**ENDOCRINOLOGY ROTATION GOALS AND OBJECTIVES**

**Internal Medicine – University of Toledo**

**Educational Goals and Objectives:**
To demonstrate competence in the ambulatory and hospital care of patients with common endocrine and metabolic disorders, including competency in the performance of an appropriately directed history and physical examination, selection and interpretation of laboratory studies, and determination of treatment.

To describe the pathophysiology, clinical manifestations, and natural history of the listed clinical syndromes.

This is a four week block rotation under the supervision of Division of Endocrinology faculty. Residents gain experience in the evaluation and care of common endocrine and metabolic disorders.

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<thead>
<tr>
<th>PGY 1 / PGY 2 / PGY 3</th>
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<tbody>
<tr>
<td><strong>Patient Care</strong></td>
<td>Obtain a thorough and pertinent history of the patient's endocrine-related problems and complaints in the ambulatory and hospital settings</td>
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<td>Determine family, social, and medication history relevant to the patient’s endocrine problems</td>
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<td>Perform a competent general Physical Examination with emphasis on the following skills:</td>
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<td>• Non-dilated fundoscopy</td>
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<td>• Use of an exophthalmometer.</td>
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<td>• Direct neck examination (thyroid palpation)</td>
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<td>• Male breast examination (gynecomastia)</td>
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<td>• Testicular examination</td>
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<td>• Diabetic foot examination</td>
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<td>• Identify necrobiosis lipoidica</td>
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<td>• Identify xanthelasmas and xanthomas</td>
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<td>• Determine body mass index</td>
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<td>Determine the indications for the following diagnostic procedures:</td>
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<td>• Thyroid fine needle biopsy</td>
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<td>• Thyroid scintigraphy</td>
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<td>• Thyroid ultrasound</td>
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<td>• Cosyntropin or CRH stimulation tests</td>
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<td>• Dexamethasone suppression test</td>
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<td>• Pituitary computed tomography (CT) or magnetic resonance imaging (MRI)</td>
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<td>• Adrenal CT or MRI</td>
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<td>• Transvaginal ultrasound</td>
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<td>• Testicular ultrasound</td>
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<td>• Commonly used radioimmunoassays</td>
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**Medical Knowledge**

Demonstrated understanding and application of key facets of the following endocrine and metabolic disorders

- Diabetes Mellitus
- Lipid Disorders
- Interpretation of thyroid function tests
- Calcium and Bone Metabolism
- Hypothalamus and Pituitary
- Adrenal Disorders
- Gonadal Disorders
- Endocrine Neoplasia Syndromes

**Practice-Based**

- Analyze and evaluate practice experiences and implement strategies to improve
| Learning and Improvement | the quality of patient care.  
|-------------------------|---------------------------------------------------|
|                         | • Use information technology and other available methodologies to access and manage information, support patient care decisions and enhance both patient and resident education.  
|                         | • Use device technology, in particular all available Diabetes management devices (meters, pens, pumps) and learn to instruct patients in same when appropriate, to support patient care decisions and enhance both patient and resident education. |

| Interpersonal and Communication Skills | Consistently establish rapport with patients and staff.  
|---------------------------------------|---------------------------------------------------|
|                                       | • Present cases in a logical, focused manner and outline impressions that can be justified based on the clinical data.  
|                                       | • Work as an effective team member with staff, dietitians, nurses, diabetes educators, and attending physicians.  
|                                       | • Write or dictate an appropriately thorough clinical record entry in standard form. |

| Professionalism | Arrive at the office or hospital promptly, well-prepared with identified learning issues.  
|-----------------|---------------------------------------------------|
|                 | • Assume responsibility for patient welfare.  
|                 | • Demonstrate the effective utilization of case related clinical learning through availability and appropriate follow-up  
|                 | • Demonstrate independent initiative in commitment to identify and follow through with learning issues.  
|                 | • Seek feedback from attending physicians.  
|                 | • Model effective teaching skills to students and peers.  
|                 | • Comply with Residency dress code. |

| Systems-Based Practice | Understand and utilize the multidisciplinary resources necessary to care optimally for patients  
|------------------------|---------------------------------------------------|
|                        | • Use evidence-based, cost-conscious strategies in the care of patients  
|                        | • Demonstrates collaboration with other members of the health care team, including residents at all levels, fellows, attendings, medical students, nurses, pharmacists, occupational/physical therapists, nutritional specialists, patient educators, social workers, case managers, and providers of home health services  
|                        | • Effectively utilizes of medical consultants, including knowing when and how to request consultation, and how best to utilize the advice provided  
|                        | • Demonstrates willingness and ability to teach medical students and interns  
|                        | • Effectively leads the team, including interns, medical students, nurses, pharmacists, case managers, and social workers |

**Teaching Methods:**  
1. Direct patient care  
2. Faculty supervision  
3. Core curriculum  
4. Observed clinical examination skills  
5. Reading materials and literature search

**Assessment Methods – Competency Score Card:**  
Medical Knowledge  
1. Monthly test  
2. New Innovation evaluations
Patient Care
1. Mini-CEX
2. New Innovation evaluations

Practice-Based Learning
1. New Innovation evaluations
2. Consultation/Literature search

System-Based Learning
1. New Innovation evaluations

Professionalism
1. Medical record completion
2. New Innovation evaluations
3. Dictation completeness

Communications
1. New Innovation evaluations
2. Transition of care (hand-off)

Educational Resources:

Guidelines
American Diabetic Association Diabetes Guidelines
National Cholesterol Education Panel: ATP III and Update to ATP III
American Association of Clinical Endocrinology Guidelines
The Endocrine Society Guidelines

Texts and References
The Washington Manual Endocrinology Subspecialty Consult
Medical Knowledge Self-Assessment Program, Endocrinology
Endocrinology: L. DeGroot, MD
Basic and Clinical Endocrinology: F. Greenspan MD, P. Forsham, MD.

Internet Resources
Thyroid.org: American Thyroid Association
AACE.com: American Association of Clinical Endocrinologists
Diabetes.org: American Diabetes Association
Endo-Society.org: The Endocrine Society
Thyroidmanager.org: a University of Chicago Thyroidology site
Heart.org: American Heart Association

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