

Reimbursement Policy

Gamma-glutamyl Transferase Testing in Adults

[POLICY DESCRIPTION](#) | [INDICATIONS AND/OR LIMITATIONS OF COVERAGE](#) | [APPLICABLE STATE AND FEDERAL REGULATIONS](#) | [APPLICABLE CPT/HCPCS PROCEDURE CODES](#) | [EVIDENCE-BASED SCIENTIFIC REFERENCES](#) | [REVISION HISTORY](#)

I. Policy Description

Gamma-glutamyl transferase (GGT), also known as gamma-glutamyl transpeptidase (GGTP),^{1,2} is an enzyme that has a half-life of between fourteen and twenty-six days and is present in the cell membrane of many different tissue types, including the heart, brain, seminal vesicles, kidneys, bile duct, spleen, and gallbladder.^{3,4} GGT is traditionally considered a predictive marker for liver dysfunction, bile duct ailments, and alcohol consumption.⁵ However, new research suggests that GGT may be useful as an early predictive marker for several other conditions including heart failure, arterial stiffness, arterial plaque, gestational diabetes, atherosclerosis, several infectious diseases, and numerous types of cancer.⁵ Terms such as male and female are used when necessary to refer to sex assigned at birth.

II. Indications and/or Limitations of Coverage

Application of coverage criteria is dependent upon an individual's benefit coverage at the time of the request. Specifications pertaining to Medicare and Medicaid can be found in the "Applicable State and Federal Regulations" section of this policy document.

This policy is specific to individuals 18 years of age or older. Criteria below do not apply to individuals less than 18 years of age.

- 1) For individuals with elevated alkaline phosphatase activity, serum GGT testing no more than once every two weeks **MEETS COVERAGE CRITERIA**.
- 2) To assess for liver injury, function, and/or disease, serum GGT testing no more than once every two weeks **MEETS COVERAGE CRITERIA** for individuals with at least one of the following conditions:
 - a) For individuals with chronic alcohol use.
 - b) For individuals on a long-term drug therapy known to have a potential for causing liver toxicity.
 - c) For individuals with exposure to hepatotoxins.

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- d) For individuals with viral hepatitis, amoebiasis, tuberculosis, psittacosis, or similar infections that may cause hepatic injury.
 - e) For individuals with primary or secondary malignant neoplasms of the digestive system.
 - f) For individuals with diabetes mellitus.
 - g) For individuals with malnutrition.
 - h) For individuals with disorders of iron and mineral metabolism.
 - i) For individuals with sarcoidosis.
 - j) For individuals with amyloidosis.
 - k) For individuals with lupus.
 - l) For individuals with hypertension.
 - m) For individuals with gastrointestinal disease.
 - n) For individuals with pancreatic disease.
 - o) To assess liver function subsequent to liver transplantation.
- 3) For asymptomatic individuals, serum GGT testing during a wellness visit or a general exam without abnormal findings **DOES NOT MEET COVERAGE CRITERIA.**

III. Applicable State and Federal Regulations

DISCLAIMER: If there is a conflict between this Policy and any relevant, applicable government policy for a particular member [e.g., Local Coverage Determinations (LCDs) or National Coverage Determinations (NCDs) for Medicare and/or state coverage for Medicaid], then the government policy will be used to make the determination. For the most up-to-date Medicare policies and coverage, please visit the Medicare search website: <https://www.cms.gov/medicare-coverage-database/search.aspx>. For the most up-to-date Medicaid policies and coverage, visit the applicable state Medicaid website.

Food and Drug Administration (FDA)

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). LDTs are not approved or cleared by the U. S. Food and Drug Administration; however, FDA clearance or approval is not currently required for clinical use.

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IV. Applicable CPT/HCPCS Procedure Codes

CPT	Code Description
82977	Glutamyltransferase, gamma (GGT)

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Procedure codes appearing in Medical Policy documents are included only as a general reference tool for each policy. They may not be all-inclusive.

V. Evidence-based Scientific References

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VI. Revision History

Revision Date	Summary of Changes
09/04/2025	Reviewed and Updated: Updated background, guidelines, and evidence-based scientific references. Literature review necessitated the following changes in coverage criteria: Added “of the digestive system.” to CC2.e., now reads: “e) For individuals with primary or secondary malignant neoplasms of the digestive system.”