March 2019

Goals and Objectives for the Endocrinology Rotation

The Endocrinology rotation primarily takes place in the Health Sciences Centre, but in-patient consults may be seen at St. Clare's Hospital or the Miller Centre as well. The rotation will combine exposure to in-patient and out-patient Endocrinology, with a focus on the latter. Residents are expected to attend a minimum of 3 out-patient clinics per week and are provided with a schedule at the beginning of the rotation. Residents are also responsible for seeing Endocrinology service inpatients (usually thyroid cancer patient for I-131 ablation, Cushing's or hypoglycemia patients admitted for dynamic endocrine testing). They will also be responsible for seeing, managing, and following-up on in-patient consultations, all under the supervision of the attending Endocrinologist.

Residents are also expected to present a case-based noon rounds during the rotation, typically on the 2^{nd} Monday of every month.

It is expected that trainees will demonstrate ongoing development in each of the CanMEDS roles such that the depth, sophistication, efficiency and proficiency of their performance increases with experience. Review of rotation objectives will be done in conjunction with creation of a learning contract at the beginning of the rotation. Trainees completing the program should expect to achieve the key competencies described. This will be documented using an end of rotation in-training evaluation report (ITER). Residents will also be evaluated on their patient presentations by the attending Endocrinologist. In accordance with CBD principles, all residents are required to submit EPA assessments with documented narrative coaching via the MUNCAT app per week to evaluate and guide their progress. This will also be documented using an end of rotation in-training evaluation report (ITER) or longitudinal rotational assessment, depending on the applicable resident curriculum.

In addition to the rotational objectives and key competencies described below, the following EPAs may be covered during the Endocrinology rotation. These will depend on the learner's stage of training, progress and individual learning needs. The learning contract and rotational goals created at the beginning of the rotation can help specify which EPAs the learner may want to focus on throughout their rotation.

Transition to Discipline:

TD1. Performing histories and physical exams, documenting and presenting findings, across clinical settings for initial and subsequent care

Foundations:

F1: Assessing, diagnosing, and providing initial management for patients with common acute medical presentations in acute care settings

F7: Identifying personal learning needs while caring for patients, and addressing those needs

Core:

C1: Assessing, diagnosing, and managing patients with complex or atypical acute medical presentations

C2: Assessing and managing patients with complex chronic conditions

C3: Providing internal medicine consultation to other clinical services

C7: Discussing serious and/or complex aspects of care with patients, families, and caregivers

C10: Implementing health promotion strategies in patients with or at risk for disease

MEDICAL EXPERT

- 1. Gain and demonstrate expertise in the ambulatory management of patients with:
 - (1) Diabetes Mellitus, type I and II
 - (2) Diabetes in pregnancy
 - (3) Thyroid disease including thyroid disease in pregnancy.
 - (4) Disorders of lipid metabolism
 - (5) Osteoporosis
- 2. Develop skills in the diagnosis and treatment of other endocrine disorders including:
 - (1) Disorders of the pituitary and adrenal glands
 - (2) Calcium abnormalities
 - (3) Disorders of testicular function including, infertility and hypogonadism.
 - (4) Androgen excess syndromes in females.
- 3. Learn the proper interpretation of laboratory and radiological investigations relevant to endocrinology.
- 4. Demonstrate expertise in history taking and physical examination in patients with endocrine disorders.

COMMUNICATOR

- 1. Document and present competently the clinical findings, problem synthesis, and management plans for clinic patients with endocrine disorders.
- 2. Demonstrate the ability to:
 - a) Share information with patients and families and elicit patients' preferences with regard to treatment decisions.
 - b) Communicate management plans through effective consultation letters to primary care physicians and other members of the healthcare team.

COLLABORATOR

- 1. Understand the importance of the multi-disciplinary approach required in the management of endocrine disorders, and contribute effectively to inter-disciplinary team activities.
- 2. Work effectively with nurses, patient educators, laboratory physicians, and surgeons to optimize patient outcomes.

LEADER

- 1. Effectively coordinate the ambulatory care of patients with diabetes, thyroid disease, hyperlipidemia, and osteoporosis.
- 2. Investigate and manage patients with endocrine disorders in a cost effective manner while focusing on optimal patient care and outcomes.

HEALTH ADVOCATE

- 1. Identify the medicosocial aspects of health care delivery for chronic endocrine disorders such as diabetes, osteoporosis, and hyperlipidemia.
- 2. Recognize and respond to opportunities to prevent and treat selective endocrine disorders such as diabetes, lipid disorders and osteoporosis, through patient education and counseling.
- 3. The endocrine rotation provides an opportunity to develop the role of a health advocate for patients given the exposure to diet and lifestyle related diseases such as diabetes. Residents will be assessed on how well they perform this role as part of the evaluation at the end of the rotation.

SCHOLAR

- 1. Use patient encounters as a stimulus to further reading and review of the current literature.
- 2. Develop and apply skills in critical appraisal and the practice of evidence-based medicine.
- 3. Understand the importance of patient education in the management of many common medical conditions, and facilitate such learning wherever possible.

PROFESSIONAL

- 1. Behave in a respectful manner toward patients, families, and other health professionals.
- 2. Consider ethical issues and patients' wishes in making treatment decisions.
- 3. Ensure adequate transition of care of patients including assuring proper handover of patients
- 4. Recognize the limits of one's expertise by knowing when to call for help
- 5. Demonstrate a commitment to improving one's performance by seeking and responding to feedback
- 6. Answer pages promptly and display punctuality

These objectives will be evaluated by the following methods:

It is expected that trainees will demonstrate ongoing development in each of the CanMEDS roles such that the depth, sophistication, efficiency and proficiency of their performance increases with experience. Review of rotation objectives will be done in conjunction with creation of a learning contract at the beginning of the rotation. Trainees completing the program should expect to achieve the key competencies described. As a lead in to competency based education, weekly clinical encounter cards and coaching are used as a formative assessment.

- 1. Trainee's knowledge based clinical skills and attitudes will be continually observed during ward rounds, clinics and the more formal teaching rounds.
- 2. Oral and written case reports under the care of the trainee will be evaluated. The accuracy of history taking and physical findings will be assessed in two ways:
 - a) By confirming the findings reported in the oral or written case report.

- b) By direct observation of the trainee during performance of a witnessed complete or partial history and physical examination.
- 3. Clinical judgment of the trainee will be assessed by encouraging the trainee to commit themselves as to the diagnosis in management of a specific problem prior to them receiving input from the attending staff.
- 4. Monitoring of attendance at academic half-day, medical grand rounds, noon-time rounds and morning report.
- 5. Professional attributes, such as communication skills, teaching skills, and interpersonal relations, will be assessed on an ongoing basis by observing the trainee interacting with other members of the healthcare team. The attending staff may seek opinions from other members of the healthcare team concerning these aspects of the evaluation.
- 6. The in-training evaluation report (ITER).
- 7. Direct observation of performance of procedures and completion of procedural log.
- 8. Evaluation by the attending staff of the trainee for the work-up and management of patients seen during occasional cross coverage of other subspecialties while on-call.

Suggested Reading during the Rotation:

1. Harrison's Principles of Internal Medicine: Endocrinology and Metabolism Section.

2. Recent NEJM Review and Clinical Practice articles on Endocrine topics e.g. Prolactinomas, N Engl J Med 2010; 362:1219-1226; April 1, 2010.