Electrocardiographic body surface mapping (BSM) is a technique that uses multiple (generally 80 or more) electrocardiography (ECG) leads to detect cardiac electrical activity. It is suggested that the use of multiple leads may result in improved diagnostic accuracy compared to the standard 12-lead ECG. One potential use is in the evaluation of suspected acute myocardial infarction. Other potential uses include the diagnosis of pulmonary embolism and location of the accessory pathway in patients with Wolff-Parkinson-White (WPW) syndrome.

The PRIME ECG® System (Heartscape Technologies) was cleared by the U.S. Food and Drug Administration (FDA) in March 2002 through the 510(k) process as being substantially equivalent to existing devices. The PRIME ECG system with Diagnostic Algorithm was cleared through the same process in June 2003. The indication is recording of electrocardiographic signals on the body surface. This system consists of an 80-lead disposable electrode array in the form of a vest that includes a conducting gel that is applied to the patient’s chest and back. According to the FDA material, the vest can be applied in less than 5 minutes. This system displays clinical data in 3 forms; a colorimetric 3-D torso image, an 80-lead single beat view, and the 12-lead ECG. The colorimetric torso images are said to allow the practitioner to rapidly scan the heart for significant ST segment abnormalities.

Electrocardiographic body surface mapping is considered INVESTIGATIVE for the diagnosis or management of cardiac disorders, including acute coronary syndrome, due to a lack of evidence demonstrating its impact on improved clinical outcomes.

Blue Cross and Blue Shield of Minnesota medical policies apply generally to all Blue Cross and Blue Plus plans and products. Benefit plans vary in coverage and some plans may not provide coverage for certain services addressed in the medical policies.
Medicaid products and some self-insured plans may have additional policies and prior authorization requirements. Receipt of benefits is subject to all terms and conditions of the member’s summary plan description (SPD). As applicable, review the provisions relating to a specific coverage determination, including exclusions and limitations. Blue Cross reserves the right to revise, update and/or add to its medical policies at any time without notice.

For Medicare NCD and/or Medicare LCD, please consult CMS or National Government Services websites.

Refer to the Pre-Certification/Pre-Authorization section of the Medical Behavioral Health Policy Manual for the full list of services, procedures, prescription drugs, and medical devices that require Pre-certification/Pre-Authorization. Note that services with specific coverage criteria may be reviewed retrospectively to determine if criteria are being met. Retrospective denial of claims may result if criteria are not met.

**Coding:**

*The following codes are included below for informational purposes only, and are subject to change without notice. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement.*

**CPT:**

0178T Electrocardiogram, 64 leads or greater, with graphic presentation and analysis; with interpretation and report
0179T Electrocardiogram, 64 leads or greater, with graphic presentation and analysis; tracing and graphics only, without interpretation and report
0180T Electrocardiogram, 64 leads or greater, with graphic presentation and analysis; interpretation and report only

**Policy History:**

*Developed October 10, 2007*

*Most recent history:*
Reviewed April 13, 2011
Reviewed April 11, 2012
Reviewed April 10, 2013
Reviewed May 14, 2014

**Cross Reference:**

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