

THE COLLEGE OF
FAMILY PHYSICIANS
OF CANADA



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SECTION OF TEACHERS • SECTION DES ENSEIGNANTS

Evaluation Objectives in Family Medicine

Defining Competence for the Purposes of Certification

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Objectives

- Describe the methodology leading to the development of the Evaluation Objectives in Family Medicine
- Describe the components of the Evaluation Objectives
- Outline their use in both the certification examination and in-training assessment

So What Is This?

- Multi-layered description of competence in Family Medicine
- Defined in terms of concrete observable actions
- Articulates expectations at the end of Family Medicine residency training

It is not intended to redefine the specialty of Family Medicine in Canada, nor to replace the Four Principles; indeed, the definition has been developed within the very context of these principles. This is a description for the purposes of assessment rather than trying to describe the scope of Family Medicine or curriculum expectations.

Where Has This Come From?

1. Practicing family physicians were surveyed and asked to describe competence using these four areas

- Patient problems and clinical situations
- Clinical decision-making and judgment
- Other qualities or behaviours
- Problem areas

2. Iterative analysis by nominal group methodology



Subsequent progressive analysis happened thereafter through a modified Delphi process to derive a detailed operational definition using multiple iterations until consensus was achieved for the items under discussion. Nominal groups included Board of Examiners, Key Features Working Group and the Working Group on the Certification Process.

The Domain of Competence

For the Purposes of Assessment in Family Medicine

1. Six Skill Dimensions of Competence
2. Phases of the Clinical Encounter
3. Priority Topics, Core Procedures and Themes
4. Key Features and Observable Behaviours



Together these four elements constitute the domain of competence in Family Medicine. Overall competence is determined through a process of continuous sampling, observation and reflection of learner performance with respect to key features and observable behaviours for a series of problems (priority topics, procedures, themes), throughout the phases of the clinical encounter, until evaluators are satisfied that the physician is competent in all the skill dimensions.

Six Skill Dimensions of Competence

- Patient-Centered Approach
- Communication Skills
- Clinical Reasoning Skills
- Professionalism
- Procedure Skills
- Selectivity

Canadian
Family Medicine
Curriculum



Le cursus en
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There are six essential skills that enable the family physician to deal competently with problems in the domain of Family Medicine. The competent family physician has the potential to use all the skills for any problem, but competence is also characterized by adapting the choice of the skills used to the specific needs of the problem at hand.

•**Patient-Centred Approach:** This is a hallmark of Family Medicine and represents one of the most efficient and effective methods for dealing with problems. The details of the method are well established in the literature, and the Evaluation Objectives for this dimension of competence are derived directly from this information.

•**Communication Skills:** Certain skills and behaviors facilitate communication, and good communication is essential for competence. Communication can be written or verbal, with patients or colleagues; it also involves listening and watching as much or more than talking and showing.

•**Clinical Reasoning Skills:** This dimension focuses on the problem-solving skills used to deal with the “medical aspects” of a problem. Although obviously knowledge-dependent, many of the difficulties in this dimension are related to poor process (the how and why). Assessment of these processes is more important than assessing the final results or answers.

•**Selectivity:** See next slides.

•**Professionalism:** This dimension was the most frequently cited in the descriptions of competence. It includes all the responses that dealt with respect and responsibility to patients, to colleagues, to oneself, to the profession, and to society. It includes ethical issues, as well as life-long learning and the maintenance of quality of care. It also includes attitudinal aspects such as caring and compassion.

•**Procedure Skills:** In the initial survey, specific procedures themselves were not often cited as being characteristic of competence. It was recognized, however, that an individual about to enter independent practice should be able to competently perform certain procedures. A working group on Procedure Skills identified 65 core procedures; assessment of competence in this dimension will be based on these.

What Is Selectivity?

The family physician demonstrating selectivity:

- Does not do things in a routine fashion, but is selective in its approach, adapting it to the situation and patient
- Sets priorities and focuses on the most important
- Knows when to say something and when not to
- Gathers the most useful information without losing time on less contributory data, or doing something extra when it will be helpful



Selectivity: This dimension has not, to our knowledge, been described with respect to physician competence. It describes a set of skills cited as characterizing the competent family physician: such a physician does not do things in a routine fashion, but is selective in their approach, adapting it to the situation and patient. This physician sets priorities and focuses on the most important; knowing when to say something and when not to; gathering the most useful information without losing time on less contributory data or doing something extra when it will be helpful. It is perhaps a subset of all the other dimensions, but it was used frequently enough to merit its own dimension.

What Is Selectivity?

Examples of Key Features of the 99 Topics Involving Selectivity

- Earache:

- Make rational drug choices when selecting antibiotic therapy for the treatment of otitis media. (Use first-line agents unless given a specific indication not to)

- Antibiotics:

- In urgent situations (e.g. septic shock, febrile neutropenia), do not delay administration of antibiotic therapy (do not wait for confirmation)

These are examples of key features in which selectivity was considered critical. There are many others.

What Is Selectivity?

Examples of Key Features of the 99 Topics Involving Selectivity

- **Trauma:**

- Determine when patient transfer is necessary (e.g. CNS bleeds, no specialty support is available)

- **UTI:**

- In a patient with a diagnosed urinary tract infection, modify the choice and duration of treatment according to risk factors; and treat before confirmation of culture results in some cases



These are examples of key features in which selectivity was considered critical. There are many others.

Phases of the Clinical Encounter:

- Hypothesis generation (iterative differential diagnosis)
- History (gather the appropriate information)
- Physical examination (gather the appropriate information)
- Investigation (gather the appropriate information)
- Diagnosis/Problem identification (interpret information)
- Treatment (or management)
- Follow-up
- Referral



This component plays an essential role in directing assessment toward the cognitive processes most critical to the competent resolution of a specific problem or situation. It covers the steps or phases from the beginning to the end of a clinical encounter. It includes the processes usually identified with the hypothetico-deductive model of clinical problem solving, and with clinical decision-making.

Priority Topics, Core Procedures and Themes

- A list of the problems or situations that the competent family physician should be able to deal with at the start of independent practice
- Sets out and limits the content of competence in family medicine for the purposes of assessment
- The limits permit all concerned to concentrate their efforts and the scope reassures that overall competence can be reasonably inferred if assessment has been based on an adequate sampling of this content

These constitute a list of the problems or situations that the competent family physician should be able to deal with at the start of independent practice. This sets out and limits the content of competence in Family Medicine for the purposes of certification decisions. The limits permit all concerned to concentrate their efforts, and the scope reassures that overall competence can be reasonably inferred if assessment has been based on an adequate sampling of this content.

•**Priority Topics:** This list was generated from the responses in the original survey. It includes diagnoses, symptoms, presentations and tasks; there are also roles (periodic health/screening), groups (immigrants, newborn, elderly), issues (lifestyle), situations (family issues, difficult patients), and even some topics (antibiotics).

•**Core Procedures:** Competence in this dimension is not limited to the technical skills required for the 65 core procedures. Other aspects, such as indications and contraindications, deciding to do or not do a procedure, and choosing among several possible approaches, should also be assessed. With this in mind, a key feature analysis was undertaken to identify the critical aspects of competence applicable to all procedures.

•**Themes:** The dimensions of patient-centered approach, professionalism and communication skills were not sufficiently defined by the key feature analysis of the priority topics. An additional iterative, focus group approach, using information from a variety of sources as inspiration, was used to develop a series of themes to organize the description of competence for each of these three dimensions.

Priority Topics

- This list was generated from the responses in the original survey
- It includes:
 - Diagnoses, symptoms, presentations and tasks
 - Roles (periodic health/screening),
 - Groups (immigrants, newborn, elderly)
 - Issues (lifestyle)
 - Situations (family issues, difficult patients)
 - Some topics (antibiotics)



Top 10 Priority Topics

1. Anxiety
2. Depression
3. Substance abuse
4. Ischemic heart disease
5. Diabetes
6. Hypertension
7. Pregnancy
8. Headache
9. Periodic health assessment / screening
10. Palliative care



Core Procedures

- Competence in this dimension is not limited to the technical skills required for the 65 core procedures
- Other aspects, such as indications and contraindications, deciding to do or not do a procedure, and choosing among several possible approaches, should also be assessed
- With this in mind, a key feature analysis was undertaken to identify the critical aspects of competence applicable to all procedures



Examples of Core Procedures

- Abscess incision and drainage
- Pap smear
- Aspiration and injection knee joint
- Bag and mask ventilation
- Peripheral intravenous line

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Themes

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Examples of Themes

Patient – Centred Approach

- “In finding common ground around the management of a problem, incorporates relevant health promotion and prevention”
(One of 6 themes)

Communication Skills

- Listening skills: “Uses both general and active listening skills to facilitate communication”
(One of 6 themes)

Professionalism

- “The physician demonstrates a mindful approach to practice by maintaining composure/equanimity, even in difficult situations, and by engaging in thoughtful dialogue about values and motives”
(One of 12 themes)

Examples are given of themes from each of Patient-centred Approach, Communication Skills, and Professionalism.

Key features and Observable Behaviors

- These are the operational evaluation objectives describing competence in relatively objective and observable terms
- This component is most useful for the assessment of competence during daily clinical supervision, as resource and reference, not as a checklist



Key Features

- Specific situations most determinant of competence within a topic
- The critical processes involved in dealing competently with each situation
- Determined by a group of practicing peers using a reflective, iterative process: generated key features for each priority topic
- Each key feature identifies the skill dimensions and phases of the clinical encounter that are to be used in assessing competence in the situation and for the task at hand

These are the operational evaluation objectives describing competence in relatively objective and observable terms. This component is most useful for the assessment of competence during daily clinical supervision.

Key Features: Key Features are the specific situations most determinant of competence within a topic and the critical processes involved in dealing competently with each situation. They are determined by a group of practicing peers using a reflective, iterative process. Each key feature identifies the skill dimensions and phases of the clinical encounter that are to be used in assessing the competence for the situation and task in question. Each priority topic underwent analysis to generate the key features for the topic. In addition, key features for procedure skills were developed.

Examples of Key Features

- **Priority topic: Difficult Patient**
 - In a patient with chronic illness, expect difficult interactions from time to time. Be especially compassionate and sensitive at those times.
(*Skills: Patient Centered/Professionalism; Phases: Treatment/Follow-up*)
- **Priority Topic: Diabetes**
 - In the acutely ill diabetic patient, diagnose the underlying cause of the illness and investigate for diabetic ketoacidosis and hyperglycemia.
(*Skills: Clinical Reasoning/ Selectivity; Phases: Diagnosis/Treatment*)
- **Procedure Skills**
 - When a procedure is not going as expected, re-evaluate the situation, and stop and/or seek assistance as required
(*Skills: Clinical Reasoning/Professionalism; Phases: Treatment*)



Observable Behaviours

- Examples of behaviours indicative of competence, or lack of it, for each theme
- No particular subset is identified as being most critical to competence for the theme or the dimension in question

Observable Behaviours: for each of the themes identified for Communication Skills and Professionalism, an iterative process analogous to the key feature analysis was used to identify behaviours indicative of competence, or lack of it, for each theme. While the key feature analysis identifies a subset of situations thought to be indicative of overall competence for a topic, the observable behaviour analysis lists examples of behaviours potentially indicative of competence, and no particular subset is identified as being most critical to competence for the theme or the dimension in question.

Examples of Observable Behaviours

Positive (✓) or Negative (✗)

- **Communication Skills with patients:**
 - Adapts communication style to the patients' disability ✓
 - Asks multiple questions without awaiting the answers ✗
- **Communication Skills with colleagues:**
 - Stops and takes time to listen respectfully to colleagues ✓
 - Uses condescending language ✗
- **Professionalism**
 - Respects patient autonomy and assesses whether patient decision making is impaired ✓
 - Discusses patients in "public places" ✗



The Domain of Competence

*For the Purposes of Assessment in
Family Medicine*

1. Skill dimensions of competence
2. Phases of the Clinical Encounter
3. Priority Topics, Core Procedures, Themes
4. Key Features and Observable Behaviours

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How to Determine Overall Competence?

- Through a process of continuous sampling, observation of and reflection on resident performance
- With respect to key features and observable behaviours
- For a series of problems (priority topics, procedures, themes), throughout the phases of the clinical encounter
- Until evaluators are satisfied that the resident is competent in all the skill dimensions

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Use of Evaluation Objectives

- For the certification examination:
 - To guide the structure and content of the examinations
 - Used by Committee on Examinations in Family Medicine in developing test items
- For competency-based in-training assessment:
 - To guide sampling of observable behaviours across the Domains of Clinical Care

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Relationship with the Triple C Curriculum

To better understand the relationship between the Evaluation Objectives and other elements of the Triple C Curriculum, please view the other resources in the Triple C Toolkit

http://www.cfpc.ca/Triple_C/

Especially:

Linking Curriculum and Assessment in Competency-based Residency Training Program

Donoff M, Iglar K, Oanadasan I, Saucier D, Schipper S, Wong E. *Triple C competency-based curriculum. Report of the Working Group on Postgraduate Curriculum Review – Part 2.* Mississauga, ON: College of Family Physicians of Canada. In press.

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Based Upon

Defining Competence in Family Medicine for the Purposes of Certification by the College of Family Physicians of Canada: The evaluation objectives in Family Medicine (updated December 2010.)

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For More Information

College of Family Physicians of Canada, Working Group on the Certification Process (2009). Defining competence for the purposes of certification by the College of Family Physicians of Canada: The new evaluation objectives in family medicine. Mississauga, ON: College of Family Physicians of Canada. Available from: <http://www.cfp.ca/EvaluationObjectives/>

Allen T, Brailovsky C, Crichton T, Lawrence K, Visser S, Carpentier MC, Rainsberry P. Defining competency-based evaluation objectives in family medicine: the dimensions of competence and the priority topics for assessment. [Can Fam Physician 2011;57:e331-40](#)

Lawrence K., Allen T, Brailovsky C, Crichton T, Bethune C, Donoff M, Laughlin T, Wetmore S, Carpentier MC, Visser S. Defining competency-based evaluation objectives in family medicine: a key feature approach. [Can Fam Physician 2011;57:e373-80](#)

Laughlin T, Wetmore S, Allen T, Brailovsky C, Crichton T, Bethune C, Donoff M, Lawrence K. Defining competency-based evaluation objectives in family medicine: Communication skills

Donoff M, Lawrence K, Wetmore S, Allen T, Brailovsky C, Crichton T, Bethune C, Laughlin T. Defining competency-based evaluation objectives in family medicine: Professionalism

Wetmore S, Laughlin T, Lawrence K, Donoff M, Allen T, Brailovsky C, Crichton T, Bethune C. Defining competency-based evaluation objectives in family medicine: Procedure Skills

Please visit www.cfp.ca for a series of articles on the Triple C Competency-based Curriculum published in *Canadian Family Physician*

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