



Examples of Resident Issues Related to Skill Dimensions (and relevant CanMEDS-FM roles)

A. Clinical Reasoning (Medical Expert/Scholar/Professional)

Residents must demonstrate established and up-to-date knowledge in the breadth required for effective patient-centered care in family medicine. The resident must be able to apply this knowledge effectively to make appropriate clinical decisions, appreciating each unique patient context and patient preferences.

a) Knowledge Base

Residents are expected to have a depth and breadth of knowledge appropriate to the discipline of family medicine.

Concerns in this area may be demonstrated by resident difficulties with the following:

- demonstrate up-to-date knowledge, identify current information resources
- establish and maintain knowledge of preventative measures and their application to individual patients
- apply evidence-based medicine to the individual patient and know its limitations
- appreciate that application of investigations and treatment is dependent on the access and uniqueness of each individual patient and situation (e.g., open discussion with patient and family about appropriateness of investigation for shut-in patients with rectal bleed)
- accept uncertainty when medical knowledge may not provide clear answers
- know limits of own medical knowledge and seek out help as necessary
- interpret laboratory results, investigative reports, radiology studies

b) Physical Examination

Residents must be able to demonstrate proficiency in physical examination skills. This can only be assessed through first-hand observation.

Concerns in this area may be demonstrated by resident difficulties with the following:

- respectfully perform a physical examination that is relevant and accurate
- be respectful of the dignity, privacy, and comfort levels of the patient (e.g., camera off, drapes available, privacy for dressing and undressing)
- incorporate presence of other health professionals as necessary
- obtain patient implicit or explicit permission for the examination by explaining relevant points and potential areas of discomfort
- optimize comfort of patient as best possible and be aware of implicit power differential
- respond, address, and respect, as necessary, patient discomfort or refusal to accept performance of certain aspects of a physical examination
- anticipate and explore potential cultural, physical, or personal barriers to aspects of the physical examination
- perform and organize a physical examination in a logical, consistent sequence taking into account the patient context
- perform an examination that is guided by the history with the goal of including or excluding content

for the differential diagnosis

- perform the physical examination in a timely manner
- be aware of the common maneuvers that accompany a targeted physical examination
- appreciate the diagnostic acumen of a well-performed physical skill
- use evidence-based physical examination techniques
- appreciate the art and science of the physical examination
- place the value of certain physical findings in context
- have insight into deficits of knowledge and skills and be proactive in remediation of deficiencies
- maintain and update skills in physical examination
- include preventative measures as necessary and relevant
- recognize potential of physical examination as an educational tool

c) Differential Diagnosis

Residents must be able to determine appropriate differential diagnoses for each individual patient.

Concerns in this area may be demonstrated by resident difficulties with the following:

- demonstrate effective clinical problem-solving and judgment
- interpret data provided from the patient and other sources in a logical fashion
- create a differential diagnosis using the principles of evidence-based medicine
- prioritize the diagnoses, organize the information, and assign importance to relevant signs or symptoms
- generate a comprehensive list while clearly identifying the most likely diagnosis
- recognize limitations of a situation (e.g., patient information, other information, self knowledge) that may influence differential diagnosis formulation
- create a differential in a timely fashion
- revise a differential as new information becomes available

B. **Selectivity (Medical Expert/Communicator/Manager/Scholar)**

a) Interventions

Residents must be able to determine appropriate investigations relevant to each individual patient and situation.

Concerns in this area may be demonstrated by resident difficulties with the following:

- select appropriate investigations applying evidence-based medicine principles
- demonstrate awareness of resource limitations (e.g., cost, availability, access)
- obtain appropriate informed consent for all interventions
- ensure patients and families understand the rationale for recommending certain investigations and the next steps beyond
- demonstrate appropriate and timely application of diagnostic and therapeutic procedures
- show clear insight into their own limitations with knowledge, application, or interpretation of investigations
- appreciate the use of consultation with other professionals to ensure appropriate use of investigations and awareness of options to optimize patient care
- recognize when a “wait and watch” approach is more appropriate than an investigation or intervention
- appreciate the limitations of investigations
- demonstrate insight into the reasons to always treat the patient first before over interpreting investigation results
- incorporate the patient’s context into deciding on investigations (e.g., ability to get blood work in an autistic child)

- recognize and effectively communicate the rationale for certain investigations in disease prevention and health promotion or the purposes of prevention and health promotion

b) Management

Residents must be able to determine appropriate therapeutic options including preventative measures relevant to each individual situation and case.

Concerns in this area may be demonstrated by resident difficulties with the following:

- incorporate evidence-based medicine and recognized guidelines into management plans
- demonstrate insight into situations where patient factors compromise evidence-based management
- appreciate when learner's therapeutic goals are unattainable due to patient- or system- related factors outside of the resident's control
- obtain appropriate consent for all therapies offered
- maintain a therapeutic relationship throughout management negotiations despite differences in goals, personalities, and socio-cultural backgrounds
- be honest with the patient and him or herself (e.g., when outcomes are not optimal)
- create an effective management plan in collaboration with patient and their family, weighing individual risks and benefits to each therapeutic option
- understand the importance of recognizing individual barriers for each patient and family, and the need to address them, even if not raised by the patient (e.g., readiness to change, education level, social or cultural questions)
- incorporate patient's individual family and community strengths and resources into the treatment plan
- appreciate ethical issues arising in management planning (e.g., respecting confidentiality with a 14-year-old patient)
- to reflect on and be aware of the impact of a therapeutic plan on an individual, community, and population
- prioritize management issues, realizing care is over a continuum
- be aware of the importance of time management skills in the delivery of care within the healthcare setting (e.g., office, patient's home, in-patient)
- organize assessment, investigations, and follow-up in a timely fashion to maximize efficiency and effectiveness
- complete required duties within given work hours (i.e., complete or triage clinic tasks within a reasonable amount of time)
- accept uncertainty and allow appropriate follow-up for evolution of unresolved issues
- ensure adequate follow-up is incorporated into all management plans
- include counseling and education in management plans and involve appropriate resources (e.g., other health professionals, community resources, consultants)
- incorporate preventive and health promotion
- explore the use of non-allopathic evidence-based options for patients

C. Communication Skills (Communicator)

Residents must be able to communicate effectively with patients, families, and healthcare staff by demonstrating abilities in effective information exchange and collaboration. Skills include appropriate use of medical records, use of patient-centered communication throughout patient encounter, effective collaboration within a healthcare team to achieve the best patient care, as well as advocacy to improve the well-being of individual patients, communities, and populations.

a) History-taking

Residents must be able to demonstrate proficiency in history taking by gathering accurate and relevant

information using a compassionate patient-centered approach.

Concerns in this area may be demonstrated by resident difficulties with the following:

- establish effective communication (e.g., introducing self, overall presentation, body language, appreciation of physical space)
- demonstrate patient-centered communication skills (refer to Patient-Centered Communication section)
- recognize the importance of verbal and nonverbal cues
- identify and explore issues, taking into account the patient's context (e.g., socio-economic, employment, education level, living situation) and preferences
- elicit a history that is relevant, concise, and accurate
- review the chart and previous encounters
- allow patients time to express their concerns or issues
- encourage patients to recognize and clarify their agenda
- begin with broad open-ended questions, moving toward more specific, closed-ended questions when appropriate
- organize his or her thoughts as demonstrated through prioritizing relevant information
- incorporate effectively and respectfully both the patient's and his or her own agenda, adapting both as necessary to the situation
- explore and identify issues related to prevention and health promotion relevant to the patient's context
- use a variety of communication styles to ensure necessary information is gathered
- explore information relevant to history from sources beyond the patient
- demonstrate appropriate time management

b) Medical Records

Residents must be able to create and maintain comprehensive and legible medical records in a timely fashion.

Concerns in this area may be demonstrated by resident difficulties with the following:

- create timely and comprehensive medical records
- understand that the medical record is a legal document
- record only those aspects of the encounter that were performed
- recognize that retrospective additions to a note must be appropriately labeled
- be respectful of the patient and family in his or her note taking
- write legibly
- record notes of appropriate length ensuring others may follow care
- manage electronic medical record or paper charts (e.g., completing and updating medical history, medication lists)
- ensure therapeutic plans include next possible actions to allow other providers to assume effectively
- document health promotion discussions
- document discussions of new medication or procedures including side effects, complications, and potential outcomes
- ensure consultation notes sent and received are included in the chart and timely follow-up is documented, as necessary, in response to these
- produce consultation notes effectively to include sufficient information on the reason for the consultation, including other relevant information (e.g., past medical history, medication)

D. **Patient centered approach (Communicator)**

Residents must be able to communicate effectively with patients and their families, appreciating and

demonstrating respect for unique cultural and socio-economic influences, across the spectrum of illnesses and ages.

Concerns in this area may be demonstrated by resident difficulties with the following:

- appreciate the various components of the patient-centered clinical method (see fp-x gen notes)
- convey, in an accurate and effective manner, all necessary information to patients and their families using language appropriate to the encounter
- recognize the basic components necessary to set up an effective assessment (e.g., introductions, warm and opening statements)
- respect confidentiality, privacy, and autonomy and clearly indicate times when such confidence may need to be breached or upheld
- practice effective interviewing skills (e.g., paraphrasing, summarizing, clarification)
- be aware of own personal biases
- recognize impact and respect diversity around issues such as culture, language, finances, religion, and sexual orientation
- demonstrate clear boundaries
- remain objective, engaged, and composed during emotional encounters involving anger, personal attacks, manipulations, misunderstandings, etc.
- reflect on his or her own patient-centered skills after a patient encounter
- reflect on how he or she projects him or herself and is perceived by patients
- engage the patient's family and relevant health professionals in shared decision-making to develop a care plan
- use language appropriate to the context (e.g., avoid medical jargon, use vocabulary and concepts appropriate to the level of understanding of the patient)
- hear both verbal and nonverbal communications
- establish rapport that places the patient at the centre of decision-making
- negotiate common ground (including being transparent about one's own agenda while respecting the patient's agenda)
- employ motivational techniques
- empower patients to take responsibility for their own health
- create relationships with patients that foster and support continuity of care

E. **Professionalism** (Professional)

Residents must demonstrate a high standard of professional behavior and commitment to ethical practice.

a) Professional behaviors

Residents must demonstrate compassion and respect at all times.

Concerns in this area may be demonstrated by resident difficulties with the following:

- maintain respectful behavior even in the face of challenging situations
- demonstrate behavior that reflects honesty and respect
- demonstrate behavior that values commitments and expectations (e.g., being on time)
- be responsible and reliable
- elicit confidence from patients
- demonstrate humility and not arrogance
- be caring and compassionate
- be clear and use appropriate boundaries with patients
- demonstrate respect for colleagues and interprofessional team members

- respect differences in others (e.g., patients, colleagues, other healthcare professionals)
- actively prevent and resolve conflicts
- demonstrate collaborative working skills
- respect individuals' rights even if in conflict with one's own values or belief systems
- dress appropriately for the clinical situation

b) Ethics

Residents must demonstrate abilities to provide the highest standards of ethical care.

Concerns in this area may be demonstrated by resident difficulties with the following:

- maintain confidentiality
- demonstrate ethical decisions in resource allocation
- respond to patients' needs that may neglect one's own self-interest
- respect diversity
- provide the necessary information to enable the patient to give informed consent
- be ethical in business practice
- balance ethical decisions with respect to withholding of care
- access existing systems to assist with ethical practices (e.g., ethics committees)

c) Accountability

Residents must be accountable to their patients, their colleagues, and society.

Concerns in this area may be demonstrated by resident difficulties with the following:

- be reliable, dependable, and trustworthy with colleagues and staff
- be willing to have performance assessed/reviewed
- demonstrate responsibility in all aspects of patient care
- accept responsibility for continuity of care
- meet the standards and requests of regulatory bodies
- balance personal needs with team or professional commitments (e.g., call schedules)

F. **Procedural Skills**

Residents must be able to demonstrate proficiency in procedural skills necessary for the practice of Family Medicine.

Concerns in this area may be demonstrated by resident difficulties with the following:

- obtain appropriate consent
- be aware of the limits of his or her own knowledge in certain procedural skills and seek appropriate guidance in training
- ensure universal precautions are observed
- recognize the difference between therapeutic and diagnostic procedures
- address, as necessary, the effectiveness and appropriateness of procedures in the context of the individual patient
- appreciate the relative urgency (i.e., emergent, urgent, or elective) in performing the procedure based on the diagnosis, risk/benefit, patient preference, and healthcare resources and make the patient aware of all influences in this decision (e.g., patient preferences, medical impact, healthcare resources)
- be respectful of the dignity, privacy, and comfort levels of the patient (e.g., camera off, drapes available, privacy for dressing and undressing)

- be aware of ethical issues that may arise from performance of a certain procedure
- respond, address, and respect, as necessary, patient discomfort or refusal to accept performance of a procedure
- anticipate and explore potential cultural, physical, or personal barriers to certain aspects of a procedure
- update own skills as evidence changes and new techniques become available
- appreciate when it is best to not complete a procedure
- acknowledge and act on non-verbal cues that may influence course of procedure
- ensure appropriate follow-up is arranged for the patient and family
- be aware of time management challenges that are inherent in performing a procedure
- respect and involve, as appropriate, other health professionals
- Other CanMEDS-FM Roles and potential issues

G. Collaborator

Residents must be able to work as a member of a healthcare team, being skilled as both a leader and collaborator with the goal of providing the best patient care.

Concerns in this area may be demonstrated by resident difficulties with the following:

- appreciate and effectively utilize other professionals within the healthcare team
- be respectful and knowledgeable of different types of medical practice
- participate effectively in inter-professional teams, supporting effective team dynamics
- demonstrate respect for and knowledge of effective team care
- demonstrate conflict resolution abilities
- recognize his or her own limitations as an individual within a group and the benefits of providing care within a group as allies with improving the patient's care as the common goal
- demonstrate leadership skills, as appropriate, within a group

H. Manager

Residents must be able to understand the complexities of the broader healthcare system and uniquely apply resources for optimal patient care. Within this larger system, the resident must learn how to effectively manage his or her own practice and career.

a) Healthcare Systems

Residents must be able to understand the benefits and challenges of the healthcare system within which they are immediately working, as well as the larger influences from government and communities.

Concerns in this area may be demonstrated by resident difficulties with the following:

- work collaboratively
- initiate and implement patient safety improvements
- anticipate high risk potential and attempt to reduce medical error within individual practice
- advocate for individuals and communities identifying unique needs

b) Resources

Residents must be able to appropriately allocate finite resources and appreciate how decisions are uniquely applied to specific populations.

Concerns in this area may be demonstrated by resident difficulties with the following:

- optimize patient care through efficient use of healthcare
- recognize and utilize community and hospital resources as they apply to individual patients
- help patients navigate the healthcare system
- appreciate the need to justly allocate health resources
- know the evidence for cost-appropriate care
- demonstrate cost-effective prescribing habits

c) Management

Residents must learn to manage their practices effectively.

Concerns in this area may be demonstrated by resident difficulties with the following:

- demonstrate understanding in billing
- describe various physician remuneration options available
- understand basic budgeting and financing for practice
- manage general human resources issues
- optimize use of information technology for patient care
- participate actively in committees and meetings
- plan and implement necessary elements of healthcare delivery (e.g., work schedules)
- participate in interdisciplinary teams to improve patient care and system issues

I. **Health Advocate**

Residents must be able to advocate for individual, community, and population needs to advance health for all.

Concerns in this area may be demonstrated by resident difficulties with the following:

- recognize and take advantage of opportunities for health promotion and disease prevention with individuals
- identify opportunities to advocate for health promotion and disease prevention in communities
- recognize and respect how individual communities and general populations may differ in their expressed needs
- respond to marginalized and vulnerable populations appropriately
- identify an approach to change a determinant of health within the population he or she serves
- appreciate the conflict that often arises between the health professional as advocate and the manager or gatekeeper
- explore the ethical and cultural issues around health advocacy
- identify how specific health policy impacts individuals in his or her practice

J. **Scholar**

Residents must recognize that mastery in Family Medicine is a lifelong pursuit. Skills necessary to pursue this goal include self-reflection, ability to critically evaluate information, and participate in ongoing learning activities. As teachers, residents must be able to translate and disseminate medical knowledge to patients, colleagues, and the wider community.

a) Evaluation skills

Residents must be able to self-reflect to identify areas for further development. They also must be able to

critically evaluate information and apply it appropriately.

Concerns in this area may be demonstrated by resident difficulties with the following:

- provide effective written and verbal feedback
- describe and actively incorporate reflection into teaching encounters
- identify his or her strengths and weaknesses in all realms of patient care
- identify and reflect on verbal and nonverbal feedback presented to the resident
- receive and accept feedback in an open manner
- demonstrate critical appraisal skills when reviewing journals, attending continuing medical education, etc.

b) Teachers

Residents must be able to facilitate the learning of students/residents, other health professionals, patients, families, and communities.

Concerns in this area may be demonstrated by resident difficulties with the following:

- target teaching to specific learning needs identified by recipients
- identify crucial areas for patient education
- identify patient education as a therapeutic learning tool
- be flexible in his or her teaching to accommodate various learning styles
- teach with appropriate language and learning tools
- solicit feedback and evaluation on teaching
- identify and/or embrace opportunities for teaching as they arise
- identify areas where good teamwork depends on sharing of knowledge
- strive to improve teaching by exploring evidence-based teaching methods

c) Lifelong learning

Residents must be able to set learning goals and perform appropriate learning activities.

Concerns in this area may be demonstrated by resident difficulties with the following:

- recognize the role of lifelong learning as central to being a physician
- identify and reflect on learning areas presented in practice
- seek further information to fill gaps in knowledge or deficiencies on his or her own initiative
- integrate new learning into practice
- use information technology to maximize learning, teaching, and patient care

d) Research

Residents must be able to understand the principles of research and appreciate the importance of Family Medicine's contribution to new knowledge and practices.

Concerns in this area may be demonstrated by resident difficulties with the following:

- critically appraise research articles
- apply current research to practice
- assess research for relevance to individual practice (e.g., research setting, funding, population exclusions)
- appreciate that research ideas and capability are found within every practice

- perform the fundamentals in research (e.g., pose scholarly question, conduct a literature search, identify appropriate methodology, understand and interpret findings, dissemination)
- appreciate the fundamental role of ethics in research
- interpret the role of advice from colleagues, experts, and research information as it applies to each individual situation

Acknowledgement

The content of this document is based on a similar resource developed by the University of Ottawa Family Medicine Residency Program and adapted for use in Calgary with permission.