

## Epidermal Nerve Fiber Density Testing

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**Member-specific benefits take precedence over medical policy and benefits may vary across plans. Refer to the individual's benefit plan for details\*.**

### Purpose:

This policy addresses the medical necessity for Epidermal Nerve Fiber Density Testing.

### Description & Definitions:

Small Nerve Fiber Pathology through Nerve Fiber Density Measurement an intra-epidermal nerve fiber density (IENFD) by skin punch biopsy where a small specimen to identify the amount of nerve fibers in the skin.

### Criteria:

**Epidermal nerve fiber density testing (ENFD)** is considered medically necessary for individuals with suspected small fiber neuropathy and **ALL of the following**:

- Painful sensory neuropathy
- Physical examination shows no evidence of findings consistent with large-fiber neuropathy, such as reduced or absent muscle-stretch reflexes or reduced proprioception and vibration sensation
- Electromyography studies are normal and show no evidence of large fiber neuropathy
- Autonomic testing is normal and show no evidence of large fiber neuropathy
- Nerve conduction velocity studies are normal and show no evidence of large fiber neuropathy

**Epidermal Nerve Fiber Density Testing (ENFD)** is considered **not medically necessary** for any use other than those indicated in clinical criteria, to include but not limited to:

- To detect preclinical small fiber neuropathy in asymptomatic members who have **1 or more** of the following:
  - Diabetes
  - impaired glucose intolerance
  - hypothyroid persons, and for evaluation of individuals with Fabry disease, not an exclusive list) known to cause peripheral neuropathy
  - hereditary transthyretin (TTR) amyloidosis and iatrogenic TTR amyloidosis
  - Ehlers-Danlos syndromes

- Fabry disease
- fibromyalgia
- postural tachycardia syndrome
- REM sleep behavior disorder
- For monitoring disease progression or response to treatment
- Sweat gland nerve fiber density for the diagnosis of small-fiber neuropathy and other indications
- Diagnosis of endometriosis

### Coding:

#### Medically necessary with criteria:

Coding	Description
11104	Punch biopsy of skin (including simple closure, when performed); single lesion
11105	Punch biopsy of skin (including simple closure, when performed); each separate/additional lesion (List separately in addition to code for primary procedure)

#### Considered Not Medically Necessary:

Coding	Description
	None

U.S. Food and Drug Administration (FDA) - approved only products only.

### Document History:

#### Revised Dates:

- 2022: May
- 2021: May
- 2020: November
- 2019: September
- 2015: July
- 2014: August
- 2013: July
- 2012: April

#### Reviewed Dates:

- 2023: May
- 2019: December
- 2018: April
- 2017: January
- 2014: July
- 2012: July

#### Effective Date:

- August 2011

### References:

Specialty Association Guidelines; Government Regulations; Winifred S. Hayes, Inc; UpToDate; Literature Review; Specialty Advisors; National Coverage Determination (NCD); Local Coverage Determination (LCD).

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### Special Notes: \*

This medical policy expresses Sentara Health Plan's determination of medical necessity of services, and they are based upon a review of currently available clinical information. Medical policies are not a substitute for clinical judgment or for any prior authorization requirements of the health plan. These policies are not an explanation of benefits.

Medical policies can be highly technical and complex and are provided here for informational purposes. These medical policies are intended for use by health care professionals. The medical policies do not constitute medical advice or medical care. Treating health care professionals are solely responsible for diagnosis, treatment and medical advice. Sentara Health Plan members should discuss the information in the medical policies with their treating health care professionals. Medical technology is constantly evolving and these medical policies are subject to change without notice, although Sentara Health Plan will notify providers as required in advance of changes that could have a negative impact on benefits.

### Keywords:

ENFD, nerve fiber, intraepidermal nerve fiber, IENF, SHP Epidermal Nerve Fiber Density Testing, SHP Surgical 98, Intraepidermal nerve fiber density (IENFD), Epidermal nerve fiber density (ENFD), reduced intraepidermal nerve fiber density (IENFD) skin biopsy