



External Cardiac Monitoring

Coding & Payment Quick Reference

Payer policies will vary and should be verified prior to treatment for limitations on diagnosis, coding, or site of service requirements. The coding options listed within this guide are commonly used codes and are not intended to be an all-inclusive list. We recommend consulting your relevant manuals for appropriate coding options.

The table below contains a list of possible CPT® / HCPCS codes that may be used to bill for External Cardiovascular Monitoring Services. Providers should select the most appropriate code(s) and modifier(s) with the highest level of detail to describe the service(s) actually rendered. For more information on external cardiac monitoring coding, billing and business model information use the **External Cardiac Monitoring Coding and Billing Guide** and **Purchased Services FAQ** resources. Technical rates include the local rates for CDx IDTF locations in Texas and California.

Mobile Cardiac Telemetry		
CPT/HCPCS Code	Code Type	Code Description
93228	Professional	External mobile cardiovascular telemetry with electrocardiographic recording, concurrent computerized real time data analysis and greater than 24 hours of accessible ECG data storage (retrievable with query) with ECG triggered and patient selected events transmitted to a remote attended surveillance center for up to 30 days; review and interpretation with report by a physician or other qualified health care professional
93229*	Technical	External mobile cardiovascular telemetry with electrocardiographic recording, concurrent computerized real time data analysis and greater than 24 hours of accessible ECG data storage (retrievable with query) with ECG triggered and patient selected events transmitted to a remote attended surveillance center for up to 30 days; technical support for connection and patient instructions for use, attended surveillance, analysis and transmission of daily and emergent data reports as prescribed by a physician or other qualified health care professional
Cardiac Event Monitoring		
CPT/HCPCS Code	Code Type	Code Description
93268	Global	External patient and, when performed, auto activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; includes transmission, review and interpretation by a physician or other qualified health care professional
93270*	Technical	External patient and, when performed, auto activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; recording (includes connection, recording, and disconnection)
93271*	Technical	External patient and, when performed, auto activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; transmission and analysis
93272	Professional	External patient and, when performed, auto activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; review and interpretation by a physician or other qualified health care professional

Holter Monitoring (Code One Appropriate Category Based on Length of Monitoring)		
CPT/HCPCS Code	Code Type	Code Description
Holter Monitoring up to 48 hours continuous recording		
93224	Global	External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional
93225*	Technical	External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; recording (includes connection, recording, and disconnection)
93226*	Technical	External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; scanning analysis with report
93227	Professional	External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; review and interpretation by a physician or other qualified health care professional
Holter monitoring long-term continuous recording greater than 48 hours and up to 7 days		
93241	Global	External electrocardiographic recording for more than 48 hours up to 7 days by continuous rhythm recording and storage; includes recording, scanning analysis with report, review, and interpretation
93242*	Technical	External electrocardiographic recording for more than 48 hours up to 7 days by continuous rhythm recording and storage; recording (includes connection and initial recording)
93243*	Technical	External electrocardiographic recording for more than 48 hours up to 7 days by continuous rhythm recording and storage; scanning analysis with report
93244	Professional	External electrocardiographic recording for more than 48 hours up to 7 days by continuous rhythm recording and storage; review and interpretation
Holter monitoring long-term continuous recording greater than 7 days up to 15 days		
93245	Global	External electrocardiographic recording for more than 7 days up to 15 days by continuous rhythm recording and storage; includes recording, scanning analysis with report, review, and interpretation
93246*	Technical	External electrocardiographic recording for more than 7 days up to 15 days by continuous rhythm recording and storage; recording (includes connection and initial recording)
93247*	Technical	External electrocardiographic recording for more than 7 days up to 15 days by continuous rhythm recording and storage; scanning analysis with report
93248	Professional	External electrocardiographic recording for more than 7 days up to 15 days by continuous rhythm recording and storage; review, and interpretation

Physician Payment – Medicare

Physician claims must contain the appropriate CPT/HCPCS code(s) to indicate the items and services that are furnished. The table below contains a list of possible CPT/HCPCS codes that may be used to bill for External Cardiovascular Monitoring Services. Providers should select the most appropriate code(s) and modifier(s) with the highest level of detail to describe the service(s) actually rendered.

Rates shown are 2026 Medicare national average and rates for Houston, TX, Santa Clara, CA and San Francisco, CA Medicare localities where IDTF technical services take place; actual rates will vary geographically and/or by individual facility and IDTF location. Consult the Medicare External Monitoring Payment Rate tool for specific locality rates.

CPT®/HCPCS Code	Short Description	Work RVUs	Total Office RVUs	National Average Medicare Rate	CA IDTF Office Rate San Francisco (Novitas)	CA IDTF Office Rate Santa Clara (Noridian)	TX IDTF Office Rate Location (Novitas)
Mobile Cardiac Telemetry							
93228	Professional component only- review and interpretation with report by a physician or other qualified health care professional	0.47	0.75	\$25.05	\$29.39	\$29.86	\$25.49
93229	Technical component only- technical support for connection and patient instructions for use, attended surveillance, analysis and transmission of daily and emergent data reports as prescribed by a physician or other qualified health care professional	0	22.71	\$758.53	\$1,067.23	\$1,091.36	\$754.12
Cardiac Event Monitoring							
93268	Global Only -24-hour attended monitoring; includes transmission, review and interpretation by a physician or other qualified health care professional	0.51	5.08	\$169.68	\$232.56	\$237.62	\$169.26
93270	Technical component only -recording (includes connection, recording, and disconnection)	0	0.25	\$8.35	\$11.44	\$11.69	\$8.42
93271	Technical component only -transmission and analysis	0	4.12	\$137.61	\$193.70	\$198.09	\$136.78
93272	Professional component only -review and interpretation by a physician or other qualified health care professional	0.51	0.71	\$23.71	\$27.41	\$27.84	\$24.06

*N/A" indicates that Medicare has not deemed this procedure to be reimbursable in this setting.

Global Only Codes--This indicator identifies stand-alone codes that describe selected diagnostic tests for which there are associated codes that describe (a) the professional component of the test only, and (b) the technical component of the test only. The total RVUs for global procedure only codes include values for physician work, practice expense, and malpractice expense.

Professional Component Only Codes--This indicator identifies stand-alone codes that describe the physician work portion of selected diagnostic tests for which there is an associated code that describes the technical component of the diagnostic test only and another associated code that describes the global test. The total RVUs for professional component only codes include values for physician work, practice expense, and malpractice expense.

Technical Component Only Codes--This indicator identifies stand- alone codes that describe the technical component (i.e., staff and equipment costs) of selected diagnostic tests for which there is an associated code that describes the professional component of the diagnostic test only. The total RVUs for technical component only codes include values for practice expense and malpractice expense only.

CPT®/ HCPCS Code	Short Description	Work RVUs	Total Office RVUs	National Average Medicare Rate	CA IDTF Office Rate San Francisco (Novitas)	CA IDTF Office Rate Santa Clara (Noridian)	TX IDTF Office Rate Location (Novitas)
Holter monitoring up to 48 continuous recording							
93224	Global only - includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional	0.38	2.11	\$70.48	\$94.39	\$96.37	\$70.56
93225	Technical component only -recording (includes connection, recording, and disconnection)	0	0.54	\$18.04	\$25.10	\$25.66	\$18.04
93226	Technical component only -scanning analysis with report	0	1.04	\$34.74	\$48.65	\$49.74	\$34.62
93227	Professional component only - review and interpretation by a physician or other qualified health care professional	0.38	0.53	\$17.70	\$20.63	\$20.96	\$17.90
Holter Monitoring long-term continuous recording greater than 48 hours and up to 7 days							
93241	Global only - includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional	0.49	8.36	\$279.23	\$387.25	\$395.82	\$278.03
93242	Technical component only -recording (includes connection and initial recording)	0	0.35	\$11.69	\$16.15	\$16.51	\$11.74
93243	Technical component only -transmission and analysis	0	7.33	\$244.83	\$344.88	\$352.69	\$243.24
93244	Professional component only - review and interpretation	0.49	0.68	\$22.71	\$26.21	\$26.62	\$23.05
Holter Monitoring long-term continuous recording greater than to 7 days up to 15 days							
93245	Global only - includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional	0.54	8.67	\$289.59	\$401.32	\$410.20	\$288.34
93246	Technical component only - recording (includes connection and initial recording)	0	0.35	\$11.69	\$16.15	\$16.51	\$11.74
93247	Technical component only - scanning analysis with report	0	7.58	\$253.18	\$356.65	\$364.73	\$251.53
93248	Professional component only - review and interpretation by a physician or other qualified health care professional	0.54	0.74	\$24.72	\$28.51	\$28.96	\$25.07

*N/A" indicates that Medicare has not deemed this procedure to be reimbursable in this setting.

Hospital Outpatient Payment – Medicare

Hospital outpatient claims must contain the appropriate CPT/HCPCS code(s) to indicate the items and services that are furnished. The table below contains a list of possible CPT/HCPCS codes that may be used to bill for External Cardiovascular Monitoring Services. Providers should select the most appropriate code(s) with the highest level of detail to describe the service(s) actually rendered.

All rates shown are 2026 Medicare national averages; actual rates will vary geographically and/or by individual facility.

CPT®/HCPCS Code	Short Description	APC	Medicare National Average Outpatient Rate
Mobile Cardiac Telemetry			
93228	Professional component only- review and interpretation with report by a physician or other qualified health care professional (Professional component only)		NA
93229	Technical component only- technical support for connection and patient instructions for use, attended surveillance, analysis and transmission of daily and emergent data reports as prescribed by a physician or other qualified health care professional (Technical component only)	5723	\$381
Cardiac Event Monitoring			
93268	Global Only -24-hour attended monitoring; includes transmission, review and interpretation by a physician or other qualified health care professional-		NA
93270	Technical component only -recording (includes connection, recording, and disconnection)	5741	\$38
93271	Technical component only -review and interpretation by a physician or other qualified health care professional, transmission, monitoring and analysis	5742	\$97
93272	Professional component only -review and interpretation by a physician or other qualified health care professional, review and interpretation		NA
Holter Monitoring up to 48 hours continuous recording			
93224	Global only - includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional		NA
93225	Technical component only -recording (includes connection, recording, and disconnection)	5734	\$136
93226	Technical component only -scanning analysis with report	5733	\$60
93227	Professional component only - review and interpretation by a physician or other qualified health care professional		NA
Holter Monitoring long-term continuous recording greater than 48 hours up to 7 days			
93241	Global only - includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional		NA
93242	Technical component only -recording (includes connection and initial recording)	5732	\$38
93243	Technical component only -transmission and analysis	5734	\$136
93244	Professional component only - review and interpretation		NA
Holter Monitoring long-term continuous recording greater than 7 days up to 15 days			
93245	Global only - includes recording, scanning analysis with report, review and interpretation by a physician or other qualified health care professional		NA
93246	Technical component only - recording (includes connection and initial recording)	5732	\$38
93247	Technical component only - scanning analysis with report	5734	\$136
93248	Professional component only - review and interpretation by a physician or other qualified health care professional		NA

*This Coding & Payment Quick Reference details CPT® / HCPCS codes and their official descriptions as provided by the American Medical Association (AMA). For Cardiac Event Monitoring (CEM) and Short-, Medium-, and Long-Term Holter Monitoring, there are two distinct technical codes for each type of service. Technical codes 93270, 93225, 93242, and 93246 are intended to report connection (often referred to as 'hook-up' by providers), recording, and disconnection. Technical codes 93271, 93226, 93243 and 93247 are intended to report transmission and analysis (in the case of CEM) or scanning analysis with report (in the case of Holter Monitoring).

The External Mobile Cardiovascular Telemetry (MCT) code 93229 includes both technical support for connection ('hook up') and attended surveillance, analysis and transmission of daily and emergent data reports. Separate technical codes for connection ('hook up') and transmission and analysis do not exist. As the Independent Diagnostic Testing Facility (IDTF) provides 24-hour attended monitoring, this requires the IDTF to perform and bill for technical support for connection ('hook up'), attended surveillance, analysis, and transmission of daily and emergent data reports.

In all scenarios except for MCT, if a physician performs the connection, or 'hook-up', as well as the review and interpretation of the report or analysis, but the transmission and analysis or scanning analysis with report is provided by an IDTF, he or she would report the appropriate technical code for connection, recording, and disconnection in addition to the professional code. The IDTF would report the appropriate technical code for transmission and analysis or scanning analysis with report.

In the event a physician orders a diagnostic test, and the technical component is purchased from and performed by the IDTF, special rules apply related to the Anti-Markup Rule (Formerly, the Purchased Diagnostic Test Rule).¹²³ This scenario is distinct in that the physician does not personally supervise employees performing the technical component. Please refer to the Purchased Service Notification FAQ for additional important details on billing requirements and Anti-Markup provisions.

Coding Scenarios for Cardiac Event Monitoring (CEM) and Short-, Medium-, and Long-Term Holter Monitoring For Non-Purchased Technical Services*		
Scenario	Physician Reports:	IDTF Reports:
Physician performs technical connection, recording, disconnection ('hook-up') and performs a review and interpretation with report of the technical data analysis, which is provided by the IDTF	<ul style="list-style-type: none"> • Technical code for connection, recording, and disconnection • Professional code for review and interpretation with report 	<ul style="list-style-type: none"> • Technical code for transmission and analysis or scanning analysis with report
IDTF performs technical connection, recording and disconnection ('hook-up') and transmission and analysis or scanning analysis and report, and physician performs a review and interpretation with report of the technical data analysis	<ul style="list-style-type: none"> • Professional code for review and interpretation with report 	<ul style="list-style-type: none"> • Technical code for connection, recording, and disconnection • Technical code for transmission and analysis or scanning analysis with report

Coding Scenario for Mobile Cardiac Telemetry (MCT) For Non-Purchased Technical Services*		
Scenario	Physician Reports:	IDTF Reports:
For MCT, separate codes for connection (hook up') and transmission and analysis do not exist. The IDTF must perform and bill for technical support for connection (hook up'), attended surveillance, analysis, and transmission of daily and emergent data reports.		
IDTF performs technical connection, recording and disconnection ('hook-up') and transmission and analysis or scanning analysis and report, and physician performs a review and interpretation with report of the technical data analysis	<ul style="list-style-type: none"> • Professional code for review and interpretation 	<ul style="list-style-type: none"> • Technical code for technical support for connection and patient instructions for use, transmission and analysis or scanning analysis with reports

* For purchased technical services, please refer to the Purchased Service Notification FAQ for additional important details on billing requirements and Anti-Markup Provisions.

¹ CMS MLN Matters MM6371. <https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/Downloads/R445OTN.pdf>, August 2, 2025.

²(42 U.S.C. 1395u(n); SSA, § 1842(n); 42 C.F.R. § 414.50(b))

³ CMS MLN Matters MM8806. <https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/Downloads/R3098CP.pdf> Accessed August 2, 2025.

Coding Resources for Rhythm Management: <http://www.bostonscientific.com/en-US/reimbursement/rhythm-management.html>

Reimbursement Help Desk: CRM.Reimbursement@bsci.com

Health economic and reimbursement information provided by Boston Scientific Corporation is gathered from third-party sources and is subject to change without notice as a result of complex and frequently changing laws, regulations, rules, and policies. This information is presented for illustrative purposes only and does not constitute reimbursement or legal advice. Boston Scientific encourages providers to submit accurate and appropriate claims for services. It is always the provider's responsibility to determine medical necessity, the proper site for delivery of any services, and to submit appropriate codes, charges, and modifiers for services rendered. It is also always the provider's responsibility to understand and comply with Medicare national coverage determinations (NCD), Medicare local coverage determinations (LCD), and any other coverage requirements established by relevant payers which can be updated frequently. Boston Scientific recommends that you consult with your payers, reimbursement specialists, and/or legal counsel regarding coding, coverage, and reimbursement matters. Boston Scientific does not promote the use of its products outside their FDA approved label.

Information included herein is current as of January 2026 but is subject to change without notice. Rates for services are effective January 1, 2026.

Payer policies will vary and should be verified prior to treatment for limitations on diagnosis, coding, or site of service requirements. The coding options listed within this guide are commonly used codes and are not intended to be an all-inclusive list. We recommend consulting your relevant manuals for appropriate coding options.

This coding information may include codes for procedures for which Boston Scientific currently offers no cleared or approved products. In those instances, such codes have been included solely in the interest of providing users with comprehensive coding information and are not intended to promote the use of any Boston Scientific products for which they are not cleared or approved. The Health Care Provider (HCP) is solely responsible for selecting the site of service and treatment modalities appropriate for the patient based on medically appropriate needs of that patient and the independent medical judgement of the HCP.

References

1. CMS. CY2026 Physician Fee Schedule, Final Rule. CMS-1832-F
2. CMS. CY2026 Hospital Outpatient Prospective Payment System, Final Rule: CMS-1834-F, Addenda A, Addenda AA

Sequestration Disclaimer

Rates referenced in these guides do not reflect Sequestration, automatic reductions in federal spending that will result in a 2% across-the-board reduction to ALL Medicare rates as of January 1, 2026.

CPT® Disclaimer

Current Procedural Terminology (CPT) Copyright 2025 American Medical Association. All rights reserved. CPT is a registered trademark of the American Medical Association. Applicable FARS/DFARS Restrictions apply to government use. Fee schedules, relative value units, conversion factors, and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein.

All trademarks are the property of their respective owners. Copyright 2025 by Boston Scientific Corporation or its affiliates.