

# Fellowship Examination Blueprint: Endodontics

## Blueprint

Competency Domain	Percentage
1. Assessment, Diagnosis, and Prognosis	30 – 40%
2. Treatment Planning and Decision-Making	20 – 30%
3. Treatment Delivery and Management	30 – 40%
4. Communication	5 – 15%

## Competencies

### 1. Assessment, Diagnosis, and Prognosis

- 1.1 Review a patient's social history, medical history, dental history (e.g., trauma, orthodontic treatment, periodontal treatment, recent dental restoration), and pain history (including non-odontogenic sources).
- 1.2 Assess a patient's chief complaint with a history-taking interview.
- 1.3 Perform extra-oral and intra-oral exams and diagnostic tests.
- 1.4 Perform diagnostic tests and methods to distinguish between pain of odontogenic and non-odontogenic origin.
- 1.5 Prescribe and interpret the required imaging, including advanced modalities when indicated.
- 1.6 Diagnose pulpal and periapical status.
- 1.7 Forecast the outcome of endodontic treatment based on:
  - 1.7.1 Endodontic status (e.g., anatomy and morphology, history of previous endodontic treatment, pulpal and periapical diagnoses)
  - 1.7.2 Periodontal status
  - 1.7.3 Restorative status (e.g., previous restoration, restorability, pre-treatment isolation, restorative demand)
- 1.8 Understand the criteria for successful treatment (e.g., success vs. survival).
- 1.9 Assess prognosis and outcome based on the best available current evidence.
- 1.10 Assess treatment outcomes through clinical and radiographic measures.
- 1.11 Evaluate periodontal status.
- 1.12 Evaluate endodontic status.
- 1.13 Evaluate the quality of existing restoration.
- 1.14 Assess healing progress.

- 1.15 Identify possible etiological factors of non-healing endodontic treatment.
- 1.16 Recommend corrective treatment strategies or refer to an appropriate specialist.
- 1.17 Keep systematic and complete records.

## **2. Treatment Planning and Decision-Making**

- 2.1 Assess the need for medical consultation.
- 2.2 Establish endodontic treatment options based on the diagnosis.
- 2.3 Effectively communicate benefits, risks, alternatives, and prognosis of treatment options to the patient.
- 2.4 Discuss the need for additional procedures (e.g., endodontic, restorative, periodontal, orthodontic) and/or referral to other specialists.
- 2.5 Develop a treatment plan considering patient preference.
- 2.6 Establish a rationale for recommended endodontic treatment.
- 2.7 Document informed consent.
- 2.8 Provide recommendations for restoring endodontically treated teeth.

## **3. Treatment Delivery and Management**

- 3.1 Manage patient anxiety, stress, and pain.
  - 3.1.1 Chair-side manners and reassurance
  - 3.1.2 Effective local anesthetic strategies
  - 3.1.3 Pharmacology (e.g., analgesia, antibiotics, sedation, and anxiolytics)
- 3.2 Provide vital pulp therapy:
  - 3.2.1 Indirect pulp capping
  - 3.2.2 Direct pulp capping
  - 3.2.3 Partial pulpotomy
  - 3.2.4 Pulpotomy
- 3.3 Provide nonsurgical endodontic treatment:
  - 3.3.1 Pre-endodontic isolation
  - 3.3.2 Primary teeth
  - 3.3.3 Permanent teeth
  - 3.3.4 Apexogenesis, apexification, and regenerative endodontics
  - 3.3.5 Perforation and resorption repair
  - 3.3.6 Post and core removal, separated instrument, silver point, paste removal, carrier-based obturation removal
  - 3.3.7 Nonsurgical root canal retreatment
  - 3.3.8 Intracoronary bleaching
- 3.4 Provide surgical endodontic treatment:

- 3.4.1 Soft tissue management (flap designs and closure)
- 3.4.2 Incision and drainage, trephination
- 3.4.3 Exploratory surgery
- 3.4.4 Root-end resection (apicoectomy)
- 3.4.5 Root-end filling (retrofilling)
- 3.4.6 Perforation and resorption repair
- 3.4.7 Root amputation, hemisection
- 3.4.8 Periradicular curettage and biopsy
- 3.4.9 Guided tissue regeneration
- 3.4.10 Prevention and management of surgical complications
- 3.4.11 Intentional replantation, auto-transplantation
- 3.5 Manage traumatic dental injuries:
  - 3.5.1 Initial neurological and clinical assessment
  - 3.5.2 Soft tissue management
  - 3.5.3 Enamel fracture
  - 3.5.4 Crown fracture (uncomplicated and complicated)
  - 3.5.5 Crown-root fracture (uncomplicated and complicated)
  - 3.5.6 Horizontal root fracture
  - 3.5.7 Concussion and subluxation
  - 3.5.8 Luxation (lateral, intrusive, and extrusive)
  - 3.5.9 Avulsion (exarticulation)
  - 3.5.10 Alveolar fracture involving teeth
  - 3.5.11 Scheduling regular follow-up appointments according to guidelines
  - 3.5.12 Communication of the possible sequelae of dental trauma/outcomes
- 3.6 Manage endodontic complications:
  - 3.6.1 Procedural incidents (e.g., instrument separation, perforation, sodium hypochlorite accident, canal deviation, restorative failure)
  - 3.6.2 Flare-ups
  - 3.6.3 Post-treatment persistent pain
  - 3.6.4 Local anesthetic complications
- 3.7 Manage medically compromised patients.
- 3.8 Manage dental emergencies.
- 3.9 Adhere to strict infection control and clinical safety protocols during endodontic procedures, including isolation and disinfection techniques.



**RCDC**

THE ROYAL COLLEGE OF DENTISTS  
OF CANADA

#### **4. Communication**

- 4.1 Communicate effectively with patients, their families, and other healthcare professionals.
- 4.2 Adapt communication based on the patient's age and stage of development.
- 4.3 Obtain informed consent from patients and/or their parents or guardians.
- 4.4 Collaborate with members of the interdisciplinary healthcare team.
- 4.5 Demonstrate collegiality when discussing differing opinions with other healthcare professionals.
- 4.6 Ensure the continuity and coordination of patient care through the appropriate transfer of information.
- 4.7 Consistently apply accurate, discipline-specific terminology when communicating clinical reasoning and decisions.
- 4.8 Communicate in a structured, clear, concise, and logical manner.
- 4.9 Clearly and transparently articulate clinical reasoning and decision-making processes.