

## **MVP/Preferred Care BENEFIT INTERPRETATION**

### **Capsule Endoscopy**

#### **Type of Policy**

Medical

#### **Codes**

**CPT code:** 91110, 91111

**ICD 9 Procedure Code:** 88.90

**ICD 9 Diagnosis Codes:** 555.0, 555.1, 555.2, 555.9, 557.0-557.9, 558.1, 558.9, 562.02, 562.03, 569.85, 578.1, 578.9, 792.1

#### **Evidence Basis for Policy**

**Some proven benefit.** This rating indicates that there are reasonably good data to support its use in the cited application(s). Further research is required to clarify clinical indications, contraindications, dosage/duration, comparison with alternative technologies, and/or impact on clinical outcomes.

#### **Description**

Capsule endoscopy consists of three components to image the small intestines:

- a “camera capsule” that obtains images of the gastrointestinal tract as it is pushed through by peristaltic activity;
- a data recorder that stores images received from the capsule via video signals to sensors attached to the patient. The data recorder is worn around the waist; and
- a work station that downloads the recorded data/images to produce a video of the images transmitted by the capsule. Average time for the capsule to travel through the intestinal tract is approximately 24 hours.

#### **Indications/Criteria**

Capsule endoscopy is indicated when the following criteria are met<sup>[1]</sup>:

- the member has one of the following:
  - obscure source of gastrointestinal bleeding;
  - suspected Crohn’s disease; or
  - suspected small bowel tumor;
- the standard endoscopic and imaging evaluations have been completed and are non-diagnostic:
  - esophagogastrosocopy (EDG) for source of bleeding;

- upper GI tract evaluation: UGI with SBFT or enteroclysis (not required for obscure gastrointestinal bleeding<sup>[4]</sup>;
- lower GI tract evaluation: colonoscopy or BE; and
- this test is covered when performed by in-plan gastroenterologists or contracted, independent diagnostic testing facilities, under general supervision of an in-plan gastroenterologist<sup>[7][17]</sup>.

### **Exclusions/Limitations**

- Requests not meeting the required criteria.
- More than one request per member per acute episode of occult GI bleeding from an unknown source.
- Requests when the diagnosis is hematemesis<sup>[8]</sup>.
- Colorectal cancer screening<sup>[8]</sup>.
- The test should be avoided in members with any of the following<sup>[1]</sup>:
  - implanted devices that are electrically or magnetically activated (e.g. cardiac pacemakers, automatic cardioverter defibrillators, drug infusion pumps, cochlear implants);
  - known narrowing, stricture, obstruction, or fistula of the small bowel;
  - history of abdominal irradiation;
  - gastric emptying or motility disorder, difficulty swallowing, or esophageal stricture; or
  - pregnancy.
- Capsule endoscopy imaging is not covered for cases of known Crohn's Disease in which it is used for management rather than diagnosis<sup>[8]</sup>.

### **Medicare Variation**

In addition to the indications noted above, Telemetric gastrointestinal capsule imaging is indicated in patients with the following<sup>[8]</sup>:

- a diagnosis of Crohn's disease of the colon is known but it is necessary to determine whether there is involvement of the small bowel as well; and
- in those cases in whom a diagnosis of colitis of an undeterminate type affecting the colon is known, and in whom a more specific diagnosis is sought by evaluating for possible small bowel involvement.

## References

1. InterQual®Care Planning Criteria. Copyright © 2007 McKesson Corporation and/or one of its subsidiaries. CPT only © 2006 American Medical Association. All rights reserved.
2. Bailey, A. A., et al. Diagnosis and outcome of small bowel tumors found by capsule endoscopy: a three-center Australian experience. American Journal of Gastroenterology. October 2006, 101(10):2237-43.
3. Triester, S.L., et al. A meta-analysis of the yield of capsule endoscopy compared to other diagnostic modalities in patients with non-stricturing small bowel Crohn's disease. American Journal of Gastroenterology. May 2006; May 101(5):954-64.
4. Triester, S.L., et al. A meta-analysis of the yield of capsule endoscopy compared to other diagnostic modalities in patients with obscure intestinal bleeding. American Journal of Gastroenterology. November 2005, 100(11):2407-18.
5. Leighton, J.A., et al. Capsule endoscopy: a meta-analysis for use with obscure gastrointestinal bleeding and Crohn's disease. Gastrointestinal Endoscopy Clinics of North America. April 2006 16(2):229-50.
6. Fireman, Z., Mahajna, E., Broide, E., et al. Diagnosing small bowel Crohn's disease with wireless capsule endoscopy. GUT, March, 2003, Pubmed Abstract [On-Line] Available: [www.ncbi.nlm.nih.gov/entrez](http://www.ncbi.nlm.nih.gov/entrez).
7. Technology Evaluation Center (TEC) Blue Cross Blue Shield Association, Wireless Capsule Endoscopy for Small-Bowel Diseases Other than Obscure GI Bleeding. 2003, October. [On-Line] Available: [www.bcbs.com/tec/tecinpress/11.html](http://www.bcbs.com/tec/tecinpress/11.html).
8. Upstate Medicare Division, HealthNow New York, Inc. (January 2003). Telemetric Gastrointestinal Capsule Imaging. Local Medical Review Policy: GI001E06. Revised January 2007. [On-line] Available: [www.umd.nycpic.com](http://www.umd.nycpic.com).
9. ECRI Health Technology Assessment Information Service (January 2002) Capsule Endoscopy. Target Report number: 819.
10. ECRI Health Technology Assessment Information Service Capsule Endoscopy, Technology Updates (July 2003) pages 7-8.
11. Nadler, M., Bardan, E., Fidler, H., Chowder, Y., et al. Capsule Endoscopy for the Evaluation of Patients with Chronic Abdominal Pain. Endoscopy. August 2003; Vol. 35(8):688-9.
12. Madisch, A., Schimming, W., Kinzel, F., et al. Locally Advanced Small-Bowel Adenocarcinoma Missed Primarily by Capsule Endoscopy Diagnosed by Push Enteroscopy. Endoscopy. October 2003; Vol. 35(10): 861-4.
13. U.S. Food and Drug Administration, Office of Public Affairs. FDA Clears Cameral Pill to Photograph Small Intestine. FDA Talk Paper T01-33, Rockville, MD: FDA August 1, 2001. <http://www.fda.gov/bbs/topics/ANSWERS/2001/ANS01094.html>.
14. ECRI Health Technology Assessment Information Service (2002). Capsule Endoscopy. <http://www.ecri.org>.
15. Costamagna, G., Shah, S.K., Riccioni, M.E. (October 2002). A prospective trial comparing small bowel radiographs and video capsule endoscopy for suspected small bowel disease (online). Gastroenterology. October 2002; 123: 999-1005.
16. Upstate Medicare Division Part B (2002). Telemetric Gastrointestinal Capsule Imaging. New York State Local Medical Review Policy #GI000AE00 (on-line). Available: <http://www.umd.nycpic.com/lmrp.html>.

- 17 Gostout, C.J. (October 2002). Capsule Endoscopy. Clinical Guidelines. American Society for Gastrointestinal Endoscopy (ASGE) [Website]. Available at: [http://asge.org/gui/clinical\\_info/updates/cu\\_cap\\_endo.asp](http://asge.org/gui/clinical_info/updates/cu_cap_endo.asp).
18. Hayes Directory: Wireless Capsule Endoscopy, November 28, 2003. Updated research, Wireless Capsule Endoscopy, December 6, 2004. Update January 26, 2007.

### **Approval(s) & Review/Revision(s)**

Medical:

#### Review:

Medical Advisory Team: 1/22/08

#### Approval:

Quality Improvement Committee: 4/14/08

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**Note:** For Preferred Care authorization requirements refer to Appendix A and Appendix B in the Referral/Precertification/Prior Authorization/Notification Administrative Policy. You may also refer to the "Prior Authorization/Precertification of Certain Prescription Drugs" for information on drugs that require precertification and prior authorization.. Both policies are available on the *easyLink* for Providers at [www.preferredcare.org](http://www.preferredcare.org).