

Coverage Guidance

Coverage Indications, Limitations, and/or Medical Necessity

Abstract:

B-type natriuretic peptide (BNP) is a cardiac neurohormone produced mainly in the left ventricle. It is secreted in response to ventricular volume expansion and pressure overload, factors often found in congestive heart failure (CHF). Used in conjunction with other clinical information, rapid measurement of BNP is useful in establishing or excluding the diagnosis and assessing the severity of CHF in patients with acute dyspnea so that appropriate and timely treatment can be initiated. This test is also used to predict the long-term risk of cardiac events or death across the spectrum of acute coronary syndromes when measured in the first few days after an acute coronary event. For the purposes of this policy, either total or N-terminal assays are acceptable.

Indications:

The measurement of brain natriuretic peptide as part of cardiovascular risk assessment panels, consisting of various combinations of biochemical, immunologic, hematologic, and molecular tests, is considered screening when performed on an asymptomatic patient, and, as such, is not a Medicare benefit. Refer to the **MoIDX: Biomarkers in Cardiovascular Risk Assessment Local Coverage Determination L36129**.

BNP measurements may be considered reasonable and necessary when used in combination with other medical data such as medical history, physical examination, laboratory studies, chest x-ray, and electrocardiography:

- To distinguish cardiac cause of acute dyspnea from pulmonary or other non-cardiac causes. Plasma BNP levels are significantly increased in patients with CHF presenting with acute dyspnea compared with patients presenting with acute dyspnea due to other causes.
- To distinguish decompensated CHF from exacerbated chronic obstructive pulmonary disease (COPD) in a symptomatic patient with combined chronic CHF and COPD. Plasma BNP levels are significantly increased in patients with CHF with or without concurrent lung disease compared with patients who have primary lung disease.
- As a risk stratification tool (to assess risk of death, myocardial infarction or congestive heart failure) among patients with acute coronary syndrome (myocardial infarction with or without T-wave elevation and unstable angina). Obtained in the first few days after the onset of ischemic symptoms, results of BNP measurement can provide useful information.

Limitations:

BNP measurements must be analyzed in conjunction with standard diagnostic tests, medical history and clinical findings. The efficacy of BNP measurement as a stand-alone test has not yet been established. Clinicians should be aware that certain conditions such as ischemia, infarction and renal insufficiency, may cause elevation of circulating BNP concentration and require alterations of the interpretation of BNP results.

Additional investigation is required to further define the diagnostic value of plasma BNP in monitoring the

efficiency of treatment for CHF and in tailoring the therapy for heart failure. Therefore, BNP measurements for monitoring and management of CHF are not a covered service.

Although a correlation between serum BNP levels and the clinical severity of HF has been shown in broad populations, "it cannot be assumed that BNP levels can be used effectively as targets for adjustment of therapy in individual patients. [T]he BNP measurement has not been clearly shown to supplement careful clinical assessment." (Hunt SA, Abraham WT, Chin MH, et al. ACC/AHA 2005 Guideline Update for the Diagnosis and Management of Chronic Heart Failure in the Adult: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiol.* 2005;46(6): e14.

Summary of Evidence

N/A

Analysis of Evidence (Rationale for Determination)

N/A

[Back to Top](#)



Bill Type Codes:

Contractors may specify Bill Types to help providers identify those Bill Types typically used to report this service. Absence of a Bill Type does not guarantee that the policy does not apply to that Bill Type. Complete absence of all Bill Types indicates that coverage is not influenced by Bill Type and the policy should be assumed to apply equally to all claims.

N/A

Revenue Codes:

Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory. Unless specified in the policy, services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the policy should be assumed to apply equally to all Revenue Codes.

N/A

CPT/HCPCS Codes

Group 1 Paragraph: N/A

Group 1 Codes:

83880 NATRIURETIC PEPTIDE

ICD-10 Codes that Support Medical Necessity**Group 1 Paragraph:**

The correct use of an ICD-10 code listed below does not assure coverage of a service. The service must be reasonable and necessary in the specific case and must meet the criteria specified in this determination.

Group 1 Codes

ICD-10 Code	Description
I11.0	Hypertensive heart disease with heart failure
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease
I16.0	Hypertensive urgency
I16.1	Hypertensive emergency
I16.9	Hypertensive crisis, unspecified
I20.0	Unstable angina
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site
I21.4	Non-ST elevation (NSTEMI) myocardial infarction
I21.9	Acute myocardial infarction, unspecified

I21.A1 Myocardial infarction type 2

I21.A9 Other myocardial infarction type

I22.0 Subsequent ST elevation (STEMI) myocardial infarction of anterior wall

I22.1 Subsequent ST elevation (STEMI) myocardial infarction of inferior wall

I22.2 Subsequent non-ST elevation (NSTEMI) myocardial infarction

I22.8 Subsequent ST elevation (STEMI) myocardial infarction of other sites

I22.9 Subsequent ST elevation (STEMI) myocardial infarction of unspecified site

I25.110 Atherosclerotic heart disease of native coronary artery with unstable angina pectoris

I25.700 Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris

I25.710 Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris

I25.720 Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris

I25.730 Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris

I25.750 Atherosclerosis of native coronary artery of transplanted heart with unstable angina

I25.760 Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina

I25.790 Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris

I31.1 Chronic constrictive pericarditis

I42.0 Dilated cardiomyopathy

I42.1 Obstructive hypertrophic cardiomyopathy

I42.2 Other hypertrophic cardiomyopathy

I42.5 Other restrictive cardiomyopathy

I42.8 Other cardiomyopathies

I42.9 Cardiomyopathy, unspecified

I50.1 Left ventricular failure, unspecified

I50.20 Unspecified systolic (congestive) heart failure

I50.21 Acute systolic (congestive) heart failure

I50.22 Chronic systolic (congestive) heart failure

I50.23 Acute on chronic systolic (congestive) heart failure

I50.30 Unspecified diastolic (congestive) heart failure

I50.31 Acute diastolic (congestive) heart failure

I50.32 Chronic diastolic (congestive) heart failure

I50.33 Acute on chronic diastolic (congestive) heart failure

I50.40 Unspecified combined systolic (congestive) and diastolic (congestive) heart failure

I50.41 Acute combined systolic (congestive) and diastolic (congestive) heart failure
I50.42 Chronic combined systolic (congestive) and diastolic (congestive) heart failure
I50.43 Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure
I50.810 Right heart failure, unspecified
I50.811 Acute right heart failure
I50.812 Chronic right heart failure
I50.813 Acute on chronic right heart failure
I50.814 Right heart failure due to left heart failure
I50.82 Biventricular heart failure
I50.83 High output heart failure
I50.84 End stage heart failure
I50.89 Other heart failure
I50.9 Heart failure, unspecified
I60.2 Nontraumatic subarachnoid hemorrhage from anterior communicating artery
I63.013 Cerebral infarction due to thrombosis of bilateral vertebral arteries
I63.033 Cerebral infarction due to thrombosis of bilateral carotid arteries
I63.113 Cerebral infarction due to embolism of bilateral vertebral arteries
I63.133 Cerebral infarction due to embolism of bilateral carotid arteries
I63.213 Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries
I63.233 Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries
I63.313 Cerebral infarction due to thrombosis of bilateral middle cerebral arteries
I63.323 Cerebral infarction due to thrombosis of bilateral anterior cerebral arteries
I63.333 Cerebral infarction to thrombosis of bilateral posterior cerebral arteries
I63.343 Cerebral infarction to thrombosis of bilateral cerebellar arteries
I63.413 Cerebral infarction due to embolism of bilateral middle cerebral arteries
I63.423 Cerebral infarction due to embolism of bilateral anterior cerebral arteries
I63.433 Cerebral infarction due to embolism of bilateral posterior cerebral arteries
I63.443 Cerebral infarction due to embolism of bilateral cerebellar arteries
I63.513 Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle cerebral arteries
I63.523 Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior cerebral arteries
I63.533 Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries
I63.543 Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries
R06.00 Dyspnea, unspecified

- R06.01 Orthopnea
- R06.02 Shortness of breath
- R06.03 Acute respiratory distress
- R06.09 Other forms of dyspnea
- R06.2 Wheezing
- R06.82 Tachypnea, not elsewhere classified
- R06.89 Other abnormalities of breathing
- R60.0 Localized edema
- R60.1 Generalized edema

Showing 1 to 91 of 91 entries in Group 1

[First](#)[Prev](#)[Currently Selected](#)[1](#)[Next](#)[Last](#)



Associated Information

Documentation Requirements

The patient's medical record must contain documentation that fully supports the medical necessity for services included within this LCD. (See "Coverage Indications, Limitations and/or Medical Necessity.") This documentation includes, but is not limited to, relevant medical history, physical examination, and results of pertinent diagnostic tests or procedures.

Documentation supporting the medical necessity should be legible, maintained in the patient's medical record, and must be made available to the A/B MAC upon request.

Utilization Guidelines

As a diagnostic test, BNP testing is not expected to be performed more than four times in a given year.

The use of BNP for monitoring CHF is not covered.