



MASSACHUSETTS

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## Medical Policy

# Signal-Averaged Electrocardiography (SAECG)

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### Policy Number: 134

BCBSA Reference Number: 2.02.04

NCD/LCD: Signal Averaged Electrocardiography (Sa-Ecg) (L7171)

### Related Policies

- T-Wave Alternans, #[539](#)

### Policy

#### Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

Signal- averaged ECG (SAECG) is **INVESTIGATIONAL**, including, but not limited to, its use for the following indications:

- As a technique of risk stratification for arrhythmias after prior myocardial infarction
- In patients with cardiomyopathy
- In patients with syncope;
- As an assessment of success after surgery for arrhythmia
- In the detection of acute rejection of heart transplants
- As an assessment of efficacy of antiarrhythmic drug therapy, or
- In the assessment of success of pharmacological, mechanical, or surgical interventions to restore coronary artery blood flow.

#### Medicare HMO Blue<sup>SM</sup> and Medicare PPO Blue<sup>SM</sup> Members

#### LMRP for Signal Averaged Electrocardiography (Sa-Ecg) (L7171)

[http://localcoverage.cms.gov/mcd\\_archive/viewlmp.asp?lmp\\_id=7171&lmp\\_version=5&show=all](http://localcoverage.cms.gov/mcd_archive/viewlmp.asp?lmp_id=7171&lmp_version=5&show=all)

### Prior Authorization Information

Pre-service approval is required for all inpatient services for all products.

See below for situations where prior authorization may be required or may not be required for outpatient services.

Yes indicates that prior authorization is required.

No indicates that prior authorization is not required.

N/A indicates that this service is primarily performed in an inpatient setting.

**Outpatient**

<b>Commercial Managed Care (HMO and POS)</b>	This is not a covered service.
<b>Commercial PPO and Indemnity</b>	This is not a covered service.
<b>Medicare HMO Blue<sup>SM</sup></b>	No
<b>Medicare PPO Blue<sup>SM</sup></b>	No

**CPT Codes / HCPCS Codes / ICD Codes**

*Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member*

*Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.*

*The following codes are included below for informational purposes only; this is not an all-inclusive list.*

**The following CPT code is considered investigational for Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity:**

**CPT Codes**

<b>CPT codes:</b>	<b>Code Description</b>
93278	Signal-averaged electrocardiography (SAECG), with or without ECG

**Description**

Signal-averaged electrocardiography (SAECG) is a more detailed type of ECG involving computerized analysis of small segments of a standard EKG to detect abnormalities, termed ventricular late potentials (VLPs). These late-potentials are associated with delayed activation of the ventricles, and can aid in the identification of a population of patients at an increased risk for ventricular tachycardia. Therefore, VLPs, as measured by SAECG, have been investigated as a risk factor for arrhythmic events in patients with a variety of cardiac conditions, including cardiomyopathy and prior history of myocardial infarction (MI).

Patients considered at high risk of ventricular arrhythmias, and thus sudden death, may be treated with drugs to suppress the emergence of arrhythmias or implantable cardiac defibrillators to promptly detect and terminate tachyarrhythmias when they occur. Because sudden cardiac death, whether from arrhythmias or pump failure, is one of the most common causes of death after a previous MI, there is intense interest in risk stratification to target therapy.

This policy does not address other risk stratification methods, such as T-wave alternans.

**Summary**

Signal-averaged ECG has some ability to risk-stratify patients at risk for ventricular arrhythmias. However, this predictive ability is modest, and this technique has not been used to stratify patients into clinically relevant categories of risk. Some RCTs have used signal-averaged ECG for selection of patients at high risk of ventricular arrhythmias, but these studies have not demonstrated outcome benefits for the treatments under study. Signal-averaged ECG has also been tested as a diagnostic test for a variety of cardiac-related disorders, but the evidence is insufficient to demonstrate clinical utility for any of the conditions tested. Therefore, signal-averaged ECG has not demonstrated improvements in health outcomes and is investigational for all indications for commercial members.

## Policy History

Date	Action
11/2015	Clarified coding information.
5/2014	Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.
3/2014	Coding information clarified.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
4/2011	Reviewed - Medical Policy Group - Cardiology and Pulmonology. No changes to policy statements.
4/2010	Reviewed - Medical Policy Group - Cardiology and Pulmonology. No changes to policy statements.
9/2009	BCBSA National medical policy review. Changes to policy statements.
4/2009	Reviewed - Medical Policy Group - Cardiology and Pulmonology. No changes to policy statements.
4/2008	Reviewed - Medical Policy Group - Cardiology and Pulmonology. No changes to policy statements.
10/2007	BCBSA National medical policy review. No changes to policy statements.
4/2007	Reviewed - Medical Policy Group - Cardiology and Pulmonology. No changes to policy statements.

## Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

## References

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