

02-61000-29

Original Effective Date: 11/15/00

Reviewed: 01/25/24

Revised: 02/15/24

## Subject: Nerve Block Injections

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### DESCRIPTION:

Nerve blocks consist of injection of a local anesthetic, with or without a steroid, into a peripheral nerve or a nerve ganglion. The predicted result is temporary interruption of conduction of impulses in peripheral nerves or nerve trunks (sympathetic nerves), to block pain signals and provide prolonged relief from pain.

**Summary and Analysis of Evidence:** A 2022 Systematic Review and Practice Guideline for Percutaneous Interventional Strategies for Migraine Prevention published by the American Academy of Pain Medicine (Barad, 2022) stated that sphenopalatine ganglion blocks received a weak recommendation for chronic migraine prevention, due to insufficient evidence found by the committee. Shanahan et al (2023) reported on the effectiveness of genicular nerve block (GNB) in participants with longstanding knee osteoarthritis in a 12-week trial with 59 participants. They concluded that US-guided GNB has shown promise as a treatment in the management of symptomatic knee OA, but its efficacy until now has not been truly established. Limitations of the study included small numbers, that safety could be established on a single study, and possible inadvertent inadequate blinding. Chowdhury et al (2022) reported on the efficacy and tolerability of combined chronic migraine treatment with greater occipital nerve block (GONB) with topiramate compared to monotherapy with topiramate. 125 participants were randomized to 3 arms: (1) topiramate monotherapy once per day; (2) topiramate plus GONB with 40 mg lidocaine (2%) and 80 mg (2 ml) methylprednisolone as the first injection followed by 2 monthly injections of lidocaine; and (3) topiramate plus monthly GONB with 40 mg lidocaine (2%) injections for 3 months. Efficacy assessments were done for 121 participants. There were some mild adverse events reported, including limb paresthesias, dizziness, bleeding, and local site swelling. The study limitations included that the investigators were not blinded and there was no placebo arm. In addition, the authors stated “post-hoc analysis of the impact of coexistent medication overuse headache on GONB resulted in two unequal groups for comparison and hence the results should be viewed with caution. Finally, chronic

migraine patients had lesser disease duration than previous studies, and it is uncertain whether chronic migraine patients with a longer duration of illness will have a similar response to the interventions.”

## **POSITION STATEMENT:**

### **Sympathetic nerve block injections**

[Sympathetic nerve](#) block injections **meet the definition of medical necessity** for the following indications:

#### **Complex regional pain syndrome (CRPS):**

- Continued pain > 4 weeks duration; **AND**
- Failed conservative treatment with **ALL** of the following treatments:
  - Antidepressant **OR** anticonvulsant; **AND**
  - Physical therapy (PT), occupational therapy (OT), or home exercise program >4 weeks.

#### **Ischemic limb pain:**

- Intractable pain at rest; **OR**
- Non-healing ulcers; **AND**
  - Severe peripheral artery disease; **AND**
  - Patient is not a candidate for revascularization, **OR**
  - Previous revascularization has failed.

#### **Pancreatic cancer:**

- Severe abdominal or back pain; **AND**
- Previous treatment attempted or not indicated.

#### **Chronic pancreatitis:**

- Chronic abdominal or back pain; **AND**
- Continued pain after parenteral narcotics for more than 1 week.

#### **Pelvic/perineal pain:**

Ganglion impar blocks of the sacrococcygeal joint are considered **experimental or investigational**. The available scientific evidence remains insufficient to permit conclusions concerning the effect of this procedure on net health outcomes.

#### **Occipital neuralgia and headache:**

Sphenopalatine nerve blocks for the treatment of any condition, including but not limited to occipital neuralgia and headache are considered **experimental or investigational**. The available scientific evidence remains insufficient to permit conclusions concerning the effect of this procedure on net health outcomes.

## Peripheral nerve block injections

Peripheral nerve block injections for the foot **meet the definition of medical necessity** for the following indications:

### Morton's neuroma:

- Pain in foot and/or toes; **AND**
- Morton's neuroma suspected by exam and history.

### Plantar fasciitis and other neuritis of the foot:

- Pain in foot; **AND**
- Plantar fasciitis or other [neuritis](#) of the foot is suspected by exam and history; **AND**
- Continued symptoms after conservative management for 3 weeks or more, including at least **ONE** of the following:
  - Activity modification; **OR**
  - orthotics/splints/taping; **OR**
  - anti-inflammatory medications (e.g., NSAIDS).

**Imaging (fluoroscopic or ultrasound) for nerve block injections to the foot does not meet the definition of medical necessity.**

### **Occipital neuralgia:**

Peripheral nerve block of any occipital or cranial nerve for the treatment of occipital neuralgia or headache is considered **experimental or investigational**. The available scientific evidence remains insufficient to permit conclusions concerning the effect of this procedure on net health outcomes.

### **Diabetic neuropathy:**

Peripheral nerve block of any nerve for the treatment of diabetic neuropathy is considered **experimental or investigational**. The available scientific evidence remains insufficient to permit conclusions concerning the effect of this procedure on net health outcomes.

### **Chronic knee pain:**

Nerve block injection of the genicular nerve for the treatment of chronic knee pain is considered **experimental or investigational**. The available scientific evidence remains insufficient to permit conclusions concerning the effect of this procedure on net health outcomes.

### **Hardware injection or blocks:**

Hardware injection or block for diagnosis or treatment of post-surgical or other spine pain is considered **experimental or investigational**. The available scientific evidence remains insufficient to permit conclusions concerning the effect of this procedure on net health outcomes.

### **All other peripheral nerve blocks:**

- Pain in affected area; **AND**
- Failure to respond to conservative management [e.g., physical therapy, NSAIDS (unless contraindicated), activity modification]; **AND**
- Repeat blocks will be considered medically necessary when there is at least 50% pain relief for 6-8 weeks.

**Imaging guidance for nerve block injections**

Fluoroscopic or ultrasound imaging guidance performed in conjunction with sympathetic or peripheral nerve block injections to isolate the target anatomic site **meets the definition of medical necessity** (**EXCEPTION:** injections for the foot, see above).

**NOTE:** PT, OT or home exercise programs would be continued in addition to nerve block injections as part of a combined treatment plan. It is not expected that epidural blocks, multiple facet joint injections, sacroiliac joint injections, and sympathetic nerve blocks in any and all combinations would be administered to the same individual on the same day. If the first procedure used to treat the presumptive diagnosis fails to produce improvement and rules out that possibility, then it may be appropriate to proceed to the next logical treatment.

Nerve block injections **do not meet the definition of medical necessity** when medical documentation indicates the injection procedures are not effective.

**BILLING/CODING INFORMATION:**

**CPT Coding:**

64400	Injection(s), anesthetic agent(s) and/or steroid; trigeminal nerve, each branch (ie, ophthalmic, maxillary, mandibular)
64405	Injection(s), anesthetic agent(s) and/or steroid; greater occipital nerve <b>(investigational)</b>
64408	Injection(s), anesthetic agent(s) and/or steroid; vagus nerve
64415	Injection(s), anesthetic agent(s) and/or steroid; brachial plexus, including imaging guidance, when performed
64416	Injection(s), anesthetic agent(s) and/or steroid; brachial plexus, continuous infusion by catheter (including catheter placement), including imaging guidance, when performed
64417	Injection(s), anesthetic agent(s) and/or steroid; axillary nerve, including imaging guidance, when performed
64418	Injection(s), anesthetic agent(s) and/or steroid; suprascapular nerve
64420	Injection(s), anesthetic agent(s) and/or steroid; intercostal nerve, single level
64421	Injection(s), anesthetic agent(s) and/or steroid; intercostal nerve, each additional level (List separately in addition to code for primary procedure)
64425	Injection(s), anesthetic agent(s) and/or steroid; ilioinguinal, iliohypogastric nerves
64430	Injection(s), anesthetic agent(s) and/or steroid; pudendal nerve
64435	Injection(s), anesthetic agent(s) and/or steroid; paracervical (uterine) nerve

64445	Injection(s), anesthetic agent(s) and/or steroid; sciatic nerve, including imaging guidance, when performed
64446	Injection(s), anesthetic agent(s) and/or steroid; sciatic nerve, continuous infusion by catheter (including catheter placement), including imaging guidance, when performed
64447	Injection(s), anesthetic agent(s) and/or steroid; femoral nerve, including imaging guidance, when performed
64448	Injection(s), anesthetic agent(s) and/or steroid; femoral nerve, continuous infusion by catheter (including catheter placement), including imaging guidance, when performed
64449	Injection(s), anesthetic agent(s) and/or steroid; lumbar plexus, posterior approach, continuous infusion by catheter (including catheter placement)
64450	Injection(s), anesthetic agent(s) and/or steroid; other peripheral nerve or branch
64451	Injection(s), anesthetic agent(s) and/or steroid; nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)
64454	Injection(s), anesthetic agent(s) and/or steroid; genicular nerve branches, including imaging guidance, when performed ( <b>investigational</b> )
64455	Injection(s), anesthetic agent(s) and/or steroid; plantar common digital nerve(s) (eg, Morton's neuroma)
64461	Paravertebral block (PVB) (paravertebral block), thoracic single injection site (including imaging guidance, when performed)
64462	Paravertebral block (PVB) (paravertebral block), second and any additional injection site(s) (including imaging guidance, when performed) (List separately in addition to code for primary procedure)
64505	Injection, anesthetic agent; <a href="#">sphenopalatine ganglion</a> ( <b>investigational</b> )
64510	Injection, anesthetic agent; <a href="#">stellate ganglion</a> (cervical sympathetic)
64517	Injection, anesthetic agent; superior hypogastric plexus
64520	Injection, anesthetic agent; lumbar or thoracic (paravertebral sympathetic)
64530	Injection, anesthetic agent; celiac plexus, with or without radiologic monitoring

### ICD-10 Diagnosis Codes That Support Medical Necessity:

G57.60 – G57.62	Lesion of plantar nerve
G89.11	Acute pain due to trauma
G89.12	Acute post-thoracotomy pain
G89.18	Other acute postprocedural pain
M25.511 – M25.519	Pain in shoulder
M25.521 – M25.529	Pain in elbow
M25.531 – M25.539	Pain in wrist
M25.541, M25.542, M25.549	Pain in joints of hand
M25.551 – M25.559	Pain in hip
M25.561 – M25.569	Pain in knee

M25.571 – M25.579	Pain in ankle
M25.751 – M25.759	Osteophyte, hip
M46.1	Sacroiliitis, not elsewhere classified
M54.10 – M54.18	Radiculopathy
M54.2	Cervicalgia
M54.50, M54.51, M54.59	Low back pain, including vertebrogenic low back pain
M54.6	Pain in thoracic spine
M70.60 – M70.62	Trochanteric bursitis, hip
M70.70 – M70.72	Other bursitis of hip
M72.2	Plantar fascial fibromatosis
M75.00 – M75.02	Adhesive capsulitis of shoulder
M76.01 – M76.32	Psoas tendinitis; Iliac crest spur; Iliotibial band syndrome
M79.2	Neuralgia and neuritis, unspecified
M79.621 – M79.622	Pain in upper arm
M79.631 – M79.632	Pain in forearm
M79.641 – M79.646	Pain in hand and fingers
M79.661 – M79.662	Pain in lower leg
M79.671, 672 – M79.674, 675	Pain in foot and toes
N94.89 – N94.9	Other specified conditions associated with female genital organs and menstrual cycle
Q85.00 – Q85.09	Neurofibromatosis or schwannomatosis
R07.1	Chest pain on breathing
R07.81	Pleurodynia
R10.0 – R10.33	Abdominal and pelvic pain
R19.8	Other and unspecified symptoms and signs involving the digestive system and abdomen
T87.30 – T87.34	Neuroma of amputation stump

## REIMBURSEMENT INFORMATION:

**\*\*64400:** Total number of injections is limited to four (4) injections in six (6) months.

**\*\*64408-64451:** Total number of injections is limited to four (4) injections in six (6) months.

**\*\*64455:** Total number of injections is limited to three (3) injections in twelve (12) months, per neuroma.

**\*\*64461-64462:** Total number of injections is limited to four (4) injections in six (6) months.

**\*\*64510-64530:** Total number of injections is limited to three (3) injections in twelve (12) months.

### Coding notes:

### Per CPT guidelines:

- CPT code 64455 is the appropriate code for reporting nerve block injections for Morton's neuroma.
- **Only one unit** of code **64455** should be reported per DOS, per neuroma, regardless of number of sites injected.

Code **64455** is a unilateral procedure. For bilateral procedures, modifier 50 should be used.

**\*\*NOTE:** Services in excess of the limitations shown above are subject to medical review of documentation for determination of medical necessity. The following information may be required documentation to support medical necessity: physician history and physical, physician progress notes including documentation of conservative treatment, treatment plan, radiology study reports, and operative report.

### LOINC Codes:

Documentation Table	LOINC Codes	LOINC Time Frame Modifier Code	LOINC Time Frame Modifier Codes Narrative
Physician history and physical	28626-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Attending physician visit note	18733-6	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Treatment plan	18776-5	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Radiology report	18726-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Surgical report	28573-4	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.

### PROGRAM EXCEPTIONS:

**Federal Employee Program (FEP):** Follow FEP guidelines.

**State Account Organization (SAO):** Follow SAO guidelines.

**Medicare Advantage:** The following Local Coverage Determination (LCD) was reviewed on the last guideline reviewed date: Peripheral Nerve Blocks (L33933), located at [cms.gov](https://www.cms.gov).

If this Medical Coverage Guideline contains a step therapy requirement, in compliance with Florida law 627.42393, members or providers may request a step therapy protocol exemption to this requirement if based on medical necessity. The process for requesting a protocol exemption can be found at [Coverage Protocol Exemption Request](#).

## DEFINITIONS:

**Cervical plexus:** a network of nerves made up of the C1, C2, C3, and C4 spinal nerves; innervates the skin and muscles of the head, neck, and shoulders. A nerve block can be performed with a single injection at the C4 transverse process with the local anesthetic spreading to the C2 and C3 nerves.

**Genicular nerve:** a sensory nerve that surrounds the knee and provides innervation for the joint.

**Morton's neuroma:** a swelling of the nerve present in the space between the third and fourth toes.

**Nerve blocks:** injection(s) near specific nerves (i.e., certain spinal, peripheral, or other nerves).

**Neuritis:** Inflammation of a nerve.

**Peripheral nerve:** any nerve outside the central nervous system.

**Plantar fasciitis:** inflammation of the band of tissue that connects the heel bone to the toes.

**Sphenopalatine ganglion:** located in a fossa behind the middle turbinate at the root of the nose and consists of somatosensory, sympathetic, and parasympathetic fibers.

**Stellate ganglion:** collection of sympathetic nerves in the upper neck on either side of the larynx and is the nerve center for the hand, arms, and shoulders.

**Sympathetic nerve:** a nerve of the sympathetic nervous system which is part of the autonomic nervous system that is concerned especially with preparing the body to react to situations of stress or emergency, that contains chiefly adrenergic fibers and tends to depress secretion, decrease the tone and contractility of smooth muscle, increase heart rate, and that consists essentially of preganglionic fibers arising in the thoracic and upper lumbar parts of the spinal cord and passing through delicate white rami communicates to ganglia located in a pair of sympathetic chains situated one on each side of the spinal column or to more peripheral ganglia or ganglionated plexuses and postganglionic fibers passing typically through gray rami communicates to spinal nerves with which they are distributed to various end organs.

## RELATED GUIDELINES:

[Neurolysis/Ablation, 02-61000-34](#)

## OTHER:

None applicable.

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### COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 01/25/24.

### GUIDELINE UPDATE INFORMATION:

11/15/00	Outpatient Pain Management MCG #02-61000-01 approved by MPCC.
12/15/03	Separate MCG created for Nerve Block Injections.
01/01/04	Annual HCPCS coding update.
01/01/06	Scheduled review and revision of guideline consisting of updated references.
11/15/07	Review and revision of guideline consisting of updated references and addition of diagnosis codes.
01/01/09	Annual HCPCS coding update: revised descriptor for codes 64416, 64446, 64448 and 64449.
05/15/09	Scheduled review; update description section to include medical necessity management statement, update position statement to include coverage criteria, update reimbursement statement and references.
11/15/10	Revision; added coverage criteria for peripheral nerve block injections for conditions of the foot; added CPT code 64455; added ICD-9 codes 355.5, 355.79 and 728.71; added related ICD-10 codes; revised reimbursement section; added coding notes; updated definitions section; updated references; reformatted guideline.
07/15/11	Revision; formatting changes.
08/15/11	Scheduled review; revised description, added coverage criteria for pre-emptive analgesia to position statement, revised ICD9 and ICD10 coding sections; added Medicare program exception; updated references; reformatted guideline.
02/15/12	Revision. Added coverage statement for CPT 64405, occipital nerve blocks (E/I). Added coverage statement for ganglion impar blocks of the sacrococcygeal joint (E/I). Added criteria for "other peripheral nerve blocks". Updated references and reformatted guideline. Deleted CPT code 64405. Deleted ICD9 codes 307.81, 564.6, 569.42 and 784.0; deleted ICD10 codes G44.00—G44.89, G44.201-G44.229, K59.4, K62.81-K62.82 and R51.
04/01/12	Revision; updated ICD10 coding with new and revised codes.
06/01/12	Revision; added CPT code 64405 back to the guideline with an investigational tag (designated as investigational on 02/15/12). Revised Position Statement verbiage regarding greater occipital nerve blocks. Revised Reimbursement Information section.
04/15/14	Revision; revised description statement and position statement (designated sphenopalantine ganglion block as E/I). Updated program exceptions section and references. Reformatted guideline.
11/15/14	Revision; added coverage statement for nerve block injections for the treatment of diabetic neuropathy (E/I). Reformatted guideline.
10/01/15	Revision; updated ICD9 and ICD10 coding sections.
11/01/15	Revision: ICD-9 Codes deleted.

01/01/16	Annual CPT/HCPCS coding update. Added codes 64461, 64462. Deleted code 64412. Revised Reimbursement Information section and Programs Exception section.
03/01/16	Revision: Update to Position Statement and ICD-10 codes.
10/01/16	ICD-10 coding update: added codes M25.541, M25.542, M25.549.
11/17/16	Revision: Update to Reimbursement Information section.
04/15/18	Scheduled review. Revised description section. Added coverage statement for imaging guidance for nerve block injections; added coverage statement for genicular nerve blocks (E/I). Revised Medicare Advantage program exception. Updated references.
01/01/20	Annual CPT/HCPCS coding update. Added 64454. Revised descriptors for codes 64400, 64405, 64408, 64415, 64416, 64417, 64418, 64420, 64421, 64425, 64430, 64435, 64445, 64446, 64447, 64448, 64449, 64450. Deleted 64402, 64410, 64413.
04/15/20	Scheduled review. Maintained position statement and updated references.
10/01/20	Revision. Updated peripheral nerve block injections, occipital neuralgia section.
12/15/20	Unscheduled review. Maintained position statement, revised definitions, and updated references.
01/01/21	Annual CPT/HCPCS coding update. Revised 64455.
10/01/21	Quarterly CPT/HCPCS coding update: added codes M54.50, M54.51, M54.59; deleted code M54.5.
03/15/22	Scheduled review. Added coverage statement for hardware blocks. Updated references.
09/15/22	Added codes 64451 and M46.1.
10/15/22	Revision: updated Reimbursement Information section.
01/01/23	Annual CPT/HCPCS coding update. Revised 64415, 64416, 64417, 64445, 64446, 64447, 64448.
08/21/23	Update to Program Exceptions section.
02/15/24	Scheduled review. Revised description, maintained position statement and updated references.