

Nephrology Consults

GOALS AND OBJECTIVES

Rotation Goals

The Nephrology rotation provides residents with experience in the evaluation and management of patients with a broad spectrum of kidney-related conditions, including acute kidney injury, chronic kidney disease, glomerular disorders, transplant complications, and metabolic and electrolyte abnormalities. Residents will primarily gain exposure to inpatient nephrology with some opportunities for outpatient management, with a focus on the consultative role of the specialty in supporting general internal medicine care. The rotation also emphasizes the principles of dialysis, transplant medicine, and the management of volume and acid-base disorders. By the end of the rotation, residents will be able to competently assess and manage common nephrology presentations, recognize unstable or life-threatening conditions requiring urgent intervention, and identify when subspecialty input or advanced therapies are required.

Entrustable Professional Activities

TRANSITION TO DISCIPLINE

- D1 Performing histories and physical exams, documenting and presenting findings, across clinical settings for initial and subsequent care
- D2 Identifying and assessing unstable patients, providing initial management, and obtaining help

FOUNDATIONS OF DISCIPLINE

- F1 Assessing, diagnosing, and initiating management for patients with common acute medical presentations in acute care settings
- F2 Managing patients admitted to acute care settings with common medical problems and advancing their care plans
- F4 Formulating, communicating, and implementing discharge plans for patients with common medical conditions from acute care settings
- F7 Identifying personal learning needs while caring for patients and addressing those needs

CORE OF DISCIPLINE

- C1 Assessing, diagnosing and managing patients with complex or atypical acute medical presentations
- C2 Assessing, diagnosing, and managing patients with complex chronic diseases
- C3 Providing medical consultation to other clinical services
- C4 Assessing, resuscitating, and managing unstable and critically ill patients
- C6 Assessing capacity for medical decision-making
- C7 Discussing serious and/or complex aspects of care with patients, families, and caregivers
- C8 Caring for patients who have experienced a patient safety incident (adverse event)

- C9 Caring for patients at the end of life
- C10 Implementing health promotion strategies in patients with or at risk for disease
- C11 Teaching and assessing junior learners through supervised delivery of clinical care

TRANSITION TO PRACTICE

- P1 Managing an inpatient medical service
- P3 Assessing and managing patients in whom there is uncertainty in diagnosis and/or treatment
- P6 Working with other physicians and healthcare professionals to develop collaborative patient care plans
- P7 Identifying learning needs in clinical practice, and addressing them with a personal learning plan
- P8 Identifying and analyzing system-level safety, quality or resource stewardship concerns in healthcare delivery

Clinical Presentations and Diagnoses

In alignment with the *Royal College Internal Medicine Competencies*, residents are expected to encounter and manage the following Medical Expert topics on this rotation:

Residents will be expected to cover the following patient presentations during this rotation with the goal of competently assessing and managing the following:

- Toxidrome/overdose
- Acute kidney injury (including nephritic & nephrotic causes)
- Electrolyte abnormality
- Hypotension / hypertension
- Renal transplant complication
- Proteinuria
- Hematuria
- Volume overload
- ESRD
- Dialysis access complication

Residents will be expected to cover the following diagnoses during this rotation with the goal of competently assessing and managing the following:

- Acute kidney injury
- Glomerular diseases
- Interstitial nephritis
- Hypertension (renovascular)
- CKD and ESRD
- Renal transplant

- Electrolyte abnormalities
- Metabolic acidosis
- Toxidromes
- Renal Tubular Acidosis

Objectives (by Stage of Training)

The specific objectives for this rotation align with the CanMEDS Competencies and Milestones as outlined in the *Royal College 2023 Entrustable Professional Activities for Internal Medicine document (Version 3.0, 2023)* and the *Royal College Internal Medicine Competencies (Version 1.0, 2018)*. Objectives are structured to ensure progressive acquisition of competence across stages.

Transition to Discipline

Medical Expert

1. Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion (ME2.2)
2. Prioritize issues to be addressed in a patient encounter (ME2.1)
3. Implement a patient-centered care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation (ME4.1)

Communicator

1. Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion (CM1.1)
2. Share information and explanations that are clear, accurate, and timely, while checking for patient and family understanding (CM3.1)
3. Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements (CM5.1)

Collaborator

1. Demonstrate safe handover of care, using both verbal and written communication, during a patient transition to a different health care professional, setting, or stage of care (CL3.2)

Foundations of Discipline

Medical Expert

1. Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner (ME1.4)
2. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice (ME1.6)
3. Prioritize issues to be addressed in a patient encounter (ME2.1)

4. Establish goals of care in collaboration with patients and their families, which may include slowing disease progression, treating symptoms, achieving cure, improving function, and palliation (ME2.3)
5. Implement a patient-centered care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation (ME4.1)
6. Adopt strategies that promote patient safety and address human and system factors (ME5.2)

Communicator

1. Elicit and synthesize accurate and relevant information, incorporating the perspectives of patients and their families (CM2)
2. Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety (CM1.2)
3. Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances (CM1.6)
4. Share information and explanations that are clear, accurate, and timely, while checking for patient and family understanding (CM3.1)
5. Use communication skills and strategies that help patients and their families make informed decisions regarding their health (CM4.3)
6. Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements (CM5.1)

Collaborator

1. Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centred collaborative care (CL1.1)
2. Demonstrate safe handover of care, using both verbal and written communication, during a patient transition to a different health care professional, setting, or stage of care (CL3.2)

Health Advocate

1. Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients (HA 1.3)

Scholar

1. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice (SC1.1)
2. Identify, select, and navigate pre-appraised resources (SC3.2)

Professional

1. Exhibit appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality (PR1.1)
2. Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice (PR3.1)

Core of Discipline

Medical Expert

1. Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner (ME1.4)
2. Carry out professional duties in the face of multiple, competing demands (ME1.5)
3. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice (ME1.6)
4. Prioritize issues to be addressed in a patient encounter (ME2.1)
5. Establish goals of care in collaboration with patients and their families, which may include slowing disease progression, treating symptoms, achieving cure, improving function, and palliation (ME2.3)

Communicator

1. Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information (CM2.1)
2. Provide a clear structure for and manage the flow of an entire patient encounter (CM2.2)
3. Recognize when the values, biases, or perspectives of patients, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly (CM1.3)
4. Manage disagreements and emotionally charged conversations (CM1.5)
5. Share information and explanations that are clear, accurate, and timely, while checking for patient and family understanding (CM3.1)
6. Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements (CM5.1)

Collaborator

1. Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care (CL1.2)
2. Work with physicians and other colleagues in the health care professions to promote understanding, manage differences, and resolve conflicts (CL2)

Leader

1. Engage in the stewardship of health care resources (LD2)
2. Set priorities and manage time to integrate practice and personal life (LD4.1)

Health Advocate

1. Work with patients to address determinants of health that affect them and their access to needed health services or resources (HA1.1)
2. Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients (HA1.3)

Scholar

1. Recognize the influence of role-modelling and the impact of the formal, informal, and hidden curriculum on learners (SC2.1)
2. Promote a safe learning environment (SC2.2)

3. Plan and deliver a learning activity (SC2.4)
4. Provide feedback to enhance learning and performance (SC2.5)
5. Integrate evidence into decision-making in their practice (SC3.4)

Professional

1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality (PR1.1)
2. Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice (PR3.1)

Transition to Practice

Medical Expert

1. Perform a patient-centered clinical assessment and establish a management plan (ME2)
2. Prioritize issues to be addressed in a patient encounter (ME2.1)
3. Plan and perform procedures and therapies for the purpose of assessment and/or management (ME3)
4. Implement a patient-centered care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation (ME4.1)
5. Recognize and respond to harm from health care delivery, including patient safety incidents (ME5.1)

Communicator

1. Share information and explanations that are clear, accurate, and timely, while checking for patient and family understanding (CM3.1)
2. Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe (CM4.1)

Collaborator

1. Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centered collaborative care (CL1.1)
2. Engage in respectful shared decision-making with physicians and other colleagues in the health care professions (CL1.3)
3. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports a collaborative culture (CL2.2)

Leader

1. Analyze patient safety incidents to enhance systems of care (LD1.3)

Health Advocate

1. Work with patients to address determinants of health that affect them and their access to needed health services or resources (HA1.1)

Professional

1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality (PR1.1)
2. Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice (PR3.1)
3. Demonstrate a commitment to physician health and well-being to foster optimal patient care (PR4)
4. Promote a culture that recognizes, supports, and responds effectively to colleagues in need (PR4.3)