

The Department of Vermont Health Access Medical Policy

Subject: Familial Adenomatous Polyposis/Associated Polyposis Conditions (APC) Genetic Testing

Last Review: August 30, 2016

Revision 3:

Revision 2:

Revision 1:

Original Effective: August 30, 2016

Description of Service or Procedure

Associated polyposis syndromes (APC) conditions include the following: familial adenomatous polyposis (FAP), attenuated familial adenomatous polyposis (AFAP), Gardner syndrome, and Turcot syndrome. APC account for less than 1% of CRC.

Testing may be considered for individuals with clinical symptoms for FAP, or AFAP, Gardner syndrome, and Turcot syndrome.

Presentations:

- FAP is characterized by the presence of hundreds to thousands of adenomas in the colon and rectal area.
- AFAP is characterized by the presence of less than 100 adenomatous polyps in the colon and rectal.
- Gardner syndrome affects individuals with colon polyps as well as growths outside the colon such as epidermoid cysts, fibromas, and desmoid tumors.
- Turcot syndrome is the association of colonic adenomatous polyposis and CNS tumors, usually medulloblastoma.

Fifteen percent of those with colorectal cancer have a family history of cancer. The formation of polyps begins in childhood for the majority of individuals and typically develop in the distal colon. By adolescence the polyp formation has spread throughout the colon, increasing in size and number. About half of all FAP individuals will develop adenomas by 15 years of age. Almost 95% of FAP individuals will develop adenomas by their mid 30's. This means that there is almost a 100% chance of malignant transformation in at least one of these polyps by their fifth decade.

Disclaimer

Coverage is limited to that outlined in Medicaid Rule that pertains to the member's aid category. Prior Authorization (PA) is only valid if the member is eligible for the applicable item or service on the date of service.



Medicaid Rule

7102.2 Prior Authorization Determination

7103 Medical Necessity

Medicaid Rules can be found at <http://humanservices.vermont.gov/on-line-rules>

Coverage Position

APC genetic testing may be covered for members:

- When genetic testing is prescribed by a licensed medical provider, enrolled in the Vermont Medicaid program, operating within their scope of practice in accordance with Vermont State Practice Act, who is knowledgeable in interpreting test results and who provides medical care to the member AND
- When the clinical guidelines below are met.

Coverage Criteria

APC genetic testing may be covered for beneficiaries who have:

1. Greater than 10 colonic polyps during their lifetime. OR
2. Personal diagnosis of FAP or AFAP. OR
3. A first degree relative diagnosed with FAP or AFAP **or** with documented APC mutation. OR
4. Personal history of desmoid tumor.

Definition: A first degree blood relative shares 50 % DNA (father, mother, brother, sister, daughter, or son)

Considerations:

- Prenatal diagnosis or pre-implantation genetic testing may be considered if a pathogenic variant has been identified in an affected family member.
- Genetic testing should be conducted in the context of pre- and post-test genetic counseling to ensure the individual's informed decision making.

Clinical guidelines for repeat service or procedure

Same criteria apply as for the initial use.

Type of service or procedure covered

Genetic testing of patients with suspected adenomatous polyposis syndromes should include APC and MUTYH-associated polyposis (MAP) gene mutation analysis.

MUTYH germline mutations are associated with an autosomal recessive form of hereditary polyposis. It has been reported that 33% and 57% of patients with clinical FAP and attenuated FAP, respectively, who are negative for mutations in the APC gene, have MUTYH mutations.

References

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