

Priority Topics for the Assessment of Competence in Rural and Remote Family Medicine



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Members of the working group are family physicians and teachers who have worked in rural and remote areas across Canada.

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Introduction

This collection of priority topics and key features was developed by the CFPC Working Group on the Assessment of Competence in Rural and Remote Family Medicine, in alignment with policy themes for advancing rural education to support the development of family physicians ready to practice in rural and remote Canada.¹

Priority topics are the main problems/situations a competent practitioner should be able to resolve in a clinical domain (or area). They are an intentionally selective list of areas for assessment that can help teachers/assessors over time to infer overall competence. Competence in a priority topic is defined by its key features. Key features represent the critical, or essential, assessable steps for resolving a clinical problem/situation (priority topic), and as a result, they direct the assessment activities. However, they do not cover all the expected skills across all phases of a clinical encounter, but only those that are critical and/or most likely to be missed. Therefore, their goal is to focus assessment on higher cognitive skills that best discriminate between competent and less competent candidates.

This document was endorsed by the CFPC Family Medicine Specialty Committee and it is recommended as a resource to guide in-training assessment and inform the design of learning opportunities for all residents, regardless of their context of training. Further work is being done to integrate these priority topics and key features into the existing Evaluation Objectives for the purposes of certification.

The CFPC's Evaluation Objectives (www.cfpc.ca/EvaluationObjectives/) guide the assessment of competence in family medicine, at the start of independent practice, for the purposes of certification by the CFPC. They describe the skills and behaviours that indicate competence dealing with the clinical tasks and problems that make up the domain of competence to be assessed. Overall competence is an inference determined by sampling, observing, and reflecting on a trainee's demonstration of the application of the six skill dimensions (patient-centred approach, communication, clinical reasoning, selectivity, professionalism, and procedure) across various topics/situations.

¹ Developing or refining current competencies for readiness to practice comprehensive family medicine that would ensure family physicians/learners are able to begin practice in rural and remote contexts.

Defining a process of determining enhanced competencies required based on community need and learning requirements, methods of learning, and assessing competency acquisition that can be attested to/certified by the CFPC.



How these priority topics and key features were developed

Priority topics were developed using a modified Delphi approach, combining surveys and nominal group discussions in an iterative fashion. The Working Group (nine family physicians and teachers with many years of experience in rural and remote areas across Canada) acted as the nominal group, generating the first list of priority topics. A second survey to a larger group of family physicians (total of 975 recipients, from CFPC and Society of Rural Physicians of Canada (SRPC) databases, as well as Advancing Rural Family Medicine: Canadian Collaborative Taskforce (ARFM) members recommended by the Working Group), representative of physicians from across the country, generated another independent list.

The lists of priority topics generated by the nominal group and the larger reference group were very similar, both in the topics named and the priorities assigned (correlation = 0.70). A final list of 18 priority topics was defined.

Key features were developed for all 18 topics through the nominal group using three iterations of discussions and consensus building.



How to use these priority topics and key features

Priority topics and key features are best used in guiding assessment efforts (sampling, observation, reflection) over time to build a case for overall competence or the lack thereof. They may also be useful in the following situations:

For trainees:

- Use as a guide for self-reflection on competence, and for developing a learning plan
- Use as a guide for soliciting feedback from teachers/assessors

For teachers/assessors:

- Compare and contrast materials in this booklet with your assessment strategies and adjust as necessary
- Use as a guide for assessing your trainees, including requesting feedback, developing questions to ask trainees, and completing field notes
- Use as a guide to help develop learning plans for your trainees

For programs:

- Use as a guide to plan curriculum that can adequately expose trainees to the priority topics and procedures
- Use as a guide to develop assessment strategies
- Use as a guide to develop learning plans for residents
- Use to articulate priorities for assessment to other health care providers who provide teaching and supervision to family medicine residents



Priority Topics

- 1. Trauma
- 2. Patient transfer
- 3. Septicemia
- 4. Pediatric emergencies
- 5. Acute cardiac presentations
- 6. Psychiatric emergencies
- 7. <u>Diabetic emergencies</u>
- 8. Active airway management
- 9. Urgent respiratory presentation
- 10. Fracture and dislocation management
- 11. Intrapartum care
- 12. Altered level of consciousness
- 13. Procedural sedation
- 14. Chronic pain
- 15. Indigenous health
- 16. Clinical courage
- 17. Adapting to rural life
- 18. Cultural safety and sensitivity



Topic 1: Trauma

- 1. When a patient presents with trauma:
 - a) Assess and stabilize life-threatening conditions using a standardized approach before addressing non-life-threatening distracting injuries
 - b) Reassess thoroughly while considering mechanisms of injury, possible underlying causes (e.g., intoxication, seizure, physical abuse), and patient as a whole
 - c) Have a high index of suspicion for significant injuries, and differentiate between multi-organ and singlesystem trauma
- 2. When a need for transfer is suspected, initiate transfer process early. (see also Patient transfer)
- 3. In a complex trauma situation (e.g., multi-patient), assume the leadership role by:
 - Communicating clearly
 - Multitasking and triaging appropriately
 - Assigning roles to your team members
 - Mobilizing your community's resources (e.g., off-service doctors, firefighters, police, clergy) early
- 4. When treating patients with trauma,
 - a) Reassess regularly for change in patient condition
 - b) Maintain communication with the team, as well as the family, and inform them of any changes



Topic 2: Patient transfer

- 1. With any patient potentially requiring transfer, consider the following factors:
 - Patient stability
 - Own and resources' limitations
 - Weather conditions and geographic factors
 - Prolonged transfer delays
 - Socio-cultural aspects, and patient's and family wishes
- 2. For all patients, assess and recognize those needing immediate transfer and do not delay the transfer for paperwork or further investigation unless it will change immediate management.
- 3. When a transfer has been decided:
 - a) Stabilize the patient and continue to reassess the conditions for transfer (e.g., weather) and patient's status
 - b) Initiate communication with the receiving team, clearly and assertively articulating needs and reasons for transfer
 - c) Assess for the best method(s) of transportation based on the patient's condition, and weather and geographic factors
 - d) Anticipate possible transfer complications (e.g., barometric trauma, pressure sores) and prepare the patient accordingly (e.g., ensure IV lines and airway are secured, ensure adequate warming)
 - e) Identify the need for accompanying health professionals and consider the implications on the remaining health team and community
 - f) Ensure ongoing communication with the family, the receiving hospital, and the team
 - g) Ensure adequate documentation
- 4. During the transfer:
 - a) Ensure regular reassessment of the patient's status, including body temperature and pressure points
 - b) Maintain communication with the receiving hospital
 - c) Remain engaged and intervene as necessary until the safe handover to the receiving physician



Topic 3: Septicemia

- 1. For a patient presenting with an infection:
 - a) Recognize early symptoms and signs of sepsis, based on currently accepted guidelines
 - b) Be alert to presentations that can be subtle and atypical (e.g., in newborns, children, the elderly)
 - c) Consider patients at risk (e.g., patients on biologic agents, patients with addiction)
- 2. For a patient presenting with signs and symptoms of sepsis:
 - a) Manage with antibiotics immediately; do not delay treatment if there is difficulty in obtaining investigations (e.g., collecting culture, imaging)
 - b) Be aware of the local antibiotic resistance patterns and institute therapy as indicated
 - c) Consider antiviral and/or antifungal therapy
- 3. Monitor septic patients closely and manage without delay as these patients decompensate quickly:
 - Recognize septic shock
 - Recognize the need for vasopressors
 - Proactively consider patient transfer, based on local treatment norms and capacity
- 4. When treating a septic patient, contact Public Health where applicable to ensure contacts are treated appropriately.



Topic 4: Pediatric emergencies

- 1. When a child presents in distress:
 - a) Anticipate rapid deterioration regardless of the setting, and identify life-threatening situations; do not underestimate the seriousness of symptoms if the child presents at the office and not the emergency department
 - b) Do not delay treatment and/or transfer when appropriate
 - c) Mobilize appropriate resources
- 2. When assessing a child in distress:
 - a) Check vital signs and measure height, weight, and glucose
 - b) Perform a comprehensive physical examination, recognizing that the history might be incomplete and considering that certain illnesses may present differently in children
 - c) Consider child abuse as an etiology and take appropriate action
- 3. When developing a management plan for a child in distress:
 - a) Prepare available pediatric equipment and supplies (e.g., intraosseous access, Broselow-pediatric emergency tape)
 - b) Base dosage on estimated weight, not age
- 4. When managing a child in distress:
 - a) Be prepared for rapid decompensation
 - b) Monitor constantly following a systematic approach, and be prepared to resuscitate
- 5. After managing a pediatric emergency and especially after a negative outcome:
 - a) Recognize the emotional impact on family, staff, the community, and yourself,
 - b) Debrief and address consequences appropriately



Topic 5: Acute cardiac presentations

- 1. For a patient with an acute cardiac presentation:
 - a) Recognize the potentially unstable patient and the need for immediate intervention, consultation, and/or transfer
 - b) Maintain a high index of suspicion and recognize variable presentations according to gender, age, and lifestyle
- 2. For a patient presenting with symptoms indicative of a myocardial infarction:
 - a) Order and interpret the ECG and available laboratory results in a timely fashion
 - b) Initiate treatment based on patient presentation and ECG findings, in an environment where cardiac serology is not available
 - c) Identify patients requiring thrombolysis, considering absolute and relative contraindications, and manage any complications that arise
 - d) Assess the need for telephone consultation versus immediate or delayed transfer



Topic 6: Psychiatric emergencies

- 1. When developing a differential diagnosis for a patient presenting in a psychiatric crisis, consider cultural differences and potential underlying causes.
- 2. For a patient with a diagnosed psychiatric crisis, identify safe disposition, taking into account:
 - Cultural and geographic setting
 - Local resources
 - Caregiver fatigue
- 3. When considering admitting or transferring a patient in psychiatric crisis:
 - a) Follow the provincial or territorial Mental Health Act, and be aware of the limitations of your local facility to admit and care for psychiatric emergencies
 - b) Ensure safety for the patient, family, and staff
 - c) Advocate strongly for the patient's admission to the appropriate level of care
- 4. When transferring a patient in psychiatric crisis, consider their need for sedation.
- 5. If faced with a co-worker, friend, or family member in a psychiatric crisis, recognize the possibility of your own discomfort, consult early, and hand over care as soon as possible.



Topic 7: Diabetic emergencies

- 1. For a patient presenting with symptoms indicative of a blood sugar related emergency:
 - a) Consider and identify hypo- and hyperglycemia even with atypical presentations (e.g., young patients with other symptoms, patients on newer classes of diabetic medications)
 - b) Assess for underlying causes (e.g., infection, acute coronary syndrome)
 - c) Evaluate the need for transfer
- 2. For a patient presenting with a hyperglycemic emergency;
 - a) Differentiate diabetic ketoacidosis (DKA) from hyperosmolar hyperglycemic state (HHS)
 - b) Assess the severity of the metabolic derangement
- 3. For a patient with diagnosed DKA or HHS, follow a systematic approach to management, including using:
 - Point of care tools
 - Laboratory resources
 - Local, tertiary, and online resources
 - Currently accepted guidelines
- 4. Following an acute diabetic emergency, educate the patient and the family about the prevention (including use of local resources) and early recognition of future, similar episodes.



Topic 8: Active airway management

- 1. When considering active airway management, use a systematic approach to assessment and identify:
 - Urgency of the situation
 - Indications and contraindications to the interventions being considered
 - Available resources (human, equipment, and medications)
 - Possibility of prolonged ventilation support requirements
- 2. Before securing the airway:
 - a) Prepare all necessary equipment
 - b) Always anticipate a difficult airway and be prepared to use alternative strategies (e.g., laryngeal mask, surgical airways)
- 3. After securing the airway:
 - a) Clinically confirm airway placement
 - b) Continue to reassess and be prepared for rapid changes in the patient's status
 - c) Ensure eye care, naso-gastric drainage, and urinary catheter
 - d) Consider capnography and chest X-ray to confirm placement
- 4. When transferring an intubated patient:
 - a) Confirm the correct placement of endotracheal tube at each patient transfer point
 - b) Consider specialized transfer requirements (e.g., saline in the cuff, pressure point padding)



Topic 9: Urgent respiratory presentations

See also Active airway management

- 1. When a patient presents in respiratory distress:
 - a) Manage the distress immediately
 - b) Develop a differential diagnosis relying on clinical skills, augmenting with imaging when available
 - c) Differentiate between upper and lower airway etiologies
- 2. When managing a patient in respiratory distress:
 - a) Consider early active airway management (e.g., inhalation injury, pulmonary contusion), based on the patient's condition and the available resources
 - b) Re-evaluate regularly as symptoms evolve and as more information becomes available, bearing in mind that decompensation can occur quickly
 - c) Consider transfer before the patient's needs exceed local capabilities
- 3. For a patient with upper airway compromise, act promptly to relieve the obstruction (e.g., peritonsillar abscess, epistaxis, foreign object, epiglottitis).



Topic 10: Fracture and dislocation management

See also Procedural sedation

- 1. For a patient presenting with a fracture or dislocation, assess for vascular compromise and neurologic deficit and document.
- 2. For a patient with vascular compromise, promptly reduce the fracture and/or dislocation without waiting for imaging.
- 3. For a patient presenting with a suspected fracture:
 - a) Splint and immobilize as appropriate and consider analgesia
 - b) Order appropriate imaging (e.g., specific view, joint above and below), based on the urgency of the situation and the available resources
 - c) Maintain a high index of suspicion for an undisplaced fracture even if the initial X-ray is negative
- 4. For patients with significant fractures, anticipate complications (e.g., thrombo-embolism, compartment syndrome, occult hemorrhage) and manage accordingly.
- 5. Consider appropriate consultation for certain cases, such as:
 - An intra-articular fracture
 - A fracture involving the growth plate
 - An open fracture
- 6. When managing a patient with a fracture or dislocation, communicate clearly with the patient and the family (especially when the patient is a child) regarding the procedure, possible complications, and recovery timelines.
- 7. When preparing a patient with a fracture for transfer:
 - a) Adequately immobilize the fracture and regularly reassess neurovascular status, including at transfer points
 - b) Provide adequate analgesia
 - c) Minimize the risk of pressure sores



Topic 11: Intrapartum care

- 1. During prenatal care, communicate early the benefits and risks of delivering locally versus at a distance.
- 2. When deciding on the location for delivery before or during labour, review important existing and evolving factors, such as:
 - Cultural preferences regarding birthing
 - Local resources
 - Weather
 - Patient's condition
- 3. For any woman in late pregnancy or in labour, have a high index of suspicion for non-cephalic presentations and manage appropriately.
- 4. When a fetus is in distress:
 - a) Perform intrapartum resuscitative interventions
 - b) Anticipate assisted vaginal delivery or surgical delivery
- 5. For a pregnant or postpartum woman, assess for and manage eclampsia if present.
- 6. After every delivery:
 - a) Be prepared to manage postpartum hemorrhage
 - b) Assess for the presence of lacerations, including a rectal exam when indicated
 - c) Manage appropriately and identify those lacerations that require consultation
- 7. For all stable women and neonates, encourage and support breastfeeding, especially in regions with poor water quality.



Topic 12: Altered level of consciousness

- 1. For a patient presenting with an altered level of consciousness:
 - a) Obtain a comprehensive history and perform a detailed clinical assessment
 - b) Quickly identify and manage common reversible causes (e.g., hypoglycemia, opioid overdose, sepsis, hypothermia)
 - c) Identify the need for additional tests that may require patient transfer to another facility
 - d) Reassess frequently for any change in status
- 2. When a patient with an altered level of consciousness presents in an agitated or aggressive state, optimize the safety of the patient and the staff.



Topic 13: Procedural sedation

- 1. When considering procedural sedation, recognize the difference between elective and emergent situations and obtain consent accordingly.
- 2. When preparing for procedural sedation:
 - a) Ensure adequate support and equipment, including a rapid sequence intubation protocol
 - b) Select medications and equipment appropriate to the clinical presentation, considering personal knowledge and skill
 - c) Always check the doses according to patient's weight, especially for children
 - d) Consider airway protection for compromised patients
- 3. When performing procedural sedation, anticipate, monitor for, and respond to potential complications (e.g., laryngospasm, hypoventilation, hypotension).
- 4. For a patient who has undergone procedural sedation,
 - a) Ensure an adequate recovery observation period
 - b) Ensure the patient is accompanied by a responsible person if they are being discharged



Topic 14: Chronic pain

- 1. For a patient presenting with chronic pain, recognize that social determinants of health and previous conditions (e.g., trauma, abuse, addiction) may contribute to the pain syndrome.
- 2. When treating patients with chronic pain, optimize non-opioid medications and strive to provide non-pharmacological management (e.g., trauma-informed counselling, physiotherapy, splinting/bracing, joint and trigger point injections).
- 3. When caring for a patient who has been prescribed opioids for chronic pain, use all resources available in the community (including the local pharmacy) to develop an effective local approach to prescribing that minimizes addiction potential, enhances treatment, and promotes safety.
- 4. When caring for patients with chronic pain in a rural or remote environment with difficult access to other resources, actively advocate for patients' access to services.



Topic 15: Indigenous health

These key features may apply equally to other underserved rural and remote populations.

- 1. When caring for Indigenous populations:
 - a) Recognize personal prejudice, assumptions, and generalizations
 - b) Consider local cultural norms of different population groups
 - c) Recognize the systemic and individual effects of historical and ongoing government policies toward Indigenous populations and the impact these have on their health status
 - d) Take the necessary time to establish trust and find common ground
 - e) Recognize the connection between poor health and social determinants of health, and actively advocate for patients' access to services
- 2. When assessing Indigenous patients, consider diseases that are prevalent in the local area (e.g., tuberculosis, water-related/environmental diseases, diseases related to traditional food sources).
- 3. When caring for Indigenous populations, consider the impact of dental health, and educate patients and families about dental care.
- 4. When caring for Indigenous populations, consider the effect of the geographical location (e.g., amount of daylight, isolation, food access) on mental and physical health.
- 5. For Indigenous patients with suicidality, identify safe places and involve available supports.
- 6. When considering transfer for Indigenous patients, recognize the potential trauma related to leaving their community and treat locally when possible.



Topic 16: Clinical courage

- 1. When dealing with a clinical situation that might surpass your level of comfort:
 - a) Do not minimize the situation (e.g., underestimate the necessary level of skill, ignore the complexity of the situation to avoid dealing with it) and do not overreact (e.g., over transferring, over consulting)
 - b) Assess comprehensively, considering the resources, presentation, indications, and contraindications of proposed interventions
 - c) Develop a management plan
- 2. When considering an intervention that surpasses your level of comfort, be prepared to take a risk by:
 - Drawing on your parallel education or knowledge
 - Anticipating difficulties and consulting when appropriate, seeking local and external support
 - Following a patient-centred approach and maintaining communication with the patient or advocate, in order to ensure that you are acting in their best interest
- 3. After an encounter that was beyond your level of comfort, reflect, debrief with colleagues, and identify learning opportunities.
- 4. When caring for a patient with an uncertain diagnosis in a rural or remote area where resources may be limited, recognize that repeated assessment over time will help provide reassurance that appropriate care is being provided.



Topic 17: Adapting to rural life

Developing a sensitivity to local culture and social norms provides a foundation for becoming familiar with your local community. Some individuals may adapt seamlessly, while others may have difficulty making the transition.

When working in a rural or remote environment:

- 1. Recognize your own needs and the needs of your family in order to develop a sustainable and satisfying lifestyle.
- 2. Remain aware of personal visibility in the community and the overlap between personal and professional life.
- 3. Ensure patients' privacy, keeping in mind that the community is connected in ways of which you may not be aware.
- 4. Be aware that creating and maintaining appropriate boundaries may be more challenging in rural environments.
- 5. Actively participate in community life.
- 6. Consider maintaining academic connections with a medical school as a preceptor.
- 7. Be prepared to share the administrative responsibilities of health care in your community (e.g., chief of staff, leadership roles, committee participation).
- 8. Recognize a strong emotional response and possible post-traumatic stress in yourself and staff after treating a co-worker, friend, or family member, or after a traumatic medical or community event, and address it appropriately.
- 9. Establish safe supportive relationships with other health care professionals (including those from other communities) where difficult medical and social issues may be discussed in an informal manner (e.g., Balint group, problem-based small group learning, Society of Rural Physicians of Canada).
- 10. Have your own family physician.



Topic 18: Cultural safety and sensitivity

- 1. When providing health care in a rural or remote community, familiarize yourself with local traditions, beliefs, and habits, and recognize cultural differences in order to anticipate and prevent potential conflicts.
- 2. When caring for patients in a rural or remote setting, remain aware of the already limited choices and resources available to the patients and that your values may further affect health care services provided in your community (e.g., opioid prescribing, birth control).
- 3. When caring for patients in a rural or remote community:
 - a) Identify their priorities, expectations, and preferences (e.g., patient transfer, birth, palliative care and dying)
 - b) Demonstrate respect for important local practices (e.g., sweat lodge, smudge ceremony, cupping)
 - c) Consider enlisting the assistance of people who are fluent in the patient's culture (e.g., minister, elder)
- 4. When working in a community with a predominant ethnic or religious group, avoid generalizing and assuming that all community members share the same beliefs and create a safe place for all individuals.