



# Entrustable Professional Activities

## EPA 1 for Pediatric Endocrinology

### EPA 1: Know the Indications for Performing the Common Procedures of the Pediatric Endocrinologist and Be Able to Interpret the Results

#### Supervision Scale for This EPA

1. Trusted to observe only
2. Trusted to determine testing and provide interpretation with direct supervision and coaching
3. Trusted to determine testing and provide interpretation with indirect supervision for most simple cases and some complex cases
4. Trusted to determine testing and provide interpretation with indirect supervision but may require discussion of interpretation for a few complex cases
5. Trusted to execute without supervision

#### Description of the Activity

All pediatric endocrinologists need to be able to perform and/or interpret the common tests and procedures of the specialty. These should include but are not limited to random hormone measurements, hormone stimulation testing, bone age x-ray readings, and continuous glucose monitoring.

The specific functions which define this EPA include:

1. Applying medical knowledge, including the anatomy, physiology, indications, risks, benefits, alternatives, and potential complications of the procedure
2. Demonstrating the ability to perform the technical (motor) skills
3. Managing post-procedure complications
4. Interpreting results of the procedure as indicated
5. Communicating with the patient and family that insures informed knowledge of the procedure as well as post-procedure explanation and instructions
6. Demonstrating confidence that puts patients and families at ease

#### Judicious Mapping to Domains of Competence

- Patient Care
- Medical Knowledge
- Practice-Based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-Based Practice
- Personal and Professional Development



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### Competencies Within Each Domain Critical to Entrustment Decisions

|        |  |
|--------|--|
| PC 1:  | Gathering information                  |
| PC 6:  | Using optimal clinical judgment        |
| MK 1:  | Demonstrating knowledge                |
| MK 2:  | Practicing EBM                         |
| SBP 3: | Incorporating cost awareness into care |
| PPD 8: | Dealing with uncertainty               |

### Context for the EPA

**Rationale:** Pediatric endocrinologists utilize a variety of biochemical tests and procedures in the evaluation of patients with potential endocrine disorders. Practitioners must be able to 1) determine appropriate testing, 2) discuss the rationale for testing, risks, and benefits with patients and families and 3) interpret results to inform both diagnosis and treatment.

**Scope of Practice:** Patients with potential endocrine disorders are seen in the ambulatory setting, emergency department, or as inpatient consultations. The patient populations will range from newborns to those in early childhood. This document is intended to address the scope of knowledge and skills of the pediatric endocrinologist in both hospital-based and private practice. As such, it focuses on the common diagnostic laboratory evaluation, functional testing, radiologic studies, and technologies that a pediatric endocrinologist would utilize in diagnosis and management of endocrine disorders with the understanding that the general pediatric endocrinologist will recognize his/her own limitations and seek additional assistance from subspecialists within and outside the field as needed.

### Curricular Components that Support the Six Broader Functions of the EPA (see Description of Activity) within the Context of the Following Critical Endocrinologic Procedures

- Ordering and interpreting of laboratory testing of hormonal levels
  - Determines appropriateness of hormonal testing to investigate possible endocrinologic disorders
  - Interprets results of testing appropriately to determine if a definitive diagnosis can be made or if further evaluation is required
  - Communicates necessity for laboratory testing to patients and families to insure informed knowledge
  - Determines when the results of testing necessitate evaluation by other specialists and effectively communicates this to consultants and patients
- Ordering and interpreting of functional/stimulation testing (examples below but are not limited to those listed)
  - Growth hormone stimulation testing
  - Oral glucose tolerance testing
  - Cosyntropin stimulation testing
  - Water deprivation testing
  - Leuprolide stimulation testing
  - Understands indications, methods, risks/benefits, and limitations of functional testing
  - Determines the applicability and appropriateness of functional testing to the clinical situation



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- Understands management of potential complications of functional testing
- Able to communicate physiology behind testing, methods, risks, and benefits to families
- Interprets results of testing appropriately to determine if a definitive diagnosis can be made and/or if further studies are indicated
- Interpreting radiologic testing (including but not limited to bone age x-ray readings, thyroid ultrasound, abdominal/pelvic ultrasound, cranial MRI)
  - Understands the indications for radiologic testing for diagnostic evaluation and determination of potential therapy
  - Interprets results appropriately and understand the implications for clinical management
  - Independently reviews radiologic testing where applicable and engage other specialists for interpretation as needed
- Utilizing of insulin pumps and interpreting continuous glucose monitoring in patients with Type 1 diabetes mellitus
  - Communicates with patients and families about benefits and potential risks of utilization of technology in the management of type 1 diabetes mellitus
  - Determines the appropriateness of utilization of insulin pump therapy for patients with type 1 diabetes mellitus in the context of ability for self-care, medical history, and social history
  - Determines the appropriateness of utilization of continuous glucose monitoring for management of type 1 diabetes management in the context of ability for self-care, medical history, and social history
  - Interprets blood glucose data obtained from insulin pumps, continuous glucose monitoring, and in-home closed-loop therapy to determine the necessity for changes in insulin regimen to improve diabetes control and prevent complications

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