Summary: Lipid Testing

NCD 190.23

The terms of Medicare National Coverage Determinations (NCDs) are binding on all fee-for-service (Part A/B) Medicare Administrative Contractors (MACs) and Medicare Advantage (MA) plans. NCDs are not binding, however, on Medicaid and other governmental payers, nor are they binding on commercial payers in their non-MA lines of business.

Item/Service Description*

Lipoproteins are a class of heterogeneous particles of varying sizes and densities containing lipid and protein. These lipoproteins include cholesterol esters and free cholesterol, triglycerides, phospholipids and A, C, and E apoproteins. Total cholesterol comprises all the cholesterol found in various lipoproteins.

Factors that affect blood cholesterol levels include age, sex, body weight, diet, alcohol and tobacco use, exercise, genetic factors, family history, medications, menopausal status, the use of hormone replacement therapy, and chronic disorders such as hypothyroidism, obstructive liver disease, pancreatic disease (including diabetes), and kidney disease.

In many individuals, an elevated blood cholesterol level constitutes an increased risk of developing coronary artery disease. Blood levels of total cholesterol and various fractions of cholesterol, especially low density lipoprotein cholesterol (LDL-C) and high density lipoprotein cholesterol (HDL-C), are useful in assessing and monitoring treatment for that risk in patients with cardiovascular and related diseases. Blood levels of the above cholesterol components including triglyceride have been separated into desirable, borderline and high risk categories by the National Heart, Lung and Blood Institute in their report in 1993. These categories form a useful basis for evaluation and treatment of patients with hyperlipidemia. Therapy to reduce these risk parameters includes diet, exercise and medication, and fat weight loss, which is particularly powerful when combined with diet and exercise.

Indications*

The medical community recognizes lipid testing as appropriate for evaluating atherosclerotic cardiovascular disease. Conditions in which lipid testing may be indicated include:

- Assessment of patients with atherosclerotic cardiovascular disease.
- Evaluation of primary dyslipidemia.
- Any form of atherosclerotic disease, or any disease leading to the formation of atherosclerotic disease.
- Diagnostic evaluation of diseases associated with altered lipid metabolism, such as: nephrotic syndrome, pancreatitis, hepatic disease, and hypo and hyperthyroidism.
- Secondary dyslipidemia, including diabetes mellitus, disorders of gastrointestinal absorption, chronic renal failure.
- Signs or symptoms of dyslipidemias, such as skin lesions.
- As follow-up to the initial screen for coronary heart disease (total cholesterol + HDL cholesterol) when total cholesterol is determined to be high (>240 mg/dL), or borderline-high (200-240 mg/dL) plus two or more coronary heart disease risk factors, or an HDL cholesterol, <35 mg/dL.

To monitor the progress of patients on anti-lipid dietary management and pharmacologic therapy for the treatment of elevated blood lipid disorders, total cholesterol, HDL cholesterol and LDL cholesterol may be used. Triglycerides may be obtained if this lipid fraction is also elevated or if the patient is put on drugs (for example, thiazide diuretics, beta blockers, estrogens, glucocorticoids, and tamoxifen) which may raise the triglyceride level.

When monitoring long term anti-lipid dietary or pharmacologic therapy and when following patients with borderline high total or LDL cholesterol levels, it may be reasonable to perform the lipid panel annually. A lipid panel at a yearly interval will usually be adequate while measurement of the serum total cholesterol or a measured LDL should suffice for interim visits if the patient does not have hypertriglyceridemia.

Any one component of the panel or a measured LDL may be reasonable and necessary up to six times the first year for monitoring dietary or pharmacologic therapy. More frequent total cholesterol HDL cholesterol, LDL cholesterol and triglyceride testing may be indicated for marked elevations or for changes to anti-lipid therapy due to inadequate initial patient response to dietary or pharmacologic therapy. The LDL cholesterol or total cholesterol may be measured three times yearly after treatment goals have been achieved.

Electrophoretic or other quantitation of lipoproteins may be indicated if the patient has a primary disorder of lipoid metabolism.

Effective January 1, 2005, the Medicare law expanded coverage to cardiovascular screening services. Several of the procedures included in this NCD may be covered for screening purposes subject to specified frequencies. See 42 CFR 410.17 and section 100, chapter 18, of the Claims Processing Manual, for a full description of this benefit.

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*This language is a direct quote from the NCD.

Limitations*

Lipid panel and hepatic panel testing may be used for patients with severe psoriasis which has not responded to conventional therapy and for which the retinoid etretinate has been prescribed and who have developed hyperlipidemia or hepatic toxicity. Specific examples include erythrodermia and generalized pustular type and psoriasis associated with arthritis.

Routine screening and prophylactic testing for lipid disorder are not covered by Medicare. While lipid screening may be medically appropriate, Medicare by statute does not pay for it. Lipid testing in asymptomatic individuals is considered to be screening regardless of the presence of other risk factors such as family history, tobacco use, etc.

Once a diagnosis is established, one or several specific tests are usually adequate for monitoring the course of the disease. Less specific diagnoses (for example, other chest pain) alone do not support medical necessity of these tests.

When monitoring long term anti-lipid dietary or pharmacologic therapy and when following patients with borderline high total or LDL cholesterol levels, it is reasonable to perform the lipid panel annually. A lipid panel at a yearly interval will usually be adequate while measurement of the serum total cholesterol or a measured LDL should suffice for interim visits if the patient does not have hypertriglyceridemia.

Any one component of the panel or a measured LDL may be medically necessary up to six times the first year for monitoring dietary or pharmacologic therapy. More frequent total cholesterol HDL cholesterol, LDL cholesterol and triglyceride testing may be indicated for marked elevations or for changes to anti-lipid therapy due to inadequate initial patient response to dietary or pharmacologic therapy. The LDL cholesterol or total cholesterol may be measured three times yearly after treatment goals have been achieved.

If no dietary or pharmacological therapy is advised, monitoring is not necessary.

When evaluating non-specific chronic abnormalities of the liver (for example, elevations of transaminase, alkaline phosphatase, abnormal imaging studies, etc.), a lipid panel would generally not be indicated more than twice per year.

Representative List of Covered ICD-10-CM Diagnosis Codes

The following diagnosis codes are among those identified as "ICD-10-CM Codes Covered by Medicare Program" in the CMS "National Coverage Determinations (NCD) Coding Policy Manual and Change Report (ICD-10-CM)" section that identifies covered diagnosis codes for the above-described NCD.

ICD-10 Code	Description
E03.8	Other specified hypothyroidism
E03.9	Hypothyroidism, unspecified
E05.90	Thyrotoxicosis, unspecified w/out thyrotoxic crisis or storm
E06.3	Autoimmune thyroiditis
E06.9	Thyroiditis, unspecified
E10.9	Type 1 diabetes mellitus without complications
E11.21	Type 2 diabetes mellitus with diabetic nephropathy
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy
E11.65	Type 2 diabetes mellitus with hyperglycemia
E11.8	Type 2 diabetes mellitus with unspecified complications
E11.9	Type 2 diabetes mellitus without complications
E66.01	Morbid (severe) obesity due to excess calories
E66.09	Other obesity due to excess calories
E66.3	Overweight
E66.9	Obesity, unspecified
E78.00	Pure hypercholesterolemia, unspecified
E78.01	Familial hypercholesterolemia
E78.1	Pure hyperglyceridemia
E78.2	Mixed hyperlipidemia
E78.49	Other hyperlipidemia

ICD-10 Code	Description
E78.5	Hyperlipidemia, unspecified
E78.6	Lipoprotein deficiency
E78.9	Disorder of lipoprotein metabolism, unspecified
E79.0	Hyperuricemia without signs of inflammatory arthritis and tophaceous disease
E89.0	Postprocedural hypothyroidism
I10	Essential (primary) hypertension
I11.9	Hypertensive heart disease without heart failure
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris
I50.9	Heart failure, unspecified
K76.0	Fatty (change of) liver, not elsewhere classified
K76.9	Liver disease, unspecified
K77	Liver disorders in diseases classified elsewhere
N18.9	Chronic kidney disease, unspecified
R07.9	Chest pain, unspecified
R78.89	Finding of other specified substances, not normally found in blood
R79.0	Abnormal level of blood mineral
R79.89	Other specified abnormal findings of blood chemistry
R79.9	Abnormal finding of blood chemistry, unspecified
Z79.899	Other long term (current) drug therapy

To view a full list of covered codes and the complete NCD, please visit the CMS website, www.cms.gov.