**Internal Medicine Residency Training Program**

**Western University Canada**

**Rotation Specific Goals and Objectives**

**Endocrinology and Metabolism**

**Revised: April 2012**

The following are the rotation specific goals and objectives for core Internal Medicine trainees during their time on the Endocrinology and Metabolism rotation. These have been formulated to guide provision of an educational experience which will encourage and allow the trainee to develop the knowledge, skills, and attitudes of a specialist in Internal Medicine. These attributes will be developed within the framework of the CanMEDS 2005 roles as outlined by the Royal College of Physicians and Surgeons of Canada.

# Medical Expert

At the end of the rotation, the resident will have:

1. developed evidence-based approaches to the investigation and management of patients presenting with:
   * polydipsia and polyuria
   * weight loss and gain
   * constant or intermittent palpitations, shakiness, and/or sweating
   * fatigue
   * visual field loss or blurred vision
   * constant or intermittent headaches
   * delayed or premature sexual development
   * sexual dysfunction
2. developed evidence-based management strategies for the following diseases:
   * type 1 and type 2 diabetes mellitus and their complications
   * diabetes during pregnancy
   * hyper and hypothyroidism
   * hyper and hypocalcemia
   * pituitary dysfunction
   * adrenal cortex and medulla dysfunction
   * hypogonadism, including infertility
   * hyperandrogenism
   * uncontrolled hypertension
   * nodules of endocrine glands
3. demonstrated proficiency in complete and appropriate assessment of patients that will include:
   * clinical examination of the thyroid
   * clinical examination to detect diabetic complications
   * visual field testing by confrontation and extraocular muscle function
4. demonstrated ability to use preventive and therapeutic interventions effectively.

# Communicator

During the rotation, the resident will:

1. develop rapport, trust, and ethical therapeutic relationships with patients and families.
2. elicit and synthesize relevant information from patients and families, and integrate perspectives from colleagues and other professionals.
3. develop a common understanding with patients and families, colleagues, and other professionals in order to create a shared plan of care.
4. convey accurate and relevant information to patients and families, colleagues, and other professionals.
5. convey effective oral and written information about a medical encounter.

# Collaborator

During the rotation, the resident will:

1. participate in the multidisciplinary team management of patients with endocrine disorders.
2. recognize the roles of the following team members:
   * nurse practitioners
   * nurse educators
   * dietitians
   * pharmacists
   * clinic support staff
   * secretarial and support staff
   * community support services
3. seek appropriate consultation from other health professionals, recognizing the limits of your expertise.

# Manager

During the rotation, the resident will:

1. demonstrate appropriate use of available resources including diagnostic tests, inpatient services, and consultative services.
2. develop an understanding of treatment costs for endocrinological diseases and available resources to assist in paying for these.
3. develop an understanding of issues around government coverage of insulin pumps.

# Health Advocate

On completion of the rotation, the resident will:

1. understand the impact of economic and social factors which predispose and/or exacerbate endocrinological diseases.
2. appreciate the importance of preventive strategies in endocrinological disease.
3. demonstrate appropriate attention to prevention counseling in patient encounters.

# Scholar

By the end of the rotation, the resident will:

1. have an understanding of the physiology of:
   * normal feedback control
   * normal metabolism of carbohydrate and fat
   * secretion of hormones and their interaction with hormone transporters
   * mechanisms of action of common hormones implied in endocrinological diseases
   * fluid and electrolyte imbalance
2. have an understanding of the pathophysiology of:
   * disorders of glucose metabolism
   * autoimmune disorders of endocrine glands
   * hormone deficiency and excess
   * genetic basis of endocrine diseases
   * endocrinological neoplasms

3. have an understanding of the pharmacology of:

* + hormone replacement
  + hypoglycemic agents including insulin and oral hypoglycemics
  + drugs used to inhibit the secretion and/or action of hormones
  + drugs used to prevent the complications of endocrine disorders such as hyperglycemia and dyslipidemia

1. have an understanding of the scientific evidence supporting investigation and management strategies in endocrinological disease.
2. demonstrate a commitment to lifelong learning.
3. facilitate the learning of patients, families, students, residents, health professionals, and others as appropriate.

# Professional

During the rotation, the resident will:

1. recognize professional obligations to patients and colleagues through ethical practice.
2. have an awareness of the responsibility of the profession to society.
3. demonstrate an understanding of the ethics of consent to treatment.
4. understand the ethical issues surrounding the care of patients with endocrine disorders, including:
   * confidentiality
   * issues on patient and public safety with regards to hypoglycemia unawareness
   * duty to report to the Ministry of Transportation of patients at risk of impaired driving
   * ethical use of drug samples and interactions with pharmaceutical companies