**Helicobacter pylori** Diagnostic Algorithm

1. **Alarm Features:** overt gastrointestinal bleeding (melena, hematemesis), unintentional weight loss, family history of gastric or esophageal cancer, palpable abdominal or epigastric mass, abnormal adenopathy, iron deficiency, anemia, persistent vomiting, dysphagia, odynophagia

2. **Patients <3 years**
   - EPIC LAB397
   - SHPAG/Helicobacter pylori Antigen, Stool

3. **Patients 3 to 54 years**
   - EPIC LAB572
   - HPYLB/ Helicobacter pylori Breath Test OR
   - SHPAG/ Helicobacter pylori Antigen, Stool

   - **POSITIVE**
     - Treat for Helicobacter pylori infection

   - **NEGATIVE**
     - Evaluate for other causes of dyspepsia

4. **Patients ≥ 55 years**

5. **Adults ≥ 55 years**
   - EPIC LAB2255
   - Surgical Pathology AND/OR
   - EPIC LAB2062
   - CLTST/Helicobacter pylori Rapid Urease

   - **POSITIVE**
     - Treat for Helicobacter pylori infection

   - **NEGATIVE**
     - Evaluate for other causes of dyspepsia

   - Optional: Monitor treatment for efficacy or confirmation of eradication:
     - EPIC LAB572
     - HPYLB/Helicobacter pylori Breath Test OR
     - SHPAG/Helicobacter pylori Antigen, Stool

   - **POSITIVE**
     - Treat for Helicobacter pylori infection

   - **NEGATIVE**
     - STOP

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1. Breath test, stool antigen, histology with special staining for H pylori organisms, and/or culture are the gold standard tests for diagnosis of H pylori infection.

2. Mayo Medical Laboratories utilizes the POcone Infrared Spectrophotometer; performance characteristics for this instrument havenot been established for persons under age 3. For patients 3 to 17 years, age, weight and height must be included in test request for appropriate result interpretation.

3. According to the 2007 American College of Gastroenterologists guidelines and Talley* et al, serology should be avoided or positive results should be confirmed with a test that identifies an active infection such as the urea breath test or stool antigen test. Serology is no longer performed at UnityPoint Health – Des Moines Laboratories as of May 2016.

4. Confirmation of eradication testing should not be ordered until 2 to 4 weeks after cessation of treatment. Proton pump inhibitors and antisecretory drugs should be discontinued for at least 1 week prior to assessment of H pylori eradication.

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*Version 1.1 Reviewed 05/23/2018; no changes*