Subject: Wireless Capsule Endoscopy

DESCRIPTION:

Wireless capsule endoscopy (capsule endoscopy) is a device intended to visualize portions of the bowel which are not accessible via upper or lower endoscopy, primarily the small bowel. Patients swallow the capsule, and it records images of the intestinal mucosa as it passes through the gastrointestinal (GI) tract. The capsule is collected after being excreted and the images interpreted.

Several systems, devices, and components for gastrointestinal imaging have received U.S. Food and Drug Administration (FDA) 510(k) clearance (e.g., Given® Diagnostic Imaging System, Given® Diagnostic System with the PillCam™ ESO, Given® AGILE Patency System, Olympus Capsule Endoscope System, and PillCam® COLON 2 Capsule Endoscopy System).

POSITION STATEMENT:

Wireless capsule endoscopy meets the definition of medical necessity for any of the following indications:

- Initial diagnosis in members with suspected Crohn’s disease without evidence of disease on conventional diagnostic tests such as small-bowel follow-through (SBFT), and upper and lower endoscopy.
- In members with an established diagnosis of Crohn’s disease, when there are unexpected change(s) in the course of disease or response to treatment, suggesting the initial diagnosis may be incorrect and re-examination may be indicated.
• Suspected small bowel bleeding, as evidenced by prior inconclusive upper and lower gastrointestinal endoscopic studies performed during the current episode of illness.

• Surveillance of the small bowel in members with hereditary GI polyposis syndromes, including familial adenomatous polyposis and Peutz-Jeghers syndrome.

• Suspected small bowel tumor.

Wireless capsule endoscopy is considered experimental or investigational for all other indications including, but not limited to the following. The evidence is insufficient to determine the effects of the technology on health outcomes.

• Evaluation of the extent of involvement of established Crohn’s disease or ulcerative colitis.

• Evaluation of the esophagus, in members with gastroesophageal reflux (GERD) or other esophageal pathologies.

• Evaluation of other gastrointestinal diseases not presenting with gastrointestinal bleeding, including but not limited to celiac sprue, irritable bowel syndrome, small bowel neoplasm, Lynch syndrome, portal hypertensive enteropathy, and unexplained chronic abdominal pain.

• Evaluation of the colon including, but not limited to, detection of colonic polyps (colorectal polyps) or colon cancer.

• PillCam COLON 2 for all indications.

• Initial evaluation of members with acute upper gastrointestinal (GI) bleeding.

The patency capsule (e.g., Given® AGILE Patency System) is considered experimental or investigational, for all indications, including use to evaluate patency of the gastrointestinal tract prior to wireless capsule endoscopy. The evidence is insufficient to determine the effects of the technology on health outcomes.

**BILLING/CODING INFORMATION:**

**CPT Coding:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>91110</td>
<td>Gastrointestinal tract imaging, intraluminal (e.g., capsule endoscopy), esophagus through ileum, with interpretation and report</td>
</tr>
<tr>
<td>91111</td>
<td>Gastrointestinal tract imaging, intraluminal (e.g., capsule endoscopy), esophagus with interpretation and report (<a href="#">investigational</a>)</td>
</tr>
<tr>
<td>0355T</td>
<td>Gastrointestinal tract imaging, intraluminal (e.g., capsule endoscopy), colon with interpretation and report (<a href="#">investigational</a>)</td>
</tr>
</tbody>
</table>

**NOTE:** 91110 have both a technical and a professional component. 91110 include provision of the capsule, hook-up and recording equipment, downloading of the digital data with processing of the video images, and physician review and interpretation with report.

**ICD-10 Diagnosis Codes That Support Medical Necessity for 91110:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D13.2</td>
<td>Benign neoplasm of duodenum</td>
</tr>
<tr>
<td>D13.30</td>
<td>Benign neoplasm of unspecified part of small intestine</td>
</tr>
<tr>
<td>D13.39</td>
<td>Benign neoplasm of other parts of small intestine</td>
</tr>
<tr>
<td>K50.00</td>
<td>Crohn’s disease of small intestine without complications</td>
</tr>
<tr>
<td>K50.011 – K50.019</td>
<td>Crohn’s disease of small intestine with complications</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>K50.80</td>
<td>Crohn's disease of both small and large intestine without complications</td>
</tr>
<tr>
<td>K50.811 – K50.819</td>
<td>Crohn’s disease of both small and large intestine with complications</td>
</tr>
<tr>
<td>K50.90</td>
<td>Crohn's disease, unspecified, without complications</td>
</tr>
<tr>
<td>K50.911 – K50.919</td>
<td>Crohn's disease, unspecified, with complications</td>
</tr>
<tr>
<td>K55.21</td>
<td>Angiodysplasia of colon with hemorrhage</td>
</tr>
<tr>
<td>K57.01</td>
<td>Diverticulitis of small intestine with perforation and abscess with bleeding</td>
</tr>
<tr>
<td>K57.11</td>
<td>Diverticulosis of small intestine without perforation or abscess with bleeding</td>
</tr>
<tr>
<td>K57.13</td>
<td>Diverticulitis of small intestine without perforation or abscess with bleeding</td>
</tr>
<tr>
<td>K57.41</td>
<td>Diverticulitis of both small and large intestine with perforation and abscess with bleeding</td>
</tr>
<tr>
<td>K57.51</td>
<td>Diverticulosis of both small and large intestine without perforation or abscess with bleeding</td>
</tr>
<tr>
<td>K57.53</td>
<td>Diverticulitis of both small and large intestine without perforation or abscess with bleeding</td>
</tr>
<tr>
<td>K92.0</td>
<td>Hematemesis</td>
</tr>
<tr>
<td>K92.1</td>
<td>Melena</td>
</tr>
<tr>
<td>K92.2</td>
<td>Gastrointestinal hemorrhage, unspecified</td>
</tr>
<tr>
<td>Q85.8</td>
<td>Other phakomatoses, not elsewhere classified</td>
</tr>
<tr>
<td>Q85.9</td>
<td>Phakomatosis, unspecified</td>
</tr>
</tbody>
</table>

**REIMBURSEMENT INFORMATION:**
Refer to section entitled [POSITION STATEMENT](#).

**PROGRAM EXCEPTIONS:**

Federal Employee Program (FEP): Follow FEP guidelines.

State Account Organization (SAO): Follow SAO guidelines.

Medicare Advantage products: The following Local Coverage Determination (LCD) was reviewed on the last guideline reviewed date: Wireless Capsule Endoscopy, (L33774) located at fcso.com.

**DEFINITIONS:**

**Angiodysplasia**: small abnormalities of blood or lymphatic vessels.

**Celiac sprue**: chronic hereditary intestinal disorder in which an inability to absorb the gliadin portion of gluten results in the gliadin triggering an immune response that damages the intestinal mucosa.

**Enteritis**: inflammation of the intestine, especially of the small intestine.

**Familial adenomatous polyposis**: a disease of the large intestine that is marked by the formation especially in the colon and rectum of numerous adenomatous polyps which typically become malignant if left untreated, that may be either asymptomatic or accompanied by diarrhea or bleeding, and that is inherited as an autosomal dominant trait – abbreviation FAP.

**Lynch syndrome**: often called hereditary nonpolyposis colorectal cancer (HNPCC), is an inherited disorder that increases the risk of many types of cancer, particularly cancers of the colon (large intestine) and rectum, which are collectively referred to as colorectal cancer.
**Obscure GI bleeding:** recurrent or persistent iron-deficiency anemia, positive fecal occult blood test, or visible bleeding with no bleeding source found at original endoscopy.

**Peutz-Jeghers syndrome:** familial polyposis inherited as an autosomal dominant trait and characterized by numerous polyps in the stomach, small intestine, and colon and by melanin-containing spots on the skin and mucous membranes especially of the lips and gums.

**Portal hypertensive enteropathy:** a condition that describes the pathologic changes and mucosal abnormalities observed in the small intestine of individuals with portal hypertension.

**RELATED GUIDELINES:**

- Esophageal pH Monitoring, 01-91000-01
- Ingestible pH and Pressure Capsule, 01-91000-08

**OTHER:**

Other names used to report Wireless Capsule Endoscopy:

**Note:** The use of specific product names is illustrative only. It is not intended to be a recommendation of one product over another and is not intended to represent a complete listing of all products available.

Capsule Endoscopy
Given Capsule Endoscopy
Ingestible Telemetric Video Endoscopy System
Ingestible Telemetric Video Diagnostic Imaging System
Video Capsule Endoscopy (VCE)
Wireless Motility Capsule (WMC)

**REFERENCES:**


16. Leighton JA, Legnani P, Seidman EG. Role of capsule endoscopy in inflammatory bowel disease: where we are and where we are going. Inflammatory Bowel Diseases 2007; 13(3): 331-7.


COMMITTEE APPROVAL:
This Medical Coverage Guideline (MCG) was approved by the BCBSF Medical Policy & Coverage Committee on 12/05/19.

GUIDELINE UPDATE INFORMATION:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>11/15/02</td>
<td>New Medical Coverage Guideline.</td>
</tr>
<tr>
<td>05/15/03</td>
<td>Reviewed and revised; investigational status changed.</td>
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<tr>
<td>09/15/03</td>
<td>Added coding clarification note.</td>
</tr>
<tr>
<td>01/01/04</td>
<td>Annual HCPCS coding update.</td>
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<tr>
<td>05/15/04</td>
<td>Scheduled review and revision of guideline; consisting of updated references additional indication for coverage and deletion of G0262.</td>
</tr>
<tr>
<td>05/15/05</td>
<td>Scheduled review and revision of guideline; consisting of updated references.</td>
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<tr>
<td>10/15/05</td>
<td>Revision to guideline; consisting of the addition of an investigational statement for wireless capsule endoscopy of the esophagus and updated references.</td>
</tr>
<tr>
<td>06/15/06</td>
<td>Scheduled review and revision of guideline consisting of updated references.</td>
</tr>
<tr>
<td>10/30/06</td>
<td>Revision to guideline consisting of the addition of Program Exception verbiage for Medicare Advantage products.</td>
</tr>
<tr>
<td>01/01/07</td>
<td>HCPCS coding update consisting of the addition of 91111.</td>
</tr>
<tr>
<td>03/15/07</td>
<td>Scheduled review and revision of guideline consisting of updated references.</td>
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<tr>
<td>06/15/07</td>
<td>Reformatted guideline; updated references.</td>
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<tr>
<td>07/15/08</td>
<td>Review and revision of guideline consisting of updated references.</td>
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<tr>
<td>11/15/09</td>
<td>Annual review. Added experimental or investigational statement for the Given® Patency System. Added program exception for Medicare, ICD-9 codes that support medical necessity for 91110 and 91111. Updated references.</td>
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<tr>
<td>01/01/11</td>
<td>Revision; added related ICD-10 codes.</td>
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<tr>
<td>03/15/11</td>
<td>Added smart pill to section titled “Other”.</td>
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<tr>
<td>11/15/11</td>
<td>Annual review; maintain medical necessity position statement. Revised description; FDA statement. Updated experimental or investigational position statement, added evaluation of the colon including, but not limited to, detection of colonic polyps or colon cancer. Revised/updated definitions. Updated reference.</td>
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<tr>
<td>01/01/13</td>
<td>Annual HCPCS coding update; revised 91110 and 91111 code descriptor.</td>
</tr>
<tr>
<td>07/15/14</td>
<td>Annual review; Updated description section. Added “performed during the current episode of illness” to meets the definition of medical necessity statement; Obscure gastrointestinal (GI) bleeding suspected of being of small bowel origin, as evidenced by prior inconclusive upper and lower gastrointestinal endoscopic studies “performed during the current episode of illness”. Added “suspected small bowel tumor” to position statement. Added “ulcerative colitis” and “initial evaluation of patients with acute upper gastrointestinal bleeding (GI) bleeding to experimental or investigational statement. Added ICD-9 diagnoses codes: 211.2, 578.0, 578.1 and 759.6. Added Medicare Advantage products program exception. Updated references for 91110.</td>
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<td>10/15/15</td>
<td>Review and revision; added evaluation of members with Crohn’s disease for unexpected change(s) in the course of disease or response to treatment to position statement, added Lynch syndrome, portal hypertensive enteropathy and unexplained chronic abdominal pain to the experimental or investigational position statement, revised experimental or investigational position statement, and updated references.</td>
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<tr>
<td>11/01/15</td>
<td>Revision: ICD-9 Codes deleted.</td>
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<tr>
<td>02/15/19</td>
<td>Review; no change to position statement. Updated references.</td>
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<tr>
<td>12/15/19</td>
<td>Review; no change to medical necessity position statement. Added PillCam COLON 2 to experimental or investigational position statement. Updated references</td>
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