C-Reactive Protein High Sensitivity Testing (hsCRP)



CPT: 86141

CMS Policy for Delaware, Maryland, New Jersey, Pennsylvania, Virginia (Suburbs), and Washington, D.C.

Local policies are determined by the performing test location. This is determined by the state in which your performing laboratory resides and where your testing is commonly performed.

Medically Supportive ICD Codes are listed on subsequent page(s) of this document.

Coverage Indications, Limitations, and/or Medical Necessity

Notice: It is not appropriate to bill Medicare for services that are not covered (as described by this entire LCD) as if they are covered. When billing for non-covered services, use the appropriate modifier.

Compliance with the provisions in this policy may be monitored and addressed through post payment data analysis and subsequent medical review audits.

History/Background and/or General Information

C-reactive protein (CRP), is a nonspecific, acute-phase reactant produced in response to tissue injury, inflammation or infection. As an acute phase reactant, concentrations rise rapidly and half-life is short. Studies have shown that chronic, low-grade inflammation contributes to atherogenesis and the development of coronary artery disease (CAD). Inflammatory changes lead to progressive disease, which culminates in plaque instability, rupture, thrombosis, and myocardial infarction (MI).

CRP testing, CPT code 86140, is eligible for coverage as a diagnostic test for the detection and evaluation of infection, tissue injury, and inflammatory disease. This CPT code, 86140, is not to be used in place of CPT code 86141, which represents high sensitivity C-reactive protein (hsCRP) testing and the subject of this policy.

A high sensitivity C-reactive protein (hsCRP) assay measures low levels of CRP, which allows for measurement of conditions indicative of chronic, low-grade inflammation. The stimulus for the rise in serum CRP in CAD remains undetermined, although it may result from local inflammation within atheromatous plaques, from a systemic or local inflammation or infection elsewhere in the body that contributes to atherogenesis, or to unrelated conditions. Increased CRP may reflect plaque instability and an increased risk for a CAD event. Published literature presents strong evidence to refute the hypothesis that CRP itself has a causative effect on coronary heart disease.

High-sensitivity assays can measure levels as low as 0.175 mg/L, which may be associated with CAD. HsCRP assays are based on nephelometric analysis of antigen-antibody complexes using monoclonal antibodies with sufficient sensitivity to detect low levels of CRP.

Covered Indications

This contractor will consider high-sensitivity C-reactive protein (hsCRP) testing reasonable and necessary when ALL of the following criteria are met:

- When the hsCRP would add substantial incremental information in the decision making process to optimize/maximize lipid lowering pharmacologic therapy, (e.g., use of statins), in a patient who has been identified as being at intermediate risk for CAD (10-year risk of coronary heart disease between 10-20% per the ATPIII Guidelines). This is to be used for a one time decision point and is not intended to monitor therapy.
- The test is performed in patients considered to be metabolically stable and without obvious inflammatory or infectious conditions.

The American Heart Association (AHA) recommends the following cutpoints for hsCRP corresponding to three levels of risk:

- Low risk < 1.0 mg/L
- Average risk > 1.0 to < 3.0 mg/L
- High risk > 3.0 mg/L

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Limitations

- Medicare does not provide coverage for routine screening performed without a relationship to the evaluation or treatment of a symptom, sign, illness or
 injury. If high sensitivity C-reactive protein (hsCRP) testing is performed for cardiovascular risk assessment, in the absence of signs or symptoms of illness or
 injury, then the service will be denied as not reasonable and necessary.
- 2. Medicare does not cover hsCRP testing as a screening test for the general population or for monitoring response to therapy.
- 3. Although hsCRP is commonly elevated in inflammatory conditions (e.g., rheumatic fever, rheumatoid arthritis, systemic vasculitis, myocardial infarction, acute pancreatitis), measurements in these illnesses is not appropriate and is considered not reasonable and necessary.

Notice: This LCD imposes frequency limitations as well as diagnosis limitations that support diagnosis to procedure code automated denials. Services performed for any given diagnosis must meet all of the indications and limitations stated in this policy, the general requirements for medical necessity as stated in CMS payment policy manuals, any and all existing CMS national coverage determinations, and all Medicare payment rules. Please refer to the "Utilization Guidelines" section for an outline of the frequency limitations.

As published in CMS IOM 100-08, Chapter 13, Section 13.5.1, in order to be covered under Medicare, a service shall be reasonable and necessary. When appropriate, contractors shall describe the circumstances under which the proposed LCD for the service is considered reasonable and necessary under Section 1862 (a)(1)(A). Contractors shall consider a service to be reasonable and necessary if the contractor determines that the service is:

- Safe and effective
- Not experimental or investigational (exception: routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000, that
 meet the requirements of the Clinical Trials NCD are considered reasonable and necessary).
- · Appropriate, including the duration and frequency that is considered appropriate for the service, in terms of whether it is:
 - Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient's condition or to improve the function of a malformed body member.
 - Furnished in a setting appropriate to the patient's medical needs and condition.
 - Ordered and furnished by qualified personnel.
 - One that meets, but does not exceed, the patient's medical needs.
 - At least as beneficial as an existing and available medically appropriate alternative.

Utilization Guidelines

- In accordance with CMS Ruling 95-1 (V), utilization of these services should be consistent with locally acceptable standards of practice.
- Generally, the measurement of hsCRP markers is performed twice (averaging results), optimally two weeks apart and fasting or nonfasting, with the average expressed in mg/L, in metabolically stable patients.
- It is considered reasonable and necessary to perform no more than 3 hsCRP services per patient lifetime.

Notice: This LCD imposes utilization guideline limitations. Despite Medicare's allowing up to these maximums, each patient's condition and response to treatment must medically warrant the number of services reported for payment. Medicare requires the medical necessity for each service reported to be clearly demonstrated in the patient's medical record. Medicare expects that patients will not routinely require the maximum allowable number of services

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There is a frequency associated with this test. Please refer to the Limitations or Utilization Guidelines section on previous page(s).

The ICD10 codes listed below are the top diagnosis codes currently utilized by ordering physicians for the limited coverage test highlighted above that are also listed as medically supportive under Medicare's limited coverage policy. If you are ordering this test for diagnostic reasons that are not covered under Medicare policy, an Advance Beneficiary Notice form is required.

*Note—Bolded diagnoses below have the highest utilization

Code	Description
E78.00	Pure hypercholesterolemia, unspecified
E78.01	Familial hypercholesterolemia
E78.1	Pure hyperglyceridemia
E78.2	Mixed hyperlipidemia
E78.3	Hyperchylomicronemia
E78.49	Other hyperlipidemia
125.10	Atherosclerotic heart disease of native coronary artery without angina pectoris
Z74.09	Other reduced mobility
Z78.9	Other specified health status

*Use ICD-10 CM code Z74.09 and Z78.9 for patients at intermediate risk for CAD who do not have elevated lipids (i.e., do not meet criteria to use ICD 10 CM codes E78.00 E78.4#).

Visit MAKOMedical.com/coverageguidance to view current limited coverage tests, reference guides, and policy information.

To view the complete policy and the full list of medically supportive codes, please refer to the CMS website reference

https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdld=34856 Last Updated: 3/18/25

Disclaimer: