructure, or enhancing student services.</p> <p>To verify effectiveness, the National Accreditation Team (NAT) may conduct direct interviews with students, faculty, or staff to assess their awareness of the mechanisms in place and whether they have observed actual improvements in response to previously raised concerns; this may be consolidated by a survey questionnaire.</p> |

4.1.3 The medical college must ensure that relevant results of evaluation influence the curriculum.

Notes:

- *The college must use the results obtained from the above sources in curriculum planning, implementation, and development*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Official documents show there are many meeting minutes between Curriculum committee members or any equivalent committee discussing relevant results of curriculum evaluation, students' progress, and addressing other concerns. |
| Applied | Official letters show the formulation of plans or suggestions for corrective actions regarding the addressed concern, "in relation to curriculum planning, implementation, and development," submitted to the dean or the college council. |
| Effective | Official orders show how implementation of the plan or action performed has influenced the curriculum as for example, any changes in curriculum, a decrease or increase in some lectures, practical hours changes, or adding some new subjects in accordance with the action plan or community need. This can be consolidated by reports of the interviews with the students, faculty, and stakeholders reporting actions' benefits, and further improvement suggestions if present. |

4.1.4. The medical college should periodically evaluate the program by comprehensively addressing:

4.1.4.1 The medical college should periodically evaluate the program by comprehensively addressing the context of the educational process.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The medical college or specific committee created by the college should present documents describing its action in annual or semiannual evaluation, in the context of the educational process which include the organization and resources as well as the learning environment and culture of the medical college. |
| Applied | Evidence shows that follow-up reports addressing any defects or thanks and praise of any good improvements in the educational process, make a collective plan, and send it to the dean or college council. |
| Effective | Evidence shows the action taken by the college or college council, without its feedback. |

4.1.4.2 The medical college should periodically evaluate the program by comprehensively addressing the specific components of the curriculum as addressed by the program evaluation.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | evidence by specific committees shows annually or any specific recurring review time, which describes updates needed for the Specific components of the curriculum, which include course description, teaching and learning methods, clinical rotations, clinical training and assessment methods |
| Applied | evidence shows any suggestion or action plan prepared or taken by these committees to improve the component of the curriculum according to the needs. |
| Effective | Documents show that the action has been taken with its feedback reports. |

4.1.4.3 The medical college should periodically evaluate the program by comprehensively addressing the long-term acquired outcomes of the program as addressed by the program evaluation.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Evidence shows annual (periodically) checking of graduate students by the graduate unit in the college or a specific committee as a postgraduate committee, that follow up the graduates making continuous channel with them, checking the number of students who enter the postgraduate study, number of graduates who pass the international exam, the number of graduates who attend or presents research through national or international conferences... etc. |
| Applied | multiple meeting minutes of this committee to discuss the results and put a plan for improving the long-term outcomes and addressing concerns, supplying reports that are sent to the dean or college council. |
| Effective | The dean or college council takes action for improvements with its feedback reports from graduates. |

4.1.4.4 The medical college should periodically evaluate the program by comprehensively addressing the social accountability of the program as addressed by the program evaluation.

Notes:

- *Social accountability would include willingness and ability to respond to the needs of society, of patients, and the health and health-related sectors, and to contribute to the national and international development of medicine by fostering competencies in health care, medical education, and medical research. This would be based on the college's own principles and in respect of the autonomy of universities.*
- *The medical college should periodically evaluate its annual commitment (periodically) to evaluate its action according to the needs of society to and present the participation in various activities that serve the health interests of the society.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|---|
| Present | Official documents show the addressing of social accountability in program evaluation. |
| Applied | Documents that reveal various educational activities in response to the related sustainable development goals involving society's needs and global health, like <ul style="list-style-type: none">*Seminars, workshops, research about new health problems, pregnancy-related issues, general health, drug abuse, smoking, or alcohol's bad effects*Activities document the participation of the medical college students and staff in various local and international health related festivals.*Documents represent the collaboration of the medical college with non-governmental organizations |
| Effective | Reports show benefits from applied activities with a degree of satisfaction. |

4.2 TEACHER AND STUDENT FEEDBACK**4.2.1 The medical college must systematically seek, analyze, and respond to teacher and student feedback.****Annotation:**

The medical college must regularly and systematically collect feedback from both students and teachers regarding the teaching process, program quality, and any observed misconduct or inappropriate practices. This feedback must be carefully analyzed and used to guide improvements.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | The college should have an official policy or order that confirms a systematic and regular process for collecting feedback. This includes verbal or written feedback from students and teachers, including good reports or complaints and reports related malpractice. |
| Applied | There should be clear evidence that this feedback is reviewed by relevant college committees (such as the curriculum committee, program evaluation committee, student counseling unit, or medical education unit). These bodies analyze the data, prepare reports with results and suggestions, and submit their recommendations to the dean or college council. |
| Effective | There should be proof that actions were actually taken by the dean or college council in response to the feedback. The National Accreditation Team (NAT) can verify effectiveness through direct interviews with students or staff who can confirm whether changes were made as a result of their feedback. |

4.2.2 The medical college should use feedback results for program development.

Annotation:

The medical college should not only collect feedback but must actively use it to improve and develop the educational program.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | Documents should show that feedback from students and teachers is consistently collected, including comments about the content, structure, delivery of the program , and any malpractice or misconduct. |
| Applied | Evidence should show that the responsible committees in the college review this feedback, analyze it, and translate it into clear suggestions or improvement plans . These are then submitted to the dean or the college council for review. |
| Effective | The college should demonstrate that actions were taken to develop or improve the program based on the feedback. The NAT can confirm this through direct interviews with students and teachers who can describe the changes or improvements that resulted from their feedback. |

4.3 PERFORMANCE OF STUDENTS AND GRADUATES

4.3.1 The medical college must analyze the performance of cohorts of students and graduates in relation to:

4.3.1.1. The medical college must analyze the performance of cohorts of students and graduates in relation to mission and intended educational outcomes.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <p>Frequent and regular feedback from students and regular direct interviews with students, reports of the examination committee and registration unit, and the curriculum /program evaluation committee. Collect information from the students and graduates about the mission and intended educational outcome.</p> <p>Regular Collection of data from the students and graduates through any committee responsible for the mission and intended educational outcome. These data were collected through a survey, direct interviews.</p> <p>1. For Students (during study):</p> <p>It means evaluating how well groups of students (i.e., cohorts) are achieving what the mission and intended learning outcomes aim for while they are still in the program.</p> <p>Examples of what is analyzed:</p> <ul style="list-style-type: none">• Exam scores, pass/fail rates• Student progression (delays, dropouts)• Feedback on how their education reflects the mission (e.g., patient-centeredness, professionalism)• Time spent on electives or service-related learning• Involvement in community or research (if part of mission) <p>2. For Graduates (after graduation):</p> <p>It also includes checking how well the mission and outcomes have been achieved by the graduates once they enter practice or further education.</p> <p>Examples of what is analyzed:</p> <ul style="list-style-type: none">• Graduate surveys asking: <i>Did the program prepare you for your role?</i> |

| | |
|------------------|--|
| | <ul style="list-style-type: none"> Employer feedback: <i>Are graduates competent and aligned with the mission?</i> National exam results (if applicable) Postgraduate training performance Career choices in line with the mission (e.g., choosing primary care or rural practice if that's a college mission) |
| Applied | Analysis of these data, which are collected from the students and graduates, gets results and makes recommendations, which are sent to the dean or college council. |
| Effective | : Documents show measures have been taken for these recommendations to improve the education process. |

4.3.1.2 The medical college must analyze the performance of cohorts of students and graduates in relation to curriculum.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The college regularly collects feedback from students through surveys and direct interviews to understand their views on the curriculum and its components. Graduates are also asked about their opinions on how well the curriculum prepared them for real-world practice. This is done through graduate surveys or interviews, usually managed by the graduate or curriculum evaluation committee. |
| Applied | The feedback from students and graduates is analyzed by the responsible committee (such as the curriculum or program evaluation committee). Based on this analysis, the committee prepares a report with results and recommendations for improvement and sends it to the dean or college council. |
| Effective | There is evidence that the dean or the college council has taken action based on these recommendations. This may include making changes to the curriculum, course structure, or teaching methods. These actions should be documented in official reports, meeting minutes, or decisions, and students and teachers should be aware of these improvements. |

4.3.1.3 The medical college must analyze the performance of cohorts of students and graduates in relation to provision of Resources.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|--------------|---|
|--------------|---|

| | |
|------------------|---|
| Present | The college regularly gathers feedback from students through surveys and interviews to evaluate the availability and quality of resources such as lecture halls, laboratories, skills labs, teaching staff, and learning materials. Graduates are also asked for feedback on how well the college resources supported their learning. This data is collected by relevant committees such as the program evaluation or the graduate committee. |
| Applied | The collected feedback is analyzed to identify strengths and weaknesses in resource provision. Based on the findings, the responsible committee prepares a report with recommendations and submits it to the dean or college council for action. |
| Effective | There is documented evidence that the college has acted on the recommendations, such as improving facilities, hiring more staff, or upgrading labs. These actions should be confirmed through official documents or observed improvements in the learning environment. |

4.3.2. The medical college should analyze the performance of cohorts of students and graduates in relation to students:

4.3.2.1 The medical college should analyze the performance of cohorts of students and graduates in relation to students' Background and conditions.

Notes:

- *If the medical students in the college have similar backgrounds, the documents here may be skipped. If there are different backgrounds, eg: international students, graduates from Bilingualism school, at this point, documents required.*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|---------------------------------------|---|
| Present, applied and effective | documents show official order for analyzing the performance of these students in comparison to a single language school and preparing the plan according to the results, with subsequent implementation of the plan with this feedback results. |

4.3.2.2. The medical college should analyze the performance of cohorts of students and graduates in relation to students' entrance qualifications.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | If the college follows national (ministerial) rules for student admission, no additional documents are needed. However, if the college uses its own admission policy, documents must show the student selection policy, requirements, and procedures. |
| Applied | The college reviews and analyzes student performance during study and after graduation, comparing it with their entrance qualifications. The findings are summarized and shared with decision-makers. |
| Effective | Surveys and interviews with students and staff confirm that the admission rules are fairly and properly applied. If needed, the college adjusts the admission process to improve student outcomes. |

4.3.3.1 The medical college should use the analysis of students' performance to provide feedback to the committees responsible for student selection.

Evidence Generation Framework:

If the student selection is not a college issue and it is a central process so documents here may be skipped. if the policy present, then documents needed, the feedback is provided to students' selection committee.

4.3.3.2. The medical college should use the analysis of students' performance to provide feedback to the committees responsible for curriculum planning.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Feedback about student performance is collected regularly from academic leadership, teachers, and stakeholders. This is discussed in meeting minutes from the curriculum committee or related committees. |
| Applied | The curriculum committee analyzes this feedback, identifies areas that need improvement, and prepares suggestions or a plan for curriculum changes. These recommendations are submitted to the dean or college council. |
| Effective | There is documented evidence (such as official orders or updated curriculum plans) showing that actions were taken based on the analysis and feedback to improve the curriculum. |

4.3.3.3. The medical college should use the analysis of student performance to provide feedback to the committees responsible for student counseling.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The student counseling committee receives regular feedback and performance reports from relevant units (like the examination or academic affairs committee). These are documented in their reports or meeting minutes. |
| Applied | The counseling committee reviews this feedback, identifies students who may need support, and develops a counseling plan based on the students' academic performance and needs. |
| Effective | There is clear evidence (such as follow-up reports or improved student outcomes) showing that the counseling services were provided based on the feedback, and students benefitted from these interventions. |

4.4. INVOLVEMENT OF STAKEHOLDERS

4.4.1 The medical college must, in its program monitoring and evaluation activities, involve its principal stakeholders.

Annotation:

[Principal stakeholders would include the dean, the faculty council, the curriculum committee, representatives of staff and students, the university leadership and administration, relevant governmental authorities and regulatory bodies].

Evidence Generation Framework:

This will be documented through all the above reports and meeting minutes, that document the attendance of routine meetings and any other activity by principal stakeholders or equivalent.

4.4.2. The medical college should:

4.4.2.1. The medical college should make the results of course and program evaluations accessible to relevant external stakeholders (e.g., affiliated hospitals, healthcare institutions, employers).

4.4.2.2 The medical college should actively seek feedback from stakeholders about the performance of its graduates in real-world practice.

4.4.2.3 The medical college should gather feedback from stakeholders regarding the relevance and quality of the curriculum to ensure alignment with workforce and community needs.

Annotation

[Other stakeholders would include representatives of other health professions, patients, the community and public (e.g. users of the health care delivery systems, including patient organizations). Other stakeholders would also include other representatives of academic and administrative staff, education and health care authorities, professional organizations, medical scientific societies and postgraduate medical educators].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | meeting minutes that document communications that inform other stakeholders about results of course and program evaluation. FB from other stakeholders about the performance of graduate in real word practice, and FB from other stakeholders about the relevant and quality of curriculum. |
| Applied | analyzes this feedback, identifies areas that need improvement, and prepares suggestions or a plan for curriculum changes. These recommendations are submitted to the dean or college council. |
| Effective | official documents show the dean or college council take un action for these results. |

Area-5-

Students

Prepared by:

Prof. Firas Tariq Ismaeel

Revised by:

Prof: Firas Tariq Ismaeel

Prof: Raid Mohammed Suhael Al-Ani

5.1 ADMISSION POLICY AND SELECTION

5.1.1. The medical college must formulate and implement an admission policy based on principles of objectivity, including a clear statement on the process of selection of students

Annotation:

(Admission policy would imply adherence to possible national regulation as well as adjustments to local circumstances. If the medical school does not control admission policy, it would demonstrate responsibility by explaining relationships and drawing attention to consequences, e.g. imbalance between intake and teaching capacity).

The statement on process of selection of students would include both rationale and methods of selection such as secondary school results, other relevant academic or educational experiences, entrance examinations and interviews, including evaluation of motivation to become doctors. Selection would also take into account the need for variations related to diversity of medical practice.

Admission Policy means a home's program statement of its purpose, eligibility requirements, and application procedures for admission.)

Notes:

- **If the college does not control the admission policy** (i.e. controlled by MOHSER) the college would demonstrate responsibility by explaining relationships and drawing attention to consequences, such as effects on teaching/learning activities, intended outcomes, and others. (there must be a report that shows the impact of lacking control on quality and quantity of students and procedures taken by the college to reduce the impact of lacking admission policy).
- **PRESENT:** Documented approved consequences report.
- **APPLIED:** implantation of procedures in the report.
- **EFFECTIVE:** the actions taken to reduce the impact must effective by documented observations and stakeholders' opinion.

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-------|--|
|-------|--|

| | |
|------------------|---|
| Present | Documented admission policy available on website, detailing criteria (e.g., entrance exams, interviews, academic performance) and selection procedures (Documents about college own admission policy, not the central MOHESR POLICY). |
| Applied | Admission process conducted annually according to outlined policy; selection committee minutes; application forms and entrance exam results archived. |
| Effective | Admission audits confirm adherence to policy; stakeholder satisfaction; minimal admission complaints. |

5.1.2. The medical college must have a policy and implement a practice for admission of disabled students.

Annotation:

(Policy and practice for admission of disabled students will have to be in accordance with national law and regulations.

Disabled students are students with some physical or mental impairment that substantially limits one or more major life activities. Usually, disabled students have low academic achievement. Many students with disabilities have difficulty remembering information presented visually or auditorily.)

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | college must have documented approved policy regarding the admission of disabled students (in accordance with national laws). |
| Applied | procedures taken for implementation. the procedures taken (regarding accommodation, training facilities, exams schedules, baths, elevators, others). |
| Effective | efficacy must be shown by questioners or interviews with principal stakeholders (including students of concern). (the college must formulate policy with its procedures for their disabled students in accordance with MOHESR policy) |

5.1.3. The medical college must have a policy and implement a practice for transfer of students from other national or international programs and institutions.

Annotation:

[Transfer of students would include medical students from other medical college and students from other study programs.]

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | Documented policy (MHESR POLICY ON STUDENT TRANSFERE) regarding transfer of students from other national and international medical colleges. |
| Applied | A copy of the college credit transfer committee orders and minutes of meetings. |
| Effective | Transfer statistics, faculty and students' opinion. |

5.1.4. The medical college should state the relationship between selection and the mission of the school, the educational program and desired qualities of graduates.

Notes:

- *If the admission and selection is central*
- *Evidence: refer to consequences report*

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|---|
| Present | Presence of statement that shows how the college use its mission, curriculum and outcomes to build up in its admission policy and selection procedures. |
| Applied | Interviews reflect mission-related criteria (e.g., commitment to rural health, professionalism). |
| Effective | Matched admissions outcomes: incoming students' profiles align with institutional mission. |

5.1.5. The medical college should periodically review the admission policy.

Annotation:

[Periodically review the admission policy would be based on relevant societal and professional data, to comply with the health needs of the community and society, and would include consideration of intake according to gender, ethnicity and other social requirements (socio-cultural and linguistic characteristics of the population), including the potential need of a special recruitment, admission and induction policy for under privileged students and minorities].

Notes:

- **If admission is central (refer to consequences report review)**
- **Present:** Formal document defining the purpose, scope, content requirements, and review schedule for the consequences report.
- **Applied:** Review Committee Meeting Minutes.
- **Effective:** Decision-Making Documentation.

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Review policy/timetable Documents. |
| Applied | Records/minutes of review meetings; summary reports showing data analysis. |
| Effective | Documented policy revisions in response to feedback and societal needs and the changes done by the college. |

5.1.6. The medical college should use a system for appeal of admission decisions.

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | The college should have a documented functioning policy for appealing on its admission decisions. |
| Applied | Implementation of this system. |
| Effective | Appeals resolved in a fair and timely manner; and positive user feedback (students' opinion). |

5.2. STUDENT INTAKE

5.2.1. The medical college must define the size of student intake and relate it to its capacity at all stages of the program.

Annotation:

[Decisions on student intake would imply necessary adjustment on national requirements for medical workforce. If the medical college does not control student intake, it would demonstrate responsibility by explaining relationships and drawing attention to consequences, e.g. imbalance between intake and teaching capacity.]

Notes:

- **IF THE COLLEGE DOES NOT CONTROL STUDENT INTAKE (central by MOHSER)**
- *The college would demonstrate responsibility by explaining relationships and drawing attention to consequences, e.g. imbalance between intake and teaching capacity (WRITING CONSEQUENCES REPORT).*

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|---|
| Present | Approved intake numbers set. The college must give description of the available resources (whether physical or nonphysical) on each stage of study (by providing enough documents). |
| Applied | Admissions conform to defined intake; resource allocation records. |
| Effective | Documents showing congruence between intake and available resources (e.g., no over-crowding); stakeholder feedback. |

5.2.2. The medical college should periodically review the size and nature of student intake in consultation with other stakeholders and regulate it to meet the health needs of the community and society.

Annotation:

[The health needs of the community and society would include consideration of intake according to gender, ethnicity and other social requirements (socio-cultural and linguistic characteristics of the population), including the potential need of a special recruitment, admission and induction policy for under privileged students and minorities. Forecasting the health needs of the community and society for trained physicians includes estimation of various markets and demographic forces as well as the scientific development and migration patterns of physicians].

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | Guidelines for regular review; committee structure includes other stakeholders |
| Applied | Review meeting minutes; surveys with health sector representatives documented. |
| Effective | Documents showing adjustments to intake made in response to health sector needs. |

5.3 STUDENT COUNSELLING AND SUPPORT

5.3.1. The medical college and/or the university must have a system for academic counseling of its student population.

Annotation:

[Academic counseling would include questions related to choice of electives, residence preparation and career guidance.

Organization of the counseling would include appointing academic mentors for individual students or small groups of students.]

Note:

- **Mentors**, must be knowledgeable and up-to-date on matters concerning (1) curriculum-- requirements in the student's majors, as well as general education and graduation requirements of the university; (2) registration procedures; (3) student personnel services-- medical, counseling, housing, placement, social, recreational, etc.; (4) financial obligations;

and (5) job market and employment information.

- The general advising duties are normally as follows:
 - The faculty advisor explains to the student the program of general or basic education as it relates to the first two years of college, to the major of the student, and to preparation for life pursuits generally.
 - The faculty advisor helps the student examine the course offerings in his major, relate these to other possible majors, and understand the graduation requirements for the curriculum leading to an appropriate degree.
 - The faculty advisor helps the student explore the career fields for which his major provides training and obtain related vocational information and survey job opportunities.
 - The faculty advisor serves as a link between the student and the administration by counseling the student on his scholastic problems (course scheduling, course adjustment, and academic progress and by making appropriate referral to other assistance agencies).

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | The college must have documented approved system, which must include (choice of electives, residence preparation and career guidance), the college must appoint mentors for individual students or small groups of students. |
| Applied | Documents of counseling meetings, scheduled and recorded. |
| Effective | The system must be functioning and effective by Student satisfaction (through surveys or interviews) show positive feedback. |

5.3.2. The medical college and/or the university must offer a program of student support, addressing social, financial and personal needs.

Annotation:

[Addressing social, financial and personal needs would mean professional support in relation to social and personal problems and events, health problems and financial matters, and would include access to health clinics, immunization programs and health/disability insurance as well as financial aid services in forms of bursaries, scholarships and loans.]

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | The college must provide a Program (documented and approved) about student support activities (social, personal, financial, and health issues). Social and personnel (presence of mentors, psychologist.). Financial support (such as loans, other way to support the students). Health issues (including presence of immunization Program, access to health clinics). |
| Applied | Evidence of active support services (financial aid distributed, counseling sessions, vaccinations.). |
| Effective | Its effectiveness is shown by asking principal stakeholders (including students) and observation of the services provided. |

5.3.3. The medical college and/or the university must allocate resources for student support.

Notes:

- **STUDENT RESOURCE ALLOCATION**

The purposeful and practical allocation of resources to support equitable access to high-quality learning opportunities, is a major component of education. Leaders at all levels are charged with making decisions about how to effectively distribute and leverage resources to support teaching and learning. It would include:

1. **Fund.** Activities at several levels of the system, determine both the amount of money that is available to support education and the purposes to which money can be allocated. No one level of the educational system has complete control over the flow, distribution, and expenditure of fund.
2. **Human capital.** People “purchased” with the allocated funds do the work of the educational system and bring differing levels of motivation and expertise developed over time through training and experience.
3. **Time.** People’s work happens within an agreed-upon structure of time (and assignment of people to tasks within time blocks) that allocates hours within the day and across the year to different functions, thereby creating more or less opportunity to accomplish goals.

Evidences generation Framework:

| Level | Description/Example Documents/Evidence |
|-------|--|
|-------|--|

| | |
|------------------|--|
| Present | The college must provide documents about its resources and how it's located to support students how its distributed and expended (budget line). |
| Applied | Expenditure reports; staffing and facility use; support program activities funded. |
| Effective | Satisfaction interviews. Resource allocation impact documents (documents showing relationships between resource investments and student outcomes). |

5.3.4. The medical college and/or the university must ensure confidentiality in relation to counseling and support.

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Written confidentiality policy for counseling and support services. |
| Applied | Staff informed about confidentiality; secure storage of records; access logs. |
| Effective | Its effectiveness is measured by student and teachers' opinion (interviews or questionnaires). |

5.3.5. The medical college should provide academic counseling that

5.3.5.1. The medical college should provide academic counseling that is based on monitoring of student progress.

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | A document that includes a written protocol specifying use of progress reports for counseling. The progress should be noticed by recording the students (formative exams, summative exams, log books, portfolios,) |
| Applied | Academic progress is tracked (documents of student performance); students with difficulties are referred for counseling. |
| Effective | Documents including the acts taken by the college (mentor) accordingly. Data shows counseling interventions correlate with academic improvement. |

5.3.5.1. The medical college should provide academic counseling that includes career guidance and planning.

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | A document shows that career guidance should be present as part of the counseling system provided for students. |
| Applied | Career counseling meetings held (attendance lists, event materials). |
| Effective | Effectiveness and usefulness shown by asking students (students' satisfaction). |

5.4 STUDENT REPRESENTATION

5.4.1.1, 5.4.1.2., 5.4.1.3., 5.4.1.4., 5.4.1.5.

The medical college must formulate and implement a policy on student representation and appropriate participation in: mission statement, design of the program, management of the program, evaluation of the program, other matters relevant to students.

Annotation:

[Student representation would include student self-governance and representation on the curriculum committee, other educational committees, scientific and other relevant bodies as well as social activities and local health care projects.]

Notes:

- *It is not sufficient to have an administrative order showing students' participation in the committees without POLICY.*

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|--------------|---|
|--------------|---|

| | |
|------------------|--|
| Present | Presence of documented policy (to maintain sustainability) on student representation and participation in curriculum committees, educational committees, college council, and other committees. |
| Applied | Documented orders of the committees, the minutes of committee meetings, and their decisions. |
| Effective | Interviews or questionnaires to show the efficacy of the role of students in these committees. |

5.4.2. The medical college should encourage and facilitate student activities and student organizations.

Annotation

[To facilitate student activities would include consideration of providing technical and financial support to student organizations.]

Evidences Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The presence of documents that show the college students activities supports program. |
| Applied | Events calendar with student activities; records of funding/support provided. |
| Effective | Students and faculty interviews to show that it is implemented effectively. Documents on increased student participation in these activities. |

Area - 6 -

ACADEMIC STAFF/FACULTY

Prepared by:

Assist. Prof. Ali Khairalla Shaaeli

Revised by:

Prof. Dr. Sinan Bahjat Alrifai

Prof. Dr. Ali Mansoor

Prof. Dr. Safaa Abd Illah Faraj

Assist. Prof. Omaima Zubair

As this area discusses a policy of the college regarding staff, so we referred you to appendix at end of the area about (HOW TO WRITE A POLICY)

Note: *evaluation and updating (on regular time) is part of any PLOICY STRUCTURE, and should be written in the policy.*

6.1.1.1. The medical college **MUST formulate and implement a staff recruitment and selection policy that specifies the types and responsibilities of academic staff needed from the basic biomedical sciences, behavioral and social sciences, and clinical sciences to effectively deliver the curriculum. This includes maintaining a balance between medical and non-medical staff, full-time and part-time staff, and academic and non-academic personnel.**

Annotation:

[The staff recruitment and selection policy would include ensuring a sufficient number of highly qualified basic biomedical scientists, behavioral and social scientists and clinicians to deliver the curriculum and a sufficient number of high-quality researchers in relevant disciplines or subjects.]

[Although recruitment primarily depends on central regulation, the college must create a policy that clarifies how to balance this dependence with other factors.]

[Balance of academic staff / faculty would include staff in the basic biomedical, the behavioral, social and clinical sciences in the university and health care facilities, and teachers with dual appointments.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|---------|--|
| Present | <p>The college must have policy document which regulate the staff recruitment and selection. This policy must show sub-heading which outline the following.</p> <ul style="list-style-type: none">• Type of staff needed by the college• Responsibility of staff• Sufficient academic staff to deliver the curriculum• Balance between medical and non-medical staff (preferred to put in range)• Balance between full-time and part-time academic staff (preferred to put in range) |

| | |
|------------------|--|
| | <ul style="list-style-type: none"> • Balance between academic and non-academic staff (preferred to put in range) |
| Applied | The implementation is through the documents like official orders for every part of this policy and sub-heading in all details. (Examples: official order for recruitment full time, part time, lecture giving, health directorate recruitment staff, salary order, job specification, specialty, specification, etc...) |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show the policy effectiveness and will be used to update the policy to make it functioning better and change any defected parts. |

6.1.1.2. The medical college **MUST formulate and implement a staff recruitment and selection policy that address criteria for scientific, educational, and clinical merit, ensuring a balance among teaching, research, and service roles.**

Annotations:

(Merit would be measured by formal qualifications, professional experience, research output, teaching awards and peer recognition),

(Service functions would include clinical duties in the health care delivery system, as well as participation in governance and management).

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <p>The medical college must have policy document of staff recruitment and selection which address scientific, educational, and clinical merit including balance between teaching, research, and service function. The policy should consider the following.</p> <ul style="list-style-type: none"> • The qualifications of faculty • The professional experience • Research • Teaching awards and peer recognition • Able to share in teaching, healthcare, research, and governance. |
| Applied | Implementation of the policy by application of official orders which emphasize the importance of the meritorious criteria of recruited or selected staff. Depending on the highest degree in his field, had award of the field, well known, recommended |

| | |
|------------------|---|
| | by his peers, interview, presentation of seminar to special committee, and pass the education methods course. |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show the policy effectiveness and will be used to update the policy to make it functioning better and change any defective parts. |

6.1.1.3. The medical college **MUST formulate and implement a staff recruitment and selection policy that specifies and monitors the responsibilities of academic staff/faculty in basic biomedical, behavioral/social, and clinical sciences.**

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The medical college must have a policy document of staff recruitment which address specify and monitor the responsibilities of its academic staff of the basic biomedical sciences, the behavioral and social sciences and the clinical sciences. This policy should show the details of each job. |
| Applied | Implementation of the policy the college must had official orders that show the Job-description in detail, and the annual evaluation of all staff. |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show the policy effectiveness and will be used to update the policy to make it functioning better and change any defected parts. |

6.1.2.1. The medical college **SHOULD in its policy for staff recruitment and selection consider criteria like its relationship to the college's mission, including significant local issues.**

Annotation:

(Significant local issues would include gender, ethnicity, religion, language, and other items of relevance to the college and the curriculum such as community needs and global health)

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The college should include in their policy for staff recruitment the relation of mission to significant local issues like gender, ethnicity, religion, language, and others. |
| Applied | Implementation of the policy through official orders in these issues. |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show the policy effectiveness and will be used to update the policy to make it functioning better and change any defected parts. |

6.1.2.2. The medical college SHOULD in its policy for staff recruitment and selection policy account for economic considerations.

Annotation:

(Economic considerations would include taking into account institutional conditions for staff funding and efficient use of resources).

(Although that most recruitment is central and governmental, however, it should be specified in the policy regarding salary, appraisal and annual upgrading with rewarding criteria.)

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The college should consider in its policy for staff recruitment economic considerations, that means the economic status of the college should be part of planning policy for recruitment. |
| Applied | Implementation of economic consideration in their policy for staff recruitment by official orders regarding staff recruitment. |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show the policy effectiveness and will be used to update the policy to make it functioning better and change any defected parts. |

6.2. STAFF ACTIVITY AND STAFF DEVELOPMENT

6.2.1 The medical college MUST formulate and implement a staff activity and development policy that:

6.2.1.1. The medical college **MUST formulate and implement a staff activity and development policy that allows for a balanced capacity among teaching, research, and service functions.**

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).

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The college must have a policy document regarding staff activity and development, that means protected time to each activity whether professional or teaching, which ensure balance of capacity between teaching, research, and service function |
| Applied | Implementation of the policy by documented official orders about all faculty protected time for all activities (teaching, research, and service function). |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show whether the policy effective or there is shortcoming. This will be used to update the policy to make it functioning better and change any defected parts. |

6.2.1.2. The medical college must formulate and implement a staff activity and development policy that ensure recognition of meritorious academic activities with appropriate emphasis on teaching, research, and service qualifications.

Annotation:

Recognition of meritorious academic activities would be through rewards, promotion, and /or remuneration.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The medical college must have a policy document which ensure recognition of meritorious (excellent and prominent achievements) academic activities with emphasis on teaching, research and service qualifications by rewards promotion or remuneration. |
| Applied | Implemented policy by documented official orders for reward, promotions, and others for staff with meritorious activities |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show the policy effectiveness and will be used to update the policy to make it functioning better and change any defected parts. |

6.2.1.3. The medical college must formulate and implement a staff activity and development policy, which ensure that clinical service functions and research are utilized in teaching and learning.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The medical college must have a policy document which ensure that clinical service functions and research are used in teaching and learning and development. |
| Applied | Implemented by documented official orders of staff schedules in clinical sections showing the clinical sessions and research used for teaching and learning. |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show the policy effectiveness and will be used to update the policy to make it functioning better and change any defected parts. |

6.2.1.4. The medical college must formulate and implement a staff activity and development policy, which ensure that individual staff members have sufficient knowledge of the total curriculum.

Annotation:

(Sufficient knowledge of the total curriculum would include knowledge about instructional/learning methods and overall curriculum content in other disciplines and subject areas with the purpose of fostering cooperation and integration)

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | The medical college must have a policy document of staff activity and development which ensure sufficient knowledge by all staff of total curriculum instructional methods, content of other departments and subjects to foster cooperation and integration. |
| Applied | Implementation of the policy by documented official orders about the ways that each discipline or department will share the content and methods of instructions with other department to ensure that all staff had sufficient Knowledge of all curriculum (content an instructional methods), including meeting, workshops, recommendations and others. |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show the policy effectiveness and will be used to update the policy to make it functioning better and change any defected parts. |

6.2.1.5. The medical college must formulate and implement a staff activity and development policy, which include teacher training, development, support and appraisal.

Annotation:

(Teacher training, development, support, and appraisal would involve all teachers, not only new teachers, and also include teachers employed by hospitals and clinics).

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|--------------|---|
|--------------|---|

| | |
|------------------|--|
| Present | The medical college must have a policy document for staff development which include teacher training (Trainee and trainers), development, support and appraisal on regular basis, for both new and every teacher. |
| Applied | Implemented by documented official orders which shows the training (trainers and trainee) activities, the staff development plans implementations, the support to staff (the academic staff support each other according to their experience fields), and appraisal of staff. |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show the policy effectiveness and will be used to update the policy to make it functioning better and change any defected parts. |

6.2.2. The medical college SHOULD consider teacher-student ratios relevant to various curricular components.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | The medical college should have a document shows that college took in the account teacher-student ratios in various curricular components. |
| Applied | Implemented by shows the document and official orders of teacher student ratio in clinical, small group, large group, and other activities |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show the policy effectiveness and will be used to update the policy to make it functioning better and change any defected parts. |

6.2.3. The medical college SHOULD design and implement a staff promotion policy.

Annotations:

[Although central regulations are present, the college should make a bulletin for academic staff guiding them to promotion steps, putting its own process in alignment with central regulations]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|--------------|---|
|--------------|---|

| | |
|------------------|--|
| Present | The medical college should have a document of staff promotion policy showing the detail of promotion, timing, and reasoning. |
| Applied | Implemented by official orders shows the promotion of staff. |
| Effective | Regular evaluation of the policy on fixed time scale (= yearly, two years or more according to institute needs). This evaluation by survey, questionnaire, or feedback. The results of this evaluation will show the policy effectiveness and will be used to update the policy to make it functioning better and change any defected parts. |

Area - 7 -

EDUCATIONAL RESOURCES

Prepared by:
Assist. Professor Abduladheem Yaseen
Prof: Talib Jawad Kadhim Nowroze

Revised by:
Prof. Safa A Faraj
Prof: Talib Jawad Kadhim Nowroze

7.1 PHYSICAL FACILITIES

7.1.1. The medical college must have sufficient physical facilities for staff and students to ensure that the curriculum can be delivered adequately.

Annotations:

[Physical facilities would include lecture halls, class, group and tutorial rooms teaching and research laboratories, clinical skills laboratories, offices, libraries, information technology facilities, student amenities such as adequate study space, lounges, transportation facilities, catering, student housing, personal storage locker, sports, and recreational facilities.]

Note:

- Annex 7: WFME data collection questions. To review these questions for all standards in all areas, see annex 7 below.
- Basic Medical Education WFME Global Standards for Quality Improvement
- Outline for data collection questions link: <https://www.who.int/workforcealliance/knowledge/toolkit/46/en/>
- (These data collection questions, based on the Areas and Sub-areas in the Global Standards, should result in a document providing comprehensive answers to all the topics. Answers should, if possible, be referenced in published documents, which could be appended)

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|---------------------|---|
| Present and Applied | <ol style="list-style-type: none">1- Provide the requested information on the types of classroom space (e.g., lecture hall, laboratory, clinical skills teaching space and or simulation space, small group discussion room, etc.) used for each instructional format during year 1, 2, 3, 4, 5 & 6 in the medical curriculum. Only include space used for regularly scheduled medical college classes, including laboratories. Add rows for all types of classroom space for each year as needed. See Annexes 7.1.1a2- Provide number of staff offices and research laboratories in each academic department of the medical school. Add rows as needed. See annexes 7.1.1.b3- Provide details of areas occupied by the college:<ul style="list-style-type: none">• Total area of the college buildings |

| | |
|---|--|
| <ul style="list-style-type: none"> • Number, area, and location of each building. • Percentage of green area out of the total area of the college | <p>4-Determine the actual students-to-area ratio and staff to area ratio in the college, then, determines the adequacy of these ratios, the college should compare these ratios with the one of the international standards in the case of the absence of national standards. Below are examples of a determination of these ratios:</p> <p>4.1- Auditorium halls, (standard; 1m² per student for Auditoriums with more than 200 seats)</p> <p>4.2- Lecture room (standard; 1m² per student in a lecture room with an area of 50-60 m²)</p> <p>4.3- Seminar rooms (standard: 1.5 m² per student for tutorial or seminar room)</p> <p>4.4-Rooms for small groups (ex. 8-10 students in each group, 2 m² per student with round table offers active participation with their facilitator and not crowded). The medical school must have adequate tutorial rooms and /or small group learning rooms. Full descriptions are required</p> <p>4.5- Clinical skill center (Standard: Skill lab should be adequate in size and quality to student number, it may consist of a large open space for seminars and several side rooms for the discussion, it may include a variety of clinical settings such as general practice consulting rooms, procedural skill rooms, accident, and emergency cubicles, an intensive care unit and a place for simulators, in addition to storage areas and offices for staff)</p> <p>The medical school must have adequate Skill laboratories. Full descriptions are needed</p> <p>4.6- Anatomy, and pathology museums and dissection room. (Standard: minimum area per student should be 2 square meters per student. Maximum 30 students for each class, presence of dissection tables, organ stations, refrigerated cadaver storage, transport equipment, sinks, embalming stations, and casework with good airflow, space allocation, plumbing, electrical requirement, etc.)</p> <p>The medical school must have efficient anatomy and pathology museums or any other alternative. Presenting a full description of the presence of adequate anatomy and /or pathology museums (number and seating capacity for each are required) The medical school must have adequate dissection rooms and/or equivalent; full descriptions are needed</p> <p>4.7-Computer laboratories: (Standard: 1 computer for each teaching staff and 1 computer for every 25 students)</p> <p>The number of computers, areas, and seating capacities, should be offered.</p> |
|---|--|

| | |
|------------------|--|
| | <p>4.8-Faculty offices (Standard: ideally 9m² single room, 15 m² shared room) Give the number of staff, number and areas of faculty rooms</p> <p>4.9-Water cycles: (Standard: water cycles for staff; ideally 1 for 20 users, and students; 1 for 30 users). Provide a number, area, and location for water cycles</p> <p>4.10-Parking area (Standard: 1 to 2 staff members and 1 to 20 students). Provide the number and location of the parking areas</p> <p>4.11-Laboratories :(Standard: Area; ideally 60m² for 20 students -Name and location, safety instructions, quality, and adequate instrument should be documented Medical colleges should have an adequate number of laboratories; basic medical sciences/ multi-disciplinary laboratories, research laboratories. Note: type of the medical program implemented should be indicated.</p> |
| Effective | <p>Staff and student feedback on the sufficiency of the physical facilities to ensure effective curriculum delivery For further details of physical facilities, see Annexes 7.1.1c and 7. 1. 1d.</p> |

7.1.2. The medical college must Ensure a learning environment, which is safe for staff, students, patients, and their relatives.

Annotation:

[A safe learning environment would include the provision of necessary information and protection from harmful substances, specimens, and organisms, laboratory safety regulations, and safety equipment.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <ul style="list-style-type: none"> • Describe the security system(s) in place and the personnel available to provide a safe learning environment for medical students during regular school hours and after school hours at each location. (Annex 7.1.2) • Provide a copy of the medical college or university plan (instructions) for emergency and disaster preparedness. This instruction should be circulated to all medical students, faculty, and staff. |

| | |
|------------------|--|
| Applied | <ul style="list-style-type: none"> • Describe how medical students and medical staff are informed of institutional policies and plans to prepare for emergencies and disasters. |
| Effective | <ul style="list-style-type: none"> • The College should evaluate the adequacy and efficiency of the security systems at the educational constructions and clinical teaching sites. This evaluation should also be supported by providing data from the student surveys, by curriculum year (Y1 to Y6), on the percent of respondents who were satisfied / very satisfied with safety and security at all instructional sites. |

7.1.3. The medical college should improve the learning environment by regularly, updating, and modifying or extending the physical facilities to match the developments in educational practices.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|---|
| Present | Describe the recent (updated) challenges in the needed teaching space such as that mentioned below |
| Applied and Effective | <ul style="list-style-type: none"> • What are the mechanisms used for scheduling <u>educational spaces</u> if these spaces are used for a required learning experience in the early years of the curriculum (lecture halls, large and small group rooms, and laboratories) are shared with other colleges/programs to accommodates the needs of the medical education program such that the delivery of the curriculum is not disrupted. • What are the mechanisms applied for scheduling <u>facilities</u> used for teaching and assessment of students' clinical skills if these facilities are shared with other colleges/programs to ensure that these facilities accommodate the needs of the medical college so that teaching and assessments are not disrupted • What are the necessary measures or adjustments the college should implement to accommodate the increase in class size over the succeeding years • What is the support plan for the college research mission and what are the resources for basic, clinical and evaluation research? |

7.2 CLINICAL TRAINING RESOURCES

7.2.1. The medical college must ensure necessary resources for giving the students adequate clinical experience, including sufficient:

7.2.1.1. The medical college must ensure necessary resources for giving the students adequate clinical experience, including sufficient number and categories of patients.

Annotations:

[Patients may include validated simulation using standardized patients or other techniques, where appropriate, to complement, but not substitute clinical training.]
(See Annex 7.2 for further details).

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <ul style="list-style-type: none">• Provide Student: Patient Bed ratio, especially for the last 3 years, (standard: 1/3).• A medical college has, or is assured the use of appropriate resources for clinical instruction in ambulatory and inpatient settings and has adequate numbers and types of patients (e.g., acuity) (level of severity of illness), case mix (groups of patients requiring similar tests, procedures, and resources that are treated at a particular hospital), age, gender by providing the following data:<ul style="list-style-type: none">• Patient Volume: Provide the required information for each hospital that will be used for the in-patient. See annexes 7.2.1.1.a• Inpatient Teaching Facilities. Provide information for inpatient teaching facilities used for required clinical training at each hospital. See annexes 7.2.1.1.b• <u>Inpatient</u> Teaching Sites by Clinical training course: List all inpatient teaching sites where medical students will take one or more required Clinical training courses, indicate the Clinical training course(s) offered at each site by placing an "X" in the appropriate column. See annexes 7.2.1.1.c• <u>Ambulatory</u> teaching sites: For each type of ambulatory teaching, sites indicate the Clinical training course(s) where students will spend time at this type of site by placing an "X" in the appropriate column. (Ambulatory care refers to care that takes place where patients |

| | |
|------------------------------|---|
| | <p>attend hospital facilities without being admitted as inpatients. See annexes 7.2.1.1.d</p> |
| Applied and Effective | <ul style="list-style-type: none"> • Evaluate the clinical facilities provided by the college for clinical training classes from the following point of view: area, location, and sufficiency. • Describe any significant changes in clinical education sites planned by the College of Medicine over the next three years as a result of class size increases or other circumstances. • Provide documents showing that Teaching Hospitals and Primary Health Care centers (PHC) have met the health institution's accreditation. If the MOH accreditation program was not implemented, see the Teaching Hospital Standard's template appendix below as a template (example) for assessment of the current situation. • Evaluate the quality and adequacy of the affiliated health care institutions for clinical training from the specialties and teaching beds' point of view. Details of teaching beds include the number of beds used, average daily occupancy, number of admissions per year, number of outpatients per year, number of classrooms, clinical boardrooms, etc. • Provide data to ensure that the college has teaching beds and outpatient clinics in main specialties (surgery, medicine, pediatrics, obstetrics & gynecology), and emergency, ENT, Dermatology, and other specialties based on the health problems, with adequate clinical teaching staff. • The college should provide documents for facilitating students' access to out-patient clinics for teaching and learning purposes. These documents might be supported by students and staff opinions • Provide documents showing that students have easy access to primary health care centers, examples: study timetable, official letters, and students/staff opinions, etc. • Describe and interpret the survey results of student, staff, and stakeholder satisfaction with the adequacy of the number and category of patients at different affiliated clinical institutions for making students adequate clinical experience. |

7.2.1.2. The medical college must ensure necessary resources for giving the students adequate clinical experience, including sufficient clinical training facilities.

Annotation:

[Clinical training facilities would include hospitals (adequate mix of primary, secondary and tertiary), sufficient patient wards and diagnostic departments, laboratories, ambulatory services (including primary care), clinics, primary health care settings, health care centers, and other community health care setting skills laboratories. All these clinical training facilities are to ensure clinical training to be organized using an appropriate mix of clinical settings and rotation throughout all main disciplines.]

Clinical training resources: Each hospital or other clinical facility affiliated with a medical college that serves as a major location for required clinical learning experiences should have sufficient information resources and instructional facilities for medical student education.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <ul style="list-style-type: none">• Describe clinical training resources at an inpatient hospital for clinical training. See annexes 7.2.1.2.a• Describe the clinical training resources by curriculum year. See annexes 7.2.1.2.b• Give comments on the adequacy of resources (from the above survey question) to support medical student education at each inpatient and outpatient site used for required clinical clerkships, including space for teaching (lectures/conference rooms), study areas, and information technology (computers and internet access).• Describe the adequacy and availability of the diagnostic departments, laboratories, ambulatory services (including primary care), clinics, health care settings, and skills laboratories in the main clinical institution• Research:<ul style="list-style-type: none">○ Check for the presence of a committee for reviewing research projects and papers, and the presence of an institutional review board (IRB) for reviewing research medical ethics.○ Show hospital budget allocation to support research (minimum 3% of hospital budget internationally)• Library, including virtual library: Provide documents showing the presence and adequacy of the following resources in the library:<ul style="list-style-type: none">○ Presence of a minimum of one database. |

| | |
|------------------|--|
| | <ul style="list-style-type: none"> ○ Presence of a minimum of 50% up-to-date information resources, ○ Books; at least 300 titles are expected to be available. ○ Periodicals: At least 10 journals in each specialty in hard copy or electronic format five years ago; all staff should have easy access via an international network. ○ Availability of dictionaries and encyclopedias. ○ Availability of wireless high-speed internet. |
| Applied | <ul style="list-style-type: none"> • The Hospital/College Clinical Skills Laboratory (CSL): <ul style="list-style-type: none"> ○ Provide documentation demonstrating that the CSL is on the cutting edge of technology with respect to equipment, anatomical models, electronic simulators, and modules for standardized patient encounters. ○ Mention who supervises the students in the laboratory experience? ○ Describe the skill lab contribution in providing support for clinical training? • Provide documents showing a website for learning aids and communication for students and staff. |
| Effective | <ul style="list-style-type: none"> • Logbook: <p>On an annual basis, the student logbooks for the entire clinical training year are usually reviewed by the Undergraduate Medical Education unit (UME) or any other authority in charge to ensure that all students have encountered the required clinical presentations. Show logbook samples and student interviews.</p> • Students and staff satisfaction on the adequacy of resources to support medical student education at each inpatient and outpatient site used for required clinical training, including space for clinical teaching (conferences/rounds), access to library resources, and information technology (computers and the internet). • Supply the data by site, for the problems with the availability of resources at one or more inpatient or outpatient sites were identified, and identify the steps being considered to address the identified problems. |

7.2.1.3. The medical college must ensure necessary resources for giving the students adequate clinical experience, including sufficient supervision of their clinical practice.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">Provide the number and quality of the training supervisors in the following clinical practices:<ul style="list-style-type: none">Internal medicinePediatric medicine.Surgery, including surgical subspecialty.Obstetrics & Gynecology.Community medicine,In addition to Accident and Emergency, ENT, Dermatology, and other specialties |
| Applied | Provide the clinical training program at different affiliated clinical institutions, including their supervising clinical training teams |
| Effective | Provide student/staff satisfaction with the clinical supervision of staff from both clinical training institutions and college. Further details on standards and specifications of teaching hospitals are provided in Appendix 7.2. |

7.2.2. The medical college should evaluate, adapt, and improve the facilities for clinical training to meet the needs of the population it serves.

Annotation:

[The term “evaluate” would include an assessment of the relevance and quality of medical education programs in terms of settings, equipment, number and categories of patients, as well as health practices, supervision, and administration.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <ul style="list-style-type: none">What areas of clinical institutions in affiliated institutions need adjustments and improvements regarding the changing needs of the population it serves? Provide documentation demonstrating improvements in parameters, equipment, patient numbers and categories, health practices, supervision, and administration. |

| | |
|------------------|---|
| | <ul style="list-style-type: none"> Does the college consider the skills lab to be part of the clinical education program? Give a summary of the skill laboratory establishment, description, contents, and activities including basic skill courses and some other skill courses carried out in the skill laboratory with the plan for improvement. |
| Applied | <ul style="list-style-type: none"> Evaluate the appropriateness and quality of the changes in clinical training resources. See annexes 7.2.2. Interpret the result of the recent survey questions (data analysis) on the adequacy, appropriateness, and quality of medical training programs of resources to support medical student education at each inpatient and outpatient site used for required clinical training. Recommendations from conferences and rounds for improvements can also be documented Provide the data by site and describe the steps and actions that could be taken to address the identified problems with the availability, adequacy, appropriateness, and quality of resources at one or more inpatient or outpatient sites, to ensure that these clinical training facilities will be adjusted to acquire adequate clinical training standard. Examples of the College's role in developing clinical training institutions: <ul style="list-style-type: none"> Adjust the grouping and scheduling of trainees for clinical training in clinical training courses, so that each group has a different course depending on the resources available. Contribution to the development and improvement of clinical education facilities in terms of supervision, administration, etc. Contribution to the Ministry of Health for the setting up of certain diagnostic units in the training site. |
| Effective | <p>Does the college assess affiliated training institutions regularly? Provide a summary of these evaluation studies and what needs to be improved. Moreover, the portfolio is important to visualize students' achievements (documents on what kind of practice they have conducted). These achievements enable the college to introduce developments to suit the training requirements of the students.</p> |

7.3 INFORMATION TECHNOLOGY

7.3.1 The medical college must formulate and implement a policy that addresses the effective and ethical use and evaluation of appropriate information and communication technology.

Annotations:

[Effective use: Information and communication technology would include:

*Use of computers, cell/mobile telephones, internal and external networks, and other means as well as coordination with library services. The policy would include common access to all educational items through a *learning management system. Information and communication technology would be useful for preparing students for evidence-based medicine and lifelong learning through continuing professional development (CPD).]*

Notes:

- Appropriate safeguards would be included in the relevant policy to promote the safety of physicians and patients while empowering them to use new tools. *Annex 7.3.1.
- **A- Effective use and assessment of information technology (policy and implementation):**

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|---------------------|--|
| Present and Applied | <ul style="list-style-type: none">• Provide information technology (IT) resources available to the college. Discuss the adequacy of these IT resources. See annexes 7.3.1.a.<ul style="list-style-type: none">○ Identify the availability of a wireless network in classrooms and workplaces. If there is no wireless network at instructional sites on campus or if the network does not cover all locations, describe the shortage of internet access points in educational spaces (e.g., in large classrooms, small classrooms, student study space).○ Describe the availability of telecommunications technology that links all instructional sites/campuses and how Information Technology (IT) services support the delivery of distributed education.○ How does the medical college assess the adequacy of IT resources to sustain the educational program? |

| | |
|------------------|--|
| | <ul style="list-style-type: none"> ○ Describe how medical students, residents, and faculty can access educational resources (e.g., curriculum materials) from off-campus sites, including teaching hospitals and ambulatory teaching sites). ● Provide the number of IT services staff. Determine the adequacy of these staff. See annexes 7.3.1.b. ● Describe the Cooperation between medical college library and information technology resources (i.e. policies or regulations). See annexes 7.3.1.c. <ul style="list-style-type: none"> ○ Identify the ways that staff members in the IT services unit are involved in curriculum planning and delivery for the medical school. For example, do IT services staff assist faculty in developing instructional materials, developing or maintaining the curriculum database or other curriculum management applications, or learning to use the technology/Audio-Visual resources for on-site or distance education? ● Provide document(s) showing that the college formulates and implement the regulations and policies designed by the learning management system or any other alternative authority in the college for effective use of information technology including the use of: <ul style="list-style-type: none"> - Computers - Cell/mobile telephones - Internal or external networks ● Which committee or body who is responsible for formulating the policy of the "information and communication technology center" in the medical college. (Example: presence of formal committee, information technology center for the whole university, etc.) ● Are there additional governmental policies dealt with information and communication technology? e.g., a computer course is a university requirement, general encouragement for the use of information technology by the government, etc. |
| Effective | <ul style="list-style-type: none"> ● Discuss the results of the Survey of Student Satisfaction with IT Resources by Curriculum Year. See annexes 7.3.1.d. <p>Does the college have the authority to direct resources to the use of information technology? If it has such authority, list its achievement, e.g. establishment of the electronic library, network, website, etc.</p> |

B- Ethical use and evaluation of IT (policies and implementation):

Annotation:

[Ethical use refers to the challenges for both physician and patient privacy and confidentiality following the advancement of technology in medical education and health care. Appropriate safeguards would be included in relevant policy to promote the safety of physicians and patients while empowering them to use new tools.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none">• Show that policy on the ethical use of IT would ensure the implication of the following concepts:<ul style="list-style-type: none">▪ Patient Privacy▪ Show documents demonstrating the practical policies of maintaining the security and privacy of patient records (limited to the patient only).▪ Patient Confidentiality▪ Demonstrate the set of rules that ensures patient's confidentiality (records distributed between the patient and the doctor who trust)▪ Appropriate safeguards:• Are safeguards to promote physician and patient safety from using the new IT tools?• Demonstrate physical, technical, and administrative safeguard rules for tools applied to patient information records, and demonstrate that these safeguards allow appropriate access to health providers for patient care. (Physical, technical, and administrative safeguards protect the privacy, security, and integrity of recorded patient information). |
| Applied | Provide college / hospital report or evidence showing the implementation of these policies. |
| Effective | Discuss Students, clinical staff, patients, satisfaction, and evaluation of the ethical use and evaluation of information technology tools. |

7.3.2. The medical college must ensure access to web-based or other electronic media.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|---|
| Present | <ul style="list-style-type: none">Provide the following information for the most recent academic year for Library journals, books, databases, seats, and public workstations. Interpret the results. See annexes 7.3.2.a.Provide the number of library staff in the medical college who provides easy access to the web-based and other electronic media, using the most recent academic year. Interpret the results. See annexes 7.3.2.b.Describe the medical students and faculty access to electronic and other library resource services across all sites both on and off college campuses (Examples: access to the homepage for students and staff to obtain the information required, literature searching, literature databases, electronic books, and journals, etc.)Provide the CVs of the professional IT staff (i.e. personnel who are working to facilitate easy access to the facilities in the library, educational resources, and even conducting workshops for the staff in this area).Provide a copy of the policies and regulations for the IT users of how to access, use types of ITs, audiovisual aids, and other different educational electronic resources in the college. |
| Applied | <ul style="list-style-type: none">Describe college action for constructing a high-security system to prevent unauthorized access to the networkBriefly summarize any partnerships that extend the process of access to other library information resources. For example, the library interactions with other universities and/or affiliated hospital libraries?The college should list the regular library working hours. Mention any additional hours during which medical students have access to all or part of the library for study including electronic media. |
| Effective | <ul style="list-style-type: none">Provide data from the Graduation Questionnaire on the percentage of respondents that were satisfied/very satisfied with the library access. Add rows as needed for each campus. See annexes 7.3.2.c.Provide data from the student questionnaires analysis by curriculum year, on the percentage of respondents that were satisfied/very satisfied with the access to the library services and library resources. Add rows as needed for each location. See annex 7.3.2.d.Evaluate the efficiency of the access process to the educational resources including; library, computers, websites, instruments, and other available IT resources, and determine the number and disciplines of the users who accessed these resources last year. |

- Provide the analysis and interpretation for the satisfaction of the students and staff with the processes used to ensure effective access to the web-based and other electronic media at each site used for required learning experiences.

7.3.3.1. The medical college should enable teachers and students to use existing and exploit appropriate new information and communication technology for independent learning.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none"> • Show documents demonstrating that the college provides high quality, meaningful digital content for teachers and learners to facilitate independent learning • Students and teachers should have sufficient access to new digital technologies and the internet in the teacher classrooms, and teacher education institutions for independent learning (Show document(s) to ensure the presence of efficient access to IT resources for the process of independent learning) |
| Applied | <ul style="list-style-type: none"> • Teachers should have the knowledge and skills to use the new digital tools and resources (homepage, literature database, e-books, and e-journals, etc.) to help all students achieve high academic and clinical standards by independent learning (College should provide the skills and activities of teachers guiding independent learning process; such as conducting courses, workshops, lectures, etc.) • Provide documents to show the application of computers, cell/mobile telephones, internal and external networks in Independent Learning. |
| Effective | Describe the activities which have been achieved by student and staff by using or exploiting new information and communication technology via independent learning skills (e.g. medical techniques, skills, research, etc.) |

7.3.3.2. The medical school should enable teachers and students to use existing and exploit appropriate new information and communication technology for accessing information.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|---|
| Present | <ul style="list-style-type: none"> • Describe the role of the college in providing medical students, and staff access to the homepage, literature searching through on-campus and out-campus LAN connection for literature databases, all the electronic books, and journals, etc. (show policies, instructions guideline, etc.). • Describe the college efforts in providing computer technologies and information technologies and skills to make access to information by students and staff. Examples, conducting workshops, training courses, lectures, written instructions, policies, modernization of IT instrument, etc. |
| Applied and Effective | <ul style="list-style-type: none"> • Provide document for the continuous improvement of the internet environment in the college locations to facilitate staff and student access as well as preventing unauthorized access to the network • Provide staff and students satisfactions in the role of the college to enable them in using new IT and communication technology in accessing information |

7.3.3.3 The medical school should enable teachers and students to use existing and exploit appropriate new information and communication technology for managing patients.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <ul style="list-style-type: none"> • Describe the healthcare information technology tools used in managing patient during the clinical training such as computer terminal installed at inpatient and outpatient practice setting and research centers • What sort of saved documents used for the management of patients that could the faculty members and students have access to it? (E.g. all the documentation, laboratory data, and images which were saved in the electronic medical chart system for faculty members and students to use) |
| Applied | Describe how the college/hospital enables staff and students to be involved in patient management by utilization of information and computer |

| | |
|------------------|---|
| | technologies. (E.g., college / hospital conducting lectures, workshops, website document...) |
| Effective | <ul style="list-style-type: none"> • Show the satisfaction of the student in accessing the electronic chart of patients (with the help and supervision of staff to ensure personal information security) in outpatient and inpatient practice settings or other research centers (show survey / interview document(s)) • Describe any plan proposed by the college for implementing new information and communication technology used for managing patients. (For a definition of Healthcare Information Technology (HIT) and Patient Management Software (PMS), see Annex 7.3.3.3) |

7.3.3.4 The medical school should enable teachers and students to use existing and exploit appropriate new information and communication technology for working in health care delivery systems.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | <ul style="list-style-type: none"> • Describe how the medical college facilitates medical students' timely access to needed diagnostic, preventive, and therapeutic health services (for their check-up) at sites in reasonable proximity to the locations of required learning experiences e.g. health center which consists of internal medicine, psychiatry, dentistry, etc. contribution to health maintenance of staff and, students, health check for radiation handlers, psychiatric problems, vaccinations, etc. • Provide document(s) showing that medical students and staff at all instructional sites are informed about availability and access to health services e.g. : information about health care database system sharing between health centers provide continuous health maintenance and support, and giving instructions for regular health checkups for students and staff with the legal basis from the college health and safety act, in addition to the web-based health check-up database construction for students and staff to read |
| Applied | <ul style="list-style-type: none"> • Show that medical college has policies and procedures in place that permit students to be excused from required learning experiences including required clinical learning experiences to seek needed care. These policies and procedures that permit students to be excused from their learning schedule should be disseminated to medical students, faculty, and residents. |

| | |
|------------------|--|
| Effective | <ul style="list-style-type: none"> Provide college data to show that the respondents (%) at the college are satisfied / very satisfied with student health services provided by different health centers sharing health care database system, e.g. satisfaction with the regular health checkups, mental health interview to ensure early detection and of an early therapeutic intervention for psychiatric problems, vaccination for faculty members and students, etc. |
|------------------|--|

7.3.3.5. The medical school should enable teachers and students to use existing and exploit appropriate new information and communication technology to optimize student access to relevant patient data and health care information systems.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none"> Provide policy or guidance documents that specify the time afforded to the students to access health care information system services in addition to the time of classes and clinical activities. Describe the skills or instructions provided by the college for optimizing student's ability to read all the medical records registered by faculty members and to be able to review the patient's electronic medical charts (for only patients they are responsible for) (e.g. lectures, workshops, brochure, etc.) |
| Applied | Provide clinical training committee discussions and recommendations for optimization of student access to patient data and health care information system by trying to relax restrictions for viewing the electronic chart, since restriction would affect student learning. |
| Effective | <ul style="list-style-type: none"> Show students and staff opinions in optimization measures for student access to relevant patient data and health care information systems (example on optimization measures: implementation of new regulation, change in syllabus objectives, skill improvement, etc.) |

7.4 MEDICAL RESEARCH AND SCHOLARSHIP

7.4.1. The medical college must use medical research and scholarship as a basis for the educational curriculum.

Annotation:

[Medical research and scholarship encompass scientific research in basic biomedical, clinical, behavioral, and social sciences. Medical scholarship means the academic attainment of advanced medical knowledge and inquiry. The medical research basis of the curriculum would be ensured by research activities within the medical college itself or its affiliated institutions and/or by the scholarship and scientific competencies of the teaching staff.]

Notes:

- For more details see Annex 7.4

A-Use medical research as a basis for the educational curriculum

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|---------|---|
| Present | <ul style="list-style-type: none">• Provide, as available, a general outlines for research facilities and research programs of the college including:<ul style="list-style-type: none">○ Committees for postgraduate studies and scientific research○ Research committee for staff research○ Laboratory facilities for biomedical research (Biochemistry, Pathology, Physiology, Microbiology, etc.)○ Facilities for clinical research (hospitals, health centers, etc.)○ Faculty staff who can supervise researchers○ Research facilities in the college or university○ Participation (or having a sponsorship) in a research program with international research institutes (WHO, UNICEF, UNPA, Universities, etc.).○ Medical research journal to improve and support research work○ Review of the main recent research programs in biomedical sciences, medicine, community medicine, evaluation of health care programs, medical education, etc.) |

| | |
|------------------|---|
| Applied | <ul style="list-style-type: none"> Provide evidence to show that each department, division, and research unit continue their efforts to maintain excellent faculty members, and promote research and top-level research products from the international competition point of view. Provide number and title of research abstracts recently submitted by medical student /staff which demonstrate research activities and competencies of the researchers. |
| Effective | Determine the impact of the following activities on the increasing student awareness and opportunities to do a research projects such as: publishing of student papers, coordination between basic and clinical researches, develop a systematic approach to solving problems and to gain familiarity with the scientific method, acquisition of medical knowledge, attitudes, or skills, etc. To determine these impacts, the college may conduct opinions survey or any other alternatives. |

B-Use a scholarship as a basis for the educational curriculum

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Provide the number, titles, and types of scholarships afforded for staff and students. |
| Applied | <ul style="list-style-type: none"> Is there a formal mentorship program to assist faculty in their development as scholars? Give a brief description of this program if present. Describe the infrastructure and resources available or planned to support faculty scholarship (e.g., a research office support for grant development, funding for research project development). |
| Effective | <ul style="list-style-type: none"> What is the impact of the scholarships granted to the staff/students on their research abilities and competencies? |

7.4.2. The medical school must formulate and implement a policy that fosters the relationship between medical research and education.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | Show that medical school has a policy to supports medical student participation in research and other scholarly activities of the faculty (e.g. show policies or regulations for coordination of student placements, |

| | |
|------------------|--|
| | development of opportunities, or provision of financial support for research cost and publications). |
| Applied | Demonstrate the implementation of college activities in developing interaction of medical research and education, e.g., providing Scholarship, research methodology courses, and training opportunities in developing medical research and education |
| Effective | Conduct student's survey to show their satisfaction in the impact of the implemented policies on enhancing the relationship between medical research and education from the following concepts: increase of understanding of clinical medicine; facilitate critical and independent thinking, discovery thinking, and critical appraisal, develops teamwork skills, contribution to the health of their patients, etc. |

7.4.3. The medical college must describe the research facilities and priorities at the institution.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------------------|--|
| Present and Applied | <ul style="list-style-type: none"> • Describe research laboratories facilities and equipment (give a general view only) with the level of conducted research at each department • Provide data for the cooperation with the affiliated research facilities and also with other education/research institutions • How does the college accomplish the research priorities? Examples; show documents for collaboration among basic sciences, clinical medicine, and social medicine, and documents for enhancing clinical research and translational research, etc. |
| Effective | Provide the student and staff satisfaction with the research facilities and priorities? |

7.4.4.1. The medical college should ensure that interaction between medical research and education influences current teaching.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">• Describe how the college runs a research methodology course in respect to the following issues: research conduction, application of research principles, research project evaluation, learning scientific writing principles, learning how to select a problem and prepare a project proposal, application of statistical methods etc.• What are other efforts or development programs to enable undergraduate students to experience basic training as researchers, and to become future researchers (e.g. attending lectures presented by senior researchers to demonstrate the integration between research projects of basic sciences, clinical sciences, and social sciences, conducting an elective research program in the department they choose, participating in seminar presentations, etc.) |
| Applied | <ul style="list-style-type: none">• List the number and titles of researches accomplished by the students which have been conducted as a result of the researcher development activities carried out by the current curriculum |
| Effective | <ul style="list-style-type: none">• Provide student and staff satisfaction in the medical researcher development program implemented in the current teaching to enable undergraduate students to become future researchers. In addition to the survey, the minutes of the research/curriculum committee meetings can also be provided as a supportive document. |

7.4.4.2. The medical college should ensure that interaction between medical research and education encourages and prepares students to engage in medical research and development.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <ul style="list-style-type: none">• Show how the college increases student awareness of the opportunity of doing medical research and development of education e.g., creates a list of potential researches and projects in Basic Science and Health Research, give promotions, conducting conferences for student researches, etc... |

| | |
|------------------|--|
| | <ul style="list-style-type: none"> • The college should announce the list of the faculty members who are willing to or already supervise students to do medical research. Show the announced list. • Describe the opportunities offered to the students to receive training in the principles and application of research methods and the appraisal and integration of research into medical science. Provide documents for these opportunities such as lectures, workshops, website information, etc. • How does the college financially support this kind of research? e.g., show funds, grants, promotions, etc. |
| Applied | <ul style="list-style-type: none"> • Provide the number of students, who are engaged as co-workers in staff research (e.g. engagement in the evaluation of community health programs or engagement in clinical research, etc.) • Give the number and titles of student research abstracts that were conducted by the financial college's support. |
| Effective | <ul style="list-style-type: none"> • Does the college perform continuing research improvement and provide opportunities for any interested students in the professional medical program, to be exposed to or participate in on-going high-quality research? Provide data • Interpret opinions of the students/graduates and faculty in the quality of the measures taken by the college to encourage and prepare students in medical research and development of education which are listed above |

7.5 EDUCATIONAL EXPERTISE

7.5.1. The medical college must have access to educational expertise where required.

Annotations:

[Educational expertise would deal with processes, practice, and problems of medical education and would include medical doctors, educational psychologists, and sociologists. It can be provided by an education development unit or a team of interested and experienced teachers at the institution or be acquired from another national or international institution. Research in the discipline of medical education investigates theoretical, practical, and social issues in medical education.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------------------|---|
| Present | Name the committee or authority (include doctors, educational psychologists, and sociologists) and their specialties, that specifically work for medical education and accept consultations on educational methodologies. |
| Applied and Effective | <ul style="list-style-type: none"> • Show documents of collaboration with medical education professors or other foreign university organization working specifically with education. • Describe the achievements that have resulted from access to medical education experts (in-house units or outside experts) in the following areas: <ul style="list-style-type: none"> ○ Professional development skills in the areas of the faculty member's discipline content ○ Curricular design ○ Student assessment methodologies ○ The instructional methodology or teaching methods (i.e., description of the learning objectives-centered activities and ensure the flow of information between teacher and students) ○ Teaching methodology or teaching methods (i.e. Describing activities that focus on learning objectives and the flow of information between teacher and students) ○ Program evaluation process (presentation of committee minutes, discussion and exchange of views, activities on program implementation and evaluation) <p>(Note: Examples of the activities which might apply the educational experts to achieve this goal are: workshops, seminars, courses, practical applications of the educational principles in the management of the curriculum, etc.).</p> |

7.5.2.1. The medical college must Formulate and implement a policy on the use of educational expertise in Curriculum development.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | Outline the policy of working with education experts to lead and develop the medical program and improve allocated educational resources. View official orders, rules, minutes, etc... |

| | |
|------------------|---|
| Applied | Describe the availability of competent people to help teachers improve their teaching and evaluation skills. Display official orders, communications or transactions, meeting minutes, etc... |
| Effective | <ul style="list-style-type: none"> Provide documents demonstrating achievements of the education expertise in curriculum development and reform, such as meeting minutes, workshops, conference recommendations, etc. Provide analysis and interpretation for faculty and student feedback, on the appropriateness and quality of the policies; moreover, provide their satisfaction with the application of the recommended reforms in the processes of curriculum development |

7.5.2.2. The medical college must formulate and implement a policy on the use of educational expertise in the development of teaching and assessment methods

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none"> Indicate the committee or authority responsible for developing and implementing teaching and assessment methodologies in the college. Outline their structure and function. Describe the availability of qualified individuals to assist teachers in improving their teaching and evaluation skills. Display official orders, communications / transactions, meeting minutes, etc... |
| Applied | What policies are implemented by the college to ensure that educational expertise is provided on a regular basis to advice on the development of teaching and evaluation methods? |
| Effective | Provide documents showing that policies implemented on the use of educational expertise in teaching and assessment methods have been met, examples: committee meetings minutes, the document showing the application of innovative scientific principles of teaching and assessment methods, with regular advice from the educational experts, studies conducted to evaluate the effectiveness of the instructional and evaluation methods(checking validity, reliability, and feasibility of the methods) under supervision of these experts, moreover, these roles should be evaluated continuously by staff and student feedback. |

7.5.3. The medical college should demonstrate evidence of the use of in-house or external educational expertise in staff development.

Annotation:

[Educational expertise would deal with processes, practice and problems of medical education and would include medical doctors with research experience in medical education, educational psychologists and sociologists. It can be provided by an education development unit or a team of interested and experienced teachers at the institution or be acquired from another national or international institution.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">• Describe the organizational placement of in-house education specialists involved in staff development in the area of education, research, and administration. (E.g. Expertise at the Faculty Development Office, Medical Education Unit, Dean's Office, University Offices)• Describe the availability of qualified external individuals who can help faculty members improve their teaching, evaluation, research and administration skills. Post official orders, invitations, communications, transactions, minutes of meetings. |
| Applied | Provide documentation demonstrating the use of teaching expertise by the college in staff development and time (ex: Part-time, full time, visitor...) they had devoted to the faculty staff development (e.g. Post formal order, college board meeting minutes, workshops, seminars, websites, etc.) |
| Effective | Evaluate specific programs or activities, and their durations that have been designed with expertise to help in the process of faculty development (e.g. medical training courses, seminars, clinical instructor training, web sites and e-mail communication skills, etc.). |

7.5.4. The medical college should pay attention to current expertise in educational evaluation and research in the discipline of medical education.

Annotation:

[Research in the discipline of medical education investigates theoretical, practical, and social issues in medical education.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">• Provide document(s) of sharing faculty members in the activities of implementation and reform of medical education carried out by experts to adopt updated information• As available, describe the college achievements to take opinions from foreign visiting professors' experts about medical education evaluation and research. |
| Applied | What is the updated information/research which has been implemented in medical education reform as a result of the sharing of faculty members' expertise in conferences, meetings, studies, etc., as well as opinions from external experts. |
| Effective | Provide staff feedback, on the college attentions processes to promote the achievements of the expertise in the educational evaluation as well as research, in the discipline of medical education. |

7.5.5. The medical school should allow staff to pursue educational research interests.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">• Describe how does the college disseminate educational research activities of the faculty staff? Outline the current status.• Show whether a medical college and/or its sponsoring institution provides opportunities/promotions to pursue educational research interest for professional development to each faculty member in the areas of discipline content.• Examples of these areas include curriculum design, program evaluation, student assessment methods, teaching methodology, or other areas of research to improve leadership skills and competencies. Demonstrate how the college disseminates research topics among teachers. |
| Applied | Show the list of educational research conducted within the college. |
| Effective | Demonstrate documents illustrating the results of staff satisfaction with the college's achievements in disseminating improvements in educational research areas based on staff research interest |

7.6 EDUCATIONAL EXCHANGES

7.6.1. The medical college must formulate and implement a policy for:

7.6.1.1. The medical college must formulate and implement a policy for national and international collaboration with other educational institutions, including staff and student mobility.

Annotations:

[Other educational institutions would include other medical schools as well as other faculties and institutions for health education, such as schools for public health, dentistry, pharmacy, and veterinary medicine]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|---------|---|
| Present | <ul style="list-style-type: none">• Does the college, university, or ministry have a policy for collaboration in educational exchange with other educational institutions including staff mobility with these institutions? Display formal policy documents.• Does the college have a student fellowship, collaboration protocol with other regional and international medical colleges. State types of collaboration, countries, and date of collaboration?• Does the College of Medicine have a well-defined clinical partnership with MOH departments? Show documents.• Does the College of Medicine have a partnership or collaboration with health colleges and paramedic training institutions (nurses, paramedics, medical technologists, etc.)? Display documentation demonstrating such collaboration.• Does the college have a copy of a written policy or order (from college, ministry, or university) for national and international collaboration with other educational institutions (medical colleges, public health, dentistry, pharmacy, and veterinary medicine), in staff and student mobility process? <p>Demonstrate policy and cases of staff and student mobility among medical colleges and other educational institutions.</p> <ul style="list-style-type: none">• Does the college have collaboration with other scientific research and training institutions to ensure scientific exchange, exchange of training experiences, organize workshops, conferences, and seminars for faculty members or students? Summarize these events. |

| | |
|------------------|--|
| Applied | Show the cases of staff and student mobility that results from the implication of collaboration and partnership arrangements with other institutions |
| Effective | Give the opinions of the student and staff on the impact of the educational collaborative and partnership arrangement with other institutions on the process of staff and student mobility |

7.6.1.2. The medical college must formulate and implement a policy for transferring of educational credits.

Annotation:

[Policy for a transfer of educational credits would imply consideration of limits to the proportion of the study program which can be transferred from other institutions. Transfer of educational credits would be facilitated by establishing agreements on mutual recognition of educational elements and through active program coordination between medical college. It would also be facilitated by the use of a transparent system of credit units and by flexible interpretation of course requirements.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none"> • Does the college have Policies for educational credit transfer between the college and other national educational institutions (medical colleges, public health, dentistry, pharmacy, and veterinary medicine, etc.), these policies should be demonstrated. • Does the college, university, or ministry have a system of issuing approval for credit transfer between national colleges and foreign medical colleges to facilitate student transfer during study time or after graduation? Describe this system's structure and policy. |
| Applied | Demonstrate student files with previously transferred credits and related committee meeting minutes, applying current policies. |
| Effective | <ul style="list-style-type: none"> • Assess the credit transfer process applied to the college, based on the following points: <ul style="list-style-type: none"> ○ The proportion limit of the study program which can be transferred from other institutions should be considered, i.e., number of courses, stage or year of the study ○ Existence of mutual recognition of educational elements among medical colleges. |

| | |
|--|---|
| | <ul style="list-style-type: none"> ○ Transparency and flexibility when discussing course requirements for student transfers. |
|--|---|

7.6.2. The medical college should facilitate the regional and international exchange of staff and students by providing appropriate resources.

Annotation:

[Staff would include academic, administrative, and technical staff.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------------------|--|
| Present and Applied | <ul style="list-style-type: none"> ● Does the college provide resources to facilitate regional and international interchange of university staff? Demonstrate appropriate resources for each event such as accommodation, transport, food, etc. particularly for international cooperation. ● Does the college provide resources to facilitate the regional and international exchange of students, e.g. resources for student exchange for short or long courses, training, visiting programs, such as accommodation, transportation, eating, registration fees, etc... Show documents demonstrating the college authority and its action in these regards. |
| Effective | Show a summary report demonstrating the assessment of the adequacy of resources provided by the college for the exchange of teachers and students on a national and international scale. |

7.6.3. The College of Medicine should ensure that the exchange is purposefully organized, taking into account the needs of staff and students, and adhering to ethical principles.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | Provide a copy of the official agreement for the exchange program, with foreign medical colleges, and demonstrating that this agreement is purposefully organized, assure fruitful and safe educational environment and meets the need of staff and students |

| | |
|------------------|--|
| Applied | Provide full documents for each exchanged national and international student or staff besides meeting minutes for the committee in charge to ensure availability of the needs and ethical principles for each case |
| Effective | Show students and staff feedback evaluation, based on the actual outcomes of past data of student/staff exchange |

Annexes for area- 7-

- **Annex 7**

Basic Medical Education WFME Global Standards for Quality Improvement

Outline for data collection link:

<https://www.who.int/workforcealliance/knowledge/toolkit/46/en/>

- **Annex.7.1.1a**

| Provide the requested information on the types of classroom space | | | | | |
|--|------------------------|----------------------------|---------------------------------------|--|--|
| Year | Classroom Space | Room Type / Purpose | No. of rooms of this size/type | Seating Capacity (Provide a range if variable across rooms) | Building(s) where rooms are located |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |

- **Annex 7.1.1b**

| Faculty offices and search laboratories. | | | |
|---|---|-----------------------|-----------------------------|
| Department name | No. of full-time teaching staff. | No. of offices | No. of research labs |
| | | | |
| | | | |
| | | | |

- **Annex 7.1.1c**

- Annex 7.1.1d

Physical educational facilities and services standards
Physical educational facilities and service standards

| No. | Details | Standard | Percentage of compatibility with standard. |
|-----|---------------------------------------|-------------------------------------|--|
| 1 | Green area | 25% | |
| 2 | Registration Office Area | 10m ² /100 student | |
| 3 | Officers in the registration office | Officer/200 students | |
| 4 | Faculty office area(single) | 9m ² | |
| 5 | College office space (shared) | 15m ² | |
| 6 | Library study area/student | 0.8 m ² | |
| 7 | Periodical/specialty | 5 for each specialty | |
| 8 | Computer/teaching staff | 1computer for each staff | |
| 9 | Computer/student | 1 computer/25 students | |
| 10 | Student/ teaching staff | 20 students/1staff member | |
| 11 | Technician/student in a laboratory... | 1technician/20 students in the lab. | |
| 12 | Lecture hall | 50-60 m ² | |
| 13 | Student/lecture hall | 50-60 student/lecture hall | |
| 14 | Student stadium | 200 student capacity | |
| 15 | Research Lab. Area | 16m ² | |
| 16 | Water closet for staff | 1W.C./20 STAFF | |
| 17 | Water closet for students | 1W.C./30 students | |

| | | | |
|----|-------------------------|--------------------|--|
| 18 | Car parking for staff | 1 space/1 staff | |
| 19 | Car parking for student | 1 space/10 student | |
| 20 | Closed hall | 2000m ² | |

- **Annex. 7.1.2**

Examples of security measures that should be available and evaluated:

- A- Police department/university guards to manage law enforcement, fire safety, emergency medical services, etc...
- B-In-card access for building
- C-Public safety department to ensure students, physician, hospital employees, patients and visitors
- D-Security cameras to monitor inside and outside the college
- E-Using emergency notification systems such as email, text messaging, TV, and loudspeakers
- F-Presence of emergency plan in case of fire and explosions, severe weather, hazardous chemical materials, contaminations, electricity shut down, law enforcement emergencies.

- **Annex 7.2:**

Teaching hospital, standards, and specifications

الرابط:
ومواصفاته معايير المستشفى التعليمي
<http://sites.ju.edu.jo/ar/pqmc/nationalaccreditation/>

- **Annex 7.2.1.1.a:**

| Facility Name/Campus (If applicable) | No. beds in use | Average daily occupancy | No. of admissions / Year | No. of out- patient visits /year |
|---|-----------------|-------------------------|--------------------------|----------------------------------|
| | | | | |

- **Annex 7.2.1.1.b**

| Facility Name/Campus (If applicable) | Clinical training course | Average daily inpatient | Anticipated(expected) Average No. of Students Per Clinical training course (Range) |
|---|--------------------------|-------------------------|--|
| | | | |

| | | census | Colleges' medical students | Medical students from other colleges |
|--|--|--------|----------------------------|--------------------------------------|
| | | | | |

- Annex 7.2.1.1.c:

| Facility Name/Campus (if applicable) | Family Medicine | Internal Medicine | Ob-Gyn | Pediatrics | Surgery | Other (list) |
|--------------------------------------|-----------------|-------------------|--------|------------|---------|--------------|
| | | | | | | |

- Annex 7.2.1.1.d:

| Facility Type | Family Medicine | Internal Medicine | Ob-Gyn | Pediatrics | Surgery | Other (list) |
|-------------------|-----------------|-------------------|--------|------------|---------|--------------|
| Teaching hospital | | | | | | |
| General hospital | | | | | | |
| Health Center | | | | | | |
| Others | | | | | | |

- Annex 7.2.1.2.a:

| Facility Name/Campus (If applicable) | Lecture / Conference Room | Study Area(s) | Computers |
|---|---------------------------|---------------|-----------|
| Ex., Hospital of..... | | | |
| List each inpatient hospital that will be used for required clinical training. Indicate whether the indicated resource is available for medical student use at that site by placing an "X" under the appropriate column heading. College with regional campuses should include the campus name for each facility. Add additional rows as needed.(Campus: the buildings of a college or university and the land that surrounds them) | | | |

- Annex 7.2.1.2.b:

| Survey question | Year 3 | Year4.... |
|-----------------|--------|-----------|
|-----------------|--------|-----------|

| | | |
|--|--|--|
| Adequacy of education/teaching spaces in hospitals, including space for teaching (lectures/conference rooms), study areas, and information technology (computers and internet access) | | |
| Data survey year, and source | | |
| As available, provide data from a single, recent academic year from the student survey analysis, clinical training evaluations, or other sources, on student satisfaction with the adequacy of educational/teaching spaces, at inpatient and outpatient clinical sites used for the inpatient and outpatient portions of required clinical training course. Add rows for each relevant question, and indicate the year and source of these data. | | |

- **Annex 7.2.2:**

| Survey questions | Year 1 | Year2..... |
|--|---------------|-------------------|
| | | |
| Data survey year....., source..... | | |
| Evaluation of Clinical Training-Resources by Curriculum Year: As available, provide data from a single, recent academic year from either the student survey analysis, clinical training evaluations, or other sources, for appropriateness and quality for the changing in medical training programs from the following points: Educational/teaching spaces, settings, equipment and number and categories of patients, health practices, supervision and administration at inpatient and outpatient clinical sites used for required clinical training. Add rows for each relevant question, and indicate the year and source of these data. | | |

- **Annex 7.3.1:**

*A learning management system (LMS) is a software application for the administration, documentation, tracking, reporting, automation, and delivery of educational courses, training programs, or learning and development programs

- **Annex 7.3.1.a:**

| |
|--|
| Medical College IT Resources |
| Provide the following information based on the most recent academic year. Colleges with regional campuses should specify the campus in each row. |

- Annex 7.3.1.b:

| Medical College IT Services Staffing | | | |
|---|--------------------|--------------------------------------|---|
| Provide the number of IT staff, in the following areas, using the most recent academic year. Colleges with regional campuses may add rows for each additional campus. | | | |
| Total No. of IT Staff | Professional Staff | Technical and Paraprofessional Staff | Part-time Staff (e.g., student workers) |
| | | | |
| | | | |

- Annex 7.3.1.c:

| |
|--|
| Medical College Library and information technology resources cooperation |
| Library/ IT Unit workers |
| 1-Number of workers: |
| 2-Qualifications: |
| a- Skills in clinical informatics (YES/NO) |
| b-Behavior (YES/NO) |
| c-Lifelong learning (YES/NO) |
| d-Professional development of teaching faculty. (YES/NO) |

- Annex 7.3.1.d:

| Student Satisfaction with IT Resources by Curriculum Year | | |
|--|--------|----------------|
| As available, provide data for the student survey, by curriculum year, on the percent of respondents that were satisfied/very satisfied with computer/IT resources. Add rows for each relevant question area on the student survey. Colleges with regional campuses should specify the campus in each row. | | |
| Survey Question (Campus as applicable) | YEAR 1 | YEAR 2...3.... |
| | | |

| | | |
|--|--|--|
| | | |
|--|--|--|

- Annex 7.3.1.2:

https://www.radiologyinfo.org/en/info.cfm?pg=article-patient-privacy#part_one

- Annex 7.3.2.a:

| Library/ Building (as appropriate) | Total Journal Subscriptions (all formats) | Current Book Titles (all formats) | Databases | Total User Seating | Public Work- stations |
|--|--|--|-----------|--------------------------|-----------------------------|
| | | | | | |

- Annex 7.3.2.b:

| Professional Staff | Technical and Paraprofessional Staff | Part-Time Staff (e.g., student workers) |
|--------------------|---|--|
| | | |

- Annex 7.3.2.c:

| Library location | College graduates' satisfaction % | | |
|------------------|-----------------------------------|------|----------|
| | 2018 | 2019 | 2020.... |
| | | | |

- Annex 7.3.2.d:

| Library location | Ease of access to library resources and holdings (includes virtual access on and off location) | College students' satisfaction % | | | |
|------------------|--|----------------------------------|--------|--------|-----------|
| | | Year 1 | Year 2 | Year 3 | Year 4... |
| | | | | | |
| | Quality of library support and services | | | | |

- **Annex 7.3.3.3:**

Definitions: -Healthcare information technology (HIT) has been defined as "the application of information processing involving both computer hardware and software that deals with the storage, retrieval, sharing, and use of health care information, data, and knowledge for communication and decision making". Health information technology presents numerous opportunities for improving and transforming healthcare in managing patients that include; reducing human errors, improving clinical outcomes, facilitating care coordination, improving practice efficiencies, and tracking data over time. Health information technology has an impact on patient management including safety. Patient management software (PMS) is one of the common categories of HIT.

-Patient management software (PMS) is referred to as software that is regulated as a medical device. It is software that is used to acquire medical information from a medical device to be used in the treatment or diagnosis of a patient. It can also be software that is an adjunct to a medical device and directly contributes to the treatment of the patient by performing analysis, or providing treatment or diagnosis functionality that replaces the decision and judgment of a physician).

- **Annex 7.4:**

Definitions:

- Medical educational research may include evaluation of the transfer or acquisition of knowledge, attitudes, or skills in any topic relevant to human health among any type of learner, including health professionals, students in the health professions, and patients.

Besides medical researches, medical educational researches are required. These researches would influence current teaching, facilitate the learning of scientific methods, and evidence-based medicine.

- **Annex 7.6.1.1:**

Examples of collaboration links with other institutions:

Cooperation in scientific activities such as workshops and conferences, international students exchange program, training programs, and opportunities, joint research activities, external examiners, visiting experts and faculty members, conduction of international examinations (e.g., MRCP examinations), Contribution in the teaching and clinical facilities, in the implementation and development of the undergraduate medical programs of other colleges. Nevertheless, many of the current links are based on personal staff connections.

- **Annex 7.6.2:**

- Examples of an exchange of academic staff: The college may provide an exchange of academic staff for certain medical colleges, health professional colleges, Iraqi Medical Specializations Board, Arab Board of Medical specialization, participation in the training or curriculum development courses, participation in the final examinations for undergraduate and postgraduate studies of other colleges, giving

consultations for the international medical organization, participation in conferences, etc.

- Transfer Students suggestions notes (These suggestions are not a substitute for the official rules, if available)
- A medical college ensures that any student accepted for transfer or admission with advanced standing demonstrates: academic achievements, completion of relevant prior required learning experiences, and other relevant characteristics comparable to those of the medical students in the class that he or she would join. A medical college accepts a transfer medical student into the final year of a medical education program only in rare and extraordinary personal or educational circumstances.
- Visiting Students Suggestions (These suggestions are not a substitute for the official rules, if available)
- A medical college, in case of acceptance of visiting students, manages and ensures the following: a) verification of the credentials of each visiting medical student, b) each visiting medical student demonstrates qualifications comparable to those of the medical students he or she would join in educational experiences, c) maintenance of a complete roster of visiting medical students, d) approval of each visiting medical student's assignments, e) provision of a performance assessment for each visiting medical student

- **Annex 7.6.3:**

The resources such as faculty, educational space, clinical placements, used by a medical college to accommodate any exchanged medical students or staff, should not significantly diminish the resources available to already enrolled medical students and should also respecting real needs, ethical principles by considering the demands and needs of staff and students (humanity, anti-discrimination.)

Area -8-

GOVERNANCE AND ADMINISTRATION

Prepared by:

Prof. Dr. Ihsan Ajeena
Prof. Nazar Haddad

Revised by:

Prof. Ihsan Ajeena
Prof. Ali Mansoor
Prof. Alaa Jamel

8.1.1. The medical college must define its governance structures and functions including their relationships within the university.

Annotation:

[Governance means the act and/or the structure of governing the medical school. 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. The institutional and program policies would normally encompass decisions on the mission of the medical college, the curriculum, admission policy, staff recruitment and selection policy and decisions on interaction and linkage with medical practice and the health sector as well as other external relations]

[Relationships within the university of its governance structures would be specified, for example if the medical college is part of or affiliated to a university.]

[The committee structure, which includes a curriculum committee, would define lines of responsibility, which would include authority over specific departmental and subject interests, and the control of the curriculum within existing rules and regulations as defined by the governance structure of the institution and governmental authorities. The curriculum committee would allocate the granted resources for planning and implementing methods of teaching and learning, assessment of students and course evaluation.]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|--|
| Present | Document/s showing the governance structure and function (job description of different disciplines) of the college and how the college implements its policy (ex. regarding the curriculum and research affairs ... etc). Document/s showing the relation between the college and university (the college as a part of the university and the connection with the university, ex. the participation of the dean in the University Council, the impact of university on college management and activities ... etc). |
| Applied | Document (ex. a photo) showing that the governance structure of the college and how the college is managed are well distributed in suitable places (ex. published at the Deanery). |

| | |
|------------------|--|
| Effective | Document/s (ex. The result of a survey, questionnaire, FGD or meetings with stakeholders) explaining that stakeholders are familiar with this information. |
|------------------|--|

8.1.2.1. The medical college should, in its governance structures, set out committee structure, and reflect representation from principal stakeholders.

Annotation:

[principal stakeholders would include the dean, the faculty council, the curriculum committee, representatives of staff and students, the university leadership and administration, relevant governmental authorities and regulatory bodies]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Document/s showing the committees within the college and their functions (especially the curriculum committee). These committees must include principal stakeholders in their structures. |
| Applied | Document/s showing that the involved stakeholders must know (ex. The result of a survey, questionnaire, FGD or meetings with stakeholders) about these committees and know the function of their committees. |
| Effective | In addition, the stakeholders being actively involved in the committees' function, by showing meeting minutes and show the effect/consequence of the committee's action. |

8.1.2.2. The medical college should, in its governance structures, set out committee structure, and reflect representation from other stakeholders.

Annotation:

[other (non-principal) stakeholders would include representatives of other health professions, patients, the community and public e.g. users of the health care delivery systems, including patient organizations. Other stakeholders would also include other representatives of academic and administrative staff, education and health care authorities, professional organizations, medical scientific societies and postgraduate medical educators].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none"> Document/s showing the committees within the college and their functions. These committees must include other (non-principal) stakeholders in their structures. |
| Applied | <ul style="list-style-type: none"> Document/s showing that the involved stakeholders must know (ex. The result of a survey, questionnaire, FGD or meetings with stakeholders) about these committees and know the function of their committees. |
| Effective | <ul style="list-style-type: none"> In addition, the (other) stakeholders being actively involved in the committees' function, by showing meeting minutes and show the effect/consequence of the committee's action. |

8.1.3. The medical college should ensure transparency of the work of governance and its decisions.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | <ul style="list-style-type: none"> Document/s showing that the college had disseminated information about the work of governance and its decisions in newsletters, web-information or and ^{the} of minutes (according to roles and regulation). |
| Applied | <ul style="list-style-type: none"> Document/s showing that this dissemination is really there (ex. A photo, a copy of the newsletter, a web site showing these information ... etc.). |
| Effective | <ul style="list-style-type: none"> Document/s showing that this information is known to students, academic and administrative staff, education and education and health care authorities, professional organizations, medical scientific societies and postgraduate medical educators (ex. The result of a survey, questionnaire, FGD or meetings). |

8.2. ACADEMIC LEADERSHIP

8.2.1. The medical college must describe the responsibilities of its academic leadership for definition and management of the medical educational program.

Annotation:

[Academic leadership refers to the positions and persons within the governance and management structures being responsible for decisions on academic matters in teaching, research and service and would include dean, deputy dean, vice deans, heads of departments, course leaders, directors of research institutes and centers as well as chairs of standing committees, ex. for student selection, curriculum planning and student counseling).

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Document/s showing the responsibilities of the academic leadership within the college |
| Applied | Documents showing that these responsibilities had reached to the involved stakeholders (ex. The result of a survey, questionnaire, FGD or meetings with stakeholders). |
| Effective | Documents showing that these responsibilities are known by the involved stakeholders (ex. The result of a survey, questionnaire, FGD or meetings with stakeholders). |

8.2.2. The medical college should periodically evaluate its academic leadership in relation to achievement of its mission and intended educational outcomes.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Document/s showing that the college periodically evaluate its academic leadership in relation to achievement of its mission and intended educational outcomes. |
| Applied | Document/s showing the results of these periodic evaluations. |
| Effective | Documents showing the participation of the involved stakeholders (ex. The result of a survey, questionnaire, FGD or meetings with stakeholders). Documents showing the impact of these periodic evaluations. It should be noted that this “periodic evaluation” must be structured by the college and that it is not the same as that |

required by the university and ministry.

8.3. EDUCATIONAL BUDGET AND RESOURCE ALLOCATION

8.3.1. The medical college must have a clear line of responsibility and authority for resourcing the curriculum, including a dedicated educational budget.

Annotation:

[The educational budget would depend on the budgetary practice in the college and would be linked to a transparent budgetary plan for the medical college]. Referencing: Consider National standards: 5.3.3. and 5.4

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|---|
| Present | <ul style="list-style-type: none">Document/s showing that the college have a clear line of responsibility and authority for resourcing the curriculum, including a dedicated educational budget. |
| Applied | <ul style="list-style-type: none">Document/s (ex. The result of a survey, questionnaire, FGD or meetings with stakeholders) showing that these responsibilities and authorities had reached to the stakeholders = transparency. In addition, the involved stakeholders must know the details of this responsibility and authority regarding this educational budget, which can be assured by questionnaire for example. |
| Effective | <ul style="list-style-type: none">Document/s (ex. The result of a survey, questionnaire, FGD or meetings with stakeholders) showing that these responsibilities and authorities are known by the stakeholders. Additionally, there must be samples of practicing these authorities by showing the effect/consequence |

8.3.2. The medical college must allocate the resources necessary for the implementation of the curriculum and distribute the educational resources in relation to educational needs.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|---|
| Present | <ul style="list-style-type: none"> Document/s showing that the college is allocating the resources necessary for the implementation of the curriculum and distribute the educational resources in relation to educational needs = College Autonomy. Annotation: <i>[Autonomy would include appropriate independence from government and other counterparts to be able to make decisions about key areas such as design of curriculum, assessments, students' admission and staff recruitment/selection and employment conditions, research and resource allocation].</i> <i>[The resources include "budget, human power whether are teaching/non-teaching members and whether are full-time/part-time"]</i> |
| Applied | <ul style="list-style-type: none"> Document/s showing that the college apply this autonomy (in at least 80% of the domains of autonomy) to improve college educational outputs. |
| Effective | <ul style="list-style-type: none"> Document/s and/or results of survey, questionnaire, FGD or meetings with stakeholders showing improvement of college educational outputs in relation to this resource allocation. Additionally, must emphasize that this allocation is based on "the curriculum and educational needs" |

8.3.3. The medical college should have autonomy to direct resources, including teaching staff remuneration, in an appropriate manner in order to achieve its intended educational outcomes.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|--|
| Present | <ul style="list-style-type: none"> Document/s showing that the college have autonomy to direct and manage resources (including teaching staff remuneration) in an appropriate manner in order to achieve its intended educational outcomes. |
| Applied | <ul style="list-style-type: none"> Document/s and/or results of survey, questionnaire, FGD or meetings with stakeholders showing that the college apply this autonomy (for at least 80% of the intended educational outcomes). |
| Effective | <ul style="list-style-type: none"> Document/s and/or results of survey, questionnaire, FGD or meetings with stakeholders showing that the intended educational outcomes are achieved as a result of this autonomy. |

8.3.4. The medical college should, in distribution of resources, take into account the developments in medical sciences and the health needs of the society.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">• Document/s showing that the college take into account the developments in medical sciences and the health needs of the society when distributing resources. |
| Applied | <ul style="list-style-type: none">• Document/s showing that this distribution of resources is applied (for more than two/year) on the developments in medical sciences and the health needs. |
| Effective | <ul style="list-style-type: none">• Document/s (ex. results of survey, questionnaire, FGD or meetings with stakeholders) showing the impact of this distribution of resources on developments in medical sciences and the health needs, preferably, if based on studies about the health needs and the developments in the medical sciences. |

8.4. ADMINISTRATION AND MANAGEMENT

8.4.1. The medical college must have an administrative and professional staff that is appropriate to:

8.4.1.1 The medical college must have an administrative and professional staff that is appropriate to support implementation of its educational program and related activities.

Annotation:

[Administrative and professional staff refers to the positions and persons within the governance and management structures being responsible for the administrative support to policy making and implementation of policies and plans and would include head and staff in the dean's office or secretariat, heads of financial administration, staff of the budget and accounting offices, officers and staff in the admissions office and heads and staff of the departments for planning, personnel and IT].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|--------------|---|
|--------------|---|

| | |
|------------------|---|
| Present | <ul style="list-style-type: none"> Document/s showing that the college have administrative and professional staff who are appropriate [appropriateness in number and qualifications] to support implementation of its educational program and related activities. |
| Applied | <ul style="list-style-type: none"> Document/s and/or results of survey, questionnaire, FGD or meetings with stakeholders showing that this adequacy had supported (for at least 80%) the implementation of the educational program and related activities |
| Effective | <ul style="list-style-type: none"> Document/s and/or results of survey, questionnaire, FGD or meetings with stakeholders showing the impact of this adequacy on this implementation. |

8.4.1.2. The medical college must have an administrative and professional staff that is appropriate to ensure good management and resource deployment.

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]*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Document/s showing that the college have administrative and professional staff who are appropriate to ensure good management and resource deployment. |
| Applied | Document/s showing that this adequacy is applied for at least 80% of management and resource deployment. |
| Effective | Document/s and/or results of survey, questionnaire, FGD or meetings with stakeholders showing the impact of this adequacy on good management and resource deployment. |

8.4.2. The medical college should formulate and implement an internal program for quality assurance of the management including regular review

Annotation:

[the **internal program for quality assurance** would include consideration of the need for improvements and review of the management].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Document/s showing that the college formulate and implement an internal program for quality assurance of the management including regular review. |
| Applied | Document/s showing that this regular review is applied for at least 80% of college management. |
| Effective | Document/s and/or results of survey, questionnaire, FGD or meetings with stakeholders showing the impact of this review. Note that this is an “internal program” not that of the university/ministry and so the regular review is also “internal” |

8.5 INTERACTION WITH HEALTH SECTOR

8.5.1. The medical college must have constructive interaction with health and health related sectors of society & government.

Annotation:

[**Constructive interaction** would imply exchange of information, collaboration, and organizational initiatives. This would facilitate provision of medical doctors with the qualifications needed by society]

[The **health sector** would include the health care delivery system, whether public or private, and medical research institutions. The **health-related sector** would include institutions and regulating bodies with implications for health promotion and disease prevention, ex. with environmental, nutritional and social responsibilities].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | Document/s showing that the college have a constructive interaction with the health and health related sectors of society and government. |

| | |
|------------------|--|
| Applied | Document/s and/or results of survey, questionnaire, FGD or meetings with stakeholders showing that this constructive interaction is applied for (at least 80% of related areas). |
| Effective | Document/s and/or results of survey, questionnaire, FGD or meetings with stakeholders showing the impact of this constructive interaction. |

8.5.2. The medical college should formalize its collaboration, including engagement of staff and students, with partners in the health sector.

Annotation:

*[To **formalize collaboration** would mean entering into formal agreements, stating content and forms of collaboration, and/or establishing joint contact and coordination committees as well as joint projects].*

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Document/s showing that the college formalize its collaboration, including engagement of staff and students, with partners in the health sector. |
| Applied | Document/s and/or results of survey, questionnaire, FGD or meetings with stakeholders showing that this formal collaboration is applied for (at least 80% of related areas). |
| Effective | Document/s and/or results of survey, questionnaire, FGD or meetings with stakeholders showing the impact of this formal collaboration. |

- Area 9 -
Continuous Renewal

Prepared by:
Prof. Nazar Haddad
Prof. Ihsan Ajeena

Revised by
Prof. Nazar Haddad
Prof. Suzan Essa
Assist. Prof. Zeki Ali Mohamed

9.1. The medical college must, as a dynamic and socially accountable institution, initiate procedures for regularly reviewing and updating the process, structure, content, outcomes/competencies, assessment, and the learning environment of the program.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | <ul style="list-style-type: none">• Framework or policy for program evaluation and renewal (periodicity, scope [process, content, outcomes/Competencies], responsible committees).• Strategic or operational plans outlining structured renewal. |
| Applied | <ul style="list-style-type: none">• Meeting minutes from curriculum or quality committees showing program review discussions.• Records of curriculum or teaching method changes resulting from reviews. |
| Effective | <ul style="list-style-type: none">• Annual QA reports summarizing changes and their impact.• Stakeholder feedback (students, faculty, graduates) indicating improvements. |

9.2. The medical college must, as a dynamic and socially accountable institution, rectify documented deficiencies in its educational program and processes.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none">• Deficiency tracking logs or corrective action registers.• Follow-up action plans from prior evaluations or external reviews. |
| Applied | <ul style="list-style-type: none">• Evidence of implemented changes (policy updates, infrastructure improvements, curriculum revisions).• Progress reports submitted to internal/external bodies. |
| Effective | <ul style="list-style-type: none">• Audit/re-evaluation reports comparing initial findings with outcomes. |

| | |
|--|---|
| | <ul style="list-style-type: none"> • Stakeholder satisfaction surveys on corrected areas |
|--|---|

- Stakeholder satisfaction surveys on corrected areas

9.3. The medical college must allocate resources (human, financial, infrastructure, and time) to support continuous program renewal.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none"> • Budget plans or financial reports showing allocated funds for program renewal. • HR/workload allocation documents supporting educational development. |
| Applied | <ul style="list-style-type: none"> • Evidence of funded improvement projects, workshops, or infrastructure upgrades. • Records of staff or committee assignments for program renewal activities. |
| Effective | <ul style="list-style-type: none"> • Budget utilization reports linked to program renewal outcomes. • KPIs showing progress in renewal initiatives. |

9.4. The medical college should base the renewal process on prospective studies, internal evaluations, and insights from the medical education literature.

Annotation:

[Prospective studies would include research and studies to collect and generate data and evidence on country-specific experiences with best practice]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|----------------|---|
| Present | <ul style="list-style-type: none"> • Internal evaluation reports or tracer studies. • References to medical education literature or national health priorities. |

| | |
|------------------|--|
| Applied | <ul style="list-style-type: none"> Curriculum reform proposals citing educational research and health system needs. Benchmarking evidence against other institutions or WFME/WHO standards. WFME/WHO. |
| Effective | <ul style="list-style-type: none"> Curriculum review reports linking evidence to changes. External reviews or peer feedback validating applied evidence. |

9.5. The medical college should ensure that the renewal and restructuring process leads to the revision of policies and practices, based on past experiences, current activities, and future projections.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | <ul style="list-style-type: none"> Updated institutional policies or procedures revised via program renewal. Policy review reports showing feedback-driven changes... |
| Applied | <ul style="list-style-type: none"> Documentation of revised academic or administrative practices. Decision logs tracking updates in response to emerging trends or accreditation feedback. |
| Effective | <ul style="list-style-type: none"> Policy impact reports assessing effectiveness of revisions. Internal audits confirming implementation and outcomes. |

9.6. IN RENEWAL PROCESS, THE MEDICAL COLLEGE SHOULD:

9.6.1. In renewal process, the medical college should make adaptation of the mission statement to scientific, socio-economic, and cultural developments during the renewal process.

Annotation:

[Mission statement refers to the vision of the college]

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|-----------|---|
| Present | Updated Mission Statement with official approval. |
| Applied | Integration of the new mission into strategic plans or curriculum reform. |
| Effective | Stakeholder survey results showing alignment with the revised mission. |

9.6.2. In renewal process, the medical college should make modification of intended learning outcomes based on environmental needs (e.g., clinical skills, public health, patient care).

Annotation:

[Educational outcomes or learning outcomes/competencies refer to statements of knowledge, skills and attitude that students demonstrate at the end of a period of learning. Outcomes might be either intended or acquired. Educational / learning objectives are often described in terms of intended outcomes. Outcomes within medicine and medical practice - to be specified by the medical college would include documented knowledge and understanding of (a) the basic biomedical sciences, (b) the behavioral and social sciences, including public health and population medicine, (c) medical ethics, human rights and medical jurisprudence relevant to the practice of medicine, (d) the clinical sciences, including clinical skills with respect to diagnostic procedures, practical procedures, communication skills, treatment and prevention of disease, health promotion, rehabilitation, clinical reasoning and problem solving; and (e) the ability to undertake life-long learning and demonstrate professionalism in connection with the different roles of the doctor, also in relation to the medical profession. The characteristics and achievements the students display upon graduation can e.g. be categorized in terms of the doctor as (a) scholar and scientist, (b) practitioner, (c) communicator, (d) teacher, (e) manager and (f) a professional) in accordance with documented needs of the environment they will enter].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|---------|--|
| Present | Updated graduate learning outcomes document. |
| Applied | Tracer study or health sector feedback justifying changes. |

| | |
|------------------|--|
| Effective | Curriculum map aligning outcomes with courses. |
|------------------|--|

9.6.3. In renewal process, the medical college should make adaptation of curriculum model and teaching methods to ensure relevance.

Annotation:

[Curriculum description would sometimes include models based on disciplines, organ systems, clinical problems / tasks or disease patterns as well as models based on modular or spiral design].

[Instructional / learning methods would encompass lectures, small-group teaching, problem-based or case-based learning, peer assisted learning, practical, laboratory exercises, bed-side teaching, clinical demonstrations, clinical skills laboratory training, field exercises in the community and web-based instruction].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Updated curriculum strategy or model description. |
| Applied | Faculty development sessions on new teaching methods. |
| Effective | Student evaluations of teaching and learning methods. |

9.6.4. In renewal process, the medical college should make adjustment of curricular elements based on scientific and societal changes.

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Revised syllabus with newly added or removed content. |
| Applied | Use of national health data to guide content changes. |
| Effective | Review report from curriculum committee. |

9.6.5. In renewal process, the medical college should update assessments based on new learning outcomes and instructional approaches.

Annotation:

[Assessment methods used would include consideration of the balance between formative and summative assessment, the number of examinations and other tests, the balance between different types of examinations (written and oral), the use of normative and criterion-referenced judgments, and the use of personal portfolio and log-books and special types of examinations, e.g. objective structured clinical examinations (OSCE) and mini clinical evaluation exercise (MiniCEX). It would also include systems to detect and prevent plagiarism].

[Assessment principles, methods and practices refer to assessment of student achievement and would include assessment in all domains: knowledge, skills and attitudes].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Assessment blueprint aligned with curriculum changes. |
| Applied | Introduction of OSCEs or formative assessments. |
| Effective | Psychometric analysis or post-exam review. |

9.6.6. In renewal process, the medical college should make adaptation of recruitment policy and student intake in response to system needs.

Annotation:

[Admission policy would imply adherence to possible national regulation as well as adjustments to local circumstances. If the medical school does not control admission policy, it would demonstrate responsibility by explaining relationships and drawing attention to consequences, e.g. imbalance between intake and teaching capacity)

(Decisions on student intake would imply necessary adjustment to national requirements for medical workforce. If the medical college does not control student intake, it would demonstrate responsibility by explaining relationships and drawing attention to consequences, e.g. imbalance between intake and teaching capacity].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Revised admission policy with updated selection criteria. |
| Applied | Workforce data used to adjust intake or diversify selection. |
| Effective | Analysis of student demographics and performance trends. |

9.6.7. In renewal process, the medical college should update academic staffing policies based on institutional and educational needs.

Annotation:

[The staff recruitment and selection policy would include ensuring a sufficient number of highly qualified basic biomedical scientists, behavioral and social scientists and clinicians to deliver the curriculum and a sufficient number of high-quality researchers in relevant disciplines or subjects].

[Teacher training, development, support and appraisal would involve all teachers, not only new teachers, and also include teachers employed by hospitals and clinics].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Revised HR policy for faculty recruitment and development. |
| Applied | Implementation of CPD activities or induction programs. |
| Effective | Faculty appraisal reports or promotion statistics. |

9.6.8. In renewal process, the medical college should update learning resources in line with program growth and needs.

Annotation:

[Physical facilities would include lecture halls, class, group and tutorial rooms, teaching and research laboratories, clinical skills laboratories, offices, libraries, information technology facilities and student amenities such as adequate study space, lounges, transportation facilities, catering, student housing, personal storage lockers, sports and recreational facilities]

[A safe learning environment would include provision of necessary information and protection from harmful substances, specimens and organisms, laboratory safety regulations and safety equipment]

[Effective and ethical use of information and communication technology would include use of computers, cell/mobile telephones, internal and external networks and other means as well as coordination with library services. The policy would include common access to all educational items through a learning management system. Information and communication technology would be useful for preparing students for evidence-based medicine and life-long learning through continuing professional development (CPD)].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Resource inventory or updated facilities report. |
| Applied | Expansion of simulation labs, e-learning tools, or classrooms. |
| Effective | Utilization reports and satisfaction surveys. |

9.6.9. In renewal process, the medical college should refine systems for monitoring and evaluating educational programs.

Annotation: *[Program monitoring would imply the routine collection of data about key aspects of the curriculum for the purpose of ensuring that the educational process is on track and for identifying any areas in need of intervention. The collection of data is often part*

of the administrative procedures in connection with admission of students, assessment and graduation].

[Program evaluation is the process of systematic gathering of information to judge the effectiveness and adequacy of the institution and its program. 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 educational outcomes. Involvement of external reviewers from other institutions and experts in medical education would further broaden the base of experience for quality improvement of medical education at the institution].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|---|
| Present | Updated QA framework or monitoring SOP. |
| Applied | Use of updated KPIs and stakeholder feedback. |
| Effective | Annual QA report showing improvements made. |

9.6.10. In renewal process, the medical college should develop organizational structure and governance to meet evolving needs.

Annotation:

[Governance means the act and/or the structure of governing the medical school. 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. The institutional and program policies would normally encompass decisions on the mission of the medical college, the curriculum, admission policy, staff recruitment and selection policy and decisions on interaction and linkage with medical practice and the health sector as well as other external relation]

[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].

Evidence Generation Framework:

| Level | Description/Example Documents/Evidence |
|------------------|--|
| Present | Revised organogram or governance policy. |
| Applied | Establishment of new units (e.g., QA, community outreach). |
| Effective | Governance effectiveness audit or stakeholder satisfaction data... |

