Clinic Name: Endocrine Clinic – outpatient Clinic Education Site Leader: Mona Mashayekhi Updated by: Mona Mashayekhi/Matthew Gonzalez

Date: March 2022

Goal:

The purpose of this educational clinic block is to provide residents with experience in identifying and managing common endocrine problems in the outpatient setting.

Objectives:

By the end of this educational block, learners in this rotation will be able to:

1. Patient Care

- a. Obtain an accurate and relevant endocrine history
- b. Perform an endocrine-focused physical exam
- c. Form appropriate differentials and work up plans for common endocrine problems
- d. Manage common endocrine problems using an evidence-based approach

2. Medical Knowledge

- a. Diabetes: distinguish between type 1 and type 2 diabetes; describe common microvascular/macrovascular complications and appropriate screening methods; form medication management plans depending on clinical situation (age/comorbidities/evidencedbased support); appropriately dose and titrate insulin; choose an appropriate A1c goal; become familiar with available diabetes technology (CGMs, insulin pumps).
- b. Thyroid: interpret thyroid function tests and discuss etiologies; initiate/titrate levothyroxine; formulate a differential diagnosis and initial testing plan for hyperthyroidism; evaluate thyroid nodules using Ti-RADS criteria; differentiate thyroid cancer subtypes and apply basic management principals.
- c. Adrenal: differentiate between hypo and hypercortisolism including clinical presentation and diagnostic testing; use appropriate testing for diagnosis of adrenal insufficiency; prescribe glucocorticoids for adrenal insufficiency and understand stress dosing; perform initial testing for primary hyperaldosteronism; evaluate adrenal incidentalomas.
- d. Osteoporosis: diagnose osteoporosis including interpretation of DXA scans and FRAX scores; test for common secondary causes of osteoporosis; form medication management plans.
- e. Hyperparathyroidism: perform tests to determine etiology of hypercalcemia (PTH-dependent or independent); discuss management options.
- f. Lipids: diagnose common lipid disorders; outline an appropriate treatment regimen considering the patient's primary cholesterol disorder and comorbidities.
- g. Hypogonadism: diagnose male hypogonadism and identify an underlying etiology; choose an appropriate treatment regimen for male hypogonadism; understand the expected benefits and main side effects of treatment with testosterone replacement; recommend monitoring with testosterone replacement.
- h. Transgender care: discuss treatment options for patients with gender dysphoria wishing to undergo transition; recognize common side effects and monitoring required for patients receiving treatment.

3. Interpersonal and Communication Skills

a. Provide quality care and establish therapeutic relationships with patients of varying backgrounds and ideologies.

b. Present accurate and succinct encounter information to clinical faculty in a timely manner to make appropriate clinical decisions.

4. Professionalism

- a. Approach all interactions (patients, family members, other health care team members) with respect and equality.
- b. Manage timing of clinic visits to align with clinic scheduling and patient flow.
- 5. Systems based practice
 - a. Accurately perform medication reconciliation.
 - b. Create documentation that is accurate and timely.
 - c. Identify when additional consultations are needed and utilize referral process.
- 6. Practice-based learning and improvement
 - a. Recognize the scope of their abilities and asks for help when appropriate.

Educational Strategies:

| Educational Strategy | Skills (taught and/or assessed) |
|--------------------------|---|
| Clinical encounters | History taking |
| | Physical exam skills |
| | Motivational interviewing |
| | Time management |
| | |
| Presentations to faculty | Clinical reasoning and communication skills |
| | Medical knowledge |
| | |
| Didactic presentations | Medical knowledge |
| (during academic half | Clinical reasoning |
| days) | |
| Documentation | Clinical reasoning |
| | Systems based practice |

Required and Suggested Readings or Resources:

- *Endocrine society guidelines on relevant topics* https://www.endocrine.org/clinical-practice-guidelines
- Distilled recommendations for diabetes care from the ADA
 https://diabetesjournals.org/clinical/article/40/1/10/139035/Standards-of-Medical-Care-in-Diabetes-2022; https://diabetesjournals.org/care/article/45/Supplement 1/S125/138908/9-Pharmacologic-Approaches-to-Glycemic-Treatment
- ATA Guidelines for Thyroid disease https://www.thyroid.org/professionals/ata-professional-guidelines/
- Ti-RADS calculator and sample images https://tiradscalculator.com/
- 2018 AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA Guideline on the Management of Blood Cholesterol: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines
 https://reader.elsevier.com/reader/sd/pii/S0735109718390338?token=23EBB41D1EBD056B1EC26026
 - 16175555A6A206E532ED8009F150C1E09AED5A9DAF7EE7EAE633020ADAD3E30C65DA9015&originRe gion=us-east-1&originCreation=20220228062201; https://www.lipid.org/recommendations
- WPATH 7 for transgender care https://www.wpath.org/media/cms/Documents/SOC%20v7/SOC%20V7_English2012.pdf?_t=1613669341_

Evaluation:

Direct observation involving a 6-question form on the New Innovations app.

- 1. What skill did you observe the resident performing?
 - a. History taking: relevant and accurate
 - b. Physical exam: focused, with specified elements
 - Medical knowledge/decision making: in regards to diabetes, thyroid, adrenal, osteoporosis, hyperparathyroidism, lipids, hypogonadism, or transgender care as listed above in objectives
 - d. Counseling/teaching: regarding patients and families
 - e. Interpersonal/communication skills: regarding presentations
 - f. Systems based practice: documentation skills and appropriate referrals
- 2. What was the resident's learning goal?
- 3. What specific behaviors or skills did you see the resident do well?
- 4. What did the resident do incorrectly and what should they do differently?
- 5. Entrustment scale (1-5 rating).
- 6. At the close of this encounter, what did you and the resident discuss that they should plan to do differently in the future?

New Direct Observation Form – Entrustment Scale - THIS IS THE FORM THAT IS ON THE APP **Internal Medicine Clinic**

| Date: | |
|--|--|
| Resident Name: | |
| Eaculty Obcorver name | |
| What specific skill did you decide to observe? | |
| | |

- 1. What is the resident's learning objective?
- 2. What did you observe the resident do well?

Skills to consider observing:

Information gather- Obtaining accurate and complete hx Specific physical exam skill Information transfer- patient education Motivational interviewing (wt mgt, tob cessation) Counseling Breaking bad news

Goals of care/ Family meeting Clinical reasoning

- 3. What deficiencies and/or errors did the resident commit?
- 4. What should they do differently? **How** should they do it differently?
- 5. Based on this single observation, how would you approach your supervision of this learner in this skill the next time?

| 1 | 2 | 3 | 4 | 5 |
|---|--|--|---|--|
| Learner can be present but only as observer | Learner can practice skill with direct supervision (supervisor in room) | Learner can practice skill with indirect supervision (supervision available within minutes) | Unsupervised practice allowed (the learner is ready to practice independently for this skill) | Learner has mastered this skill, is an exemplar for other, and is ready to teach others this skill |
| (i.e. The learner cannot perform this skill. Learner can be present, but only as observer) | (i.e. I need to watch the learner perform the skill in real time) | (i.e. I don't need to watch the learner in the room, but I am going to reassess the patient/confirm findings with the patient) | (i.e. I don't need to watch the learner but I am available if the learner comes for help or to provide feedback) | (i.e. learner is a role model for other, demonstrates best practice, able to teach) |

6. What plans for change did you and the resident make going forward?