



Geisinger Health Plan Policies and Procedure Manual

Policy: MP382

Section: Medical Policy

Subject: Genetic Testing for Monogenic and Syndromic Obesity

Applicable line of business:

Commercial	x	Medicaid	x
Medicare	x	ACA	x
CHIP	x		

I. Policy: Genetic Testing for Monogenic and Syndromic Obesity

II. Purpose/Objective: To provide a policy of coverage regarding Genetic Testing for Monogenic and Syndromic Obesity

III. Responsibility:

- A. Medical Directors
- B. Medical Management

IV. Required Definitions

1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

Commercial

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Medicare

Geisinger Gold Medicare Advantage HMO, PPO, and HMO D-SNP plans are offered by Geisinger Health Plan/Geisinger Indemnity Insurance Company, health plans with a Medicare contract. Continued enrollment in Geisinger Gold depends on contract renewal. Geisinger Health Plan/Geisinger Indemnity Insurance Company are part of Geisinger, an integrated health care delivery and coverage organization.

CHIP

Geisinger Health Plan Kids (GHP Kids) is a Children's Health Insurance Program (CHIP) offered by Geisinger Health Plan in conjunction with the Pennsylvania Department of Human Services (DHS). Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Medicaid

Geisinger Health Plan Family (GHP Family) is a Medical Assistance (Medicaid) insurance program offered by Geisinger Health Plan in conjunction with the Pennsylvania Department of Human Services (DHS). Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community.
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and

the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient

Medicaid Business Segment

Medically Necessary — A service, item, procedure, or level of care that is necessary for the proper treatment or management of an illness, injury, or disability is one that:

- Will, or is reasonably expected to, prevent the onset of an illness, condition, injury or disability.
- Will, or is reasonably expected to, reduce or ameliorate the physical, mental or developmental effects of an illness, condition, injury or disability.
- Will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for Members of the same age.

INDICATIONS: REQUIRES PRIOR AUTHORIZATION BY A PLAN MEDICAL DIRECTOR OR DESIGNEE

Genetic testing for genetic causes of obesity is considered medically necessary when the following criteria are met:

1. Extreme early onset obesity (diagnosed before 5 years of age); **OR**
2. Family history of one first degree relative with extreme obesity, **AND**
3. Also have at least one clinical feature suggestive of a syndromic cause,
 - a. Developmental or intellectual disability, language delay, seizure disorder, or behavioral disorder,
 - b. Dysmorphic features,
 - c. Hypotonia,
 - d. Short stature, growth hormone deficiency, or hypogonadism,
 - e. Endocrine abnormalities such as hypocalcemia, delayed puberty, or hypothyroidism,
 - f. Renal fibrosis, cardiac, bone, or hearing abnormalities

AND

4. Evidence that a positive genetic test result would alter medical management.

EXCLUSIONS:

The Plan does **NOT** provide coverage for genetic testing for non-syndromic monogenic obesity, not meeting the above criteria, because it is considered unproven. There is insufficient evidence in the peer-reviewed published medical literature to establish the effectiveness of this test on health outcomes when compared to established tests or technologies.

Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in MP 15 - Experimental Investigational or Unproven Services or Treatment.

Medicaid Business Segment:

Any requests for services, that do not meet criteria set in the PARP, may be evaluated on a case by case basis.

CODING ASSOCIATED WITH:

The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at www.cms.gov or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.

81408 Monogenic Obesity Panel {Invitae panel}

81443 genomic sequence analysis panel to evaluate the patient specimen for genetic sequences of at least 15 genes {U.of Chicago Monogenic Obesity panel}

LINE OF BUSINESS:

Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

REFERENCES:

Styne DM et al (2017). Pediatric Obesity—Assessment, Treatment, and Prevention: An Endocrine Society Clinical Practice Guideline. The Journal of Clinical Endocrinology & Metabolism, Volume 102, Issue 3, 1 March 2017, Pages 709–757.

Dubern B, Mosbah H, Pigeyre M, et al. Rare genetic causes of obesity: Diagnosis and management in clinical care. Ann Endocrinol (Paris). 2022 Feb;83(1):63-72. doi: 10.1016/j.ando.2021.12.003. Epub 2021 Dec 23. PMID: 34953778.

Roberts KJ, Ariza AJ, et al. Testing for rare genetic causes of obesity: findings and experiences from a pediatric weight management program. Int J Obesity 2022;46:1493-1501.

Mohammed I, Haris B, Al-Barazeni T, et al. Understanding the Genetics of Early-Onset Obesity in a Cohort of Children From Qatar. The Journal of Clinical Endocrinology & Metabolism, 2023; 108(12):3201–3213.

Faccioli N, Poitou C, Clément K, Dubern B. Current Treatments for Patients with Genetic Obesity. J Clin Res Pediatr Endocrinol. 2023 May 29;15(2):108-119. PMID: 37191347.

Mainieri F, La Bella S, Rinaldi M, Chiarelli F. Rare genetic forms of obesity in childhood and adolescence: A narrative review of the main treatment options with a focus on innovative pharmacological therapies. Eur J Pediatr. 2024 Apr;183(4):1499-1508. doi: 10.1007/s00431-024-05427-4. Epub 2024 Jan 16. PMID: 38227053.

Duarte MK, Leite-Lais L, et al. Obesity and Nutrigenetics Testing: New Insights. Nutrients 2024;16(5):607.

This policy will be revised as necessary and reviewed no less than annually.

Devised: 2/25

Revised:

Reviewed:

CMS UM Oversight Committee Approval: 4/25

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Coverage for experimental or investigational treatments, services and procedures is specifically excluded under the member's certificate with Geisinger Health Plan. Unproven services outside of an approved clinical trial are also specifically excluded under the member's certificate with Geisinger Health Plan. This policy does not expand coverage to services or items specifically excluded from coverage in the member's certificate with Geisinger Health Plan. Additional information can be found in MP015 Experimental, Investigational or Unproven Services.

Prior authorization and/or pre-certification requirements for services or items may apply. Pre-certification lists may be found in the member's contract specific benefit document. Prior authorization requirements can be found at <https://www.geisinger.org/health-plan/providers/ghp-clinical-policies>

Please be advised that the use of the logos, service marks or names of Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company on a marketing, press releases or any communication piece regarding the contents of this medical policy is strictly prohibited without the prior written consent of Geisinger Health Plan. Additionally, the above medical policy does not confer any endorsement by Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company regarding the medical service, medical device or medical lab test described under this medical policy.