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Policy Effective Date	05/01/2026

Nerve Graft with Radical Prostatectomy

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Disclaimer

Carefully check state regulations and/or the member contract.

Each benefit plan, summary plan description or contract defines which services are covered, which services are excluded, and which services are subject to dollar caps or other limitations, conditions or exclusions. Members and their providers have the responsibility for consulting the member's benefit plan, summary plan description or contract to determine if there are any exclusions or other benefit limitations applicable to this service or supply. **If there is a discrepancy between a Medical Policy and a member's benefit plan, summary plan description or contract, the benefit plan, summary plan description or contract will govern.**

Coverage

Unilateral or bilateral nerve graft **is considered experimental, investigational, and/or unproven** in individuals who have had resection of one or both neurovascular bundles as part of a radical prostatectomy.

Policy Guidelines

There are no specific CPT codes describing sural nerve grafting of the cavernous nerves; the CPT codes describing nerve grafts specifically identify the anatomic site and do not include the cavernous nerves. Therefore, CPT code 64999 (unlisted procedure, nervous system) may be used to describe the nerve harvest and grafting component of the procedure. Alternatively, a nonspecific CPT code for nerve repair-64910 or 64913 may be used.

Description

Nerve grafting at the time of radical prostatectomy, most commonly using the sural nerve, has been proposed to reduce the risk of postoperative erectile dysfunction.

Erectile Dysfunction

Erectile dysfunction is a common problem after radical prostatectomy. In particular, spontaneous erections are usually absent in men whose prostate cancer required bilateral resection of the neurovascular bundles as part of the radical prostatectomy procedure.

Treatment

A variety of noninvasive treatments are available, including vacuum constriction devices and intracavernosal injection therapy. However, spontaneous erectile activity is preferred by individuals. Studies have reported results from bilateral and unilateral nerve grafts, the latter involving resection of 1 neurovascular bundle.

There has been interest in sural nerve grafting to replace cavernous nerves resection during prostatectomy. The sural nerve is considered expendable and has been extensively used in other nerve grafting procedures, such as brachial plexus and peripheral nerve injuries. As applied to prostatectomy, a portion of the sural nerve is harvested from 1 leg and then anastomosed to the divided ends of the cavernous nerve. Reports also indicate the use of other nerves (e.g., genitofemoral nerve) for grafting.

Regulatory Status

A nerve graft with radical prostatectomy is a surgical procedure and, as such, is not subject to regulation by the U.S. Food and Drug Administration (FDA).

Several nerve cuff products have been cleared for marketing by FDA through the 510(k) process. FDA product code: JXI. An example of a human tissue nerve graft product, the Avance[®] nerve graft (AxoGen), is regulated by FDA under 21 CFR, Part 1271 regulations for Human Cellular and Tissue-based Products (HCT/P).

Rationale

This policy is based on a review of relevant professional guidelines and position statements.

National Comprehensive Cancer Network (NCCN)

The NCCN guidelines on the treatment of prostate cancer (v.5.2026) state: “Replacement of resected nerves with nerve grafts has not been shown to be beneficial” for recovery of erectile function after radical prostatectomy.” (1)

Coding

Procedure codes on Medical Policy documents are included **only** as a general reference tool for each policy. **They may not be all-inclusive.**

The presence or absence of procedure, service, supply, or device codes in a Medical Policy document has no relevance for determination of benefit coverage for members or reimbursement for providers. **Only the written coverage position in a Medical Policy should be used for such determinations.**

Benefit coverage determinations based on written Medical Policy coverage positions must include review of the member's benefit contract or Summary Plan Description (SPD) for defined coverage vs. non-coverage, benefit exclusions, and benefit limitations such as dollar or duration caps.

CPT Codes	55840, 55842, 55845, 55899, 64910, 64911, 64912, 64913, 64999
HCPCS Codes	None

*Current Procedural Terminology (CPT®) ©2025 American Medical Association: Chicago, IL.

References

1. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Prostate Cancer. Version 5.2026. Available at: <<https://www.nccn.org>> (accessed March 24, 2026).

Centers for Medicare and Medicaid Services (CMS)

The information contained in this section is for informational purposes only. HCSC makes no representation as to the accuracy of this information. It is not to be used for claims adjudication for HCSC Plans.

The Centers for Medicare and Medicaid Services (CMS) does not have a national Medicare coverage position. Coverage may be subject to local carrier discretion.

A national coverage position for Medicare may have been developed since this medical policy document was written. See Medicare's National Coverage at <<https://www.cms.hhs.gov>>.

Policy History/Revision

Date	Description of Change
05/01/2026	Document updated. Coverage unchanged. No new references added; one updated.
01/01/2026	Document updated. Coverage unchanged. No new references added; one updated and multiple removed.
02/01/2025	Document updated with literature review. Coverage unchanged. No new references added; reference 1 updated.
12/01/2023	Reviewed. No changes.
01/01/2023	Document updated with literature review. Coverage unchanged. No new references added; reference 1 updated.
07/01/2021	Reviewed. No changes.
09/15/2020	Document updated with literature review. Coverage unchanged. No new references added.
10/15/2019	Reviewed. No changes.
11/15/2018	Document updated with literature review. Coverage unchanged.
01/01/2018	Document updated with literature review. Coverage unchanged.

07/15/2017	Reviewed. No changes.
01/01/2017	Document updated with literature review. Coverage unchanged. Editorial change made as follows: “undergone” changed to “had” in the coverage statement. Title changed from “Nerve Graft in Association With Radical Prostatectomy”.
05/15/2015	Reviewed. No changes.
07/01/2014	Document updated with literature review, coverage unchanged. CPT/HCPCS code(s) updated.
10/15/2013	Document updated with literature review, coverage unchanged and entire rationale section revised. Codes updated.
09/01/2009	Revised/ updated entire document. Coverage remains experimental, investigational and unproven.
09/01/2007	Revised/updated entire document.
08/15/2003	New Medical document