Clinical Guideline



Oscar Clinical Guideline: Colorectal Cancer Screening (CG024, Ver. 11)

Colorectal Cancer Screening

Disclaimer

Clinical guidelines are developed and adopted to establish evidence-based clinical criteria for utilization management decisions. Clinical guidelines are applicable according to policy and plan type. The Plan may delegate utilization management decisions of certain services to third parties who may develop and adopt their own clinical criteria.

Coverage of services is subject to the terms, conditions, and limitations of a member's policy, as well as applicable state and federal law. Clinical guidelines are also subject to in-force criteria such as the Centers for Medicare & Medicaid Services (CMS) national coverage determination (NCD) or local coverage determination (LCD) for Medicare Advantage plans. Please refer to the member's policy documents (e.g., Certificate/Evidence of Coverage, Schedule of Benefits, Plan Formulary) or contact the Plan to confirm coverage.

Summary

The Plan follows the colorectal cancer screening guidelines from the U.S. Preventive Services Task Force (USPSTF) and the U.S. Multi-Society Task Force of Colorectal Cancer (MSTF), which represents the American College of Gastroenterology, the American Gastroenterological Association, and the American Society for Gastrointestinal Endoscopy. Colorectal cancer screening is a medically necessary preventive service for men and women aged 45 years and older, and for even younger men and women with specific risk factors. Depending on individual risk factors, the treating provider may recommend the appropriate screening regimen and intervals. Screening options may be chosen based on individual risk and also by personal preference.

Definitions

"Polyps" are abnormal tissue growths that most often look like small, flat bumps or tiny mushroom-like stalks.

"Endoscopic and radiologic screening examinations" include colonoscopy, flexible sigmoidoscopy, double-contrast barium enema, capsule endoscopy and CT colonography and are based on direct or radiographic visualization of the polyp or cancer. Procedures that fall within this definition include:

• "Colonoscopy" is a procedure that allows a provider to examine the inner lining of the large intestine (rectum and colon) by using a thin, flexible tube called a colonoscope.

- "Flexible sigmoidoscopy" is a procedure that allows the provider to examine the rectum and lower sigmoid colon using a flexible sigmoidoscope or a colonoscope that is not inserted all the way
- "Double contrast barium enema" is a form of contrast radiography in which x-rays of the colon and rectum are taken using barium and air contrast to visualize the internal structures more easily.
- "CT colonography" or "virtual colonoscopy" is a procedure that uses specialized CT scan x-ray equipment to examine the large intestine for cancer or polyps.
- "Capsule endoscopy" is a procedure where a small ingestible capsule is swallowed. This disposable capsule has small cameras which take video as it moves through the digestive system to visualize the colon for detection of polyps. The video signal is recorded by an external box, then downloaded to a computer so your doctor can visualize the colon for detection of polyps.

"Incomplete colonoscopy" refers to a situation when the colon cannot be fully evaluated for a number of reasons, such as patient discomfort, a very twisty colon anatomy, prior surgery, or suboptimal bowel preparation.

"Stool-based screening tests" include the guaiac-based fecal occult blood test (gFOBT), fecal immunochemical test (FIT), and stool DNA testing (sDNA). While these tests typically cannot detect precancerous polyps, they may be able to detect other signs of cancer such as blood or cell debris in the stool. Tests that fall within this definition include:

- "Guaiac-based fecal occult blood test (gFOBT)" is a non-invasive screening tool that targets human red blood cell components in stool. This detects bleeding from any part of the gut.
- "Fecal immunochemical test (FIT)" is a non-invasive screening tool that targets human red blood cell components in stool. This detects bleeding predominantly originating in the colon.
- "Stool DNA test (sDNA)" is a non-invasive screening tool that targets both human red blood cell components and specific genetic alterations in stool.
- "Serum-based testing" is a non-invasive blood-based screening tool that looks for evidence of existing colon cancer.

A. Clinical Indications

- 1. Medical Necessity Criteria for Clinical Review
 - a. General Medical Necessity Criteria
 - b. Indication-Specific Criteria
- 2. Experimental or Investigational / Not Medically Necessary
- B. Applicable Billing Codes
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Medical Necessity Criteria for Clinical Review

General Medical Necessity Criteria

Average Risk Screening

Average risk includes persons who meet ALL of the following criteria:

- 1. ONE of the following age groups:
 - a. Ages 45 to 75, for which regular screening indicated; or
 - b. Ages 76 to 85, for which screening is indicated based on individual's prior screening history and overall health status; *and*
- 2. No personal or family history of adenomatous polyps, colorectal cancer, familial adenomatous, polyposis (FAP), hereditary nonpolyposis colorectal cancer (HNPCC), or other genetic syndromes that predispose members to an increased risk of colorectal cancer; *and*
- 3. No personal history of inflammatory bowel disease such as Crohn's Disease or Ulcerative Colitis.

High Risk Screening

People at increased or high risk of colorectal cancer may begin colorectal cancer screening before age 45 and be screened at more frequent intervals. For individuals defined as high risk, increased surveillance generally means a specific recommendation for colonoscopy. High risk includes persons who meet ONE of the following criteria:

- 1. A personal history of colorectal cancer or adenomatous polyps. This may include individuals up to age 85, for which re-screening is indicated based on individual's prior screening history and overall health status; *or*
- 2. A personal history of inflammatory bowel disease (ulcerative colitis or Crohn's disease); or
 - Guidelines recommend screening colonoscopy for these patients 8-10 years after diagnosis, with the interval for further surveillance guided by risk factors and findings at the time of initial colonoscopy.
- 3. A family history of colorectal cancer or polyps; or
 - Persons with a first-degree relative in whom colorectal cancer developed at any age should undergo a colonoscopy at 40 years of age or an age 10 years younger than the relative's age when cancer developed, whichever is earlier; or
- 4. A known family history of hereditary colorectal cancer syndrome such as familial adenomatous polyposis (FAP), hereditary non-polyposis colon cancer (HNPCC), or other genetic syndromes that predispose members to an increased risk of colorectal cancer.
 - Persons with a family history of FAP should undergo their first surveillance colonoscopy at 10 to 12 years of age.
 - If there is a family history of FAP and genetic testing is not available, not feasible, or negative, then annual screening colonoscopy or sigmoidoscopy is recommended. If adenomatous polyps are found, the colonoscopy becomes surveillance and flexible sigmoidoscopy is no longer used as a screening tool.
 - Persons with a family history of HNPCC should undergo their first colonoscopy at the age of 20 to 25 years, or 10 years before the youngest case in their immediate family followed by a colonoscopy every 1-2 years thereafter.

Indication-Specific Criteria

Endoscopic Screening Procedures

The Plan considers the following tests medically necessary for either average *or* high risk patients for the detection of polyps (precancerous lesions) *and* colorectal cancer when ALL of the following criteria are met:

- 1. If a preventive screening results in a therapeutic service performed during the same encounter and as an integral part of the preventive service (e.g., polyp removal during a preventive colonoscopy), the therapeutic service is still considered a preventive service upon screening; and
- 2. ONE of the following:
 - a. A colonoscopy may be indicated as a preventive measure when ALL of the following are present:
 - i. Average Risk Screening criteria are met and no colonoscopy within the past 10 years; *or*
 - High Risk Screening criteria are met OR MCG Colonoscopy (A-0129) criteria are met for abnormal results of screening, high-risk family history, or high-risk personal history; and
 - iii. Testing frequency is ordered for 1 of the following:
 - For high risk members, a screening interval appropriate for the individual's underlying high risk indication and associated degree of risk; or
 - 2. Accelerated rescreening with optimal preparation is warranted when examination is performed in the setting of limited visualization due to patient factors or occluding colonic contents; *or*
 - b. A flexible sigmoidoscopy may be indicated as a preventive measure when ALL of the following are present:
 - i. Average Risk Screening criteria are met; or
 - ii. High Risk Screening criteria are met OR MCG Sigmoidoscopy, Flexible (A-0128) colorectal cancer screening criteria are met for family history or surveillance for local recurrence (excludes MCG average-risk adult criteria); and
 - iii. Testing frequency is ordered for 1 of the following:
 - 1. Once every 5 years for average risk patients; or
 - For high risk members, a screening interval appropriate for the individual's underlying high risk indication and associated degree of risk; or
 - c. A double contrast barium enema may be indicated as a preventive measure when ALL of the following are present:
 - i. Average Risk Screening criteria are met; and
 - ii. Colonoscopy or CT colonography are not available or desired by the member; and
 - iii. Testing frequency is ordered for 1 of the following:

- 1. Once every 5 years for average risk patients; or
- 2. For high risk members, a screening interval appropriate for the individual's underlying high risk indication and associated degree of risk.

Stool-Based and Imaging-Based Screening Tests

The Plan considers the following tests medically necessary for average risk patients for the detection of colorectal cancer when ONE of the following criteria is met:

- 1. A CT colonography can detect but not remove polyps and may be indicated as a preventive measure when ALL of the following are present:
 - a. Average Risk Screening criteria are met; and
 - b. MCG Colonography, CT (Virtual Colonoscopy) (A-0030) colorectal cancer screening criteria is met: *and*
 - c. Testing is ordered once every 5 years; or
 - **The patient may also qualify if unable to tolerate a colonoscopy with sedation or has medical conditions (e.g., recent myocardial infarction, recent colonic surgery, bleeding disorders, severe lung and/or heart disease).
- 2. A guaiac-based fecal occult blood test (gFOBT) cannot adequately screen for precancerous polyps but may be indicated as a preventive measure when ALL of the following are present:
 - a. Average Risk Screening criteria are met; and
 - b. No gFOBT within 1 year; and
 - c. gFOBT is ordered for 3 separate bowel movements yearly; and
 - d. gFOBT is ordered alone or in conjunction with a sigmoidoscopy; and
 - e. No positive result from another colorectal cancer screening test in last 6 months; and
 - f. No signs or symptoms of active colorectal disease (e.g., no lower GI pain, no blood in stool, no positive stool DNA test or fecal immunochemical test); and
 - g. Testing is ordered once annually; or
- 3. A fecal immunochemical test (FIT) cannot adequately screen for precancerous polyps but may be indicated as a preventive measure when ALL of the following are present:
 - a. Average Risk Screening criteria are met; and
 - b. No FIT testing within 1 year; and
 - c. No positive result from another colorectal cancer screening test in last 6 months; and
 - d. No signs or symptoms of active colorectal disease (e.g., no lower GI pain, no blood in stool, no positive guaiac fecal blood test or stool DNA test); and
 - e. Testing is ordered once annually; or
- 4. A stool DNA test (sDNA) cannot adequately screen for precancerous polyps but may be indicated as a preventive measure when ALL of the following are present:
 - a. The stool DNA test is the Cologuard® test; and
 - b. Average Risk Screening criteria are met; and
 - c. No stool DNA test within 1 year; and
 - d. No positive result from another colorectal cancer screening test in last 6 months; and

- e. No signs or symptoms of active colorectal disease (e.g., no lower GI pain, no blood in stool, no positive guaiac fecal blood test or FIT test); and
- f. Testing is ordered once every one to three years and in lieu of colonoscopy, unless test results warrant further colonic investigation.

Experimental or Investigational / Not Medically Necessary

Colorectal cancer screening is currently NOT recommended for average risk patients age 85 or older.

The application and clinical utility of capsule endoscopies is considered experimental or investigational:

- 1. Colon capsule endoscopy (e.g., PillCam COLON 2)
- 2. Patency capsule (e.g., PillCam Patency System)

Any colorectal cancer screening tests for which safety and efficacy have not been established and proven are considered experimental, investigational, or unproven, and are therefore not covered by the Plan. Furthermore, serum-based genetic testing or biomarker testing for the purposes of routine colorectal cancer screening is considered experimental. (Testing and monitoring related to the diagnosis of colon cancer may be considered medically necessary as per MCG or NCCN, but are considered outside the scope of this Colorectal Cancer Screening guideline).

Experimental routine *screening* tests include, but are not limited to, the following:

- 1. Oncotype DX gene expression assay
- 2. GeneFx Colon gene expression assay
- 3. ColoPrint gene expression assay
- 4. Colorectal cancer (hereditary) gene panel
- 5. ColoSense™ (multitarget stool RNA or mt-sRNA test)
- 6. Guardant Health's Shield™ blood test
- 7. Methylated septin 9 (ColoVantage, EpiproColon)
- 8. MicroRNA detection in serum or stool
- 9. Screening upper endoscopy
- 10. Chromoendoscopy or narrow-band imaging optical colonoscopy
- 11. Other stool DNA tests (PreGen-26, PreGen-Plus, ColoSure)
- 12. Serum-based screening test

Applicable Billing Codes

Table 1		

CPT/HCPCS codes considered medically necessary if criteria are met (a screening colonoscopy or sigmoidoscopy may turn into a diagnostic or therapeutic procedure due to findings during the procedure and should be billed with the appropriate diagnosis codes or modifiers):

procedure and should be billed with the appropriate diagnosis codes or modifiers):			
Code	Description		
44388	Colonoscopy through stoma; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)		
44389	Colonoscopy through stoma; with biopsy, single or multiple		
44390	Colonoscopy through stoma; with removal of foreign body(s)		
44391	Colonoscopy through stoma; with control of bleeding, any method		
44392	Colonoscopy through stoma; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps		
44394	Colonoscopy through stoma; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique		
44401	Colonoscopy through stoma; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre-and post-dilation and guide wire passage, when performed)		
44403	Colonoscopy through stoma; with endoscopic mucosal resection		
44404	Colonoscopy through stoma; with directed submucosal injection(s), any substance		
45330	Sigmoidoscopy, flexible; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)		
45331	Sigmoidoscopy, flexible; with biopsy, single or multiple		
45332	Sigmoidoscopy, flexible; with removal of foreign body(s)		
45333	Sigmoidoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps		
45334	Sigmoidoscopy, flexible; with control of bleeding, any method		
45335	Sigmoidoscopy, flexible; with directed submucosal injection(s), any substance		

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Code	Description		
45338	Sigmoidoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique		
45341	Sigmoidoscopy, flexible; with endoscopic ultrasound examination		
45342	Sigmoidoscopy, flexible; with transendoscopic ultrasound guided intramural or transmural fine needle aspiration/biopsy(s)		
45346	Sigmoidoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)		
45349	Sigmoidoscopy, flexible; with endoscopic mucosal resection		
45378	Colonoscopy, flexible; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)		
45379	Colonoscopy, flexible; with removal of foreign body(s)		
45380	Colonoscopy, flexible; with biopsy, single or multiple		
45381	Colonoscopy, flexible; with directed submucosal injection(s), any substance		
45382	Colonoscopy, flexible; with control of bleeding, any method		
45384	Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps		
45385	Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique		
45388	Colonoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)		
74263	Computed tomographic (CT) colonography, screening, including image postprocessing		
74270	Radiologic examination, colon, including scout abdominal radiograph(s) and delayed image(s), when performed; single-contrast (eg, barium) study		
45378 45379 45380 45381 45382 45384 45385 45388 74263	Colonoscopy, flexible; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure) Colonoscopy, flexible; with removal of foreign body(s) Colonoscopy, flexible; with biopsy, single or multiple Colonoscopy, flexible; with directed submucosal injection(s), any substance Colonoscopy, flexible; with control of bleeding, any method Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique Colonoscopy, flexible; with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed) Computed tomographic (CT) colonography, screening, including image postprocessing Radiologic examination, colon, including scout abdominal radiograph(s) and		

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CPT/HCPCS codes considered medically necessary if criteria are met (a screening colonoscopy or sigmoidoscopy may turn into a diagnostic or therapeutic procedure due to findings during the procedure and should be billed with the appropriate diagnosis codes or modifiers):

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Code	Description	
81201	APC (adenomatous polyposis coli) (eg, familial adenomatosis polyposis [FAP], attenuated FAP) gene analysis; full gene sequence	
81202	APC (adenomatous polyposis coli) (eg, familial adenomatosis polyposis [FAP], attenuated FAP) gene analysis; known familial variants	
81203	APC (adenomatous polyposis coli) (eg, familial adenomatosis polyposis [FAP], attenuated FAP) gene analysis; duplication/deletion variants	
81210	BRAF (B-Raf proto-oncogene, serine/threonine kinase) (eg, colon cancer, melanoma), gene analysis, V600 variant(s)	
81528	Oncology (colorectal) screening, quantitative real-time target and signal amplification of 10 DNA markers (KRAS mutations, promoter methylation of NDRG4 and BMP3) and fecal hemoglobin, utilizing stool, algorithm reported as a positive or negative result	
82270	Blood, occult, by peroxidase activity (eg, guaiac), qualitative; feces, consecutive collected specimens with single determination, for colorectal neoplasm screening (ie, patient was provided 3 cards or single triple card for consecutive collection)	
82274	Blood, occult, by fecal hemoglobin determination by immunoassay, qualitative, feces, 1-3 simultaneous determinations	
G0104	Colorectal cancer screening; flexible sigmoidoscopy	
G0105	Colorectal cancer screening; colonoscopy on individual at high risk	
G0106	Colorectal cancer screening; alternative to G0104, screening sigmoidoscopy, barium enema	
G0120	Colorectal cancer screening; alternative to G0105, screening colonoscopy, barium enema	
G0121	Colorectal cancer screening; colonoscopy on individual not meeting criteria for high risk	
G0122	Colorectal cancer screening; barium enema	
G0328	Colorectal cancer screening; fecal occult blood test, immunoassay, one to three simultaneous determinations	

Table 1		
CPT/HCPCS codes considered medically necessary if criteria are met (a screening colonoscopy or		
sigmoidoscopy may turn into a diagnostic or therapeutic procedure due to findings during the		
procedure and should be billed with the appropriate diagnosis codes or modifiers):		
Code	Description	
S0285	Colonoscopy consultation performed prior to a screening colonoscopy procedure	

Table 2	Table 2		
ICD-10 codes considered medically necessary with Table 1 codes if criteria are met:			
Code	Description		
C18.0-C18.9	Malignant neoplasm of colon		
C19	Malignant neoplasm of rectosigmoid junction		
C20	Malignant neoplasm of rectum		
C21.0 - C21.8	Malignant neoplasm of anus and anal canal		
C7A.020 - C7A.029	Malignant carcinoid tumors of the appendix, large intestine, and rectum		
D12.0 - D12.9	Benign neoplasm of colon, rectum, anus and anal canal		
D3A.020 - D3A.029	Benign carcinoid tumors of the appendix, large intestine, and rectum		
K50.00 - K50.919	Crohn's disease [regional enteritis]		
K51.00 - K51.919	Ulcerative colitis		
K52.0 - K52.9	Other and unspecified noninfective gastroenteritis and colitis		
K55.011 - K55.9	Vascular disorders of intestine		
K57.20 - K57.21	Diverticular disease of large intestine with perforation and abscess		
K57.30 - K57.33	Diverticular disease of large intestine without perforation or abscess		
K57.40 - K57.41	Diverticulitis of both small and large intestine with perforation and abscess		
K57.50 - K57.53	Diverticulitis of both small and large intestine without perforation or abscess		
K57.80 - K57.81	Diverticulitis of intestine, part unspecified, with perforation and abscess		
K57.90 - K57.93	Diverticulitis of intestine, part unspecified, without perforation or abscess		

Table 2		
ICD-10 codes considered medically necessary with Table 1 codes if criteria are met:		
Code	Description	
K63.5	Polyp of colon	
Z12.10	Encounter for screening for malignant neoplasm of intestinal tract, unspecified	
Z12.11	Encounter for screening for malignant neoplasm of colon	
Z12.12	Encounter for screening for malignant neoplasm of rectum	
Z15.09	Genetic susceptibility to other malignant neoplasm	
Z80.0	Family history of malignant neoplasm of digestive organs	
Z83.71	Family history of colonic polyps	
Z83.79	Family history of other diseases of the digestive system	
Z85.030	Personal history of malignant carcinoid tumor of large intestine	
Z85.038	Personal history of other malignant neoplasm of large intestine	
Z85.040	Personal history of malignant carcinoid tumor of rectum	
Z85.048	Personal history of other malignant neoplasm of rectum, rectosigmoid junction, and anus	
Z86.0100	Personal history of colon polyps, unspecified	
Z86.0101	Personal history of adenomatous and serrated colon polyps	
Z86.0102	Personal history of hyperplastic colon polyps	
Z86.0109	Personal history of other colon polyps	

Table 3		
CPT/HCPCS codes considered experimental or investigational for colorectal cancer screening:		
Code	Description	
0002U	Oncology (colorectal), quantitative assessment of three urine metabolites (ascorbic acid, succinic acid and carnitine) by liquid chromatography with tandem mass spectrometry (LC-MS/MS) using multiple reaction monitoring acquisition, algorithm reported as likelihood of adenomatous polyps	

Table 3		
CPT/HCPCS codes considered experimental or investigational for colorectal cancer screening:		
Code	Code Description	
0163U	Oncology (colorectal) screening, biochemical enzyme-linked immunosorbent assay (ELISA) of 3 plasma or serum proteins (teratocarcinoma derived growth factor-1 [TDGF-1, Cripto-1], carcinoembryonic antigen [CEA], extracellular matrix protein [ECM]), with demographic data (age, gender, CRC-screening compliance) using a proprietary algorithm and reported as likelihood of CRC or advanced adenomas	
0229U	BCAT1 (Branched chain amino acid transaminase 1) and IKZF1 (IKAROS family zinc finger 1) (eg, colorectal cancer) promoter methylation analysis (Colvera®, Clinical Genomics Pathology Inc)	
0368U	Oncology (colorectal cancer), evaluation for mutations of APC, BRAF, CTNNB1, KRAS, NRAS, PIK3CA, SMAD4, and TP53, and methylation markers (MYO1G, KCNQ5, C9ORF50, FLI1, CLIP4, ZNF132 and TWIST1), multiplex quantitative polymerase chain reaction (qPCR), circulating cell-free DNA (cfDNA), plasma, report of risk score for advanced adenoma or colorectal cancer [Includes ColoScape™ Colorectal Cancer Detection, DiaCarta Clinical Lab, DiaCarta, Inc]	
0421U	Oncology (colorectal) screening, quantitative real-time target and signal amplification of 8 RNA markers (GAPDH, SMAD4, ACY1, AREG, CDH1, KRAS, TNFRSF10B, EGLN2) and fecal hemoglobin, algorithm reported as a positive or negative for colorectal cancer risk	
0651T	Magnetically controlled capsule endoscopy, esophagus through stomach, including intraprocedural positioning of capsule, with interpretation and report.	
44799	 Unlisted procedure, small intestine <u>Due to the broad nature of this code, specific exclusions are indicated:</u> When this code is billed for chromoendoscopy or narrow-band imaging optical colonoscopy, it is considered experimental or investigational 	
45399	 Unlisted procedure, colon <u>Due to the broad nature of this code, specific exclusions are indicated:</u> When this code is billed for chromoendoscopy or narrow-band imaging optical colonoscopy, it is considered experimental or investigational 	
45999	Unlisted procedure, rectum	

Table 3			
CPT/HCPCS	CPT/HCPCS codes considered experimental or investigational for colorectal cancer screening:		
Code Description			
	 Due to the broad nature of this code, specific exclusions are indicated: When this code is billed for chromoendoscopy or narrow-band imaging optical colonoscopy, it is considered experimental or investigational 		
81327	SEPT9 (Septin9) (eg, colorectal cancer) promoter methylation analysis		
81435	Hereditary colon cancer-related disorders (eg, Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatosis polyposis); genomic sequence analysis panel, 5 or more genes, interrogation for sequence variants and copy number variants		
81436	Hereditary colon cancer disorders (eg, Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatosis polyposis); duplication/deletion analysis panel, must include analysis of at least 5 genes, including MLH1, MSH2, EPCAM, SMAD4, and STK11		
88271	Molecular cytogenetics; DNA probe, each (e.g., FISH)		
88272	Molecular cytogenetics; chromosomal in situ hybridization, analyze 3-5 cells (eg, for derivatives and markers)		
88273	Molecular cytogenetics; chromosomal in situ hybridization, analyze 10-30 cells (eg, for microdeletions)		
88274	Molecular cytogenetics; interphase in situ hybridization, analyze 25-99 cells		
88275	Molecular cytogenetics; interphase in situ hybridization, analyze 100-300 cells		
91113	Gastrointestinal tract imaging, intraluminal (eg, capsule endoscopy), colon, with interpretation and report		
G0327	Colorectal cancer screening; blood-based biomarker		

References

1. American Cancer Society. (2024). Guideline for Colorectal Cancer Screening. Last Revised: January 29, 2024.

- https://www.cancer.org/cancer/colon-rectal-cancer/detection-diagnosis-staging/acs-recommendations.html
- American Society of Colon and Rectal Surgeons Clinical Practice Guideline for Colorectal Cancer Screening Update. (2021). Diseases of the Colon & Rectum, 65(2), 148–177. https://doi.org/10.1097/dcr.00000000000000003323
- 3. American Society for Gastrointestinal Endoscopy (ASGE). (2016). Capsule Endoscopy. https://www.asge.org/list-pages/patient-informations/understanding-capsule-endoscopy.
- 4. Bailey, et al. Colorectal Cancer Screening: Stool DNA and Other Noninvasive Modalities. Gut and Liver, 2016; 10(2), 204.
- 5. Barnell, E. K., Wurtzler, E. M., La Rocca, J., Fitzgerald, T., Petrone, J., Hao, Y., ... & Lieberman, D. A. (2023). Multitarget stool RNA test for colorectal cancer screening. Jama, 330(18), 1760-1768.
- 6. Chung, D. C., Gray, D. M., Singh, H., Issaka, R. B., Raymond, V. M., Eagle, C., ... & Grady, W. M. (2024). A cell-free DNA blood-based test for colorectal cancer screening. New England Journal of Medicine, 390(11), 973-983.
- 7. ClinicalTrials.gov. (2024). Evaluation of the ctDNA LUNAR Test in an Average Patient Screening Episode (ECLIPSE). Sponsor: Guardant Health, Inc. NCT ID: NCT04136002.
- 8. Doubeni, C. (2024). Screening for colorectal cancer: Strategies in patients at average risk. *UpToDate*. Retrieved from https://www.uptodate.com/contents/screening-for-colorectal-cancer-strategies-in-patients-at-ave-rage-risk
- 9. Doubeni, C. (2024). Tests for screening for colorectal cancer. *UpToDate*. Retrieved from https://www.uptodate.com/contents/tests-for-screening-for-colorectal-cancer
- 10. Eckmann JD, Ebner DW, Kisiel JB. Multi-Target Stool DNA Testing for Colorectal Cancer Screening: Emerging Learning on Real-world Performance. Curr Treat Options Gastroenterol. 2020 Jan 21;18(1):109-119.
- 11. Fleshner, P.R. (2020). Operative management of Crohn disease of the small bowel, colon, and rectum. *UpToDate*.
 - https://www.uptodate.com/contents/operative-management-of-crohn-disease-of-the-small-bowe l-colon-and-rectum
- 12. Fornaro, et al. Colorectal Cancer in Patients with Inflammatory Bowel Disease: The Need for a Real Surveillance Program. Clinical Colorectal Cancer. 2016; 15(3), 204-212.
- 13. Gupta S. Screening for Colorectal Cancer. Hematol Oncol Clin North Am. 2022 Jun;36(3):393-414.
- 14. Hayes, Inc. Clinical Utility Evaluation. Liquid Biopsy Tests for Colorectal Cancer Screening. Lansdale, PA: Hayes, Inc.; Annual Review: March 2023.
- 15. Hayes, Inc. Molecular Test Assessment. *Cologuard (Exact Sciences Corp.) for Colorectal Cancer Screening in Average-Risk Adults.* Lansdale, PA: Hayes, Inc.; March 2025.
- 16. Hayes, Inc. Molecular Test Assessment. *Cologuard Plus (Exact Sciences Corp.)*. Lansdale, PA: Hayes, Inc.; March 2025.
- 17. Hayes, Inc. Molecular Test Assessment. *Epi proColon (Epigenomics Inc.)*. Lansdale, PA: Hayes, Inc.; November 2023.

- 18. Hayes, Inc. Precision Medicine Research Brief. *Shield (Guardant Health Inc.)*. Lansdale, PA: Hayes, Inc.; February 2025.
- Hodan, R., Gupta, S., Weiss, J. M., Axell, L., Burke, C. A., Chen, L., Chung, D. C., Clayback, K. M., Felder, S., Foda, Z., Giardiello, F. M., Grady, W., Gustafson, S., Hagemann, A., Hall, M. J., Hampel, H., Idos, G., Joseph, N., Kassem, N., . . . Diwan, Z. (2024). Genetic/Familial High-Risk Assessment: Colorectal, Endometrial, and Gastric, Version 3.2024, NCCN Clinical Practice Guidelines in Oncology. Journal of the National Comprehensive Cancer Network, 22(10), 695–711. https://doi.org/10.6004/jnccn.2024.0061
- 20. Huguet JM, Suárez P, Ferrer-Barceló L, Ruiz L, Monzó A, Durá AB, Sempere J. Endoscopic recommendations for colorectal cancer screening and surveillance in patients with inflammatory bowel disease: Review of general recommendations. World J Gastrointest Endosc. 2017 Jun 16;9(6):255-262.
- Imperiale, T. F., Gagrat, Z. D., Krockenberger, M., Porter, K., Ziegler, E., Leduc, C. M., Matter, M. B., Olson, M. C., & Limburg, P. J. (2024). Algorithm development and early performance evaluation of a next-generation multitarget stool DNA screening test for colorectal cancer. Gastro Hep Advances, 3(6), 740–748. https://doi.org/10.1016/j.gastha.2024.05.002
- 22. Imperiale, T. F., Porter, K., Zella, J., Gagrat, Z. D., Olson, M. C., Statz, S., Garces, J., Lavin, P. T., Aguilar, H., Brinberg, D., Berkelhammer, C., Kisiel, J. B., Limburg, P. J., & BLUE-C Study Investigators (2024). Next-generation multitarget stool DNA test for colorectal cancer screening. The New England Journal of Medicine, 390(11), 984–993. https://doi.org/10.1056/NEJMoa2310336
- 23. Inadomi, et al. Screening for Colorectal Neoplasia. The New England Journal of Medicine. 2017; 376:149-56.
- 24. Lieberman, et al. Guidelines for Colonoscopy Surveillance After Screening and Polypectomy: A Consensus Update by the US Multi-Society Task Force on Colorectal Cancer. Gastroenterology. 2012;143:844–857.
- 25. Lişcu, H., Verga, N., Atasiei, D., Badiu, D., Dumitru, A. V., Ultimescu, F., Pavel, C., Stefan, R., Manole, D., & Ionescu, A. (2024). Biomarkers in colorectal cancer: Actual and future perspectives. International Journal of Molecular Sciences, 25(21), 11535. https://doi.org/10.3390/ijms252111535
- 26. Liu, D., Saikam, V., Skrada, K. A., Merlin, D., & Iyer, S. S. (2022). Inflammatory bowel disease biomarkers. Medicinal Research Reviews, 42(5), 1856–1887. https://doi.org/10.1002/med.21893
- 27. Lopes, G., Stern, M. C., Temin, S., Sharara, A. I., Cervantes, A., Costas-Chavarri, A., ... & Correa, M. C. (2019). Early detection for colorectal cancer: ASCO resource-stratified guideline. Journal of global oncology, 5, 1-22.
- 28. Lu, P., Zhu, X., Song, Y., Luo, Y., Lin, J., Zhang, J., Cao, Y., & Huang, Z. (2022). Methylated septin 9 as a promising biomarker in the diagnosis and recurrence monitoring of colorectal cancer.

 Disease Markers, 2022, 1–8. https://doi.org/10.1155/2022/7087885
- 29. Melson, J., Trikudanathan, G., Dayyeh, B. K. A., Bhutani, M. S., Chandrasekhara, V., Jirapinyo, P., ... & Lichtenstein, D. R. (2021). Video capsule endoscopy. Gastrointestinal endoscopy, 93(4), 784-796.

- 30. National Comprehensive Cancer Network. (2025). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) Colorectal Cancer Screening, Version 2.2025. https://www.nccn.org/professionals/physician_gls/pdf/colorectal_screening.pdf
- 31. National Comprehensive Cancer Network. (2023). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®). Colon Cancer. Version 2.2023. https://www.nccn.org/professionals/physician_gls/pdf/colon.pdf
- 32. National Comprehensive Cancer Network. (2023). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) Genetic/Familial High-Risk Assessment: Colorectal. Version 1.2023. https://www.nccn.org/professionals/physician_gls/pdf/genetics_colon.pdf
- 33. Patel, S. G., May, F. P., Anderson, J. C., Burke, C. A., Dominitz, J. A., Gross, S. A., Jacobson, B. C., Shaukat, A., & Robertson, D. J. (2021). Updates on age to start and stop colorectal cancer screening: Recommendations from the U.S. Multi-Society Task Force on Colorectal Cancer. Gastroenterology, 162(1), 285–299. https://doi.org/10.1053/j.gastro.2021.10.007.
- 34. Pennazio, M., Rondonotti, E., Despott, E. J., Dray, X., Keuchel, M., Moreels, T., ... & Triantafyllou, K. (2023). Small-bowel capsule endoscopy and device-assisted enteroscopy for diagnosis and treatment of small-bowel disorders: European Society of Gastrointestinal Endoscopy (ESGE) Guideline–Update 2022. Endoscopy, 55(01), 58-95.
- 35. Qaseem, A., Harrod, C. S., Crandall, C. J., Wilt, T. J., Clinical Guidelines Committee of the American College of Physicians, Balk, E. M., Cooney, T. G., Cross, J. T., Jr, Fitterman, N., Maroto, M., Obley, A. J., Tice, J., Tufte, J. E., Shamliyan, T., & Yost, J. (2023). Screening for colorectal cancer in asymptomatic average-risk adults: A guidance statement from the American College of Physicians (Version 2). Annals of Internal Medicine, 176(8), 1092–1100. https://doi.org/10.7326/M23-0779
- 36. Ranganathan, M., Sacca, R. E., Trottier, M., Maio, A., Kemel, Y., Salo-Mullen, E., Catchings, A., Kane, S., Wang, C., Ravichandran, V., Ptashkin, R., Mehta, N., Garcia-Aguilar, J., Weiser, M. R., Donoghue, M. T., Berger, M. F., Mandelker, D., Walsh, M. F., Carlo, M., . . . Latham, A. (2023). Prevalence and clinical implications of mismatch repair-proficient colorectal cancer in patients with Lynch Syndrome. JCO Precision Oncology, 7. https://doi.org/10.1200/po.22.00675
- 37. Rex DK, et al. Colorectal Cancer Screening: Recommendations for Physicians and Patients from the U.S. Multi-Society Task Force on Colorectal Cancer. Am J Gastroenterol 2017. Available at https://gi.org/guideline/colorectal-cancer-screening-recommendations-for-physicians-and-patien ts-from-the-u-s-multi-society-task-force-on-colorectal-cancer/. Accessed on June 26, 2018.
- 38. "Risk Factors for Colorectal Cancer." The American Cancer Society. Accessed at http://www.cancer.org/cancer/colonandrectumcancer/moreinformation/colonandrectumcancerea rlydetection/colorectal-cancer-early-detection-risk-factors-for-crc on March 20, 2017.
- 39. Santos DAR, Gaiteiro C, Santos M, Santos L, Dinis-Ribeiro M, Lima L. MicroRNA Biomarkers as Promising Tools for Early Colorectal Cancer Screening-A Comprehensive Review. Int J Mol Sci. 2023 Jul 3;24(13):11023.
- 40. Schubert SA, Morreau H, de Miranda NFCC, van Wezel T. The missing heritability of familial colorectal cancer. Mutagenesis. 2020 Jul 11;35(3):221-231.

- 41. Shaukat, A., Burke, C. A., Chan, A. T., Grady, W. M., Gupta, S., Katona, B. W., Ladabaum, U., Liang, P. S., Liu, J. J., Putcha, G., Robertson, D. J., Schoen, R. E., Meng, Z., Piscitello, A., Sun, C., Xu, C., Lin, C. J., Lee, L. C., Baldo, L., & Levin, T. R. (2025). Clinical validation of a circulating tumor DNA–Based blood test to screen for colorectal cancer. JAMA, 334(1), 56. https://doi.org/10.1001/jama.2025.7515.
- Shaukat, A., Kahi, C.J., Burke, C.A., et al. (2021). ACG Clinical Guidelines: Colorectal Cancer Screening 2021. *The American Journal of Gastroenterology, 116* (3), 458-479. doi: 10.14309/ajg.000000000001122. https://sysqe.org/wp-content/uploads/colorectal_cancer.14.pdf
- 43. Smith, et al. Cancer Screening in the United States, 2016: A Review of Current American Cancer Society Guidelines and Current Issues in Cancer Screening. CA: A Cancer Journal for Clinicians. 2016; 66(2), 95-114.
- 44. Sychowski, G., Romanowicz, H., Ciesielski, W., Hogendorf, P., Durczyński, A., & Smolarz, B. (2025). Diagnostic and therapeutic potential of selected microRNAs in colorectal cancer: A literature review. Cancers, 17(13), 2135. https://doi.org/10.3390/cancers17132135
- 45. Williams, C. D., Grady, W. M., & Zullig, L. L. (2016). Use of NCCN guidelines, other guidelines, and biomarkers for colorectal cancer screening. Journal of the National Comprehensive Cancer Network, 14(11), 1479–1485. https://doi.org/10.6004/jnccn.2016.0154
- 46. Wolf AMD, Fontham ETH, Church TR, Flowers CR, Guerra CE, LaMonte SJ, Etzioni R, McKenna MT, Oeffinger KC, Shih YT, Walter LC, Andrews KS, Brawley OW, Brooks D, Fedewa SA, Manassaram-Baptiste D, Siegel RL, Wender RC, Smith RA. Colorectal cancer screening for average-risk adults: 2018 guideline update from the American Cancer Society. CA Cancer J Clin. 2018 Jul;68(4):250-281.
- 47. U.S. Preventive Services Task Force. (2021). Final Recommendation Statement Colorectal Cancer: Screening.
 https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/colorectal-cancer-screening
- 48. U.S. Preventive Services Task Force. (2021). Screening for Colorectal Cancer: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. JAMA, 325(19), 1978. https://doi.org/10.1001/jama.2021.4417
- 49. U.S. Preventive Services Task Force. (2021). Screening for Colorectal Cancer: US Preventive Services Task Force Recommendation Statement. *JAMA*, 325(19), 1965. https://doi.org/10.1001/jama.2021.6238
- 50. Van Den Puttelaar, R., De Lima, P. N., Knudsen, A. B., Rutter, C. M., Kuntz, K. M., De Jonge, L., Escudero, F. A., Lieberman, D., Zauber, A. G., Hahn, A. I., Inadomi, J. M., & Lansdorp-Vogelaar, I. (2024). Effectiveness and cost-effectiveness of colorectal cancer screening with a blood test that meets the Centers for Medicare & Medicaid Services coverage decision. Gastroenterology, 167(2), 368–377. https://doi.org/10.1053/j.gastro.2024.02.012
- 51. Zhang, Y., Luo, J., Yang, W., & Ye, W. C. (2023). CircRNAs in colorectal cancer: potential biomarkers and therapeutic targets. Cell death & disease, 14(6), 353.

52. Zoghbi, et al. New era of colorectal cancer screening. World Journal of Gastrointestinal Endoscopy. 2016; 8(5), 252.

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