



QUEEN'S UGME COMPETENCY FRAMEWORK

Curricular Goals and Competency-Based Objectives



SCHOOL OF
Medicine

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INTRODUCTION

Original Curricular
Advisory Group

This is the third edition of what has affectionately come to be known around the Queen's School of Medicine as "the Red Book". Officially titled "***Curricular Goals and Competency Based Objectives***", it was initially drafted in 2008 by a Curricular Advisory Group that had been struck the year before to revamp our undergraduate curriculum. That group, which included **Ted Ashbury, Lindsay Davidson, Michelle Gibson, Susan Moffatt, Sheila Pinchin, Mike Sylvester, Sherry Taylor and Elaine VanMelle** set out with no less a goal than to completely redefine the objectives and curricular design of our medical school. In doing so, they began with high level aspirations for our graduates, and provided structure to those goals by consulting a number of sources, including the *Four Principles* of the Canadian College of Family Physicians, the Medical Council of Canada's clinical presentations and *Objectives for the Qualifying Examination*, and the American Association of Medical Colleges' *Scientific Foundations for Future Physicians*. These and other sources were used to create a framework of program and learning objectives based on competency that informed the development of the **Foundations Curriculum**, which was substantially defined in 2008. The transition to the complete curricular design occurred over the next five years.

In 2011, early experience with the transforming curricular design and practical utilization of the objectives led to requests from curricular leadership for a revision of some components. The Curriculum Committee at the time decided to take the opportunity to also reconsider the primary assignment of MCC presentations among courses. It became clear from that exercise that periodic review and updating of the framework was a highly valuable process, although very complex and demanding.

This revision came about as a deliberate intention to refresh and revise the framework, now that the full curricular transition is complete. There has been particular focus on the Advocacy, Collaborator and Scholar domains, as well as a reconsideration of our clinical presentations and deliberate efforts to extend the objectives more fully into the Clinical Clerkship. In doing so, the Curriculum Committee has been aware of the evolving landscape of medical education in Canada, as evidenced by the emerging CanMEDS revisions, the CanMEDS-Family Medicine (CanMEDS-FM) initiative, the Future of Medical Education in Canada initiatives, and evolving focus on Entrustable Professional Acts as developed by recent AAMC working groups.

I would like to thank the current members of our **Curriculum Committee** for the excellent stewardship they provide our school and students, and particularly for their efforts in developing this third edition. Particular thanks go out to **Sheila Pinchin and Alice Rush-Rhodes** of our superb Educational Development team, and to **Catherine Isaacs and Candice Miller** for their steadfast administrative support of the committee.

Tony Sanfilippo
Associate Dean
Undergraduate Medical Education



CURRICULAR GOVERNANCE AT QUEEN'S

The Undergraduate Medical Education Curriculum Committee has responsibility and authority for the design, implementation and ongoing review of the medical education program. This mandate is rooted in the CACMS/LCME accreditation standard ED-33 which states:

There must be integrated institutional responsibility in a medical education program for the overall design, management, and evaluation of a coherent and coordinated curriculum.

The Terms of Reference of the Curriculum Committee provide for:

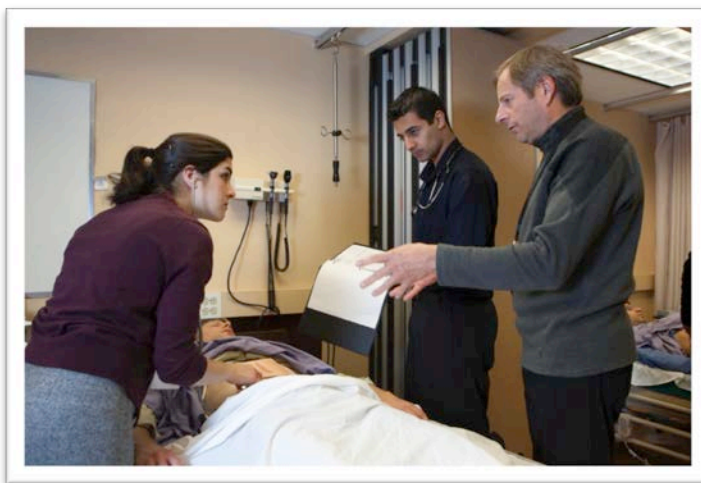
- Faculty, student and administrative participation.
- Expertise in curricular design, pedagogy and evaluation methods.
- The ability to establish, approve and promote policy relevant to its mandate.
- Authority for design of a coherent and coordinated curriculum that will achieve its educational objectives.
- Responsibility for curricular management, which the standards characterize as *"leading, directing, coordinating, controlling, planning, evaluating and reporting" on the curriculum.*

The Curriculum Committee has authority delegated from the Queen's Senate for all components of the MD educational program. This mandate is rooted in a generally accepted and approved set of objectives, which form the basis of the curricular design and are articulated in this document.



Teaching and Learning at Queen's

Teaching and Learning at Queens UGME is relevant, integrated and interactive and is based on a competency framework that captures the multifaceted roles of a physician. Preclerkship emphasizes a combination of independent learning, collaborative problem solving and expert-guided instruction. Students develop a broad skill set of knowledge and competencies as they work with other professionals, community agencies, researchers and patients in planned integrated curricular threads. Clerkship is an opportunity to apply prior learning and develop the knowledge, skills and attitudes required to enter residency training and future practice. —**Dr. Lindsay Davidson, Chair, UGME Teaching, Learning and Innovations Committee**



Queen's Approach to Assessment

At Queen's UGME, our primary goal is to use assessment strategies that support student learning and to prepare our students to be successful in residency programs as self-regulated learners. We provide multiple points of assessment, both formative and summative, with meaningful feedback, aligned with the competency being assessed. Throughout their time in UGME, students are assessed frequently on any given curricular objective or MCC presentation, by multiple assessors, in order to provide students and our program with rich assessment data. Our practices are informed by educational theory, literature, and best practices.—**Dr. Michelle Gibson, Chair, UGME Student Assessment Committee**

Curricular Governance: Roles and Committees

In order to carry out its mandate, the Curriculum Committee delegates responsibility for components of the curriculum to people and committees, and receives consultation and reports from them.

- **Course Directors** – Faculty members with responsibility for curricular courses, who are represented on the Curriculum Committee, receive regular communications from the Committee and meet at least twice per term at Course Director Retreats and Curricular Council. Course Directors are represented on the Curriculum Committee.
- **Year Directors** – who oversee and coordinate courses within each year of our curriculum, and support the Course Directors. All Year Directors sit on the Curriculum Committee.
- **Competency and Theme Leads** – who have responsibility for curricular elements running progressively through multiple terms or years of the curriculum. Competency Leads are represented on the Curriculum Committee.
- **Discipline Leads** – who oversee curricular content in content domains distributed within our curriculum. Discipline Leads work with Course Directors.
- **The Student Assessment Committee** – which is charged with policy development and ongoing review of all curricular assessment processes and reports to the Curriculum Committee.
- **The Teaching, Learning and Innovation Committee** – which is charged with policy development and ongoing review of teaching methods, course design and scholarship and reports to the Curriculum Committee.
- **The Course and Faculty Review Committee** – which develops and implements processes for regular review of all curricular courses and teaching faculty and reports to the Curriculum Committee.
- **The Professional Foundations Committee** – which is responsible for curriculum development in the intrinsic roles and competencies and reports to the Curriculum Committee.
- **The Program Evaluation Committee** – which is responsible for systematically collecting information, analyzing, and making recommendations about the program. This committee reports to the Curriculum Committee.



**CURRICULAR GOVERNANCE:
THE UGME CURRICULUM COMMITTEE MEMBERSHIP**

Chair

Associate Dean, UGME

Year 1 Director

Year 2 Director

Clinical Clerkship Director

Clerkship Curricular Courses Director

Clinical Skills Director

Chair, Professional Foundations Committee

Director, Student Assessment Committee

Director, Teaching, Learning and Innovation Committee

Director, Course and Faculty Review Committee

Manager, Educational Development and Faculty Support

Aesculapian Society Representative

Scientific Foundations Course Director

Clinical Foundations Course Director

Clerkship Course Director

Competency Lead

Discipline Lead

Humanities Lead

DEFINING THE CURRICULUM

The Queen's UGME curriculum is the result of a branching design that expresses with increasing detail, the educational goals at various levels. The curricular tree begins with values and extends through an analysis of roles and competencies to the objectives of the program, curriculum, courses, and finally to individual learning opportunities.

Our program reflects the mission and values of Queen's and its faculty, as well as the needs of our society. Therefore, we start by defining a set of **Values** that describe the expected professional and personal qualities of our students and the educational and clinical environment our school aims to create to foster these qualities. We have identified five core values: lifelong learning; service through patient care, citizenship; scholarship; and respect. These are described in greater detail on page 11.



Our values direct the **Goals** of our program. These express the successful outcomes of our program: *"Our graduates will have exemplary foundations in medical competencies that will prepare them for success in qualifying examinations and in post-graduate training programs and for fulfilling careers serving their patients and their communities. Our innovative approaches to adult education will provide relevant, integrated and interactive learning experiences that foster lifelong learning."* Our goals are summarized on page 12.

We have based our curriculum on the **Seven Roles of a Physician** described by the CanMEDS framework. The competent physician is an **Expert** in the medical arts and sciences who also understands and demonstrates the characteristics of an effective **Communicator, Collaborator, Manager, health Advocate and Scholar**, while consistently embodying the attitudes and behaviors associated with **Professionalism**. The Royal College of Physicians and Surgeons and the College of Family Physicians have both adopted this framework to guide post-graduate education. The use of this framework in the medical school promotes educational alignment across the continuum of training for our students and their instructors.

Our analysis indicated that each role requires a physician to be particularly competent in 1-4 essential areas that we have referred to as **Core Competencies**. From the seven roles we have therefore identified fourteen such competencies. These describe the knowledge, skills, and attributes required of a competent graduate. The core competencies are the primary organizing principle of the curriculum. They are summarized on page 13.

Each of the fourteen core competencies is further subdivided into its major conceptual elements. These are called **Program Objectives**. There are twenty-seven such program objectives.

Each of the twenty-seven program objectives is, in turn, described in greater detail by several **Curricular Objectives**. There are ninety-one curricular objectives.

The relationship among the roles, competencies, program and curricular objectives is reflected in the alphanumeric identification code for the curricular objectives. For example: Within the **role** of Medical Expert (ME):

- the second **competency** (ME2) is: *“Clinical Presentations and Clinical Assessment,”*
- within which the third **program objective** (ME2.3) is: *“The medical graduate demonstrates proficient and appropriate use of selected procedural skills, diagnostic and therapeutic,”*
- for which the third **curricular objective** (ME2.3c) is: *“Describe the potential risks of selected therapeutic procedures, and be aware of the principles of informed consent and disclosure of medical error and complications.”*

The roles, competencies and their program and curricular objectives are summarized in a table on page 13, and described in detail on pages 14 - 29.

This process continues with the development of course objectives and ultimately objectives for each learning event. The Curriculum Committee assigns curricular objectives to course and the Course Directors undertake guided implementation of these through development of course and learning event objectives.

The explicit branching design of our curriculum enables the Curriculum Committee, students and teachers to appreciate how individual curricular elements fit into a coherent whole. It encourages a shared vision and purpose for the undergraduate curriculum that is visibly congruent with students' continuing education. It provides a clear framework for regular assessment of curriculum content, ensuring appropriate inclusion, minimizing redundancy and enabling the curriculum to be responsive to changes in professional practice and expectations.

By basing the curriculum on the roles and competencies of a physician, we emphasize the importance of students gaining not only knowledge, but also the skills and attitudes that will support lifelong learning. To achieve that goal, we aim to create learning opportunities that promote and emulate the processes students will use in practice. In this sense, the “form” of the curriculum reflects its function. This intent is evident in two features of our curricular design throughout all four years of the program: there is a balance of content and process, and clinical material is organized to address clinical presentations.

Through the selection of objectives, instructional and assessment methods, all courses are expected to intentionally promote professional skills such as critical appraisal, teamwork and independent learning strategies. Skills and principles introduced in the pre-clinical setting are applied with increasing independence in the clinical settings.

The Medical Council of Canada (MCC) has identified over one hundred and twenty core Clinical Presentations that are the basis for the Canadian licensing examinations. We are using these MCC presentations as the reference for the essential clinical presentations to which our students will be exposed over the course of their undergraduate training. Each of the presentations is linked to one or more relevant courses from first to fourth year. A clinical presentation may be addressed in a variety of educational formats and with increasing depth as the student's progress.

The MCC presentations provide clinically relevant guidance for and encourage linkages between pre-clinical and clinical courses. The process of analyzing undifferentiated presentations helps students integrate core content among systems, enables them to practice self-directed learning and critical appraisal skills, and illustrates the clinical relevance of the values, roles and competencies upon which the curriculum is founded.

Acknowledgements

We acknowledge the following sources that were instrumental in the development of this framework:

The Royal College of Physicians and Surgeons CanMEDS Physician Competency Framework

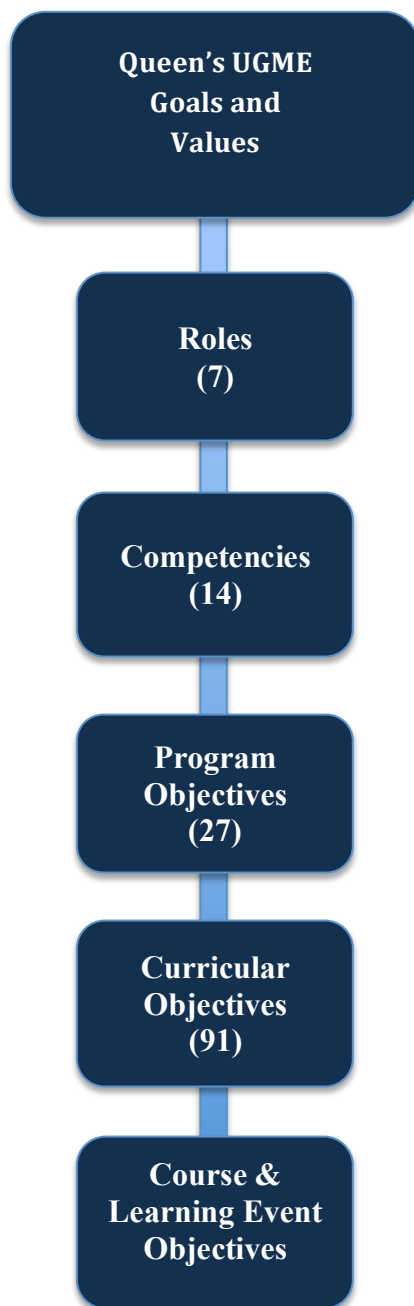
The Four Principles of Family Medicine: The College of Family Physicians of Canada

The Medical Council of Canada Clinical Presentations

Scientific Foundations for Future Physicians – Association of American Medical Colleges



DEFINING THE CURRICULUM:
Queen's Curricular Framework



MD PROGRAM VALUES

Learning

We believe that learning is a lifelong process, and that the skills and motivation for learning must begin at the undergraduate level.

- We promote students' development of independent and collaborative learning strategies that will be effective throughout their careers.
- We foster an environment that optimizes learning in pre-clinical and clinical settings.
- We support and encourage innovation in learning and teaching, including new instructional processes and technology.
- We value teaching. We support our educators and facilitate their growth and development.



Patient Care

As a medical school, our students' learning is directed to the ultimate goal of serving the needs of patients.

- We ensure that our students understand normal and abnormal human functioning.
- We ensure that our students are able to recognize and manage clinical presentations of disease.
- We ensure our students understand the impact of disease on patients, their families and society.
- We ensure our students are able to direct appropriate preventive strategies.

Citizenship

We believe our students should be active contributors and participants in the leadership of their communities, society, and professional organizations.

Scholarship

We believe that exemplary providers of patient care continually inquire, are skilled problem solvers, are motivated by the highest standards of practice and research, and contribute to the acquisition of new knowledge through active research and publication.

Respect

We believe that physicians must hold a deep appreciation of humanity.

- We foster an ongoing sense of compassion for patients and their families.
- We encourage understanding of the roles of other health care providers.
- We foster tolerance and understanding of differences among people.

MD PROGRAM GOALS

Our graduates will have *exemplary foundations in medical competencies* that will prepare them for success in *qualifying examinations and post-graduate training programs*, and *fulfilling careers serving their patients and their communities*.

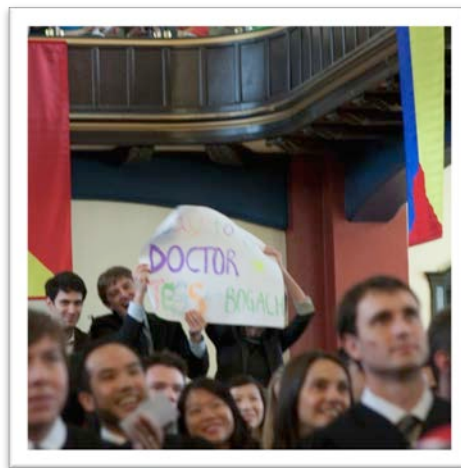
Our innovative approaches to adult education will provide *relevant, integrated and interactive learning experiences* that *foster lifelong learning*.



CORE COMPETENCIES

The medical graduate:

1. Articulates and utilizes the basic sciences to inform disease prevention, health promotion and the assessment and management of patients presenting with clinical illness. **(ME1)**
2. Is able to perform a complete and appropriate clinical assessment of and provide initial management for patients presenting with clinical illness. **(ME2)**
3. Effectively communicates with colleagues, other health professionals, patients, families and other caregivers. **(CM1)**
4. Works with colleagues, other health professionals, patients, families and other caregivers. **(CL1)**
5. Describes a variety of practice options and settings within the practice of medicine. **(M1)**
6. Balances personal health and professional responsibilities. **(M2)**
7. Responds to the individual patient's health needs by advocating (supporting and speaking up) with the patient within and beyond the clinical environment. **(A1)**
8. Identifies and communicates about community resources to promote health, prevent disease and manage illness in the communities and populations that will impact his/her practice. **(A2)**
9. Is able to identify and engage opportunities to demonstrate social responsibility and service. **(A3)**
10. Demonstrates proficiency in the steps of evidence-based medical practice. **(S1)**
11. Contributes to the process of knowledge creation (research). **(S2)**
12. Engages in lifelong learning. **(S3)**
13. Demonstrates appropriate professional behaviours to serve patients, the profession and society. **(P1)**
14. Applies knowledge of legal and ethical principles to serve patients, the profession and society. **(P2)**



CONSOLIDATED TABLE DEMONSTRATING RELATIONSHIP OF ROLES, COMPETENCIES, PROGRAM AND CURRICULAR OBJECTIVES

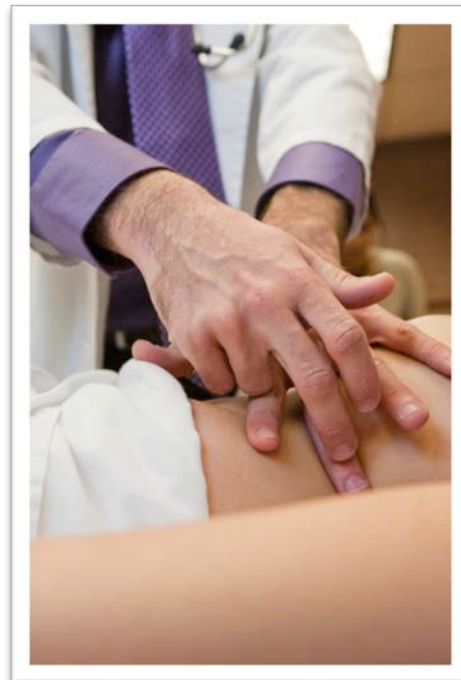
Role	Competency	Program Objectives	Curricular Objectives (n)
Medical Expert			
ME1	Application of Basic Sciences	ME1.1 Scientific foundations for clinical practice	6
ME2	Clinical Presentations and Clinical Assessment	ME2.1 Clinical assessment	8
		ME2.2 Clinical management	4
		ME2.3 Procedural skills	3
Communicator			
CM1	Effective Communication	CM1.1 Therapeutic relationships	4
		CM1.2 Eliciting perspectives	2
		CM1.3 Sharing information	5
Collaborator			
CL1	Effective Collaboration	CL1.1 Teamwork	4
		CL1.2 Conflict resolution	1
		CL1.3 Patient safety	2
Manager			
M1	Practice Options	M1.1 Career settings	3
M2	Balancing Personal Health & Profession	M2.1 Personal management	4
		M2.2 Professional manager	3
Advocate			
A1	Advocates for the Patient	A1.1 Advocate for the patient	4
A2	Advocates for the Community and Populations	A2.1 Advocates for the community and population	4
A3	Identifies Service and Responsibility	A3.1 Service and responsibility	4
Scholar			
S1	Evidence Based Medical Practice	S1.1 Translation of uncertainty into an answerable question	2
		S1.2 Search for and retrieval of evidence	2
		S1.3 Critical appraisal of evidence for validity and importance	6
S2	Research	S2.1 Research methodology	5
		S2.2 Sharing results of student enquiries	1
S3	Lifelong learning	S3.1 Learning strategies	3
		S3.2 Sharing information and learning with others	2
Professionalism			
P1	Professional Behavior	P1.1 Professional behavior	1
		P1.2 Professional self-awareness	2
P2	Principles of Professionalism	P2.1 Ethics	3
		P2.2 Law and regulation	3
# Items	14	27	91

ROLES, COMPETENCIES, PROGRAM OBJECTIVES AND CURRICULAR OBJECTIVES

The following section expands the curricular organizational “tree” from each of the roles into its core competencies, and from those to the program and curricular objectives. Individual courses have responsibility to provide instruction to a greater degree for some objectives than others, but all courses are expected to address relevant aspects of several roles and competencies.

EDICAL EXPERT

The undergraduate curriculum has the primary goal of providing students with foundational knowledge, skills and attitudes to enable them to be successful in postgraduate training and to become competent practitioners. Foundational knowledge and skills are those required to establish sound diagnostic and initial management approaches to the presentation-based objectives set forth by the Medical Council of Canada (MCC).



Foundational knowledge and skills include:

- Basic scientific knowledge fundamental to understanding the scientific basis of disease.
- Clinical knowledge, skills and therapeutic approaches considered essential for all graduating physicians.
- Clinical judgment, decision making, problem-solving and critical appraisal.

The program and curricular objectives described for the medical expert role represent a comprehensive itemization to guide curricular design. The Course Directors, with the guidance of the Curriculum Committee, are responsible for determining the depth to which each objective is achieved. These decisions are guided by the information required to address the core MCC presentations, and the expectation to promote lifelong learning skills. Students will practice the application of foundational skills and principles to clinically relevant examples.

In choosing content and instructional methods course chairs are guided by considering:

- What knowledge/skills/attitudes are required to enable a student to initially manage patients presenting with a representative clinical presentation?
- What knowledge/skills/attitudes regarding this presentation would be considered pre-requisites to entry into any post-graduate training?
- What knowledge/skills/attitudes regarding this presentation would be reasonably expected of any practicing physician?

Medical Expert Competency 1:

Application of Basic Sciences

The medical graduate articulates and utilizes the basic sciences to inform disease prevention, health promotion and the assessment and management of patients presenting with clinical illness.

ME1.1: Scientific foundations for clinical practice

The medical graduate applies the major principles of the sciences (genetics, physics, chemistry, biochemistry, and mathematics) to explain normal biology, pathological processes, and therapeutic management.

The graduate is able to:

- a. Know the location, macroscopic structure and normal development of the various tissues and organ systems.
- b. Explain how each of the major body systems functions with an emphasis on homeostasis and integration.
- c. Predict the functional consequences of structural variability and damage or loss of tissues and organs associated with congenital/developmental abnormalities, trauma, disease, and aging.
- d. Understand the core pathological process underlying inflammation, infection, atherosclerosis, neoplasia, haematological and genetic disorders.
- e. Apply an understanding of normal and abnormal genetics to health and disease.
- f. Apply the concepts of pharmacokinetics and pharmacodynamics to understand drug mechanisms of action, individual variability and adverse responses.

Medical Expert Competency 2:

Clinical Presentations and Clinical Assessment

The medical graduate is able to perform a complete and appropriate clinical assessment of and provide initial management for patients presenting with clinical illness.

ME2.1: Clinical assessment

The medical graduate assesses patients presenting with clinical illness.

The graduate is able to:

- a. Identify and apply knowledge of normal human structure, development and physiology relevant to a clinical presentation.
- b. Identify genetic, pathologic or maladaptive processes relevant to a clinical presentation.
- c. Elicit a history that is relevant, concise and accurate to context and preferences.
- d. Perform a focused physical examination that is relevant and accurate.

- e. Select basic, medically appropriate diagnostic tests.
- f. Interpret diagnostic tests appropriately to establish working diagnoses.
- g. Demonstrate problem solving and judgment to develop a differential diagnosis of the clinical presentation.
- h. Identify factors that contribute to the prognosis of conditions contributing to the clinical presentation.

ME2.2: Clinical management

The medical graduate provides appropriate basic management for patients presenting with clinical illness.

The graduate is able to:

- a. Develop an appropriate basic management plan for the clinical presentation.
- b. Formulate preventive measures into his or her management strategies.
- c. Communicate with the patient, the patient's family and other caregivers with regard to risk factors and their modification where appropriate.
- d. Define the concept of "standard of care" and provide examples relevant to the clinical presentation.

ME2.3: Procedural skills

The medical graduate demonstrates proficient and appropriate use of selected procedural skills, diagnostic and therapeutic.

The graduate is able to:

- a. Demonstrate effective, appropriate and timely performance of selected diagnostic procedures including infection control processes and documentation.
- b. Demonstrate effective, appropriate and timely performance of selected therapeutic procedures.
- c. Describe the potential risks of selected therapeutic procedures, and be aware of the principles of informed consent and disclosure of medical error and complications.



COMMUNICATOR

Physicians are involved in dynamic exchanges with patients, families, colleagues, and members of the community. Effective communication skills are therefore essential to successful medical practice and contribute to the successful fulfillment of all the physician roles.

Medical students will learn the principles of effective communication and will demonstrate these in a variety of educational and clinical settings. They will recognize that being a good communicator is a core clinical skill for physicians, and that effective patient-centered communication can foster patient satisfaction, physician satisfaction, adherence and improved clinical outcomes. In the clinical years, students will incorporate these principles in their management of patients.

Communicator Competency 1: *Effective Communication*

The medical graduate effectively communicates with colleagues, other health professionals, patients, families and other caregivers.

CM1.1: Therapeutic relationships

The medical graduate demonstrates skills and attitudes to foster rapport, trust and ethical therapeutic relationships with patients and families.

The graduate is able to:

- a. Apply the skills that develop positive therapeutic relationships with patients and their families, characterized by understanding, trust, respect, honesty and empathy.
- b. Respect patient confidentiality, privacy and autonomy.
- c. Listen effectively and be aware of and responsive to verbal and nonverbal cues.
- d. Respect diversity and difference and communicate effectively with individuals regardless of their social, cultural or ethnic backgrounds.

CM1.2: Eliciting perspectives

The medical graduate elicits and synthesizes relevant information and perspectives of patients and families, colleagues and other professionals.

The graduate is able to:

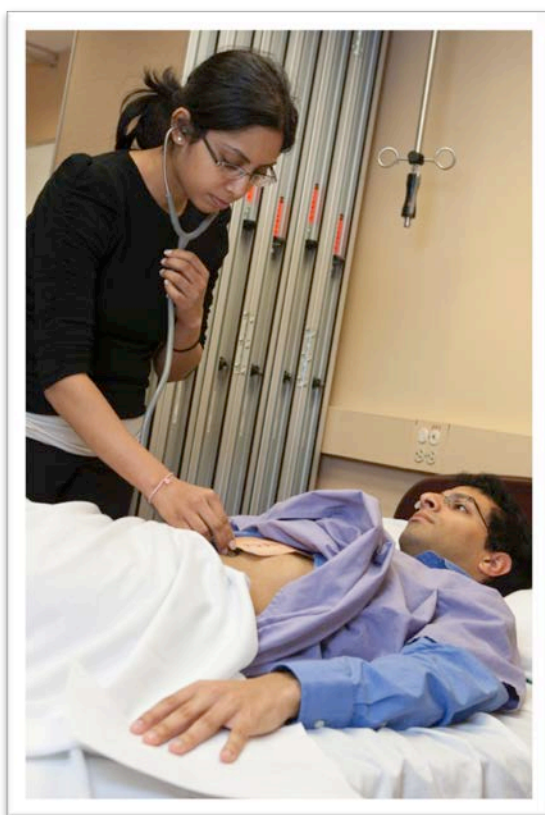
- a. Gather information about a disease, and about a patient's beliefs, concerns, expectations and illness experience.
- b. Appropriately seek out and synthesize relevant information from other sources, such as a patient's family, caregivers and other professionals.

CM1.3: Sharing information

The medical graduate conveys relevant information and explanations appropriately to patients and families, colleagues and other professionals, orally and in writing.

The graduate is able to:

- a. Provide accurate information to a patient and family, colleagues and other professionals in a clear, non-judgmental, and understandable manner.
- b. Facilitate questions and effective discussion in arriving at a shared understanding and care plan.
- c. Effectively manage challenging communication situations such as delivering bad news and barriers to communication.
- d. Maintain clear, accurate and appropriate records of clinical encounters and care plans in line with current standards for written and electronic medical records.
- e. Effectively present verbal reports of clinical encounters and plans.



COLLABORATOR

Physicians must collaborate effectively with others in a variety of settings to ensure the delivery of optimal patient care. Respectful “two-way” interaction allows physicians to receive and give information and advice, and provide leadership when appropriate. Physicians must be able to work cooperatively with patients, families and relevant caregivers, and members of patient care teams.

In the pre-clinical setting, medical students will learn the principles of effective teamwork and collaboration, along with the roles and responsibilities of members of patient care teams and community health care agencies. They will demonstrate application of these principles and effective collaboration in their educational and clinical settings.

Collaborator Competency 1: *Effective Collaboration*

The medical graduate works with colleagues, other health professionals, patients, families and other caregivers.

CL 1.1: Teamwork

The graduate works collaboratively with other providers, patients and families to provide optimal patient care.

The graduate is able to:

- a. Establish and maintain inter- and intra-professional working relationships for collaborative care.
- b. Describe his/her role and that of others and negotiate overlapping/shared responsibility in the context of patient care.
- c. Engage in effective and respectful shared decision-making with the patient and family in the context of patient care.
- d. Engage in effective and respectful shared decision-making with team members in the context of patient care and/or learning teams.

CL1.2: Conflict resolution

The graduate uses strategies to recognize and resolve conflict in teams in a constructive fashion.

The graduate is able to:

- a. Work with others to prevent misunderstandings, manage differences, and resolve conflicts in the context of patient care and/or learning teams.

CL 1.3: Transitions of care and patient safety

The graduate demonstrates collaborative behaviour that contributes to patient safety.

The graduate is able to:

- a. Recognize when care should be transferred to another physician or health care provider.
- b. Demonstrate effective communication with other health care providers with the goal of providing safe patient care.



MANAGER

Physicians are required to effectively manage the care of their patients, their practice, and themselves in the context of the health care system, community, and society in which they practice. The skills of an effective manager include the competencies described for an effective communicator and collaborator. As the goal of the medical school is to prepare students for rewarding careers, it is important that they learn about the challenges and responsibilities of physicians, and develop personal insight and behaviours that will promote healthy lifelong careers.

In the pre-clinical setting, medical students will learn the principles and obligations of effective and responsible health care delivery in Canada. During their clinical experiences, they will demonstrate these principles in their patient care.

In the pre-clinical settings, students will learn the principles of self-management and resources to support physician well-being. They will demonstrate their ability to maintain a healthy work-life balance in their educational and clinical settings. Students' clinical opportunities will ensure they experience a variety of practice settings in order to inform their career choice and prepare them for entry into postgraduate training.

Manager Competency 1: *Practice Options*

The medical graduate describes a variety of practice options and settings within the practice of medicine.

M1.1: Career settings

The medical graduate is aware of the variety of practice options and settings within the practice of medicine, and makes informed personal choices regarding career direction.

The graduate is able to:

- a. Describe the range of practice opportunities in the Canadian health care system.
- b. Recognize one's own personal preferences and strengths and utilize this knowledge in career decisions.
- c. Identify a variety of career paths within health care settings.

Manager Competency 2: *Balancing Personal Health and Profession*

The medical graduate balances personal health and professional responsibilities.

M2.1: Personal management

The medical graduate identifies and implements strategies that promote care of one's self and one's colleagues and maintains balance between personal and educational/professional commitments.

The graduate is able to:

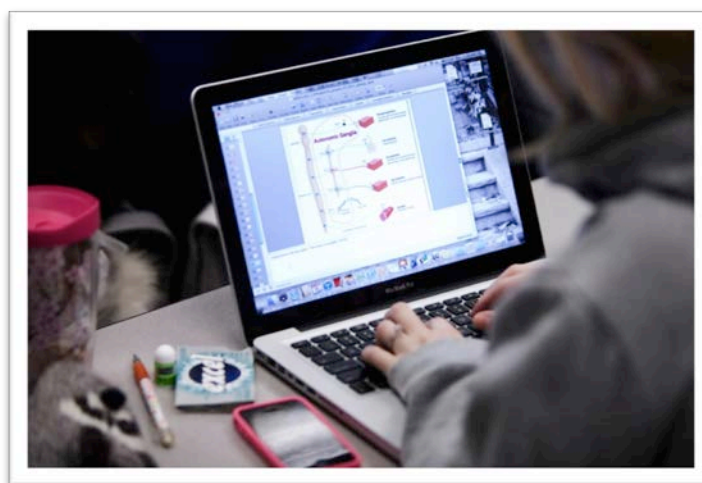
- a. Balance personal, educational and clinical priorities for a sustainable, responsible practice.
- b. Practice personal and professional awareness, accept feedback and peer review.
- c. Implement plans to overcome barriers to healthy personal and professional behavior.
- d. Recognize and respond to colleagues in need of support.

M2.2: Professional manager

The medical graduate effectively manages a variety of situations in a professional setting.

The graduate is able to:

- a. Demonstrate good time-management skills, and a capacity to prioritize tasks and to meet deadlines.
- b. Consider resource allocation in clinical decision-making.
- c. Identify current issues relevant to the function of and practice within the Canadian health care system.



HEALTH ADVOCATE

As health advocates, physicians recognize their duty and ability to improve the overall health of their patients, their communities, and the broader populations they serve.

For the purposes of defining this role, a “community” is a group of people and/or patients connected to one’s practice, including those in the global community. A “population” is a group of people and/or patients with a shared issue or characteristic.

Health advocacy integrates the attitudes of compassion, understanding, respect for, and belief in the role of the physician to act on behalf of patient, community and population health. Health advocacy recognizes and respects diversity in the patient population.

It is important to note that these graduation competencies begin with the acquisition of specific knowledge about the diverse factors that influence the health of individuals, communities and populations. This progresses to an investigation into or analysis of the possible obstacles to advocacy. Finally, students apply their learning in their clinical practice years.

Advocacy Competency 1: *Advocates for the Patient*

The medical graduate responds to the individual patient’s health needs by advocating (supporting and speaking up) with the patient within and beyond the clinical environment.

A1.1: Advocate for the patient

The graduate synthesizes and applies knowledge of factors that influence health, disease, disability and access to care of a patient and family.

The graduate is able to:

- a. Apply knowledge of the determinants of health to a patient’s health needs and challenges respecting the importance of diversity.
- b. Identify a patient’s obstacles to health care access, and work toward solutions, respecting the diversity of the patient population.
- c. Identify opportunities to encourage healthy behaviours to a patient and her/his family.
- d. Identify opportunities for integration of disease prevention and health promotion into interactions with patients and their families.

Advocacy Competency 2:

Advocates for the Community and the Population

The medical graduate identifies and communicates about community resources to promote health, prevent disease and manage illness in the communities and populations that will impact his/her practice.

A2.1: Advocates for the community and the population

The graduate describes community and population health principles and concepts and their applications.

The graduate is able to:

- a. Identify the health needs of a community or a population.
- b. Identify the availability of and access to resources for a community or a population.
- c. Explain the principles of *Population Health* as defined by the Medical Council of Canada* and describe methods to implement these for the health of the diverse peoples of Canada.
- d. Explain the principles of population health as defined by the Medical Council of Canada and describe methods to implement these for the health across social and national borders (Global Health).

Advocacy Competency 3:

Identifies Service and Responsibility

The medical graduate is able to identify and engage opportunities to demonstrate social responsibility and service.

A3.1: Service and responsibility

The graduate is able to identify and engage opportunities to demonstrate social responsibility and service.

The graduate is able to:

- a. Describe the role and examples of physicians and medical associations to be socially accountable in advocating for health and patient safety.
- b. Analyze ethical and professional conflicts that may arise, such as between roles of gatekeeper and manager.
- c. Engage in opportunities for service that include but are not limited to local and diverse communities, marginalized populations, global health and disease prevention.
- d. Identify the implications of health policy in achieving the goals of population health.

SCHOLAR

As scholars, physicians demonstrate a lifelong commitment to reflective learning as well as the creation, dissemination, application and translation of medical knowledge.

The graduating medical student will have developed effective learning strategies that include the capacity to engage in reflection and self-assessment, the ability to critically evaluate information and its sources (the literature), and the ability to contribute to the process of knowledge creation (research).

Scholar Competency 1: *Evidence-Based Medical Practice*

The medical graduate demonstrates proficiency in the steps of evidence-based medical practice.

S1.1: Translation of uncertainty into an answerable question

The medical graduate recognizes knowledge gaps and can ask focused questions to address these gaps appropriately.

The graduate is able to:

- a. Identify knowledge gaps when applied to specific clinical scenarios and to individual learning scenarios.
- b. Develop focused questions to address knowledge gaps appropriately.

S1.2: Search for and retrieval of evidence

The medical graduate is able to retrieve medical information efficiently and effectively.

The graduate is able to:

- a. Efficiently search sources of medical information in order to address specific clinical questions.
- b. Use objective parameters to assess the reliability of various sources of medical information.

S1.3: Critical appraisal of evidence for validity and importance

The medical graduate is able to critically evaluate the validity and applicability of medical procedures and therapeutic modalities to patient care using knowledge of research and statistical methodology.

The graduate is able to:

- a. Assess the validity of evidence regarding diagnosis.
- b. Assess the validity of evidence regarding prognosis.
- c. Assess the validity of evidence regarding therapy.
- d. Assess the validity of evidence regarding harm.
- e. Assess the validity of evidence summaries.
- f. Balance scientific evidence with consideration of patient preferences and overall quality of life in therapeutic decision-making.

Scholar Competency 2:

Research

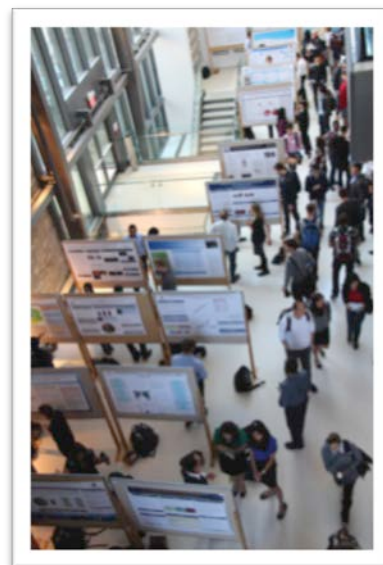
The medical graduate contributes to the process of knowledge creation (research).

S2.1: Research methodology

The medical graduate adopts rigorous research methodology and scientific inquiry procedures.

The graduate is able to:

- a. Formulate relevant research hypotheses.
- b. Develop rigorous research methodologies.
- c. Develop appropriate collaborations in order to participate in research projects.
- d. Adhere to ethical research practices e.g. regarding disclosure, conflicts of interest, research on human subjects and industry relations.
- e. Evaluate the outcomes of research by applying appropriate analytic methods.



S2.2: Sharing results of studies and enquiries

The competent medical graduate prepares and disseminates findings from studies to colleagues and faculty.

The graduate is able to:

- a. Report to students and faculty new knowledge gained from research and enquiry using a variety of methods.

Scholar Competency 3:

Lifelong Learning

The medical graduate engages in lifelong learning.

S3.1: Learning strategies

The medical graduate develops, monitors and adjusts his/her learning skills.

The graduate is able to:

- a. Appropriately accept supervision and feedback.
- b. Identify and prioritize his/her learning needs and formulate personal learning goals.
- c. Implement learning strategies to meet educational goals, and use multi-source feedback to monitor progress and adjust his/her learning plan as needed.

S3.2: Sharing feedback, information and learning with others

The medical graduate educates and provides feedback, information and learning to peers, faculty, patients and others, using sound and professional methods.

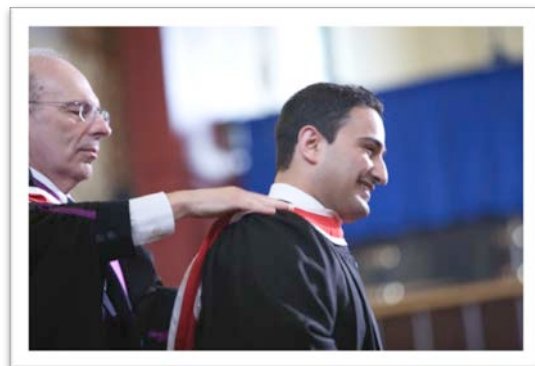
The graduate is able to:

- a. Learn and implement sound strategies to prepare material and teach others.
- b. Give feedback to others in a professional manner.

PROFESSIONALISM

Medical professionalism is defined as a set of values, behaviours and relationships that underpin the trust the public has in doctors. Professionalism in medicine is based on ethical principles and bound by codes, both explicit and implicit, regarding the relationships among physicians and their patients, their profession, and society at large. As medical professionals, physicians demonstrate maintenance of competence, ethical behaviour, adherence to professional codes, adherence to legal principles and responsibilities, as well as the qualities of integrity, honesty, altruism, service to others, justice, respect for others, confidentiality and self-regulation. The central importance of the patient-physician relationship is a crucial part of professionalism.

At the undergraduate level, professionalism begins with the study of foundational principles of professionalism. Students will be expected to demonstrate their understanding of these principles and integrate them into their behaviour in all their clinical and educational interactions throughout their four years of medical education. It is our hope that these will become integral to their lifelong behaviour as physicians.



Professionalism Competency 1: *Professional Behaviour*

The competent medical graduate demonstrates appropriate professional behaviours to serve patients, the profession and society.

P1.1: Professional behaviour

The medical graduate practices appropriate professional behaviours, including honesty, integrity, commitment, dependability, compassion, respect, an understanding of the human condition, and altruism in the educational and clinical settings.

The graduate is able to:

- a. Identify honesty, integrity, commitment, dependability, compassion, respect, confidentiality and altruism in clinical practice and apply these concepts in their learning and in medical and professional encounters.

P1.2: Professional self-awareness

The medical graduate is professionally self-aware, and seeks consultancy appropriately.

The graduate is able to:

- a. Identify and address personal values, abilities, and biases that affect their clinical judgment and practice.
- b. Appropriately engage colleagues and other health professionals for improved patient care.

Professionalism Competency 2: *Principles of Professionalism*

The medical graduate applies knowledge of legal and ethical principles to serve patients, the profession and society.

P2.1: Ethics

The medical graduate analyzes and appropriately responds to ethical issues encountered in practice (such as informed consent, confidentiality, truth telling, vulnerable populations, etc.).

The graduate is able to:

- a. Analyze ethical issues encountered in practice (such as informed consent, confidentiality, truth telling, vulnerable populations etc.).
- b. Analyze the psychosocial, cultural and religious issues that could affect patient management.
- c. Define and implement principles of appropriate relationships with patients.

P2.2: Law and regulation

The medical graduate applies profession-led regulation to serve patients, the profession and society.

The graduate is able to:

- a. Recognize the professional, legal and ethical codes and obligations required of current practice in a variety of settings, including hospitals, private practice and health care institutions, etc.
- b. Analyze legal issues encountered in practice (such as conflict of interest, patient rights and privacy, disclosure of medical error, etc.).
- c. Recognize and respond appropriately to unprofessional behaviour in colleagues consistent with professional, legal and ethical codes and obligations.



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