Curricular Components That Support the Functions of EPA 5: Perform Medical Procedures Related to Gastrointestinal and Liver Disease for Screening, Diagnosis, and Intervention

1. Demonstrating baseline knowledge about the procedure, including indications and contraindications, risks, costs and benefits, and anatomy
   - Becomes familiar with indications and contraindications, risks and benefits, diagnostic results, and therapeutic outcomes for endoscopy including wireless capsule endoscopy
   - Becomes familiar with indications and contraindications, risks and benefits, diagnostic results, and therapeutic outcomes for liver biopsy
   - Becomes familiar with indications and contraindications, risks and benefits, diagnostic results, and therapeutic outcomes for non-endoscopic procedures including esophageal impedance-pH monitoring, esophageal and antral manometry, anorectal and colonic manometry, and diagnostic breath testing
   - Knows and understands typical anatomy, as well as anatomic abnormalities
   - Considers cost/benefit analysis when making recommendations for diagnostic and/or therapeutic procedural interventions

2. Understanding of the technical aspects of the procedure both pre- and post-procedure including sedation, antibiotics, and equipment
   - Obtains a basic anesthesia exposure history and counsels pediatric patient and family on pre-procedure requirements for endoscopy
   - Becomes familiar with sedation modalities available for endoscopy and selects appropriate anesthesia plan for a given patient situation consulting with anesthesia for complex cases
   - Selects relevant endoscopy equipment (accounting for age, size, condition) for procedures and sets up and uses equipment without aid from endoscopy staff/supervisors
   - Becomes familiar with procedures to clean, maintain, and store endoscopy equipment
   - Becomes familiar with standards for infection control, monitoring, quality improvement
   - Knows and understands how an endoscopy unit is run and how it interfaces with inpatient/outpatient practices and other services

3. Performing the procedure in a safe and effective manner
   - Performs routine endoscopy and other routine procedures (North American Society for Pediatric Gastroenterology, Hepatology and Nutrition [NASPGHAN] Training Guidelines Level 1 Procedures) safely and independently including esophagogastroduodenoscopy (EGD), foreign body removal, colonoscopy, polypectomy, and bleeding control, including intubation of the esophagus and pylorus, direct visualization of the stomach and the duodenum to the third portion, and intubation of the cecum and terminal ileum, using proper technique and ergonomic considerations
Entrustable Professional Activities
Curricular Components Supporting EPA 5 for Pediatric Gastroenterology

- Performs **optional** complex or new procedures (NASPGHAN Training Guidelines Level 2 Procedures) safely and independently if trained, including some/all of the following: percutaneous endoscopic gastrostomy (PEG) placement, dilation, wireless capsule endoscopy deployment, endoscopic placement of transpyloric feeding tubes, enteroscopy, capsule pH probe deployment, percutaneous liver biopsy, and rectal biopsy

- Perform **optional** advanced procedures (Level 3) safely and independently if trained, including some/all of the following: endoscopic retrograde cholangio-pancreatography (ERCP), stent placement, balloon enteroscopy, and/or endoscopic ultrasound (EUS)

- Recognizes endoscopic/anatomic landmarks and differentiates normal from abnormal findings on gross endoscopy

- Performs therapeutic procedures as indicated including bleeding control and polypectomy

- Documents endoscopic procedure (including consent, anesthesia, findings and interventions, and subsequent management plan) in an accurate and timely fashion

- Recognizes complications related to endoscopy and knows how to manage them

- Recognizes when assistance is needed during a procedure and asks for help

4. Interpreting the procedure results and applying the results and findings to the management of the patient
   - Integrates endoscopic findings or therapy into the patient’s clinical management plan
   - Knows and understands the use of procedures to monitor diseases, including eosinophilic esophagitis and inflammatory bowel disease

5. Communicating with the patient and/or family about the procedure including pre-procedure, informed consent, procedure results, and biopsy results
   - Perform essential informed consent elements prior to endoscopy, covering indications, alternatives, and risks and benefits, and answering questions from pediatric patient and family
   - Communicate with the patient, family, and health care team members regarding endoscopic findings
   - Communicate with the patient and family regarding procedural complications

6. Communicating with health care professionals, including the referring provider, about the endoscopy/procedure including risks, findings, and management
   - Communicates with the primary physician regarding procedure indications, findings, and any change in management
   - Communicates with health care team members regarding endoscopic findings, complications, and management of disease

7. Working with an interprofessional team to enhance safety and effectiveness of the procedure
   - Works within the interprofessional team during endoscopy including anesthesia staff, surgical/endoscopy staff, and pathology
   - Works within the interprofessional team to enhance safety within the endoscopy suite
Curricular Components Authors

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