

**2018**

**EDITORIAL REVISION – NOVEMBER 2019  
VERSION 1.0**

*These training requirements apply to those who begin training on or after July 1, 2018.*

*NOTE: This document applies to residents in both adult and pediatric Nephrology. Throughout this document, unless otherwise indicated, all clinical experiences are intended to refer to an experience with the patient population relevant to the resident's training stream: Adult or Pediatric.*

## **ELIGIBILITY REQUIREMENTS**

Royal College certification in Internal Medicine or Pediatrics, or enrolment in a Royal College-accredited residency program in these areas (see requirements for these qualifications). All candidates must be Royal College certified in their primary specialty in order to be eligible to write the Royal College certification examination in Nephrology.

A maximum of one year of training may be undertaken at the 4<sup>th</sup> year residency level during training for certification in Internal Medicine or Pediatrics.

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

## **TRANSITION TO DISCIPLINE (TTD)**

*The focus of this stage is to introduce residents to the subspecialty of Nephrology, providing a comprehensive orientation to the educational program and to the setting in which they will train and work. This stage also serves to assess and verify the competencies acquired in the base specialty and their application to the unique patient population served by Nephrology.*

### **Required training experiences (TTD stage):**

1. Clinical training experiences:
  - 1.1. Any nephrology clinical service
  - 1.2. Afterhours coverage for a nephrology service
  
2. Other training experiences:
  - 2.1. Formal instruction in:
    - 2.1.1. Basic orders for hemodialysis and peritoneal dialysis

2.1.2. Common complications of hemodialysis and peritoneal dialysis

2.1.3. Common clinical emergencies in Nephrology

2.2. Orientation to:

2.2.1. The training program, its functioning and relevant policies and procedures

2.2.2. The Nephrology Portfolio and local electronic platform

2.2.3. The local institution(s) and clinical environment(s)

2.2.4. Patient care protocols and care pathways

**Optional training experiences (TTD stage):**

3. Other training experiences:

3.1. Formal instruction in time management skills

3.2. Orientation to the interprofessional team

**FOUNDATIONS OF DISCIPLINE (F)**

*The focus of this stage is experience with patients across the breadth of nephrology practice including all renal replacement modalities and different settings. Residents develop an approach to the initial assessment and investigation of all patient presentations and competence in managing common problems in patients with renal disease.*

**Required training experiences (Foundations stage):**

1. Clinical training experiences:

1.1. Breadth of nephrology practice in different settings to include:

1.1.1. Hospital: inpatient and/or consult service

1.1.2. Ambulatory clinics

1.1.3. Dialysis units/clinics in any setting

1.2. Longitudinal clinic

1.3. Afterhours coverage for a nephrology service

2. Other training experiences:

2.1. Formal instruction in:

2.1.1. Renal physiology and pathophysiology

2.1.2. Renal pathology

**Optional training experiences (Foundations stage):**

3. Clinical training experiences:
  - 3.1. Observation of relevant medical imaging procedures (e.g., renal ultrasound, line insertion, renal biopsy, dimercaptosuccinic acid (DMSA) studies)
4. Other training experiences:
  - 4.1. Formal instruction in:
    - 4.1.1. Research skills
    - 4.1.2. Research ethics
    - 4.1.3. Communication skills
    - 4.1.4. Teaching skills
  - 4.2. Simulation experience with:
    - 4.2.1. Ultrasound guided central line insertion (Adult stream only)
    - 4.2.2. Rare presentations and clinical emergencies in Nephrology
  - 4.3. Participation in critical appraisal activities, such as journal club
  - 4.4. Initiation of a scholarly project
  - 4.5. Establishment of a mentoring relationship
  - 4.6. Career planning

**CORE OF DISCIPLINE (C)**

*In this stage, residents build on their achieved competencies to provide comprehensive management of any patient with renal disease and/or its complications, including all renal replacement modalities, in a range of care settings and including the coordination of continuity of care in the transition from one setting and/or one modality to another. In addition to the focus on care for individual patients, this stage includes taking on more responsibility for the management of renal replacement therapy programs, quality improvement, scholarship and teaching and supervising junior colleagues.*

**Required training experiences (Core stage):**

1. Clinical training experiences:
  - 1.1. Breadth of nephrology practice in different settings to include:
    - 1.1.1. Hospital: inpatient and/or consult service; renal replacement therapy for acute indications
    - 1.1.2. Ambulatory clinics
    - 1.1.3. Dialysis units/clinics to include outpatient, in-centre, as well as home therapies

- 1.2. Longitudinal clinic
  - 1.3. Interpretation of renal histology
  - 1.4. Afterhours coverage for a nephrology service, including calls from outside physicians/patients
2. Other training experiences:
- 2.1. Formal instruction in:
    - 2.1.1. Operation of the dialysis procedure
      - 2.1.1.1. Water quality
      - 2.1.1.2. Machine mechanics: hemodialysis, slow low efficiency dialysis (SLED), continuous renal replacement therapy (CRRT), cyclor
      - 2.1.1.3. Home hemodialysis set-up and operations
    - 2.1.2. Communication of difficult topics: end of life, disclosure of adverse events
    - 2.1.3. Written clinical communication
    - 2.1.4. Culturally safe practice
    - 2.1.5. The effects of colonialization on the health care disparities of Indigenous Peoples of Canada
    - 2.1.6. Social determinants of health
      - 2.1.6.1. Marginalized<sup>1</sup> populations
    - 2.1.7. Advocacy for special populations, including those who are marginalized and/or vulnerable
  - 2.2. Participation in interprofessional team rounds
  - 2.3. Participation in quality improvement activities relevant to nephrology
  - 2.4. Teaching other learners

**Optional training experiences (Core stage):**

3. Clinical training experiences:
  - 3.1. Vascular access clinic
  - 3.2. Critical care service
  - 3.3. Renal stone clinic

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<sup>1</sup> "Marginalized populations" are populations with decreased access to the social determinants of health that are essential to good mental health and recovery from mental illness. Examples include those excluded on the basis of: race; ethnic or cultural origin; age; gender; sexuality; economic or housing status; and mental or physical illness and /or disability.

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- 3.4. Nephrology in the community setting
  - 3.5. Telehealth clinics
  - 3.6. Hemodialysis in a satellite setting
  - 3.7. Tissue typing laboratory
  - 3.8. Observation of kidney retrieval and/or transplantation
  - 3.9. Observation of vascular access operations
  - 3.10. Pediatric nephrology (for Adult stream)
  - 3.11. Adult nephrology (for Pediatric stream)
  - 3.12. Urology (for Pediatric stream)
  - 3.13. Apheresis
  - 3.14. Palliative care
  - 3.15. Interventional radiology for renal biopsy, tunneled catheter insertion, and/or PD catheter insertion
4. Other training experiences:
- 4.1. Formal instruction in culturally sensitive communication
  - 4.2. Simulation experiences in CRRT

## **TRANSITION TO PRACTICE (TTP)**

*The focus of this stage is the consolidation of skills required to manage the caseload of a practising Nephrologist; this includes priority and time management and the integration of all aspects of clinical care as well as clinical leadership, supervision and administrative tasks. The resident will also 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. Any nephrology clinical service
2. Other training experiences:
  - 2.1. Leading interprofessional team meetings (i.e., ward, transplant, dialysis)
  - 2.2. Participation in hemodialysis management committee
  - 2.3. Formal instruction in practice management

**Optional training experiences (TTP stage):**

3. Clinical training experiences:
  - 3.1. Outpatient consult triage
  
4. Other training experiences:
  - 4.1. Formal instruction in medico-legal issues
  - 4.2. Leadership training

**CERTIFICATION REQUIREMENTS**

Royal College certification in Nephrology requires all of the following:

1. Royal College certification in Internal Medicine or Pediatrics;
2. Successful completion of the Royal College examination in Nephrology; and
3. Completion of all elements of the Nephrology Portfolio.

**NOTES**

The Nephrology 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.

**MODEL DURATION OF TRAINING**

Progress in training occurs through demonstration of competence and advancement through the stages of the Competence Continuum. Nephrology is planned as a two-year residency training program. There is no mandated period of training in each stage. Individual duration of training may be influenced by many factors which may include but are not limited to 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, Competence Committee, and program director.

## NEPHROLOGY TRAINING EXPERIENCES (2018)

### Guidance for programs:

The Royal College Specialty Committee in Nephrology suggested course of training, for the purposes of planning learning experiences and schedules, is as follows:

- 4 weeks in Transition to Discipline
- 3-6 months in Foundations
- 12-18 months in Core
- 3 months in Transition to Practice

*This document is to be reviewed by the Specialty Committee in Nephrology by October 2020.*

**APPROVED** – Specialty Standards Review Committee – October 2017

**EDITORIAL REVISION** – Office of Specialty Education – November 2018

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