GOALS AND OBJECTIVES

Endocrinology, Diabetes & Metabolism Fellows’ Continuity Clinic

Fridays 12:30 – 5:00 p.m. / Center for Advanced Medicine, 5th Floor
Consultants: William E. Clutter, MD; Jing Hughes, MD, PhD; Amy Riek, MD
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Educational Goal and description of the rotation: The Endocrinology, Diabetes & Metabolism Fellows’ Continuity Clinic is held one half day per week continuously for 24 months. Fellows in endocrinology, diabetes and metabolism see patients in their continuity panel weekly throughout their first two years. Fellows who remain & conduct research in their third & fourth years also continue to have a weekly continuity clinic.

This is a general endocrinology, diabetes and metabolism clinic. It includes patients referred for consultations and those with complex chronic endocrine-metabolic disorders receiving long-term subspecialty care. While other faculty rotate through this clinic as needed, the ED & L Fellow’s Continuity Clinic is supervised weekly by three experienced endocrinologists: William E. Clutter, MD, Amy Riek, MD, and Jing Hughes, MD, PhD. The overall goal for this rotation is the provision of continuity of care for patients with endocrine diseases.

The educational purposes of this rotation are to permit fellows to understand the clinical presentation of outpatients with endocrine-metabolic disorders and to learn to evaluate, diagnose and treat endocrine-metabolic disorders in the outpatient setting. The specific objectives of this rotation are to teach fellows to become skilled in the evaluation and treatment of outpatients – ours is largely an outpatient subspecialty – with a broad array of acute, subacute or chronic endocrine-metabolic disorders and the identification of non-endocrine-metabolic disorders presenting with symptoms, signs or laboratory findings suggestive of endocrine-metabolic disorders. The endocrine-metabolic disorders include diabetes; dyslipidemias; hypertension; cardiovascular diseases in the setting of endocrine-metabolic disorders; obesity and other nutritional disorders; hormonal hypo- or hyperfunction of the hypothalamus/pituitary, thyroid, parathyroids, pancreatic islets, adrenal gland, ovaries, or testicles; hormone-producing neoplasms or neoplasms of endocrine organs; metabolic bone disease including osteoporosis; disorders of calcium, phosphorous and magnesium metabolism; age-related disorders including the effects of menopause and the impact of aging on treatment of endocrine-metabolic disorders; gender dysphoria and transgender medicine; disorders of fluid/electrolyte/acid-base metabolism; endocrine adaptations/maladaptations to systemic diseases including psychiatric disorders; endocrine effects of drug therapies for non-endocrine disorders.

Patient Care: This is a critical aspect of the continuity clinic. Fellows are expected to provide timely, expert management of patients with one or more endocrine diagnoses, often superimposed on other chronic illnesses and complicated by environmental stresses. Patient care includes the diagnosis and management of common or uncommon endocrine diseases. The fellows must be facile with
endocrine testing, interpretation of test results and treatment to be successful in the continuity clinic. Notes on each patient are expected to be completed prior to the next week’s clinic.

**Medical knowledge:** We expect each fellow in the clinical training program to 1) acquire the specialized knowledge of endocrinology, diabetes and metabolism needed to provide exemplary care to patients affected by the disorders encompassed by the subspecialty, 2) learn how to perform, interpret and cost-effectively use diagnostic testing essential to the modern practice of endocrinology, diabetes and metabolism, and 3) develop the abilities to critically evaluate clinical data relevant to endocrine-metabolic disorders and to make appropriate decisions in the management of patients with those disorders.

**Practice-based learning and improvement:** Fellows are expected to understand their limitations in their knowledge base or clinical experience. Fellows should be self-motivated to learn about each case, essentially building their specialty knowledge one case at a time. Experienced attending physicians assist with this process by directing the fellow to appropriate resources and discussing testing and treatment options.

**Interpersonal and communication skills:** Fellows should be able to communicate effectively with patients, families, attending physicians, colleagues and staff in order to optimize treatment of continuity clinic patients. First year fellows are expected to demonstrate caring, respectful behaviors during interviews, examinations, and treatment discussions. Second year fellows are expected to have greater sensitivity to verbal and non-verbal cues as well as relevant social interactions.

**Professionalism:** Fellows should exhibit behaviors that demonstrate commitment to the optimal care of the patient, considering the risks and benefits of diagnostic tests and treatments. Second year fellows should display more confidence in their knowledge and ability to obtain the best possible outcome for patients with a variety of techniques including patient counseling, communication with other physicians and discussions with family members.

**Systems-based practice:** Fellows should become acquainted with the electronic medical record and use it to its maximal capability. Second year fellows should be able to order diagnostic tests and treatments independently with less supervision and “how to” types of instructions.

**Teaching methods:** For each of the major dimensions of the curriculum teaching is carried out under the supervision of a member of the faculty in the educational settings detailed below through the use of the following discrete methods:

- Performance of a history and physical examination on patients with endocrine-metabolic disorders.
- Presentation to a faculty member of the historical data and physical findings for both inpatient and outpatient encounters. The faculty member confirms and/or corrects the clinical data at the bedside or in the clinic examination room.
- Progressive, graduated responsibility for the development of diagnostic plans based on available clinical data.
- Progressive, graduated responsibility for the development of treatment plans based on clinical data and results from diagnostic testing.
- Self-directed reading based on patient encounters and complemented by references provided by faculty members individually and through the conferences.
• Progressive, graduated responsibility for communication of the findings with the patient and the referring physician, integration of new information from the patient, the referring (often primary care) physician, the patient’s course and the laboratory, and systematic follow-up.
• Attendance and participation in the following conferences: Metabolism, Obesity & Diabetes (MOD) Seminar; Internal Medicine Grand Rounds; Postgraduate Clinical Endocrinology Course; Endocrine Case Conference; Endocrine Oncology Conference, Bone Clinical Case Conference and Pituitary Conference.

Fellows are supervised by faculty in all patient encounters. While fellows are expected to diagnose and formulate treatment plans for endocrine and metabolic diseases independently by their second year, each patient they see is also seen by a member of the faculty.

**Mix of diseases:** The fellows’ continuity clinic receives referrals for all types of endocrine problems. The most common consultation and collaborative care is for patients with diabetes. Diagnoses of bone and mineral problems, hyper and hypoparathyroidism, thyroid disease, adrenal insufficiency, pituitary tumors and other CNS endocrine problems, gonadal failure, hypoglycemia and other uncommon problems are seen in the continuity clinic.

**Reading lists and other educational materials:** Fellows are expected to read about their patients’ problems and incorporate the new information gained into the care of those and future patients. This is facilitated by the availability to all fellows of online services such as “Up-to-Date in Endocrinology,” as well as access to primary literature through the WU School of Medicine library. In addition, references to specific patient-related issues may be provided by the faculty working with the fellow in inpatient and outpatient settings and references to specific topics are provided in conferences/handouts.

A general reference is:


While a comprehensive, structured curriculum covering the science of endocrinology, diabetes and metabolism is fundamentally important, it is not sufficient for the training of an effective endocrinologist. The faculty must also teach professionalism, humanism and ethics coupled with sensitivity to cultural, occupational, environmental, socioeconomic and behavioral issues. These issues can be, and are, incorporated into lectures, but it is our premise that these are most effectively taught by example and by discussion in the setting of the care of real patients – inpatients, outpatients, patient-based conferences – with diverse cultural, occupational, environmental, socioeconomic and behavioral backgrounds. This is made possible by the racial/ethnic and socioeconomic diversity of our patient population, which is drawn from inner city, middle class, suburban, rural and distant referral areas, and the sensitivity of our faculty to the importance of the ethical care of patients.