

Highmark Reimbursement Policy Bulletin



HISTORY VERSION

Bulletin Number: RP-077
Subject: Intraoperative Neurophysiological Monitoring
Effective Date: June 24, 2024 **End Date:**
Issue Date: December 1, 2025 **Revised Date:** December 2025
Date Reviewed: August 2025
Source: Reimbursement Policy

Applicable Commercial Market	PA	☒	WV	☒	DE	☒	NY	☒
Applicable Medicare Advantage Market	PA	☒	WV	☐	DE	☒	NY	☐
Applicable Claim Type	UB	☒	1500	☒				

➔ A checked box indicates the policy is applicable to that market either entirely, or partially, as indicated within the policy.

Reimbursement Policy designation of Professional or Facility application is based on how the provider is contracted with the Plan.

PURPOSE:

The purpose of this policy is to address the reimbursement for Intraoperative Neurophysiologic Monitoring (IONM) but is not intended to impact care decisions or medical practice.

GENERAL REIMBURSEMENT GUIDELINES:

IONM is the use of electrophysiological methods to monitor the functional integrity of certain neural structures during surgery. It includes several procedures performed to monitor the integrity of the nerve function during high-risk neurosurgical, orthopedic, or vascular surgeries. The purpose of IONM is to reduce the risk of damage to the patient's nervous system and to provide functional guidance to the surgeon and anesthesiologist.

IONM codes are reported based upon the time spent monitoring only, and not the number of baseline tests performed, or parameters monitored. Time spent monitoring excludes; time to set up, record, interpret the baseline studies and to remove electrodes at the end of the procedure. Time spent performing or interpreting baseline neurophysiologic studies should not be counted as intraoperative monitoring, as it represents the separately reportable procedures. Intraoperative neurophysiology testing for codes 95940 and G0453 should not be reported by the physician performing an operative or anesthesia procedure since it is included in the global package. The use of modifier 26 and TC does not apply to codes 95940 and G0453 and will be denied.

Note: If one or more of the criteria outlined in medical policy (see policy related policy section) are not met, and therefore considered NOT medically necessary, professional charges will NOT be covered and the associated facility charges are not considered eligible for reimbursement.

Applicable codes:

0464T	92653	95863	95868	95911	95925	95928	95938	*95941
92650	95829	95864	95907	95912	95926	95929	95939	95955
92651	95860	95865	95908	95913	95927	95937	95940	G0453
92652	95861	95867	95910					

***Note:** The plan does not separately reimburse for 95941.

ADDITIONAL BILLING INFORMATION AND GUIDELINES:

Coding Tips

1. Baseline studies (e.g., EMGs, NCVs), should not be billed more than one (1) time per operative session.
2. IONM monitoring studies (e.g., EMGs, NCVs), should not be billed more than one (1) time per operative session.
3. Modifier 26 must be appended for the professional component of monitoring and test interpretation only. Documentation must support appropriate separately reimbursable IONM services for eligible reimbursement. The technical component is the responsibility of the facility.
4. Additional timed codes may not be billed (e.g., 95961); instead bill code(s) that do not require time.
5. The place of service (POS) billed must be the location of the member.
6. IONM services must be billed to the Plan where the provider rendering the IONM service(s) is physically located/present at the time of the service.
7. Train-of-four (TOF) monitoring should not be billed separately and is considered integral to intraoperative monitoring and/or the administration of anesthesia and is primarily done to prevent or avoid permanent neurological injury. Therefore, TOF monitoring or any type of neuromuscular blockade testing, is not separately reimbursed. TOF monitoring should not be billed using NOC code 95999.

Codes that may be utilized when professional oversight is employed for IONM. Professional oversight of IONM may be provided in two different ways:

1. Monitoring oversight within the O.R. (95940)
2. Monitoring oversight remotely from outside the O.R. (G0453) which requires real-time remote connection.

The separate reimbursement for “incident to” care services provided by an assisting physician or technician for the monitoring physician is not allowed. The monitoring time of the two codes are mutually exclusive. Therefore, codes 95940 and G0453 may not be reported together for the same overlapping time of a monitoring session. While codes 95940 and G0453 may be reported for sequential non-overlapping time periods, such as when the provider begins monitoring in the operating room and then moves outside the operating room for remote monitoring, these codes may not be reported for concurrent time periods. That is, the monitoring physician cannot be both inside and outside the operating room at the same time.

Code 95940 is not used to report the services of a technician who may be inside the operating room while the provider is performing remote monitoring activities outside the operating room. Do not report codes 95940 or G0453 for automated monitoring devices that do not require continuous attendance by a professional qualified to interpret the testing and monitoring.

For procedures that last beyond midnight, report services using the day on which the monitoring began and using the total time monitored. Time spent after the procedure performing or interpreting neurophysiologic studies should not be counted as IONM but reported as a separate procedure.

Intraoperative neurophysiology monitoring may not be billed by the physician performing an operative or anesthesia procedure as this is included in the global surgical package, UNLESS otherwise specified in the Plan's medical policies. This includes, but not limited to, the neurophysiology testing CPT codes 90000 series for intraoperative neurophysiology testing (e.g., 92653, 95822, 95860-95870, 95907-95913, 95925, 95926, 95927, 95928, 95929, 95930-95937, 95938, 95939).

Code G0453

Code G0453 should be billed only for undivided attention by a monitoring provider to a single member and not for simultaneous attention by the monitoring provider to more than one member. This code can be billed in multiple units to account for the cumulative time spent exclusively monitoring a single member.

Therefore, code G0453 can be billed for 15-minutes of continuous monitoring of the member followed by an additional 15-minutes later in the same members procedure, equal to a total of 30-minutes or two units.

G0453 may not be billed for 7 minutes or less.

- This code is reported based on the time spent for monitoring only, and not for the number of baseline tests that are rendered, or the parameters monitored.
- Units for IONM code G0453 must be billed for time spent for one-on-one monitoring to a single member. Units for these codes must reflect the total duration of one-on-one monitoring even if that time is not in a single continuous block.
- Modifier(s) TC and 26 do not apply to HCPCS code G0453.
- Intraoperative neurophysiology monitoring may not be billed by the physician performing an operative or anesthesia procedure as this is included in the global surgical reimbursement package for that surgical episode.

Code 95941 Not Eligible for Reimbursement

Consistent with The Centers for Medicare and Medicaid Services (CMS) guidance, code 95941 does not qualify for reimbursement by the Plan. Providers should instead submit code G0453 for continuous intra-operative neurophysiological monitoring of a single patient, ensuring undivided attention. For additional information on this service, see Commercial Medical Policy M-13 and Medicare Advantage Medical Policy M-55.

DEFINITIONS:

Modifier	Definition
26	Professional component

TC	Technical component, under certain circumstances, a charge may be made for the technical component alone
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RELATED POLICIES:

Refer to the following Commercial Medical Policy for additional information:

- M-13: Intraoperative Neurophysiologic Monitoring (Sensory-Evoked Potentials, Motor-Evoked Potentials, EEG Monitoring)

Refer to the following Medicare Advantage Medical Policy for additional information:

- M-55: Intraoperative Neurophysiological Testing

Refer to the following Reimbursement Policies for additional information:

- RP-035: Correct Coding Guidelines
- RP-038: Out of Network Services
- RP-042: Global Surgery and Subsequent Services

REFERENCES:

- Centers for Medicare and Medicaid Services (CMS); Article ID: 56722. <https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=5672>
- Centers for Medicare and Medicaid Services; Article L35003. <https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?LCDId=35003&ver=61&Date=&DocID=L35003&bc=iAAAAABAAAA&>
- Centers for Medicare and Medicaid Services, Billing Medicare for Remote Intraoperative Neurophysiology Monitoring (HCPCS Code G0453) <https://www.cms.gov/medicare/medicare-fee-for-service-payment/physicianfeesched/downloads/faq-remote-ionm.pdf>
- American Medical Association, Current Procedural Terminology (CPT®) and associated publications and services
- American Academy of Neurology: https://www.aan.com/siteassets/home-page/tools-and-resources/practicing-neurologist-administrators/billing-and-coding/model-coverage-policies/18iommodelpolicy_tr.pdf
<http://www.aanem.org/getmedia/884f5b94-a0be-447e-bdae-20d52aaf8299/Recommended-Policy-for-Electrodiagnostic-Medicine.pdf>
- Centers for Medicare and Medicaid (CMS) Medicine Evaluation and Management Services, Chapter 11, [Medicare NCCI 2022 Coding Policy Manual – Chap11CPTCodes -90000-99999 \(cms.gov\)](#)

POLICY UPDATE HISTORY INFORMATION:

6 / 2024	Implementation
12 / 2025	Updated direction for code 95941 and G0453

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Applicable Commercial Market

Applicable Medicare Advantage Market

Applicable Claim Type

PA	☒	WV	☒	DE	☒	NY	☒
PA	☒	WV	☐	DE	☒	NY	☐
UB	☒	1500	☒				

➔ A checked box indicates the policy is applicable to that market either entirely, or partially, as indicated within the policy.

Reimbursement Policy designation of Professional or Facility application is based on how the provider is contracted with the Plan. This Policy supersedes direction provided in Bulletins prior to the effective date of this policy.

PURPOSE:

The purpose of this policy is to address the reimbursement for Intraoperative Neurophysiologic Monitoring (IONM) but is not intended to impact care decisions or medical practice.

REIMBURSEMENT GUIDELINES:

IONM is the use of electrophysiological methods to monitor the functional integrity of certain neural structures during a surgery. It includes a number of procedures performed to monitor the integrity of the nerve function during high-risk neurosurgical, orthopedic, or vascular surgeries. The purpose of IONM is to reduce the risk of damage to the patient's nervous system and to provide functional guidance to the surgeon and anesthesiologist.

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***Note:** Consistent with CMS guidelines, procedure code 95941 is not reimbursed for Medicare Advantage, and providers should instead submit claims using procedure code G0453.

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Coding Tips

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- This code is reported based on the time spent for monitoring only, and not for the number of baseline tests that are rendered, or the parameters monitored.
- Units for IONM code G0453 must be billed for time spent for one-on-one monitoring to a single member. Units for these codes must reflect the total duration of one-on-one monitoring even if that time is not in a single continuous block.
- Modifier(s) TC and 26 do not apply to HCPCS code G0453.
- Intraoperative neurophysiology monitoring may not be billed by the physician performing an operative or anesthesia procedure as this is included in the global surgical pack.

DEFINITIONS:

Modifier	Definition
26	Professional component
TC	Technical component, under certain circumstances, a charge may be made for the technical component alone

RELATED POLICIES:

Refer to the following Commercial Medical Policy for additional information:

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REFERENCES:

- Centers for Medicare and Medicaid Services (CMS); Article ID: 56722. <https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=56722>
- Centers for Medicare and Medicaid Services; Article L35003. <https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?LCDId=35003&ver=61&Date=&DocID=L35003&bc=iAAAAABAAAA&>
- Centers for Medicare and Medicaid Services, Billing Medicare for Remote Intraoperative Neurophysiology Monitoring (HCPCS Code G0453) <https://www.cms.gov/medicare/medicare-fee-for-service-payment/physicianfeesched/downloads/faq-remote-ionm.pdf>
- American Medical Association, Current Procedural Terminology (CPT®) and associated publications and services
- American Academy of Neurology: https://www.aan.com/siteassets/home-page/tools-and-resources/practicing-neurologist-administrators/billing-and-coding/model-coverage-policies/18iommodelpolicy_tr.pdf
<http://www.aanem.org/getmedia/884f5b94-a0be-447e-bdae-20d52aaf8299/Recommended-Policy-for-Electrodiagnostic-Medicine.pdf>
- Centers for Medicare and Medicaid (CMS) Medicare Evaluation and Management Services, Chapter 11, [Medicare NCCI 2022 Coding Policy Manual – Chap11CPTCodes -90000-99999 \(cms.gov\)](#)

POLICY UPDATE HISTORY INFORMATION:

6 / 2024	Implementation
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