Celiac Disease Testing AHS – G2043

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Description of Procedure or Service

Celiac disease is a chronic autoimmune disorder triggered by the ingestion of gluten, a protein found in wheat, rye, and barley. When an individual with celiac disease ingests gluten, the body mounts an immune response that attacks the small intestine. These attacks lead to damage on the villi within the small intestine, inhibiting nutrient absorption (CDF, 2018). Celiac disease is hereditary disease.

***Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.

Policy

BCBSNC will provide coverage for celiac disease testing when it is determined the medical criteria or reimbursement guidelines below are met.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Celiac Disease Testing is covered

1. Reimbursement is allowed for serologic testing for the diagnosis of celiac disease with the IgA anti-tissue transglutaminase (TTG) for individuals with a suspicion of celiac disease as defined as having ONE of the following:
   a) Unexplained chronic or intermittent diarrhea
   b) Unexplained weight loss
   c) Unexplained chronic or intermittent abdominal pain or bloating
   d) Down syndrome
   e) Dermatitis herpetiformis
   f) Unexplained iron deficiency anemia
   g) Unexplained liver transaminase elevations
   h) Primary biliary cirrhosis
   i) Autoimmune hepatitis
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j) Asymptomatic first-degree relatives of individuals with documented celiac disease

2. Reimbursement is allowed for testing for serum total IgA level when a serum IgA anti-TTG is negative but the clinical suspicion for celiac disease is high.

3. Reimbursement is allowed for testing for IgA endomysial antibodies in individuals at risk for celiac disease (as defined above) when IgA anti-TTG is negative.

4. Reimbursement is allowed for testing for IgG anti-TTG in individuals with clinical suspicion of celiac disease, as defined above, with IgA deficiency.

5. Reimbursement is allowed for testing for IgA and IgG antibodies to deamidated gliadin peptides for the diagnosis of celiac disease in children under 2 years of age with a clinical suspicion of celiac disease as defined above and in those over 2 years of age as a substitute for anti-TTG testing.

6. Reimbursement is allowed for genetic testing for HLA DQ2 and DQ8 for:
   a) Symptomatic individuals for whom other testing is undiagnostic or
   b) Symptomatic individuals with positive serology tests who are unable to undergo biopsy evaluation

7. Biopsy of the small intestine is considered medically necessary for confirmation of celiac disease for individuals at high risk for celiac disease regardless of the result of celiac disease serology testing.

When Celiac Disease Testing is not covered

1. Reimbursement is not allowed for testing for anti-reticulin antibodies for the diagnosis of celiac disease.

2. Reimbursement is not allowed for testing of stool or saliva samples for the evaluation of celiac disease.

3. Reimbursement is not allowed for serologic testing using an HLA-DQ-gluten tetramer-based assay, including flow cytometry-based HLA-DQ-gluten tetramer assays.

4. Reimbursement is not allowed for rapid antigen point-of-care testing for anti-TTG.

5. Reimbursement is not allowed for panel testing, multiplex, or multi-analyte testing (for more than two analytes) for the diagnosis or the evaluation of celiac disease.

Policy Guidelines

Background
The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK, 2016) provides the following statistics for celiac disease:

- An estimated 1 in 141 Americans has celiac disease
- Majority of people are unaware of their status
- Can affect all races, but higher rate in Caucasians
- Can affect both genders, but higher rate in females
- More common among people with Down syndrome, Turner syndrome, and type 1 diabetes
- Patients with celiac disease are at risk for Addison’s disease, Hashimoto’s disease, primary biliary cirrhosis, and type 1 diabetes
Clinical presentation of celiac disease is varied and age-dependent. In children, failure to thrive, malnutrition, diarrhea, abdominal pain and distension is a common presentation of celiac disease. In adults, abdominal pain, diarrhea or constipation, bloating, and excessive gas are commonly seen (Barker & Liu, 2008). Serologic tests are the first step in identifying candidates for intestinal biopsy to confirm diagnosis of celiac disease with IgA anti-tissue transglutaminase (TTG) antibody being the preferred serologic test for patients more than two years old (Kelly, 2018).

Olen et al. (2012) evaluated diagnostic performance and actual costs in clinical practice of immunoglobulin (Ig)G/IgA DGP (deamidated gliadin peptide antibodies) as a complement to IgA-TTG for the diagnosis of pediatric CD. The authors concluded that for diagnosing CD, TTG is superior to DGP, even in children younger than 2 years. Combining TTG and DGP does not provide a better trade-off between number of missed cases of CD, number of unnecessary duodenal biopsies, and cost than TTG alone (Olen et al., 2012).

Sakly et al. (2012) evaluated the usefulness of anti-DGP antibodies (a-DGP), in the diagnostic of celiac disease. Their study included 103 untreated CD patients of all ages and 36 CD patients under a gluten-free diet. The specificity of A-DGP for IgG was 93.6% and for IgA was 92% as compared to the 100% for each by anti-endomysium antibodies (AEA) and TTG. The authors concluded that the findings of this study showed “that a-DGP increases neither the sensitivity nor the specificity of AEA and [TTG] (Sakly et al., 2012)”. 

Celiac disease is an inherited disorder with 90-95% of CD patients having the HLA-DQ2 protein encoded by HLA-DQA1*05 and DQB1*02 alleles. The remaining CD patients have mutations in the HLA-DQ8 protein encoded by the HLA-DQA1*03 and DQB1*03:02 alleles. “Presence of susceptible HLA-DQ genotypes does not predict certain disease development, but their absence makes CD very unlikely, close to 100% (Stankovic et al., 2014).” A study in the Netherlands reports that using buccal swabs to obtain DNA samples for HLA genotyping in children results were “identical to typing on blood-derived DNA” (Adriaanse et al., 2016). However, the use of genotyping in diagnosing CD is not without controversy. The study by Paul and colleagues (Paul, Hoghton, & Sandhu, 2017) reports that 25-40% of white Caucasians are positive for the HLA-DQ2/DQ8 haplotype but that only 0.1-1% of the population will develop celiac disease. They note that the European guidelines released in 2012 recommend genotyping for HLA-DQ2/DQ8 in children with very high anti-TTG titers, but the authors recommend the following: “HLA-DQ2/DQ8 testing must not be done to ‘screen’ or ‘diagnose’ children with coeliac disease. Its use by paediatricians should be limited to children with anti-tTG>10×ULN, where the diagnosis of coeliac disease is being made on serology alone (Paul et al., 2017).” A 2018 report (Selleski et al., 2018) shows that only some of the DQ2/DQ8 alleles were significantly different between pediatric CD patients and pediatric non-CD patients. 97% of the CD patients were positive for at least either DQ2 or DQ8; however, 29.9% of the non-CD patients were also positive for DQ2. In fact, “No significant association was found between DQ2.2 variant and celiac disease in the studied population (Selleski et al., 2018).” Previously, high regard had been given to DQ2.2 variant as being a predisposing variant for CD (Mubarak et al., 2013). Finally, a rapid nucleic acid amplification test using multiplex ligation-dependent probe amplification (MLPA) to detect HLA-DQ2.2, HLA-DQ2.5, and HLA-DQ8 has been developed with a reported 100% specificity for those particular genotypes (Vijzelaar et al., 2016), but this test has not been FDA-approved for use in the United States.

Serologic and histologic HLA-DQ testing requires the patient to be on a gluten-containing diet, which given the decrease of gluten in today’s society and the increase in the number of self-prescribed gluten-free diets, can be a disadvantage to testing. Recently, testing for HLA-DQ-gluten tetramer-based assays using flow-cytometry have been developed that reportedly can be accurate whether the patient is on a gluten-containing or gluten-free diet. The assay has a reported 97% sensitivity and 95% specificity for patients on a gluten-free diet as compared to controls (patients without celiac disease). The authors conclude, “This test would allow individuals with
suspected celiac disease to avoid gluten challenge and duodenal biopsy, but requires validation in a larger study (Sarna et al., 2018).”

**Applicable Federal Regulations**

The Quanta Lite Celiac Screen ELISA test for tissue transglutaminase/gliadin and the Quanta Lite Celiac DGP Screen by Inova Diagnostics, Inc. were approved by the FDA on 01/28/1999 and 12/13/2006, respectively. Quanta Plex Celiac IgA and IgG profiles by Inova Diagnostics, Inc. were approved on 03/14/2007 and 06/20/2007.

EliA Celikey IgG for use with the EliA Celikey IgG Immunoassay by Phadia US, Inc. was approved by the FDA on 12/26/2006.

The FIDIS Celiac on the FIDS Analyser and FIDIS CELIAC kit by Biomedical Diagnostics S.A. were approved by the FDA on 09/24/2004 and 03/29/2006, respectively.

The IMMULISA CELIAC ELISA testing systems for gliadin IgA/IgG and TTG IgA/IgG by IMMCO Diagnostics, Inc. were approved on 02/04/2010 and 03/10/2010. IMMCO’s IMMULISA enhanced celiac fusion (TTG/DGP) IgA/IgG antibody ELISA system was approved on 10/25/2013.

Bio-Rad Laboratories’ Bioplex 2200 Celiac IgA IgG kits were approved on 09/19/2013. The IgX Plex Celiac qualitative assay and Ig Plex Celiac DG panel by SQI diagnostics systems, Inc. were approved by the FDA on 06/02/2011 and 11/06/2014, respectively.

No nucleic acid-based test for celiac disease has been approved by the FDA.

Additionally, many labs have developed specific tests that they must validate and perform in house. These laboratory-developed tests (LDTs) are regulated by the Centers for Medicare and Medicaid (CMS) as high-complexity tests under the Clinical Laboratory Improvement Amendments of 1988 (CLIA ‘88). As an LDT, the U. S. Food and Drug Administration has not approved or cleared this test; however, FDA clearance or approval is not currently required for clinical use.

**Guidelines and Recommendations**

UpToDate (Kelly, 2018)

Kelly (2018) recommended that celiac disease testing should be performed in the following situations:

- “Those with gastrointestinal symptoms including chronic or recurrent diarrhea, malabsorption, weight loss, and abdominal distension or bloating. This includes patients with symptoms suggestive for irritable bowel syndrome or severe lactose intolerance.”
- “Individuals without other explanations for extraintestinal signs and symptoms such as iron deficiency anemia, folate or vitamin B12 deficiency, persistent elevation in serum aminotransferases, short stature, delayed puberty, recurrent fetal loss, mothers of low birthweight infants, reduced fertility, persistent aphthous stomatitis, dental enamel hypoplasia, idiopathic peripheral neuropathy, nonhereditary cerebellar ataxia, or recurrent migraine headaches.”
- “Patients with type 1 diabetes mellitus if they have signs, symptoms, or laboratory evidence of possible celiac disease.”
- “Asymptomatic first-degree relatives of patients with a confirmed diagnosis of celiac disease. Our recommendations are consistent with the American College of Gastroenterology guidelines. However, screening for celiac disease in the absence of suggestive signs or
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symptoms of celiac disease is controversial. This is reflected in a United States Preventative Services Task Force report that concluded that there are insufficient data to support screening for celiac disease in asymptomatic individuals.”

Concerning HLA testing, Kelly states the following:

“Individuals without HLA DQ2 or DQ8 are very unlikely to have celiac disease. HLA testing is useful in ruling out celiac disease due to its high negative predictive value. A systematic review of the literature estimated that testing for these haplotypes had a sensitivity of 90 to 95 percent but specificity was only around 30 percent. We perform HLA testing in the following clinical scenarios:

- Seronegative patients with equivocal small bowel histology findings (Marsh I-II)
- Evaluation of patients on a gluten-free diet in whom no serologic testing was performed before starting a gluten-free diet
- Patients with discrepant celiac-specific serology and histology
- Patients with suspicion of refractory celiac disease where the original diagnosis of celiac remains in question
- HLA typing is sometimes performed in patients at high risk for celiac disease (eg, family history of celiac disease). A negative result will exclude celiac disease risk. This approach is most commonly used in at risk children to obviate the need for periodic serology testing.”

Kelly also stated that IgA anti-TTG antibody is the single preferred test for detection of celiac disease in individuals over the age of two years. The author further recommended that “when there exists a high probability of celiac disease (>5 percent), total IgA should be measured, especially if IgA based serology is negative. An alternative approach is to include both IgA and IgG-based testing, in particular, IgG-deamidated gliadin peptides (DGPs), in patients with a high probability of celiac disease. In patients in whom low IgA or selective IgA deficiency is identified, IgG-based testing (preferably IgG DGP) should be performed.”

Concerning the novel HLA-DQ-gluten tetramer-based assay for celiac disease first published in March 2018, Kelly states, “Diagnostic testing for celiac disease requires patients to be on gluten-containing diets. An early study suggests that a novel HLA-DQ-gluten tetramer-based assay that detects gluten-specific T cells in blood may be able to identify patients with celiac disease, regardless of whether testing is performed on a gluten-free diet. While the assay has demonstrated a high degree of accuracy, the results require validation before it can be used clinically.”

2013 American College of Gastroenterology (ACG)

The American College of Gastroenterology (ACG) recommends to test for celiac disease in the following (Rubio-Tapia, Hill, Kelly, Calderwood, & Murray, 2013):

1. “Patients with symptoms, signs, or laboratory evidence suggestive of malabsorption, such as chronic diarrhea with weight loss, steatorrhea, postprandial abdominal pain and bloating, should be tested for CD. (Strong recommendation, high level of evidence)”
2. “Patients with symptoms, signs, or laboratory evidence for which CD is a treatable cause should be considered for testing for CD. (Strong recommendation, moderate level of evidence)”
3. “Patients with a first-degree family member who has a confirmed diagnosis of CD should be tested if they show possible signs or symptoms or laboratory evidence of CD. (Strong recommendation, high level of evidence)”
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4. “Patients with type I diabetes mellitus should be tested for CD if there are any digestive symptoms, or signs, or laboratory evidence suggestive of celiac disease. (Strong recommendation, high level of evidence)”

5. “Celiac disease should be sought among the explanations for elevated serum aminotransferase levels when no other etiology is found. (Strong recommendation, high level of evidence)”

6. “Consider testing of asymptomatic relatives with a first-degree family member who has a confirmed diagnosis of CD (Conditional recommendation, high level of evidence)”

The ACG guidelines indicate that “Immunoglobulin A (IgA) anti-tissue transglutaminase (TTG) antibody is the preferred single test for detection of CD in individuals over the age of 2 years.” Also, if there is “a high probability of CD wherein the possibility of IgA deficiency is considered, total IgA should be measured.” Additionally, “an alternative approach is to include both IgA and IgG-based testing, such as IgG-deamidated gliadin peptides (DGPs), in these high-probability patients.” In those patients with low or deficient IgA, the ACG recommends “IgG-based testing (IgG DGPs and IgG TTG).” The guidelines also indicate that all serological testing should be done while the individual is on a gluten-containing diet.

Intestinal biopsy is recommended by the ACG for individuals with positive serology testing and for those with a clinical presentation consistent with CD, “even if the serologies are negative.”

Although antibodies directed against native gliadin are not recommended for the primary detection of CD,” the ACG notes that “when screening children younger than 2 years of age for CD, the IgA TTG test should be combined with DGP (IgA and IgG).”

With regard to HLA-DQ2 / DQ8 genotype testing, the ACG recommends that it “should not be used routinely in the initial diagnosis of CD” but rather “should be used to effectively rule out the disease in selected clinical situations” such as, “equivocal small-bowel histological finding (Marsh I-II) in seronegative patients; evaluation of patients on a GFD in whom no testing for CD was done before GFD; patients with discrepant celiac-specific serology and histology; patients with suspicion of refractory CD where the original diagnosis of celiac remains in question; or patients with Down’s syndrome… Because HLA-DQ2 is present in approximately 25%-30% of the white population, testing for CD with either HLA-DQ type is not useful because the PPV is only about 12%.” Concerning HLA typing, “HLA typing and histological response may help to rule out or confirm the diagnosis of CD in patients with sero-negative CD.”

The ACG does not recommend stool or salivary testing, indicating that are not validated for use in the diagnosis of CD.

The ACG advocates monitoring of adherence to a gluten-free diet, based on “a combination of history and serology.” Additionally, “upper endoscopy with intestinal biopsies is recommended for monitoring in cases with lack of clinical response or relapse of symptoms despite a GFD.”

Celiac Disease Diagnostic Testing Algorithm (Rubio-Tapia, et al., 2013)
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2006 American Gastroenterological Association (AGA) (Rostom, Murray, & Kagnoff, 2006)

The American Gastroenterological Association (AGA) Institute recommends consideration of testing for celiac disease “in symptomatic individuals who are at particularly high risk. These include those with unexplained iron deficiency anemia, a premature onset of osteoporosis, Down syndrome, unexplained elevations in liver transaminase levels, primary biliary cirrhosis, and autoimmune hepatitis.” They also note that “testing for celiac disease “should be selectively considered if symptoms that could be the result of celiac disease are present,” such as “type 1 diabetes mellitus, autoimmune thyroid disease, Sjögren’s syndrome, unexplained recurrent fetal loss, unexplained delayed puberty, selective IgA deficiency, irritable bowel syndrome, Turner’s syndrome, peripheral neuropathy, cerebellar ataxia, and recurrent migraine, as well as children with short stature and first- and second-degree relatives of patients with celiac disease.”

The AGA recommends that testing be done prior to gluten restriction, and that “the initial detection of possible celiac disease is probably best obtained by the use of a simple and accurate serologic test: the IgA tTGA.” The AGA considers positive serologic results as “supportive of the diagnosis of celiac disease” but designates duodenal biopsy as the “gold standard for establishing the diagnosis of celiac disease.”

The AGA notes that “HLA testing for the relevant DQ alleles can be a useful adjunct in an exclusionary sense when the diagnosis based on other tests is not clear,” and recommends genetic counseling when using HLA testing for family members of an individual with celiac disease.

Relative to ongoing monitoring of individuals with celiac disease, the AGA recommends periodic serologic testing.
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2012 European Society for Pediatric Gastroenterology, Hepatology, and Nutrition (ESP-GHAN) (Husby et al., 2012)

The European Society for Pediatric Gastroenterology, Hepatology, and Nutrition (ESP-GHAN) recommends that CD testing be considered for: “children and adolescents with the otherwise unexplained symptoms and signs of chronic or intermittent diarrhoea, failure to thrive, weight loss, stunted growth, delayed puberty, amenorrhea, iron-deficiency anaemia, nausea or vomiting, chronic abdominal pain, cramping or distension, chronic constipation, chronic fatigue, recurrent aphthous stomatitis (mouth ulcers), dermatitis herpetiformis–like rash, fracture with inadequate traumas/osteopenia/osteoporosis, and abnormal liver biochemistry.” Testing should also be offered to “asymptomatic children and adolescents with an increased risk for CD such as type 1 diabetes mellitus (T1DM), Down syndrome, autoimmune thyroid disease, Turner syndrome, Williams syndrome, selective immunoglobulin A (IgA) deficiency, autoimmune liver disease, and first-degree relatives with CD.”

ESP-GHAN recommends that “the initial test be IgA class anti-TG2 from a blood sample. If total serum IgA is not known, then this also should be measured.” If the individual has humoral IgA deficiency, “at least 1 additional test measuring IgG class CD-specific antibodies should be done (IgG anti-TG2, IgG anti-DGP or IgG EMA.” They also note that “tests measuring antibodies against DGP may be used as additional tests in patients who are negative for other CD-specific antibodies but in whom clinical symptoms raise a strong suspicion of CD, especially if they are younger than 2 years,” and “tests for the detection of IgG or IgA antibodies against native gliadin peptides (conventional gliadin antibody test) should not be used for CD diagnosis.” They also indicate that “tests for the detection of antibodies of any type in faecal samples should not be used.”

For individuals with “severe symptoms and a strong clinical suspicion of CD” and negative serology testing, “small intestinal biopsies and HLA-DQ testing are recommended.”

With regard to the evaluation of asymptomatic children and adolescents with CD-associated conditions, ESP-GHAN recommends HLA testing “should be offered as the first line test,” due to its high negative predictive value. “If the patient is DQ8 and/or DQ2 positive, homozygous for only the bchains of the HLA-DQ2 complex (DQB1_0202), or HLA testing is not done, then an anti-TG2 IgA test and total IgA determination should be performed, but preferably not before the child is 2 years old. If antibodies are negative, then repeated testing for CD-specific antibodies is recommended.”

ESP-GHAN also recommends that in asymptomatic individuals at increased genetic risk for CD “duodenal biopsies with the demonstration of an enteropathy should always be part of the CD diagnosis.” As an initial step, “it is recommended that the more specific test for EMA be performed. If the EMA test is positive, then the child should be referred for duodenal biopsies. If the EMA test is negative, then repeated serological testing on a normal gluten-containing diet in 3 to 6 monthly intervals is recommended.” Testing of infants, as with all serologic testing for CD, should be done only when the individual is on a gluten-containing diet.

2015 North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition (NASPGHAN) (Hill et al., 2016)

NASPGHAN updated their recommendations in 2015 (published in 2016) for gluten-related disorders, including CD, wheat allergy (WA), and nonceliac gluten sensitivity (NCGS). Concerning who should be tested for gluten-related disorders, “Children with symptoms consistent with gluten-related disorders, or who have self-identified relief of symptoms when avoiding gluten, should undergo testing for CD and/or WA before the elimination of dietary gluten. CD should be an early consideration in those with typical gastrointestinal symptoms such as chronic diarrhea, abdominal pain, distension, and weight loss.” The table below outlines their recommendations for considering CD testing:
“Children belonging to groups known to be at increased risk for CD may initially have no symptoms, or very minor symptoms, despite having intestinal histologic changes that are characteristic for CD. Included in these groups are first-degree relatives of an index case, people with trisomy 21, Turner syndrome, Williams syndrome, and IgA deficiency, and those with other autoimmune conditions (Hill et al., 2016).”

For initial testing, they recommend the TTG-IgA antibody test due to its reliability and cost-effectiveness. They note that co-testing for serum IgA can be performed to “identify those who have selective IgA deficiency”; however, “use of a panel of antibodies instead of a single tTG-IgA test is not recommended. Although this approach may be associated with a marginal increase in the sensitivity of the test, it decreases the specificity and significantly increases the costs (Hill et al., 2016).” Testing for serum antibodies against gliadin is less sensitive, reliable, and specific as compared to TTG and EMA.

They do not recommend genetic testing for HLA variants as an initial diagnostic test or screening for CD since up to 40% of the general population contains one of the variant alleles. “Testing for HLA-DQ2/8 is best reserved for patients in whom there is a diagnostic dilemma, such as when there is a discrepancy between the serological and histologic findings or when a GFD [gluten-free diet] has been started before any testing (Hill et al., 2016).”

They do not recommend the use of rapid, point-of-care tests for TTG since these tests do not allow for the quantitative analysis of the antibody.

2015, 2016 National Institute for Health and Care Excellence (NICE, 2015, 2016)

The National Institute for Health and Care Excellence (NICE) recommends CD serologic testing in symptomatic young people and adults with the following algorithm (NICE, 2015):

1. First test for total serum IgA and TTG
2. Next test for IgA endomysial antibodies (EMA) if TTG is inconclusive (i.e. weakly positive)
3. “Consider using IgG EMA, IgG deamidated gliadin peptide (DGP) or IgG tTG if IgA is deficient”

For children with suspected CD, they recommend:

1. First test for total serum IgA and TTG
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2. “Consider using IgG EMA, IgG DGP or IgG tTG if IgA is deficient”

NICE also recommends offer CD testing for people with the following:

1. Autoimmune thyroid disease
2. Persistent unexplained abdominal or gastrointestinal symptoms
3. Irritable bowel syndrome
4. Type 1 diabetes
5. First-degree relatives (parents, siblings or children) with coeliac disease
6. Other symptoms indicative of possible CD, including faltering growth in children, prolonged
   fatigue, unexpected weight loss, severe or persistent mouth ulcers, unexplained dietary
   deficiencies

NICE also recommends considering CD testing for people with the following:

1. Metabolic bone disorder
2. Unexplained neurological symptoms
3. Unexplained subfertility or recurrent miscarriage
4. Down’s syndrome or Turner’s syndrome
5. Dental enamel defects
6. Persistent elevated hepatic enzymes of unknown etiology

They do note that “People who are following a normal diet (containing gluten) should be advised
 to eat gluten in more than 1 meal every day for at least 6 weeks before testing for coeliac disease
 (NICE, 2016).”

NICE indicates that HLA testing should not be done as part of the initial testing. Also, “Only
 consider using HLA DQ2 (DQ2.2 and DQ2.5)/DQ8 testing in the diagnosis of coeliac disease in
 specialist settings (for example, in children who are not having a biopsy, or in people who already
 have limited gluten ingestion and choose not to have a gluten challenge) (NICE, 2015).”

2017 US Preventive Services Task Force (Bibbins-Domingo et al., 2017)

The United States Preventative Services Task Force (Bibbins-Domingo et al., 2017) recently
 published guidelines on the screening of asymptomatic populations for celiac disease and found
 that:

“The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits
 and harms of screening for celiac disease in asymptomatic persons. Evidence is lacking, and the
 balance of benefits and harms cannot be determined.” However, it was noted that: “Persons at
 increased risk for celiac disease include those who have a positive family history (eg, a first- or
 second-degree relative), with an estimated prevalence of 5% to 20%, and persons with other
 autoimmune diseases (eg, type 1 diabetes mellitus, inflammatory luminal gastrointestinal
 disorders, Down syndrome, Turner syndrome, IgA deficiency, and IgA nephropathy). Several
 specialty societies recommend screening in these populations.”

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that
 it will be reimbursed. For further information on reimbursement guidelines, please see Administrative
 Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed
 in the Category Search on the Medical Policy search page.
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Applicable service codes: 81376, 81377, 81382, 81383, 82784, 83516, 83519, 83520, 86255, 86256, 86828, 86829, 86831, 86833, 86835, 88305, 88346, 88350

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources


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specialty Matched Consultant Advisory Panel review 11/2019

policy Implementation/Update Information

1/1/2019  BCBSNC will provide coverage for celiac disease testing when it is determined to be medically necessary because criteria and guidelines are met. Medical Director review 1/1/2019. Policy noticed 1/1/2019 for effective date 4/1/2019. (jd)

10/1/19  Policy statement revised to read: BCBSNC will provide coverage for celiac disease testing when it is determined the medical criteria or reimbursement guidelines below are met. Wording revised in the When Covered section. “Medically Necessary” changed to “Reimbursement is allowed...” Wording revised in the Not Covered section. “Not Medically Necessary” and “investigational” changed to read “Reimbursement is not allowed...” Deleted coding grid. Notification given 10/1/2019 for effective date 12/2/2019. (an)

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Specialty Matched Consultant Advisory Panel review 11/2019

Medical Director review 11/2019

Sarna, V. K., Lundin, K. E. A., Morkrid, L., Qiao, S. W., Sollid, L. M., & Christophersen, A. (2018). HLA-DQ-Gluten Tetramer Blood Test Accurately Identifies Patients With and Without Celiac Disease in Absence of Glut...
Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.