



BlueCross BlueShield of Illinois

If a conflict arises between a Clinical Payment and Coding Policy ("CPCP") and any plan document under which a member is entitled to Covered Services, the plan document will govern. If a conflict arises between a CPCP and any provider contract pursuant to which a provider participates in and/or provides Covered Services to eligible member(s) and/or plans, the provider contract will govern. "Plan documents" include, but are not limited to, Certificates of Health Care Benefits, benefit booklets, Summary Plan Descriptions, and other coverage documents. BCBSIL may use reasonable discretion interpreting and applying this policy to services being delivered in a particular case. BCBSIL has full and final discretionary authority for their interpretation and application to the extent provided under any applicable plan documents.

Providers are responsible for submission of accurate documentation of services performed. Providers are expected to submit claims for services rendered using valid code combinations from Health Insurance Portability and Accountability Act ("HIPAA") approved code sets. Claims should be coded appropriately according to industry standard coding guidelines including, but not limited to: Uniform Billing ("UB") Editor, American Medical Association ("AMA"), Current Procedural Terminology ("CPT®"), CPT® Assistant, Healthcare Common Procedure Coding System ("HCPCS"), ICD-10 CM and PCS, National Drug Codes ("NDC"), Diagnosis Related Group ("DRG") guidelines, Centers for Medicare and Medicaid Services ("CMS") National Correct Coding Initiative ("NCCI") Policy Manual, CCI table edits and other CMS guidelines.

Claims are subject to the code edit protocols for services/procedures billed. Claim submissions are subject to claim review including but not limited to, any terms of benefit coverage, provider contract language, medical policies, clinical payment and coding policies as well as coding software logic. Upon request, the provider is urged to submit any additional documentation.

Fecal Calprotectin Testing in Adults

Policy Number: CPCPLAB026

Version 1.0

Enterprise Medical Policy Committee Approval Date: January 25, 2022

Plan Effective Date: May 1, 2022

Description

BCBSIL has implemented certain lab management reimbursement criteria. Not all requirements apply to each product. Providers are urged to review Plan documents for eligible coverage for services rendered.

Reimbursement Information:

1. Fecal calprotectin testing **may be reimbursable** when evaluating a differential diagnosis between non-inflammatory gastrointestinal disease (e.g., IBS) and inflammatory gastrointestinal disease (e.g., IBD).
2. Fecal calprotectin testing **may be reimbursable** for monitoring of gastrointestinal conditions such as inflammatory bowel disease (IBD) and to assess response to therapy and relapse.
3. Fecal calprotectin testing **is not reimbursable** for any other conditions not mentioned above.

Procedure Codes

| Codes |
|-------|
| 83993 |

References:

- Abej, E., El-Matary, W., Singh, H., & Bernstein, C. N. (2016). The Utility of Fecal Calprotectin in the Real-World Clinical Care of Patients with Inflammatory Bowel Disease. *Can J Gastroenterol Hepatol*, 2016, 2483261. doi:10.1155/2016/2483261
- Almario, C. V., Ballal, M. L., Chey, W. D., Nordstrom, C., Khanna, D., & Spiegel, B. M. R. (2018). Burden of Gastrointestinal Symptoms in the United States: Results of a Nationally Representative Survey of Over 71,000 Americans. *Am J Gastroenterol*, 113(11), 1701-1710. doi:10.1038/s41395-018-0256-8
- Boirivant, M., & Cossu, A. (2012). Inflammatory bowel disease. *Oral Dis*, 18(1), 1-15. doi:10.1111/j.1601-0825.2011.01811.x
- Burri, E., & Beglinger, C. (2014). The use of fecal calprotectin as a biomarker in gastrointestinal disease. *Expert Rev Gastroenterol Hepatol*, 8(2), 197-210. doi:10.1586/17474124.2014.869476
- Campbell, J. P., Zierold, C., Rode, A. M., Blocki, F. A., & Vaughn, B. P. (2021). Clinical Performance of a Novel LIAISON Fecal Calprotectin Assay for Differentiation of Inflammatory Bowel Disease From Irritable Bowel Syndrome. *J Clin Gastroenterol*, 55(3), 239-243. doi:10.1097/mcg.0000000000001359
- Colombel, J. F., Shin, A., & Gibson, P. R. (2019). AGA Clinical Practice Update on Functional Gastrointestinal Symptoms in Patients With Inflammatory Bowel Disease: Expert Review. *Clin Gastroenterol Hepatol*, 17(3), 380-390.e381. doi:10.1016/j.cgh.2018.08.001
- Degraeuwe, P. L., Beld, M. P., Ashorn, M., Canani, R. B., Day, A. S., Diamanti, A., . . . Kessels, A. G. (2015). Faecal calprotectin in suspected paediatric inflammatory bowel disease. *J Pediatr Gastroenterol Nutr*, 60(3), 339-346. doi:10.1097/mpg.0000000000000615
- El-Matary, W., Abej, E., Deora, V., Singh, H., & Bernstein, C. N. (2017). Impact of Fecal Calprotectin Measurement on Decision-making in Children with Inflammatory Bowel Disease. *Front Pediatr*, 5, 7. doi:10.3389/fped.2017.00007
- Fagerhol, M. K., Dale, I., & Andersson, T. (1980). A radioimmunoassay for a granulocyte protein as a marker in studies on the turnover of such cells. *Bull Eur Physiopathol Respir*, 16 Suppl, 273-282. Retrieved from <http://dx.doi.org/>
- FDA. (2006). 510(k) SUBSTANTIAL EQUIVALENCE DETERMINATION Retrieved from https://www.accessdata.fda.gov/cdrh_docs/reviews/K050007.pdf
- FDA. (2016). 510(k) Retrieved from https://www.accessdata.fda.gov/cdrh_docs/pdf16/K160447.pdf
- FDA. (2018a). 510(k) Retrieved from https://www.accessdata.fda.gov/cdrh_docs/pdf18/K182698.pdf

FDA. (2018b). LIAISON Calprotectin. Retrieved from
https://www.accessdata.fda.gov/cdrh_docs/pdf18/K182698.pdf

FDA. (2019). Buhlmann FCAL Turbo And CALEX Cap. Retrieved from
<https://www.accessdata.fda.gov/scripts/cdrh/devicesatfda/index.cfm?db=pmn&id=K191718>

Foster, A. J., Smyth, M., Lakhani, A., Jung, B., Brant, R. F., & Jacobson, K. (2019). Consecutive fecal calprotectin measurements for predicting relapse in pediatric Crohn's disease patients. *World J Gastroenterol*, 25(10), 1266-1277. doi:10.3748/wjg.v25.i10.1266

Gibson, P. (2019). Irritable bowel syndrome in patients with inflammatory bowel disease - UpToDate. In K. Robson (Ed.), *UpToDate*. Retrieved from https://www.uptodate.com/contents/irritable-bowel-syndrome-in-patients-with-inflammatory-bowel-disease?source=search_result&search=fecal%20calprotectin&selectedTitle=4~19#H6829241

Gomollón, F., Dignass, A., Annese, V., Tilg, H., Van Assche, G., Lindsay, J. O., . . . on behalf of, E. (2016). 3rd European Evidence-based Consensus on the Diagnosis and Management of Crohn's Disease 2016: Part 1: Diagnosis and Medical Management. *Journal of Crohn's and Colitis*, 11(1), 3-25. doi:10.1093/ecco-jcc/jjw168

Halpin, S. J., & Ford, A. C. (2012). Prevalence of symptoms meeting criteria for irritable bowel syndrome in inflammatory bowel disease: systematic review and meta-analysis. *Am J Gastroenterol*, 107(10), 1474-1482. doi:10.1038/ajg.2012.260

Higuchi, L. M., & Bousvaros, A. (2020). Clinical presentation and diagnosis of inflammatory bowel disease in children - UpToDate. In M. Heyman (Ed.), *UpToDate*. Retrieved from https://www.uptodate.com/contents/clinical-presentation-and-diagnosis-of-inflammatory-bowel-disease-in-children?source=search_result&search=Clinical%20presentation%20and%20diagnosis%20of%20inflammatory%20bowel%20disease%20in%20children.&selectedTitle=1~150

Hsu, K., Champaiboon, C., Guenther, B. D., Sorenson, B. S., Khammanivong, A., Ross, K. F., . . . Herzberg, M. C. (2009). ANTI-INFECTIVE PROTECTIVE PROPERTIES OF S100 CALGRANULINS. *Antiinflamm Antiallergy Agents Med Chem*, 8(4), 290-305. Retrieved from <http://dx.doi.org/>

Khaki-Khatibi, F., Qujeq, D., Kashifard, M., Moein, S., Maniati, M., & Vaghari-Tabari, M. (2020). Calprotectin in inflammatory bowel disease. *Clin Chim Acta*, 510, 556-565. doi:10.1016/j.cca.2020.08.025

Koninkx, C. R., Donat, E., Benninga, M. A., Broekaert, I. J., Gottrand, F., Kolho, K.-L., . . . Thapar, N. (2021). The Use of Fecal Calprotectin Testing in Paediatric Disorders: A Position Paper of the European Society for Paediatric Gastroenterology and Nutrition Gastroenterology Committee. *J Pediatr Gastroenterol Nutr*, 72(4), 617-640. doi:10.1097/mpg.0000000000003046

Lacy, B. E., Pimentel, M., Brenner, D. M., Chey, W. D., Keefer, L. A., Long, M. D., & Moshiree, B. (2021). ACG Clinical Guideline: Management of Irritable Bowel Syndrome. *Am J Gastroenterol*, 116(1), 17-44. doi:10.14309/ajg.0000000000001036

Lichtenstein, G. R., Loftus, E. V., Isaacs, K. L., Regueiro, M. D., Gerson, L. B., & Sands, B. E. (2018). ACG Clinical Guideline: Management of Crohn's Disease in Adults. *Am J Gastroenterol*, 113(4), 481-517. doi:10.1038/ajg.2018.27

Maaser, C., Sturm, A., Vavricka, S. R., Kucharzik, T., Fiorino, G., Annese, V., . . . Stoker, J. (2019). ECCO-ESGAR Guideline for Diagnostic Assessment in IBD Part 1: Initial diagnosis, monitoring of known IBD, detection of complications. *J Crohns Colitis*, 13(2), 144-164. doi:10.1093/ecco-jcc/jjy113

Magro, F., Gionchetti, P., Eliakim, R., Ardizzone, S., Armuzzi, A., Barreiro-de Acosta, M., . . . Colitis, O. (2017). Third European Evidence-based Consensus on Diagnosis and Management of Ulcerative Colitis. Part 1: Definitions, Diagnosis, Extra-intestinal Manifestations, Pregnancy, Cancer Surveillance, Surgery, and Ileo-anal Pouch Disorders. *Journal of Crohn's and Colitis*, 11(6), 649-670. doi:10.1093/ecco-jcc/jjx008

Mao, R., Xiao, Y. L., Gao, X., Chen, B. L., He, Y., Yang, L., . . . Chen, M. H. (2012). Fecal calprotectin in predicting relapse of inflammatory bowel diseases: a meta-analysis of prospective studies. *Inflamm Bowel Dis*, 18(10), 1894-1899. doi:10.1002/ibd.22861

Molander, P., af Bjorkesten, C. G., Mustonen, H., Haapamaki, J., Vauhkonen, M., Kolho, K. L., . . . Sipponen, T. (2012). Fecal calprotectin concentration predicts outcome in inflammatory bowel disease after induction therapy with TNFalpha blocking agents. *Inflamm Bowel Dis*, 18(11), 2011-2017. doi:10.1002/ibd.22863

Molander, P., Farkkila, M., Ristimaki, A., Salminen, K., Kemppainen, H., Blomster, T., . . . Sipponen, T. (2015). Does fecal calprotectin predict short-term relapse after stopping TNFalpha-blocking agents in inflammatory bowel disease patients in deep remission? *J Crohns Colitis*, 9(1), 33-40. doi:10.1016/j.crohns.2014.06.012

Mumolo, M. G., Bertani, L., Ceccarelli, L., Laino, G., Di Fluri, G., Albano, E., . . . Costa, F. (2018). From bench to bedside: Fecal calprotectin in inflammatory bowel diseases clinical setting. *World J Gastroenterol*, 24(33), 3681-3694. doi:10.3748/wjg.v24.i33.3681

NICE. (2017a). Faecal calprotectin diagnostic tests for inflammatory diseases of the bowel. Retrieved from <https://www.nice.org.uk/guidance/dg11/chapter/6-Considerations>

NICE. (2017b). Faecal calprotectin diagnostic tests for inflammatory diseases of the bowel DG11. *NICE Diagnostics guidance*. Retrieved from <https://www.nice.org.uk/guidance/DG11>

Rosenfeld, G., Greenup, A. J., Round, A., Takach, O., Halparin, L., Saadeddin, A., . . . Bressler, B. (2016). FOCUS: Future of fecal calprotectin utility study in inflammatory bowel disease. *World J Gastroenterol*, 22(36), 8211-8218. doi:10.3748/wjg.v22.i36.8211

Rubin, D. T., Ananthakrishnan, A. N., Siegel, C. A., Sauer, B. G., & Long, M. D. (2019). ACG Clinical Guideline: Ulcerative Colitis in Adults. *Am J Gastroenterol*, 114(3), 384-413. doi:10.14309/ajg.0000000000000152

Tham, Y. S., Yung, D. E., Fay, S., Yamamoto, T., Ben-Horin, S., Eliakim, R., . . . Kopylov, U. (2018). Fecal calprotectin for detection of postoperative endoscopic recurrence in Crohn's disease: systematic review and meta-analysis. *Therap Adv Gastroenterol*, 11, 1756284818785571. doi:10.1177/1756284818785571

Tibble, J. A., Sigthorsson, G., Foster, R., Forgacs, I., & Bjarnason, I. (2002). Use of surrogate markers of inflammation and Rome criteria to distinguish organic from nonorganic intestinal disease. *Gastroenterology*, 123(2), 450-460. Retrieved from <http://dx.doi.org/>

Turner, D., Leach, S. T., Mack, D., Uusoue, K., McLernon, R., Hyams, J., . . . Day, A. S. (2010). Faecal calprotectin, lactoferrin, M2-pyruvate kinase and S100A12 in severe ulcerative colitis: a prospective multicentre comparison of predicting outcomes and monitoring response. *Gut*, 59(9), 1207-1212. doi:10.1136/gut.2010.211755

van Rheenen, P. F., Van de Vijver, E., & Fidler, V. (2010). Faecal calprotectin for screening of patients with suspected inflammatory bowel disease: diagnostic meta-analysis. *Bmj*, 341, c3369. doi:10.1136/bmj.c3369

von Roon, A. C., Karamountzos, L., Purkayastha, S., Reese, G. E., Darzi, A. W., Teare, J. P., . . . Tekkis, P. P. (2007). Diagnostic precision of fecal calprotectin for inflammatory bowel disease and colorectal malignancy. *Am J Gastroenterol*, 102(4), 803-813. doi:10.1111/j.1572-0241.2007.01126.x

Walsham, N. E., & Sherwood, R. A. (2016). Fecal calprotectin in inflammatory bowel disease. *Clin Exp Gastroenterol*, 9, 21-29. doi:10.2147/ceg.s51902

Waugh, N., Cummins, E., Royle, P., Kandala, N. B., Shyangdan, D., Arasaradnam, R., . . . Johnston, R. (2013). Faecal calprotectin testing for differentiating amongst inflammatory and non-inflammatory bowel diseases: systematic review and economic evaluation. *Health Technol Assess*, 17(55), xv-xix, 1-211. doi:10.3310/hta17550

Yang, Z., Clark, N., & Park, K. T. (2014). Effectiveness and cost-effectiveness of measuring fecal calprotectin in diagnosis of inflammatory bowel disease in adults and children. *Clin Gastroenterol Hepatol*, 12(2), 253-262.e252. doi:10.1016/j.cgh.2013.06.028

Policy Update History:

| | |
|----------|------------|
| 5/1/2022 | New policy |
|----------|------------|