Entrustable Professional Activity

- 1. EPA Title: Care of infants, children and adolescents with inflammatory bowel disease
- 2. Description of Activity

Practicing subspecialists must be trained to care for children and adolescents with IBD which represents one of the major chronic diseases managed by gastroenterologists. Pediatric gastroenterologists need to be familiar with classic understanding of disease processes but also differences in children compared to adults. Additionally, subspecialists should be able to manage acute issues as well as long-term chronic management including the transition of care. This requires a multitude of competencies within each domain of competence.

The functions required of this activity include:

- 1. Understand the epidemiology, pathogenesis and natural history, of Crohn's disease (CD) and ulcerative colitis (UC)
- 2. Understand the clinical implications of basic/translational research in IBD
- 3. Diagnose and recognize children with suspected IBD in a variety of clinical presentations
- 4. Manage children and adolescents with IBD
- 5. Educate parents and children on IBD cause, treatment, and clinical course.
- 6. Lead and direct care for children/adolescents with IBD in the medical system including coordinating care

3.	Domains of Competence (Judicious Mapping) XPatient Care XMedical Knowledge and Diagnostic Skills Required XPractice Based Learning XInterpersonal Skills Professionalism XSystem-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. Curriculum - List Specific Knowledge, skills and attitudes needed to execute EPA

Medical Knowledge

1. Understand clinical science of IBD including epidemiology, natural history, clinical presentation and features including similarities and differences between CD and UC.

- 2. Understand the pathogenesis, genetics, microbiome, and mucosal immunology of IBD including similarities and differences between CD and UC.
- 3. Understand the mechanism of action, side effects, and other complications of medications and treatments for IBD including steroids, immunomodulators, biologics, nutrition therapy and other medications.
- 4. Understand and identify red flags for systemic auto-immune and immune deficiency syndromes which may have similar manifestations and findings as IBD and can co-exist with IBD

Patient Care

- Perform an appropriate history and physical examination in a child with suspected IBD.
- 2. Perform an appropriate initial workup and appropriate use of diagnostic labs, serology and other studies for a child with suspected IBD (laboratory, serology, endoscopy, histological interpretation, imaging, video capsule endoscopy)
- 3. Develop an initial diagnosis and treatment strategy focused on inducing remission
- 4. Recognize a disease flare and perform appropriate tests to differentiate a disease flare from symptoms of other etiology
- 5. Develop a treatment plan for disease flares and maintenance therapy
- 6. Perform standard endoscopy for the diagnosis of CD and UC
- 7. Understand imaging modalities for small and large bowel evaluation in IBD including but not limited to abdominal radiography, UGI with SBFT, ultrasonography, CT or MR enterography, and video capsule endoscopy
- 8. Understand the use of treatment modalities for CD and UC including:
 - a. Steroids
 - b. Immunomodulators including TPMT and use of metabolites to optimize dose
 - c. Biologics including use of levels and antibodies
 - d. Oral, enteral and parenteral nutrition
 - e. Other medications and supplements(probiotics, fish oil, etc)
 - f. Surgical treatment
 - g. Non-conventional therapies: fecal transplant, alternative medicine
 - h. Evolving Therapies / New Treatment Modalities
- 9. Apply and understand disease activity indices and phenotypic classifications for CD and UC.
- 10. Recognize extra-intestinal manifestations of IBD (PSC, joints, etc)
- 11. Interpret endoscopy and pathology findings including knowing differences between CD and UC
- 12. Diagnose and treat penetrating or fistulizing Crohn's disease including perianal disease, intra-abdominal abscess, fistulizing disease, and stricturing disease.
- 13. Understand health care maintenance and vaccinations in children with IBD
- 14. Recognize and manage relevant problems associated with IBD such as malnutrition, anemia, osteopenia and psychosocial concerns

Practice Based Learning

- 1. Understand quality measures as they have been applied to IBD (for example Improve Care Now)
- 2. Apply quality measures to improve care of children with IBD
- 3. Educate parents and children on cause, treatment, and other aspects of IBD including maintenance health checks and cancer surveillance
- 4. Participate in lifelong learning as it relates to care of children with IBD

Interpersonal and Communication Skills

- 1. Effectively communicate disease information, treatment plan, and outcome to parents and children
- 2. Effectively communicate with other medical professionals involved in the care of IBD patients

Professionalism

- 1. Demonstrate compassion, integrity, respect and sensitivity to diversity in treating IBD, a complex chronic disease
- 2. Protect patient privacy

System-based Practice

- 1. Coordinate care of children with IBD including PCPs, surgeons, psychologists/social workers, nutritionists, radiologists, and other medical professionals
- 2. Transition care in children with IBD to adult gastroenterologists

Personal and Professional Development

- 1. Thoughtfully analyze practice style, self-confidence and seek advice for management of complex patients
- 2. Develop effective bedside manner and maturity through interactions with patients and families
- 6. Assessment Procedure (from ACGME Assessment Toolbox see below):

Checklist Chart stimulated recall / Chart audits Direct observations

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
Care of children and adolescents with Inflammatory Bowel Disease	 Summary: The tasks required: Understand the pathogenesis, natural history, and basic/translational research on IBD Understand clinical implications of basic, translational and clinical research Diagnose and recognize children with suspected IBD in a variety of clinical presentations Manage children and adolescents with IBD Educate parents and children on IBD cause, treatment, and clinical course. Lead and direct care for children/adolescents with IBD in the medical system including coordinating care 	Patient Care (PC) Medical Knowledge (MK) Practice-Based Learning & Improvement (PBLI) Interpersonal & Communication Skills (ICS) Professionalism (P) Systems-Based Practice (SBP) Personal and Professional Development (PPD)	1 – 10 1 - 2 1, 6, 9 1, 3, 4, 6 1, 3, 5	Checklist Chart stimulated recall Chart audits Direct observations Standardized patient In-training examination 360 Global Rating Procedure Log Patient Survey Simulation Portfolios

Level 1	Level 2	Level 3	Level 4	Level 5
Understand basic similarities and differences between CD and UC	Understand the natural history, epidemiology, pathogenesis, and extraintestinal manifestations	Develop an appropriate management plan for maintenance therapy and disease flares	Manage complex advanced issues associated with IBD including fistulae, strictures, perianal disease, pouchitis	Interpret video capsule endoscopy for children/adolescents with IBD
Recognize potential patients pased on history and aboratory data	otential patients Perform endoscopy for Children with suspected IBD Develop an appropriation management plan for	Develop an appropriate	and post-surgical management Understand medication	Participate in scholarly activity related to inflammatory bowel disease
Complete an essential history	Develop an appropriate initial diagnostic plan including laboratory evaluation,	Understand indications for surgical treatment and work	optimization including use of metabolites and medication levels/antibodies in treatment	Present research findings at a national meeting in oral format
and examination on children with potential IBD	endoscopy, imaging and other tests	with surgeons to develop a surgical plan of care	Recognize conditions associated with IBD and refer	Participate in
	Understand medication classes/side effects (steroids, immune-modulators,biologics, other)	Understand the various disease activity measures (clinical, endoscopic, other)	when necessary including depression Lead a multi-disciplinary-	regional/national meetings specific to IBD
	Understand enteral therapy as treatment for CD	Recognize GI related diseases associated with IBD (PSC and FGIDs)	nutritionist, surgeon, nurses, support staff, psychologist	Be invited to speak at regional meetings/grand rounds on IBD
	Be familiar with other medications and supplements that can be used and have	Advanced education including side effects, long-term outcome, surgery, risk	Apply QI, Best Practices, and scientific evidence	Lead an institutional IBD Center
	been studied in IBD	benefits and prevention	Understand the use and interpretation of disease	
	Develop an appropriate initial management plan for newly-diagnosed IBD	Perform health care maintenance (flu shot, bone health, vaccinations, optho exams)	monitoring modalities including imaging, video capsule endoscopy and repeat endoscopy	
	Basic education to families and children regarding diagnosis, treatment, disease course, etc.		Transition care of IBD from pediatric to adult practitioner	
Training / Expertise Level				
Entrustment Level				Supervision of others