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)**
   - X Patient Care
   - X Medical Knowledge and Diagnostic Skills Required
   - X Practice Based Learning
   - X Interpersonal Skills
   - ___ Professionalism
   - X 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. **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

1. 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

<table>
<thead>
<tr>
<th>End-of-Training EPA</th>
<th>Step 1 Description and Tasks</th>
<th>Step 2 Domains of Competence and Competencies within each Domain Critical to Entrustment Decisions</th>
<th>Step 3 Assessment Methods/Tools</th>
</tr>
</thead>
</table>
| 1. 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)**  
1 – 10 | Checklist  
Chart stimulated recall  
Chart audits  
Direct observations  
Standardized patient In-training examination  
360 Global Rating  
Procedure Log  
Patient Survey  
Simulation Portfolios |
|                     | **Medical Knowledge (MK)**  
1 - 2 | **Practice-Based Learning & Improvement (PBLI)**  
1, 6, 9 | **Interpersonal & Communication Skills (ICS)**  
1, 3, 4, 6 | **Professionalism (P)**  
1, 3, 5 | **Systems-Based Practice (SBP)**  
4, 5 | **Personal and Professional Development (PPD)** |
### EPA Title: Care of children and adolescents with Inflammatory Bowel Disease

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

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### Entrustment Level

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<th>Execution with direct proactive supervision</th>
<th>Execution with reactive supervision (on request)</th>
<th>Supervision at distance post hoc supervision</th>
<th>Enterrustment, ready for unsupervised practice</th>
<th>Supervision of others junior colleagues</th>
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