

2021
VERSION 1.0

These training requirements apply to those who begin training on or after July 1, 2021.

ELIGIBILITY REQUIREMENTS TO BEGIN TRAINING

Royal College certification in Pediatrics.

OR

Eligibility for the Royal College certification examination in Pediatrics.

OR

Registration in a Royal College-accredited residency program in Pediatrics. (See requirements for these qualifications.)

A maximum of one year of training may be undertaken during concurrent training for certification in Pediatrics.

ELIGIBILITY REQUIREMENTS FOR EXAMINATION¹

All candidates must be Royal College certified in Pediatrics in order to be eligible to write the Royal College examination in Pediatric Hematology/Oncology.

The following training experiences are required, recommended, or optional, as indicated.

TRANSITION TO DISCIPLINE (TTD)

The purpose of this stage is to verify achievement of the competencies of primary specialty training, particularly pertaining to confirmation of clinical assessment and communication skills. This stage also provides residents with an orientation to the Pediatric Hematology/Oncology program, the setting in which they will train and work, and the role of clinical trials in patient care.

Required training experiences (TTD stage):

1. Clinical training experiences
 - 1.1. Any pediatric hematology/oncology experience, including

¹ *These eligibility requirements do not apply to Subspecialty Examination Affiliate Program (SEAP) candidates. Please contact the Royal College for information about SEAP.*

- 1.1.1. Inpatient care
- 1.1.2. Clinics
- 1.1.3. Consultation service

- 1.2. After-hours coverage for a pediatric hematology/oncology service

2. Other training experiences
 - 2.1. Orientation to the program, the university, and the institution
 - 2.2. Orientation to the interprofessional team
 - 2.3. Formal instruction in
 - 2.3.1. Hematologic and oncologic emergencies and their management
 - 2.3.2. Common diagnoses in Pediatric Hematology/Oncology
 - 2.3.3. Safe handling and prescribing practices for systemic and intrathecal therapies
 - 2.3.4. Communication skills, including breaking bad news
 - 2.3.5. Introduction to research consortia, cooperative trial groups, and clinical trials, including Children's Oncology Group (COG)
 - 2.3.6. Introduction to the mandate and functioning of the research ethics board

 - 2.4. Completion of Good Clinical Practice² (GCP) training

Recommended training experiences (TTD stage):

3. Clinical training experiences
 - 3.1. Procedures, including bone marrow aspiration and biopsy, and lumbar puncture with intrathecal chemotherapy administration

Optional training experiences (TTD stage):

4. Clinical training experiences
 - 4.1. Longitudinal/continuity clinic, including hematology and oncology patients

FOUNDATIONS OF DISCIPLINE (F)

The focus of this stage is the evaluation and management of patients with common and uncomplicated hematology and oncology conditions, including determining the diagnosis and proposing a treatment plan. By the end of this stage, residents will be independent in the performance of the procedures of the discipline. This stage also includes fundamental competencies in laboratory medicine relevant to Pediatric Hematology/Oncology, with a focus on hematopathology laboratory services.

Required training experiences (Foundations stage):

1. Clinical training experiences
 - 1.1. Pediatric Hematology/Oncology

² As described by the International Conference on Harmonisation (ICH).

- 1.1.1. Inpatient care
 - 1.1.2. Clinics
 - 1.1.3. Longitudinal/continuity clinic, including hematology and oncology patients
 - 1.1.4. Consultation services
 - 1.1.5. Procedures, including bone marrow aspiration and biopsy, and lumbar puncture with intrathecal chemotherapy administration
 - 1.1.6. Multidisciplinary team meetings, such as tumour board and case conferences
 - 1.1.7. Interprofessional team meetings
 - 1.1.8. After-hours coverage, including calls from outside physicians, patients, and families
- 1.2. Hematopathology laboratory services, with a focus on peripheral blood smear and bone marrow morphology, and transfusion medicine
2. Other training experiences
- 2.1. Formal instruction in pediatric hematology/oncology topics
 - 2.2. Instruction regarding Common Terminology Criteria for Adverse Events (CTCAE)³
 - 2.3. Orientation to COG
 - 2.3.1. Protocols
 - 2.3.2. Resources, including supportive care, long-term follow-up guidelines, and study progress reports
 - 2.4. Quality assurance and improvement activities, including morbidity and mortality rounds

Recommended training experiences (Foundations stage):

3. Other training experiences
 - 3.1. Courses in communication skills (e.g., conflict resolution, debriefing)
 - 3.2. Journal club, or other critical appraisal activity
 - 3.3. Review of COG or other treatment protocols
 - 3.4. Initiation of scholarly project

Optional training experiences (Foundations stage):

4. Clinical training experiences
 - 4.1. Observation of a patient through consultation and through treatment in radiation oncology
 - 4.2. Observation of oncologic surgery, including discussions between the family and the surgical team
 - 4.3. Observation of interventional radiology procedures relevant to Pediatric Hematology/Oncology
 - 4.4. Observation of pheresis treatments

³ *Developed in the United States by the National Cancer Institute (NCI).*

5. Other training experiences
 - 5.1. Attendance at a national or international scientific meeting relevant to the discipline
 - 5.2. Participation in hospital and/or university committees
 - 5.3. Participation in the residency training committee

CORE OF DISCIPLINE (C)

In this stage residents build on their foundational experiences to independently manage patients across the breadth of pediatric hematology/oncology presentations. This includes all phases of a patient's care—from initial consultation and development of a management plan, through ongoing follow-up and monitoring, and including transition to a surveillance plan, the adult care setting, further specialized care, or end-of-life care. This stage also includes further experience in laboratory medicine, expanding beyond the hematopathology laboratory to include other diagnostic laboratory services relevant to Pediatric Hematology/Oncology.

This stage provides the resident with the opportunity to identify and prepare for individualized career goals linked to the location or focus of future practice; this may include enhancing clinical skills in a specific area of interest, developing a new clinical focus, or developing an academic focus.

Required training experiences (Core stage):

1. Clinical training experiences
 - 1.1. Pediatric Hematology/Oncology in the breadth of the discipline⁴, including hematologic disorders, hematologic malignancies, and solid tumours
 - 1.1.1. Inpatient care
 - 1.1.2. Clinics
 - 1.1.3. Specialized clinics for long-term follow-up of children following cancer treatment (i.e., survivorship clinics)
 - 1.1.4. Longitudinal/continuity clinic, including hematology and oncology patients
 - 1.1.5. Consultation service
 - 1.1.6. Focused experience in the acute and long-term care of patients undergoing hematopoietic stem cell transplantation (HSCT) and cellular therapy
 - 1.1.7. Procedures, including bone marrow aspiration and biopsy, and lumbar puncture with intrathecal chemotherapy administration
 - 1.1.8. Multidisciplinary team meetings, such as tumour board and case conferences
 - 1.1.9. Interprofessional team meetings
 - 1.1.10. After-hours coverage, including calls from outside physicians, patients, and families
 - 1.2. Palliative care and pain and symptom management service
 - 1.3. Diagnostic laboratory services relevant to Pediatric Hematology/Oncology, including hematopathology, pathology, cytogenetics, flow cytometry, and transfusion medicine

⁴ The "breadth of the discipline" includes acute and ongoing care, pain and symptom management, and end-of-life care.

2. Other training experiences
 - 2.1. Formal instruction in pediatric hematology/oncology topics
 - 2.2. Participation in a scholarly project
 - 2.3. Teaching and supervision of junior learners
 - 2.4. Journal club, or other critical appraisal activity
 - 2.5. Committee membership relevant to trainee interest and experience
 - 2.6. Quality assurance and improvement activities, including morbidity and mortality rounds
 - 2.7. Formal or informal instruction in
 - 2.7.1. Curriculum vitae preparation
 - 2.7.2. Job application preparedness

Recommended training experiences (Core stage):

3. Clinical training experiences
 - 3.1. Radiation oncology treatment planning and delivery, and outpatient follow-up care
 - 3.2. Hematology clinics in the adult care setting, with focus on disorders prevalent in the pediatric population
 - 3.3. Clinics for adolescent and young adult patients transitioning from the pediatric to the adult care setting
4. Other training experiences
 - 4.1. Attendance at a national or international scientific meeting relevant to the discipline
 - 4.2. Presentation at a local, national, or international meeting relevant to the discipline
 - 4.3. Completion of a scholarly project

Optional training experiences (Core stage):

5. Clinical training experiences
 - 5.1. Pediatric Hematology/Oncology at another Canadian or international institution(s)
6. Other training experiences
 - 6.1. Attendance at adult hematology and/or medical oncology rounds
 - 6.2. Formal postgraduate training, such as a master's degree, the Clinician Investigator Program, or special certificates
 - 6.3. Participation in the residency training committee, or other divisional, hospital, or university committees

TRANSITION TO PRACTICE (TTP)

The focus of this stage is the integration and consolidation of skills required to manage the caseload of a practising pediatric hematologist/oncologist; this includes prioritization and time management, and the integration of all aspects of clinical care. It includes clinical administrative work, such as facilitating access to treatments and services. The resident will prepare for independent practice and the demands of practice management and continuing professional development.

Required training experiences (TTP stage):

1. Clinical training experiences
 - 1.1. Pediatric Hematology/Oncology in the role of junior attending⁵, with responsibility for a hematology and/or oncology service, including both inpatient and outpatient responsibilities, and calls from outside physicians, patients, and families
2. Other training experiences
 - 2.1. Instruction regarding
 - 2.1.1. Health Canada's Special Access Program
 - 2.1.2. Continuing professional development and/or maintenance of certification requirements and opportunities
 - 2.2. Quality assurance and improvement activities, including morbidity and mortality rounds
 - 2.3. Completion of a scholarly project

Recommended training experiences (TTP stage):

3. Other training experiences
 - 3.1. Attendance at regional, national, or international scientific meetings

Optional training experiences (TTP stage):

4. Other training experiences
 - 4.1. Participation in the residency training committee, or other divisional, hospital, or university committees

CERTIFICATION REQUIREMENTS

Royal College certification in Pediatric Hematology/Oncology requires all of the following:

1. Royal College certification in Pediatrics;
2. Successful completion of the Royal College examination in Pediatric Hematology/Oncology; and
3. Successful completion of the Royal College Pediatric Hematology/Oncology Portfolio.

NOTES:

The Pediatric Hematology/Oncology Portfolio refers to the list of entrustable professional activities across all four stages of the residency Competence Continuum, and associated national standards for assessment and achievement.

⁵ "Junior attending" means that the resident assumes responsibility for patient care, and leadership in the education and clinical supervision of junior colleagues, with as much independence as permitted by ability, law, and hospital policy.

MODEL DURATION OF TRAINING

Progress in training occurs through demonstration of competence and advancement through the stages of the Competence Continuum. Pediatric Hematology/Oncology is planned as a 3-year residency program. There is no mandated period of training in each stage. Individual duration of training may be influenced by many factors, which may include the resident's singular progression through the stages, the availability of teaching and learning resources, and/or differences in program implementation. Duration of training in each stage is therefore at the discretion of the faculty of medicine, the competence committee, and the program director.

Guidance for programs

The Royal College Specialty Committee in Pediatric Hematology/Oncology's suggested course of training, for the purposes of planning learning experiences and schedules, is as follows:

2 months in Transition to Discipline

8-10 months in Foundations of Discipline

21-24 months in Core of Discipline, including at least 3 months, or longitudinal equivalent, in a focused experience providing care for patients undergoing HSCT and cellular therapy

2-3 months in Transition to Practice

It is recommended that the course of training includes a total of at least 3 months' experience, or longitudinal equivalent, in laboratory services in the Foundations and Core stages (see Foundations 1.3 and Core 1.6).

Guidance for postgraduate medical education offices

The stages of the Competence Continuum in Pediatric Hematology/Oncology are generally no longer than

2 months for Transition to Discipline

10 months for Foundations of Discipline

24 months for Core of Discipline

3 months for Transition to Practice

Total duration of training – 3 years

This document is to be reviewed by the Specialty Committee in Pediatric Hematology/Oncology by December 31, 2022.

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