Medical Policy

**Chromoendoscopy as an Adjunct to Colonoscopy**

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**Policy Number:** 904
BCBSA Reference Number: 2.01.84

**Related Policies**
- Virtual Colonoscopy/CT Colonography, #179

**Policy**
Chromoendoscopy is considered **INVESTIGATIONAL** as an adjunct to diagnostic or surveillance colonoscopy.

Virtual chromoendoscopy is considered **INVESTIGATIONAL** as an adjunct to diagnostic or surveillance colonoscopy.

**Prior Authorization Information**
**Commercial Members: Managed Care (HMO and POS)**
This is **NOT** a covered service.

**Commercial Members: PPO, and Indemnity**
This is **NOT** a covered service.

**Medicare Members: HMO BlueSM**
This is **NOT** a covered service.

**Medicare Members: PPO BlueSM**
This is **NOT** a covered service.

**CPT Codes / HCPCS Codes / ICD-9 Codes**
The following codes are included below for informational purposes. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.
Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

CPT Codes
There is no specific CPT code for this service.

ICD-9 Diagnosis Codes
Investigational for all diagnoses.

Description
Chromoendoscopy refers to the application of dyes or stains during endoscopy to enhance tissue differentiation or characterization. When used with colonoscopy, the intent is to increase the sensitivity of the procedure by facilitating the identification of mucosal abnormalities. There are two types of chromoendoscopy; one involves actual spraying of dyes or stains through the working channel of an endoscope. The other type, known as virtual chromoendoscopy, uses a computer algorithm to simulate different colors of light that result from dye or stain spraying.

Several adjunct endoscopic techniques, including chromoendoscopy, could potentially enhance the sensitivity of colonoscopy. Chromoendoscopy can be used in the whole colon (pan-colonic chromoendoscopy) on an untargeted basis or can be directed to a specific lesion or lesions (targeted chromoendoscopy). Chromoendoscopy differs from endoscopic tattooing in that the former uses transient stains, whereas tattooing involves the use of a long-lasting pigment for future localization of lesions.

Potential applications of chromoendoscopy as an alternative to standard colonoscopy include:

- Diagnosis of colorectal neoplasia in symptomatic patients at increased risk of colorectal cancer due to family history of colorectal cancer, personal history of adenomas, etc.
- Identification of mucosal abnormalities for targeted biopsy as an alternative to multiple random biopsies in patients with inflammatory bowel disease (IBD)
- Screening the general population for colorectal cancer

The equipment used in regular chromoendoscopy is widely available. Several authors of review articles and technology assessments have stated that, although the techniques are simple, procedure, e.g. concentration of dye and amount of dye sprayed, is variable and classification of mucosal staining patterns for identifying specific conditions is not standardized.

Virtual chromoendoscopy involves imaging enhancements with endoscopy systems that could potentially be an alternative to dye spraying. One system is the Fujinon Intelligent Color Enhancement (FICE) feature (Fujinon, Inc.). This technology uses post-processing computer algorithms to modify the light reflected from the mucosa from conventional white light to various other wavelengths.

Summary
Chromoendoscopy is a technique that is intended to increase the sensitivity of colonoscopy by improving the polyp detection rate. Multiple randomized controlled trials and back-to-back colonoscopy studies have evaluated chromoendoscopy in patients at increased risk of colorectal cancer. This evidence establishes that chromoendoscopy improves the polyp detection rate, but it is unclear whether the additional polyps detected are clinically important, and therefore whether the improved polyp detection rate will translate to improved health outcomes. In addition, there are concerns about the comparison group in some of these trials. It is uncertain whether the control groups received optimal colonoscopy, therefore the improved detection rate by chromoendoscopy may be a function of suboptimal standard colonoscopy.

There is insufficient evidence on chromoendoscopy in an average-risk screening population. One large randomized controlled trial on chromoendoscopy with screening colonoscopies did not find that high-definition chromoendoscopy identified more clinically meaningful lesions than high-definition white light colonoscopy.
As a result of these limitations in the evidence for both high-risk and average-risk individuals, as well as a lack of consistent support from clinical reviewers, chromoendoscopy is considered investigational as an adjunct colonoscopy for both of these populations.

There is also insufficient evidence that virtual chromoendoscopy improves the detection of clinically significant adenomas or improves health outcomes compared to standard colonoscopy or standard chromoendoscopy. In addition, virtual chromoendoscopy devices have been recalled by the FDA because they did not undergo the proper approval process. Thus, virtual chromoendoscopy is considered investigational.

Policy History

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<tr>
<td>5/2013</td>
<td>New references from BCBSA National medical policy.</td>
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<td>2/2013</td>
<td>New policy describing non-coverage</td>
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Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:
- Medical Policy Terms of Use
- Managed Care Guidelines
- Indemnity/PPO Guidelines
- Clinical Exception Process
- Medical Technology Assessment Guidelines

References


