



## WIRELESS CAPSULE ENDOSCOPY

**Policy number:** 200402-0004

**Effective date:** 03/01/2004

**Revision date:** 09/30/2009

### Overview

Wireless capsule endoscopy, also called capsule endoscopy, is a noninvasive endoscopic procedure which allows visualization of the small intestine without sedation or anesthesia. As the name implies, capsule endoscopy makes use of a swallowable capsule that contains a miniature video camera.

It has been clearly demonstrated that capsule endoscopy is superior to traditional radiological techniques (small-bowel follow through and small bowel enteroclysis) and push enteroscopy in the diagnosis of obscure gastrointestinal bleeding. On the grounds of the large amount of published literature, capsule endoscopy is now recommended by experts as the third step after negative bidirectional endoscopy in the investigation of obscure gastrointestinal bleeding.

Capsule endoscopy is not without limitations however. Capsule endoscopy has no therapeutic capabilities therefore it does not obviate the need for other tests or procedures in some cases, and it is contraindicated in patients with small bowel strictures or swallowing disorders. Patients with established small bowel Crohn's disease, chronic usage of non-steroidal anti-inflammatory drugs and abdominal radiation injury are at high risk of capsule retention. Patients should be fully informed about the risk of capsule retention before consent for capsule endoscopy is given. Patients should be advised that further intervention, including surgery, may be required if passage of the capsule is impeded.

### Definitions

**Colonoscopy:** the endoscopic examination of the large intestine with a colonoscope. A colonoscope is a long, thin, flexible instrument that has a tiny video camera and light at one end. To perform a colonoscopy, a gastroenterologist will insert a colonoscope into the rectum of the patient and slowly guide it into the colon. The colonoscope is able to bend and flex and the gastroenterologist can carefully maneuver the colonoscope in any direction to investigate the interior of the colon. The colonoscope produces a high quality picture displayed on a monitor, providing a clear, detailed view of the colon. Colonoscopy may allow for a visual diagnosis (e.g. ulceration, polyps) and provides the opportunity for biopsy or removal of suspected lesions.



**Esophagogastroduodenoscopy:** a diagnostic endoscopic procedure that visualizes the upper part of the gastrointestinal tract to the duodenum. In this procedure, a thin flexible instrument is advanced through the mouth to evaluate or treat problems of the esophagus, stomach, and beginning part of the small intestine.

Esophagogastroduodenoscopy may be abbreviated EGD. It is also called upper endoscopy, gastroscopy or simply endoscopy (since it is the most commonly performed type of endoscopy, the general term 'endoscopy' refers to EGD by default).

**Enteroclysis:** a fluoroscopic exam of the small intestine. Radiocontrast material (usually barium) is infused through a tube inserted through the nose into the duodenum, and images are taken in real time as the contrast moves through.

**Endoscopy:** a broad term used to describe examining the inside of the body using an lighted, flexible instrument.

**Enteroscopy:** direct visualization of the small bowel, extending into the jejunum and/or the ileum, using a fiberoptic endoscope or wireless endoscopy system, including wireless capsule endoscopy.

**Iron-deficiency anemia (IDA):** IDA occurs when the body is iron deficient to the extent that red blood cell production is reduced. Blood loss from the gastrointestinal tract is the most common cause of iron deficiency anemia in adult men and post-menopausal women. Common causes include, but are not limited to, non-steroidal anti-inflammatory drug use, gastric ulcers, celiac disease, and inflammatory bowel disease. Investigations of IDA that should be considered include referral for upper and lower endoscopy. Iron deficiency is the most common cause of anemia. Anemia is defined as:

- hemoglobin < 13 g/dL in men over 15 years of age
- hemoglobin < 12 g/dL in non-pregnant women over 15 years of age
- Hb < 12 g/dL in children ages 12 to 14 years

**Obscure GI bleeding:** bleeding from the GI tract that persists or recurs without an obvious etiology. Obscure bleeding can have two clinical forms: (1) obscure-occult, as manifested by recurrent iron deficiency anemia (IDA) and/or recurrent positive fecal occult blood test (FOBT) results, and (2) obscure – overt, with recurrent passage of visible blood.

**Upper GI Series:** a fluoroscopic exam of the esophagus, stomach and duodenum. During an upper GI series, the patient drinks one or more cups of a barium mixture. (Barium enhances visualization by sharpening the outline of the inner surface layer of the esophagus, stomach, and/or duodenum.) The radiologist or radiology technician observes the movement of the barium through the digestive system. At various times during the procedure, x-rays may also be taken. An upper GI series may be performed to identify structural or tissue abnormalities in the upper and middle GI tract, such as ulcers, tumors or polyps, or to evaluate swallowing difficulties or motility disorders.

**Small bowel follow-through:** a small bowel follow-through is typically done immediately after an upper GI series to examine the small intestine from the distal duodenum/duodenojejunal junction to the ileocecal valve as the barium travels through.



## Policy

### Wireless capsule endoscopy requires preauthorization by FCHP.

FCHP covers wireless capsule endoscopy for evaluation of the small bowel, when ordered by a gastroenterologist or surgeon, for all plan members with:

1. Obscure GI bleeding or unexplained iron deficiency anemia, when EGD and colonoscopy are negative or non-diagnostic, and if no contraindications exist.<sup>1</sup>
2. Suspected Crohn's disease and or known Crohn's disease (outside of the small bowel) with suspected small bowel involvement or a suspected recurrence, undetected by colonoscopy or ileocolonoscopy. It is recommended that these patients have radiological imaging to exclude strictures prior to capsule endoscopy.<sup>2</sup>

### In addition, for Fallon Senior Plan™ members only:

FCHP covers wireless capsule endoscopy for evaluation of the small bowel when ordered by a gastroenterologist or surgeon for Fallon Senior Plan™ members with:

1. Suspected small bowel neoplasm, when the diagnosis has not been previously confirmed by other studies. The patient must be symptomatic for a neoplasm (e.g., partial bowel obstruction, GI bleeding), and other diagnostic testing to assess these symptoms (i.e., EGD and colonoscopy) must have been performed.

## Exclusions

1. Wireless capsule endoscopy for other small bowel indications, including but not limited to colorectal cancer screening, suspected celiac disease, polyposis syndromes, etc.
2. Wireless capsule endoscopy is not covered for the investigation of pathologies of the gastrointestinal tract within the reach of conventional EGD or colonoscopy (lesions proximal to the ligament of Treitz or distal to the ileum).
3. Wireless capsule endoscopy of the esophagus (e.g., PillCam™ ESO) (CPT code 91111) is experimental/investigational.
4. Wireless capsule endoscopy of the colon (e.g., PillCam™ COLON) is experimental/investigational.
5. Use of a patency capsule such as the Given Patency Capsule (to verify patency of the GI tract prior to administration of an endoscopy capsule in patients at risk of capsule retention) is experimental/investigational.
6. Wireless capsule endoscopy is not FDA-approved for use in children < 10 years of age.

## Codes

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<sup>1</sup> Repeat EGD and colonoscopy should be considered before performing a small bowel evaluation. Repeat EGD or colonoscopy may reveal a source of bleeding even when the initial exam was negative. Commonly missed lesions in the upper GI tract include peptic ulcers, Cameron ulcers large hiatal hernias, angioectasias, and lesions caused by NSAIDs. Lesions missed in the colon include angioectasias and neoplasms.

<sup>2</sup> Capsule retention remains a risk in patients with Crohn's disease even in the presence of radiological investigations that do not show significant strictures.



FCHP considers wireless capsule endoscopy of the esophagus (e.g., PillCam™ ESO) experimental/investigational. Effective November 1, 2009, claims for wireless capsule endoscopy of the esophagus (CPT code 91111) will not be reimbursed and will be denied vendor liable.

Code	Number	Description
CPT	91110	Gastrointestinal tract imaging, intraluminal (e.g., capsule endoscopy); esophagus through ileum, with physician interpretation and report
	91111	Gastrointestinal tract imaging, intraluminal (e.g., capsule endoscopy); esophagus with physician interpretation and report

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### Products to Which This Policy Applies

- ⊕ FCHP Direct & Select Care
- ⊕ Fallon Preferred Care (PPO)
- ⊕ MassHealth
- ⊕ FCHP Independent Care, Direct Enrollment, & Bill-at-Home
- ⊕ Fallon Senior Plan™
- ⊕ Commonwealth Care

### Committee review dates:

Technology Assessment Subcommittee: 06/23/09, 07/28/09

Technology Assessment Committee: 02/23/04, 09/30/09

#### IMPORTANT NOTE

**Not all services are covered for all commercial products or employer groups.** Even though this policy may indicate that a particular service or supply is considered covered, this conclusion is not based upon the terms of your particular benefit plan. Each benefit plan contains its own specific provisions for coverage and exclusions. Not all benefits that are determined to be medically necessary will be covered benefits under the terms of your benefit plan. You need to consult the Evidence of Coverage to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and your plan of benefits, the provisions of your benefits plan will govern. However, applicable state mandates will take precedence with respect to fully insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, Federal mandates will apply to all plans. With respect to Medicare and Medicaid members, this policy will apply unless Medicare and Medicaid policies extend coverage beyond this Medical Policy & Criteria Statement.