

Entrustable Professional Activity

1. EPA Title: Care of infants, children and adolescents with mucosal diseases

2. Description of Activity

Practicing subspecialists must be trained to care for children and adolescents with all types of mucosal diseases including esophagitis, eosinophilic and allergic GI Disorders, celiac disease, and other mucosal diseases. In addition, practicing gastroenterologists must be trained to care for children with acid-related mucosal conditions including gastric and duodenal ulcers as well as unusual mucosal disease. Esophagitis, eosinophilic gastrointestinal disorders (EGIDs), IBD and celiac disease are chronic diseases managed primarily by gastroenterologists with support from a variety of other health care professionals including allergists and nutritionists. Pediatric gastroenterologists should be familiar with the current literature regarding the etiology and pathophysiology of these diseases, the immune system's role, and the treatment of these disorders.

The functions required of this activity include:

1. Understand the pathology, epidemiology, natural history of EGIDs, Celiac Disease, and Esophagitis.
2. Recognize presentations of EoE and other eosinophilic/allergic diseases and perform an appropriate evaluation including endoscopy and allergy referral
3. Recognize presentation of celiac disease and perform appropriate workup including laboratory evaluation and endoscopy
4. Understand reflux esophagitis and its potential progression to cancer and strictures
5. Manage children and adolescents with esophagitis, EoE, EGIDs, Celiac Disease
6. Educate parents and children regarding their diagnosis.
7. Lead and direct care in a medical system including leading a team of gastroenterologists, allergist, and dieticians.

3. Domains of Competence (Judicious Mapping)

- Patient Care
- Medical Knowledge and Diagnostic Skills Required
- Practice Based Learning
- Interpersonal Skills
- Professionalism
- System-based Practice
- Personal and Professional Development

4. Competencies within each domain critical to entrustment decision (From Pediatric Milestones Document)

PC 2, 7
MK 1, 2
PBLI 3
ICS 1, 3
SBP 2

5. List Specific Knowledge, skills and attitudes needed to execute EPA

Knowledge:

(The fellow must have a basic, broad understanding of all that goes into a comprehensive evaluation for diarrhea, including obtaining a history of dietary/nutritional intake, plotting of past and current growth/anthropometrics, reviewing existing laboratory studies and identification of infection, malabsorption, and inflammatory conditions. The fellow must be able to differentiate from acute and self-limited conditions as well as the more chronic diseases associated with mucosal abnormalities. An understanding of the pathophysiology of common gastrointestinal diseases including celiac disease, esophagitis and peptic ulcer disease, and malabsorption is required to create diagnostic and therapeutic management plans, which can then be set into motion and revised as needed.

The fellow must have a basic, broad understanding of major mucosal diseases managed by the pediatric gastroenterologist. This includes comprehensive knowledge of the presentation, epidemiology, diagnosis, and management of disease including celiac disease, eosinophilic esophagitis and other EGIDs, acid-related mucosal conditions including esophagitis and peptic ulcer disease, and other less common mucosal diseases. The fellow must develop the knowledge base of causes, treatments, and long-term risks associated with all of these conditions, and apply this medical knowledge to patient care.

Skills:

The fellow must be able to care for pediatric patients of all ages with these conditions and unite a team of caregivers to provide exceptional patient care. The fellow must display skills of communication and life-long learning skills as it applies to primary mucosal diseases.

Attitudes:

The trainee must be sensitive to a wide variety of patient's backgrounds and beliefs in their caring for children with mucosal disease. The trainee must demonstrate a caring and empathetic attitude towards patients and families.

Medical Knowledge

1. Understand emerging data on the pathogenesis, genetics, epidemiology, natural history, and role of the immune system in celiac disease, EGIDs, EoE, and other mucosal diseases
2. Identify the classic clinical presentation and diagnosis of EGIDs with a special emphasis on Eosinophilic Esophagitis, celiac disease, and other mucosal diseases including diagnostic criteria and unusual presentations.
3. Understand the different allergy testing methods (Specific IgE blood tests (RAST), skin prick, patch, etc)
4. Understand different serologic testing for celiac disease and management of celiac disease with a gluten-free diet
5. Understand treatment options for EGIDs including use of corticosteroids, food elimination diets, biologic medications (anti-IL-5? Too specific) and emerging treatments (anti-IL-13, anti-prostaglandin D2) for EGIDs
6. Understand the progression of esophagitis from inflammation (esophagitis) to cancer and treatment modalities (medical, endoscopic, surveillance, etc)
7. Identify key gaps in medical knowledge within EGIDs, celiac disease, and other mucosal diseases.
8. Demonstrate knowledge of diagnostic tests including stool exams for pathogens, occult blood, reducing substances, stool pH, stool fat, stool anti-trypsin, lactoferrin, calprotectin.
9. Understand similarities and differences between non-IgE mediated gastrointestinal food hypersensitivity (food protein induced enterocolitis syndrome – FPIES) and EGIDs.

Patient Care

1. Perform an appropriate initial workup for a child with suspected EGIDs, celiac disease, other mucosal diseases
2. Involve appropriate health care professionals within the medical team once a diagnosis is confirmed (example: allergist for EoE, nutritionist for EoE/celiac, etc)
3. Discuss treatment options for newly diagnosed EoE including allergy testing directed modification of diet, food elimination diets, use of corticosteroids (oral, budesonide slurry, inhaled steroids)
4. Discuss the gluten free diet with parents and children
5. Perform appropriate monitoring of mucosal diseases through growth, labs and/or regular endoscopy.

Practice Based Learning

1. Participate in lifelong learning

Interpersonal and Communication Skills

1. Effectively communicate disease information, treatment plan, and outcome to parents and children
2. Effectively communicate with other medical professionals including allergists and dieticians.

6. Assessment Procedure

Quick Summary of EPA

End-of-Training EPA	Step 1 Description and Tasks	Step 2 Domains of Competence and Competencies within each Domain Critical to Entrustment Decisions		Step 3 Assessment Methods/Tools
<p>1. Care of children and adolescents with mucosal diseases – EoE/EGIDs, celiac disease, other</p>	<p>Summary:</p> <p>The tasks required:</p> <ul style="list-style-type: none"> • Understand the pathology, epidemiology, and natural history of EGIDs, Celiac Disease, and Esophagitis, Peptic Ulcer Disease • Recognize presentations of EoE and other eosinophilic/allergic diseases and perform an appropriate workup • Recognize presentation of celiac disease and perform appropriate workup including laboratory testing and endoscopy • Understand reflux esophagitis and its progression • Understand the pathogenesis, genetic basis, diagnostic testing and management of polyposis syndromes and solitary polyps • Manage children and adolescents with esophagitis, EoE, EGIDs, Celiac Disease • Educate parents and children regarding their diagnosis. • Lead and direct care in a medical system including leading a team of gastroenterologists, allergist, and dieticians. 	Patient Care (PC)	1, 2, 4, 6-9	<p>Checklist Chart stimulated recall Chart audits Direct observations Standardized patient In-training examination 360 Global Rating (multi-source?) Procedure Log Patient Survey Simulation Portfolios</p>
		Medical Knowledge (MK)	1 - 2	
		Practice-Based Learning & Improvement (PBLI)	3, 6, 9	
		Interpersonal & Communication Skills (ICS)	1, 3	
		Professionalism (P)		
		Systems-Based Practice (SBP)		
		Personal and Professional Development (PPD)		

EPA Title: Care of Infants, Children and Adolescents with Mucosal Diseases: Esophagitis, EGIDs, Celiac Disease, GI bleeding/PUD, Polyposis Syndromes

Level 1	Level 2	Level 3	Level 4	Level 5
<p>Develop a basic initial diagnostic plan for uncomplicated diarrhea</p> <p>Identify milk protein sensitivity in infants</p> <p>Identify signs/symptoms within a history that may suggest esophageal mucosal disease and EGIDs</p> <p>Identify signs/symptoms of celiac disease</p> <p>Recognize signs and symptoms of malabsorption/diarrhea related to mucosal disease</p>	<p>Understand the natural history of EoE, celiac disease, EGIDs</p> <p>Understand the pathogenesis of food allergies and development of eosinophilic esophagitis.</p> <p>Understand the epidemiology and genetics of celiac disease and its associated conditions</p> <p>Develop an appropriate initial diagnostic plan including laboratory evaluation for EoE and celiac disease</p> <p>Basic education to families and children regarding EoE, celiac disease</p> <p>Understand the differential diagnosis of GI bleeding in infants, children and adolescents and signs/symptoms of ulcers</p> <p>Recognize the contribution of H.Pylori to peptic ulcer disease</p>	<p>Understand the natural history and pathogenesis of FPIES</p> <p>Understand pharmacologic therapy that may be used for esophagitis and EoE</p> <p>Understand food allergy testing in EGIDs</p> <p>Advanced education of long-term effects of celiac disease and EoE</p> <p>Recognize unusual presentations of Celiac</p> <p>Advanced understanding of a gluten-free diet and dietary modifications in EGIDs</p> <p>Read impedance/pH studies and direct management of peptic disorders</p> <p>Basic understanding of polyps and definition of polyposis syndromes</p> <p>Understand current theories on food allergy development and the prevention of food allergies as it pertains to food initiation</p>	<p>Understand experimental and emerging treatments for EoE</p> <p>Understand epidemiology, genetic basis, natural history, pathogenesis, cancer risk, and treatment of polyps and polyposis syndromes</p> <p>Understand advanced endoscopic approaches to esophageal cancer and the risk of cancer development in Barretts esophagitis</p> <p>Apply QI, Best Practices and scientific evidence to celiac disease, EoE, EGIDs, PUD, polyposis syndromes and other mucosal diseases</p> <p>Recognize presentation and treat other mucosal diseases: CGD, immunodeficiencies, neonatal enteropathies, HUS, HSP, autoimmune enteropathy,</p> <p>Lead a medical team including dieticians, allergists, pathologists, and surgeons as it pertains to mucosal diseases</p>	<p>Identify gaps in knowledge within Eosinophilic and allergic diseases and perform research to improve the understanding of these diseases</p> <p>Participate in scholarly activity related to EGIDs, celiac disease, GI Bleeding, or polyposis syndromes</p> <p>Present research findings at a national meeting in oral format</p> <p>Participate in regional/national meetings</p> <p>Be invited to speak at regional meetings/grand rounds</p>

Training / Expertise Level

Entrustment Level

Execution with direct proactive supervision

Execution with reactive supervision (on request)

Supervision at distance post hoc supervision

Entrustment, ready for unsupervised practice

Supervision of others junior colleagues